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

Nowak & Fraus Engineers, PLLC
46777 Woodward Avenue
Pontiac, MI 48342

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. 00981
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

Nowak & Fraus Engineers
Firm Name

CV0038506
SIGMA Vendor ID Number

Digitally signed by Jeffrey J Huhta
DN: C=US, E=jhuhta@nfe-engr.com, O=Nowak & Fraus Engineers, OU=Managing Partner, CN=Jeffrey J Huhta
Date: 2023.03.23 10:59:31-04'00'

Signature Date

Jeffrey J Huhta

Title

FOR THE STATE OF MICHIGAN:

Director, DTMB | SFA | Design and Construction

March 31, 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 Occurrence $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.

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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.

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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

Request for Proposal

2023 INDEFINITE SCOPE DELIVERY (ISID) CONTRACT FOR GENERAL ARCHITECTURAL/ ENGINEERING/LANDSCAPE ARCHITECTURE SERVICES VARIOUS LOCATIONS, MICHIGAN

Prepared by:
Nowak & Fraus Engineers

January 19, 2023

NF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

January 19, 2023

Mr. Chris Parsons, DTMB-DCD Project Director
Department of Technology, Management and Budget
3111 West St. Joseph Street
Lansing, MI 48917

RE: Proposal for 2023 Indefinite-Scope Indefinite-Delivery (ISID) for Professional Design Services

Dear Mr. Parsons and the Selection Committee:

Nowak & Fraus Engineers (NFE) is pleased to submit our proposal for the 2023 ISID Professional Design Services contract. NFE has held an ISID contract for Professional Design Services since October 2008, and we look forward to the prospect of continuing this excellent relationship. Our current contract is set to expire in June 2023. Our work with the DTMB includes Lansing's Capitol Complex Master Plan, MSP Grand Rapids Consolidation, multiple Shooting Ranges, along with multiple projects on behalf of the MDNR for campground design/redevelopment, pathway design, water system improvements, water control structures, sanitary system improvements and parking lot improvements; and MDOC for walking surfaces and parking areas. It is our understanding that the DTMB Project Directors have been pleased with services provided by NFE on these projects based upon our overall consultant evaluation scopes, and we strive to continue to grow our relationship with the DTMB.

NFE has significant experience working with multiple stakeholders building consensus, preparing design development plans and managing the implementation of important design and construction projects. We attribute the success of our work in our ability to carefully listening to our clients and stakeholders while providing our professional expertise, which balances the realities of implementation and budgets. Our careful attention to detail has also been paramount to our success. Our design approach is based on crafting and testing design solutions, which explore the many elements pertaining to important design objectives, value engineering, functionality, project safety, maintainability, code compliance, and most importantly, budgets and timelines.

It is with the above in mind that NFE is submitting this proposal for your consideration. NFE's team brings the experience and expertise of major land development, architecture, geotechnical, land surveying, land planning and consulting engineering services, including: trail/pathway design, environmental planning, ADA compliance review and design, bridge design, building architecture, marina design, forestry consulting, wetland consulting, site planning, site design, utility design, storm water management, SESC design, specialty surveying, and project management. Our firm offers a unique and dynamic perspective when addressing project management activities, along with understanding the sensitivities and constraints of developing projects involving multiple stakeholders.

We look forward to the opportunity to discuss our design approach with the selection committee.

Respectfully submitted,

Jeffrey Huhta, PE, PS
Managing Partner

TABLE OF CONTENTS

PROPOSAL ORGANIZATION

For any questions, please contact:
Jeffrey Huhta, PE, PS
Managing Partner
(248) 635-6473

PART I - TECHNICAL

SECTION 1 - UNDERSTANDING OF PROJECT & TASKS

SECTION 1 - UNDERSTANDING OF PROJECT AND TASKS

The NFE Team understands that the Michigan Department of Technology, Management and Budget (DTMB) is soliciting proposals for an Indefinite-Service, Indefinite-Delivery (ISID) contract for general professional design services for architecture, engineering, surveying, and landscape architecture for State of Michigan facilities construction projects. We further understand that ISID contracts provide the State of Michigan with simple and streamlined qualifications-based selection process for obtaining professional services for minor and/or routine professional services.

As a firm that has held a DTMB ISID General Professional Services contract since 2008 and is prequalified with MDOT in 18 different categories (see Section 6), NFE has a 54-year history of providing consulting services to a broad range of clientele, and we are especially pleased with the work performed for the DTMB and its Client Agencies, like MDNR, MDMV and MDOC. Our knowledge of federal, state, county and local agency requirements within the region have proven time and again to be an invaluable asset in completing projects for the DTMB. The professional team we have assembled affords NFE the opportunity to handle just about any project the DTMB requires. Where services cannot be performed in house, NFE will consult with one of our partners to ensure the tasks are completed to the satisfaction of the DTMB and Client Agency.

The standard ISID contract with the State of Michigan may include Phase 100 (Study), Phase 200 (Programming), Phase 300 (Schematic Design), Phase 400 (Preliminary Design), Phase 500 (Construction Documentation), Phase 600 (Construction Administration-Office Services), and Phase 700 (Construction Administration-Field Services). The standard contract identifies tasks of work required for each of the phases of work identified above. Having completed projects involving Phase 100, 200, 300, 400, 500, 600 and 700, NFE is very familiar with the required tasks and associated expectations of the DTMB. In our time working for the DTMB and Client Agencies, NFE has built a good reputation, which is evidenced as we have received numerous unsolicited compliments from Client Agency representatives and DTMB staff. Below we have identified a brief understanding of the various phases of work required for projects undertaken by the DTMB.

We hereby acknowledge Addendum 1, and all requirements contained within said addendum is incorporated herein.

DETAILED SCOPE OF WORK

Phase 100 – Study
This study phase will begin after a project kickoff meeting. Typically, the study phase is designed to obtain critical project research, perform detailed field review, coordinate with client to understand project objectives, provide analysis of research in consideration of the project programming and objectives, identify project alternatives, and prepare preliminary project cost estimates. All data developed or collected during this phase of work shall be consolidated into a report format and submitted to the DTMB and Owner Agency for their preliminary review. Upon receipt of final comments of the draft report, the professional is required to prepare a final study report incorporating and/or resolving all comments.

Phase 200 – Programming
The programming phase requires the consultant to coordinate with the DTMB and Client Agency in preparing a detailed program analysis for the project. Programming includes listening to the DTMB and Client Agency in identifying the specific needs the project is intended for. Elements such as spaces, physical features, systems, functions, capacities, relationships and interactions shall be considered.

Programming analysis shall be completed in consideration of the State of Michigan's current "Major Project Design Manual for Professional Service Contractors and State/Client Agencies" and shall be consistent with the developed Project Statement and Project Budget. During this phase of work, the professional consultant will prepare a detailed project cost estimate and verify the programming activities can be completed within the prescribed project budget. All data collected in the study and programming phase shall be consolidated into a comprehensive Programming Analysis Report and submitted to the DTMB/Client Agency for review. All comments shall be addressed, and a final report issued. It is expected that a formal presentation to the DTMB and Client Agency will be required during this phase of work.

Phase 300 – Schematic Design

The Schematic Design phase requires the consultant to coordinate with the DTMB and Client Agency in preparing schematic design documents. The consultant will prepare schematic design deliverables consistent with the Project/Program Statement and approved program analysis. Included in this phase work is establishing principal building design, structural design, mechanical design, HVAC design, electrical design and other systems as may be required by the project statement. Also, the professional shall coordinate with Professional Consulting firms for civil/site survey, site geotechnical investigation analysis and soil testing as necessary to achieve the viable and economic project design. This phase of work includes detailed Construction Code and Design Reviews by DTMB and Client Agency. A detailed project schedule will be prepared to assure that the project can be constructed in the timeframe identified in the Project Statement.

Phase 400 – Preliminary Design

The Preliminary Design phase requires the consultant to coordinate with the DTMB and Client Agency in preparing preliminary design documents to develop the project based on the Project/Program Statement and the approved schematic design and program. This phase refines the schematic design documents to produce an acceptable preliminary design and related project specifications. These documents define the size, function, arrangements, spaces, location, and operations of equipment and materials comprising the principal design details of the structures and systems. Furthermore, the preliminary design and specifications shall depict the proposed design intent of the project's systems, materials, equipment, utilities, site improvements and other project elements. The preliminary design will serve as the basis for further detail into final design drawings. Elements which are required during this phase of work include: preparation of project construction schedule; developing a detailed project cost estimate; completion of all related design work for civil, structural, mechanical, electrical and architectural systems; preparing all drawings and details in CAD format; attending design development meetings as required; making permit submittals (if appropriate at this stage of the project); and resolving comments from DTMB, Client Agency, and Public Agency reviews.

Phase 500 – Construction Documentation

The Construction Document phase requires the consultant to coordinate with the DTMB and Client Agency in preparing Final Construction Documents to further and final develop the project based on the Project/Program Statement and the approved Preliminary design. This phase documents a complete and constructible project and includes: preparing final design documents and specifications (Advertisement, Instructions to Bidders, proposal form, general, supplemental and special conditions, standard form of agreement, etc.) to DTMB standards; utilizing MICHSPEC 2001 or the current DMB DCSPEC in preparing project specifications; incorporating all current applicable regulations, ordinances, construction codes and statutes; addressing all reviews by appropriate federal, state or local authorities having jurisdiction; applying for and obtaining on behalf of the project required permits from permitting agencies; performing all QA/QC checks of contract documents; coordinating construction testing program; developing a final cost estimate; determining an appropriate

construction schedule to be a part of the Construction Contract; assisting the DTMB with construction bidding and contracting; and performing any final design corrections as may be discovered during construction.

Phase 600 – Construction Administration - Office
The construction administration phase is broken up into two separate requirements—an office component and a field component. The office component requires the consultant to coordinate with the DTMB, Client Agency, and the construction contractor in completing construction administration services to allow the design intent to be successfully implemented into a complete project. This element of work includes: shop drawing and submittal review/approval, review and process contractor payments, monitoring construction schedule progress, review and document construction change orders, monitor construction testing program, monitor construction contractor performance, preparation of project punch list, evaluate and respond to claims against the DTMB, review and preparation of project as-built documents, maintain project records for project close-out, attend and preside over project meetings, and take meeting minutes and distribute to appropriate parties.

Phase 700 – Construction Administration - Field
The field component requires the consultant to coordinate with the DTMB, Client Agency, and the construction contractor in completing construction administration services to allow the design intent to be successfully implemented into a complete project. This element of work includes: providing a proper level of field inspections to review the project construction work in place, attending preconstruction meeting and issuance of meeting minutes, attending problem solving meetings as needed, attending regularly scheduled progress meetings, performing final project inspections, and completing other tasks are required to assure the work is progressing in a timely and orderly fashion.

REPRESENTATIVE PROJECT EXPERIENCE

As evidenced by our past performance, and our 54-year track record of providing quality professional services in the State of Michigan, we believe our firm and associated team is very well positioned to provide services under the ISID contract. Providing consulting services to both municipal and private clientele affords NFE a very unique perspective in completing assignments. NFE has a solid understanding of the regimented process and high level of accountability required to work in the public sector. Couple that with the demands of providing efficient yet detailed designs in the private sector, and you get a company with a thorough understanding of the full design development process, how stakeholder involvement relates to the overall design development process, and how well-trained employees can make a significant difference in overall project success.

The following information is selected to give the reviewer a representative sample of clientele and projects completed by the NFE Team in recent history. We believe these projects exemplifies our commitment to excellence and demonstrates our suitability to perform services under this contract.

NOWAK & FRAUS ENGINEERS - DTMB PROJECT EXPERIENCE

State of Michigan – Department of Corrections

- DTMB, Central Michigan Correctional Facility Paving Improvements, St. Louis, Michigan
- DTMB, Woman's Huron Valley Correctional Facility Paving Improvements, Commerce, Michigan
- DTMB, Lakeland Correctional Facility Sanitary Improvements, Coldwater, Michigan
- DTMB, Lakeland Correctional Facility Water System Improvements, Coldwater, Michigan
- DTMB, Egeler Correctional Facility Paving Improvements, Jackson, Michigan
- DTMB, Ionia Correctional Facility Paving Improvements, Ionia, Michigan
- DTMB, Woodland Correctional Facility Paving Improvements, Northville, Michigan
- DTMB, Woodland Correctional Facility Water System Improvements, Northville, Michigan
- DTMB/DOC, Lakeland Correctional Facility Shooting Range Improvements, Coldwater, Michigan
- DTMB/DOC, McCoy Gun Range, Jackson, Michigan
- DTMB/DOC, Thumb Correctional Facility, Shooting Range Improvements, Lapeer, Michigan
- DTMB/DOC, Carson City CF, Paving Improvements, Carson City, Michigan

State of Michigan – Shooting Ranges

- DTMB/DNT, Echo Point Shooting Range, Allegan, Michigan
- DTMB/DNR, Lake Superior Sportsman Club Shooting Range, Ontonagon, Michigan
- DTMB/DNR, Marquette Shooting Range, Marquette, Michigan
- DTMB/DNR, Grand Travers Shooting Range, Grand Traverse, Michigan
- DTMB/DNR, Pontiac Lake Recreation Area, Waterford, Michigan
- DTMB/DNR, Sharonville Shooting Range, Sharonville, Michigan
- DTMB/DNR, Algonac Shooting Range, Algonac, Michigan
- DTMB/DNR, Lapeer Shooting Range, Lapeer, Michigan
- DTMB/DNR, Barry State Forest Game Area Shooting Range, Middleville, Michigan
- DTMB/DNR, Roscommon State Forest Shooting Range, Roscommon, Michigan
- DTMB/DOC, McCoy Gun Range, Jackson, Michigan
- DTMB/DOC, Thumb Correctional Facility, Shooting Range Improvements, Lapeer, Michigan
- DTMB/DOC, Lakeland Correctional Facility, Shooting Range Improvements, Coldwater, Michigan

State of Michigan/Department of Natural Resources – Paving Projects

- DTMB, Pine Street Parking Area Design, Replacement and Construction, Lansing, Michigan
- DTMB/DNR, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Warren Dunes State Park Master Plan Implementation, Sawyer, Michigan
- DTMB/DNR, Highland Recreation Area Roadway Repairs, Highland Township, Michigan
- DTMB, Central Michigan Correctional Facility Paving Improvements, St. Louis, Michigan
- DTMB, Woman's Huron Valley Correctional Facility Paving Improvements, Commerce, Michigan
- DTMB, Egeler Correctional Facility Paving Improvements, Jackson, Michigan
- DTMB, Ionia Correctional Facility Paving Improvements, Ionia, Michigan
- DTMB, Woodland Correctional Facility Paving Improvements, Northville, Michigan
- DTMB/DNR, Pontiac Lake Recreation Area Day Use Area Improvements, White Lake Township, Michigan
- DTMB, Roscommon Airport Paving Improvements, Roscommon, Michigan
- DTMB/DNR, Lexington Harbor BAS Paving Improvements, Lexington, Michigan
- DMTB/DNR, Quanicassee River BAS Paving Improvements, Essexville, Michigan
- DTMB, Michigan State Police Forensic Lab, District Headquarters and Rockford Post Consolidation, Walker, Michigan
- DTMB, Michigan State Police Paving Improvements, Niles, Michigan
- DTMB/DNR, Maybury State Park Parking Lot Reconstruction, Northville, Michigan

- DTMB/DOC, Carson City CF, Paving Improvements, Carson City, Michigan
- DTMB/DNR, Brighton Recreation Area, ARPA Electrical and Paving Improvements, Brighton, Michigan
- DTMB/DNR, Seven Lakes Recreation Area, ARPA Paving and Shelter Improvements, Holly, Michigan
- DTMB/DNR, Island Lake Recreation Area, ARPA Paving Improvements, Brighton, Michigan
- DTMB/DNR, Bald Mountain Recreation Area, Culvert Replacement and Paving Improvements, Lake Orion, Michigan
- DTMB/DNR, Twin Lakes State Park Paving Improvements, Toivola, Michigan

State of Michigan – Department of Natural Resources – Studies/Utility Improvements

- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB/DNR, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Warren Dunes State Park Master Plan Implementation, Sawyer, Michigan
- DTMB/DNR, Statewide Electrical Improvements, 8 State Parks throughout Michigan
- DTMB/DNR, Statewide Utility Improvements, 8 State Parks throughout Michigan
- DTMB, Lakeland Correctional Facility Sanitary Improvements, Coldwater, Michigan
- DTMB, Bay City State Park Connectivity Study, Bay City, Michigan
- DTMB, Michigan State Police Forensic Lab, District Headquarters and Rockford Post Consolidation, Walker, Michigan
- DTMB/DNR, Roscommon State Forest Shooting Range, Roscommon, Michigan
- DTMB/DNR, Bald Mountain Recreation Area, Culvert Replacement and Paving Improvements, Lake Orion, Michigan
- DTMB/DNR, Twin Lakes State Park Utility Improvements, Toivola, Michigan

State of Michigan – Department of Natural Resources – Toilet/Shower Buildings & other Structures

- DTMB/DNR, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Warren Dunes State Park Master Plan Implementation, Sawyer, Michigan
- DTMB/DNR, Pontiac Lake Recreation Area Day Use Area Improvements, White Lake Township, Michigan
- DTMB/DNR, Wilson State Park Toilet Shower Building Replacement, Harrison, Michigan
- DTMB/DNR, Brimley State Park Toilet Shower Building Replacement, Brimley, Michigan
- DMTB/DNR, Straits State Park Toilet Shower Building Replacement, St. Ignace, Michigan
- DTMB/DNR, North Higgins Lake State Park Toilet Shower Building Replacement, Roscommon, Michigan
- DTMB/DNR, Roscommon State Forest Shooting Range, Roscommon, Michigan
- DTMB/DNR/Michigan Army Reserve National Guard
  - Otsego Lake State Park Upgrades & Improvements, Gaylord, Michigan
  - Young State Park Upgrades & Improvements, Boyne City, Michigan
- DTMB/DNR, Belle Isle Shelter Replacement, Detroit, Michigan
- DTMB/DNR, Twin Lakes State Park Toilet Shower Building Replacement, Toivola, Michigan

State of Michigan – Department of Natural Resources – Trails/Recreational Facilities/Boat Access Sites

- DTMB/DNR, Kal-Haven State Park Linear Trail from South Haven to Kalamazoo, Michigan
- DTMB/DNR, Highland Recreation Area Regional Trail (Cedar Creek Trail), Highland Township, Michigan
- DTMB/DNR, Island Lake Regional Trail, Brighton/Green Oak Township, Michigan
- DTMB/DNR, Belle Isle State Park Kayak and Canoe Launch, Detroit, Michigan
- DTMB, Bay City State Park Connectivity Study, Bay City, Michigan
- DTMB/DNR, Lexington Harbor BAS Paving Improvements, Lexington, Michigan
- DMTB/DNR, Quanicassee River BAS Paving Improvements, Essexville, Michigan
- DTMB, Pointe Mouillee State Game Area Dike Improvements, Berlin Township, Michigan
- DTMB/DNR/Michigan Army Reserve National Guard

- Otsego Lake State Park Upgrades & Improvements, Gaylord, Michigan
- Petoskey State Park Upgrades & Improvements, Petoskey, Michigan

State of Michigan – DTMB/MSP/DMVA Facilities

- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB, Michigan State Police Forensic Lab, District Headquarters and Rockford Post Consolidation, Walker, Michigan
- DTMB, Michigan State Police Paving Improvements, Niles, Michigan
- DTMB, Michigan State Police Utility Improvements, Coldwater, Michigan
- DTMB, Capital Complex Directional Study, Lansing, Michigan
- DMTB, Capital Complex Revenue Collection System Upgrade, Lansing, Michigan
- DMVA – Albion Armory Site Improvements, Albion, Michigan
- DMVA – Shiawassee Armory Site Improvements, Shiawassee, Michigan

WILDERNESS STATE PARK CAMPGROUND MASTER PLAN AND IMPLEMENTATION

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Master Plan

Project Location
Carp Lake Township, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Joel Gordon
Project Director
517-242-0761

Services Performed
Surveying
Schematic and Final Design
Plans and Specifications
Construction Administration

Estimated Construction Cost
$10,000,000

Service Budget
$950,000

Year Completed
2018

NFE Project No.
H137

NFE, in collaboration with Land Design Studio, was retained by the Department of Technology, Management and Budget (DTMB)/Michigan Department of Natural Resources (DNR) to conduct a comprehensive study as well as design and construction administration services for the redevelopment of Wilderness State Park's Lakeshore Campground.

The campground is located in Carp Lake Township on the pristine shoreline of Lake Michigan approximately 20 miles west of Mackinaw City. The existing campground was developed in the early 1950's and serves a very loyal group of repeat visitors who enjoy camping on the shore of Lake Michigan. It is considered one of Michigan's most valuable resources, but needed redevelopment to meet the demands of today's 21st Century campers and recreation enthusiasts.

NFE designed the Master Plan in close collaboration with the DTMB/DNR. Environmental factors were taken into careful consideration on all aspects of the design. On-site and on-line surveys were utilized to gather information from users and were helpful in deciding where to concentrate resources. Upon completion, the entire Lakeshore Campground was fully redeveloped, along with new utility and electrical infrastructure.

The site featured two new toilet/shower buildings which became a prototypical building design that was used at other state parks.

BURT LAKE STATE PARK LAGOON ABANDONMENT AND SEWER UPGRADES

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NF ENGINEERS

Project Type
Sanitary Sewer
Lagoon Abandonment

Project Location
Indian River, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Gerald Gregorski
Project Director
517-241-4499

Services Performed
Land Surveying
Site Plan Documents
Construction Documents
Construction Administration

Estimated Construction Cost
$800,000

Service Budget
$115,000

Year Completed
2017

NFE Project No.
I142

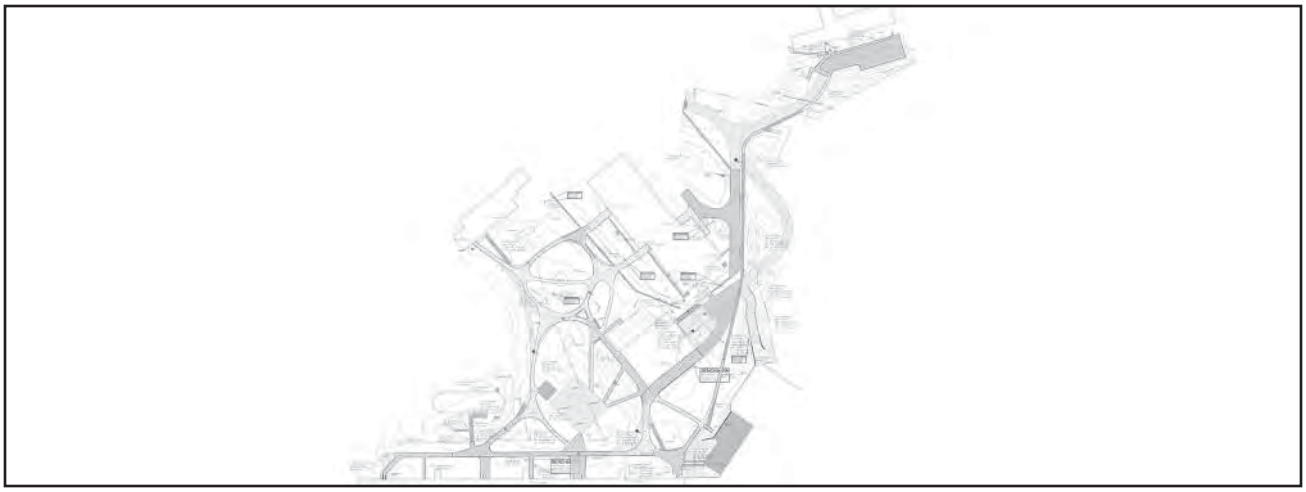
NFE was selected by the Department of Technology, Management and Budget (DTMB)/Department of Natural Resources (DNR) to assist with the process of abandoning an existing sewer lagoon system and connecting to a municipal sanitary sewer system. The Village of Indian River had contemplated for decades the development of a municipal sanitary sewer system for their downtown business district. A key user in the system was the State of Michigan's Burt Lake State Park which accounted for approximately 20% of the expected usage in the system. NFE was tasked with assisting the DTMB/DNR through the difficult negotiation process and completed a study to review: system viability, residential equivalent unit (REU) calculations, ordinances, connection fees, operations and maintenance fees, agreements, etc. which were all developed as a part of this process. The municipal system was successfully constructed in the spring of 2016 and the DTMB/DNR initiated the process to abandon the lagoon system and connect to the municipal system.

NFE prepared full design documents for the lagoon abandonment project whereby existing pump systems were upgraded, force mains extended, sewer lines replaced, lagoon abandoned, and important areas of the park reclaimed for alternative development. This work included all required MDEQ testing for lagoon abandonment. Additionally, NFE performed all construction engineering services to oversee the construction process on behalf of the client.

EGELER RECEPTION AND GUIDANCE CENTER REPAIR/REPLACE FACILITY SIDEWALKS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS



Project Type
Sidewalks, Pathways, Loading Areas, Roadways

Project Location
Jackson, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Corrections

Contact
Jud Sorensen, DTMB
517-284-7916
Gene Page, DOC
517-749-7518

Services Performed
Topographic/Geotechnical Survey
Engineering Design
Construction Administration (Office and Field)

Estimated Construction Cost
$840,500

Service Budget
$57,840

Year Completed
2018

NFE Project No.
K276

The Michigan Department of Corrections (DOC) is responsible for maintaining the existing pathway systems within the Egeler Reception and Guidance Center located in Jackson, Michigan. Egeler sits on 53 acres and serves as a quarantine facility responsible for processing all male offenders sentenced to a term of incarceration with the DOC.

DTMB/DOC contracted with NFE to assess the condition of existing paved surfaces, both asphalt and concrete, within the secured area of the facility. This included sidewalks, pathways, loading areas and roadways, as well as their sub-surface soil and base conditions.

NFE designed an ADA compliant repair/replacement plan for the pathway system, addressed site specific drainage concerns, provided construction cost estimates throughout the design phases, outlined phased construction alternatives, and produced construction documents for bidding and construction, as well as providing construction inspection and material testing follow-up services.

ISLAND LAKE STATE RECREATION AREA TRAIL DEVELOPMENT

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Non-Motorized Trails

Project Location
Brighton, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Jan Miller, RA
Project Director
517-284-7969

Services Performed
Schematic Design
Surveying
Final Design Permitting
Specifications

Estimated Construction Cost
$2,750,000

Service Budget
$550,000

Year Completed
2018 (Design)
Construction Pending

NFE Project No.
I866

NFE provided the Department of Natural Resources (DNR) with schematic design, trail blazing, surveying, final design and permitting services for this 3.5 mile trail within Island Lake State Recreation Area. The asphalt trail connects the park's trails to the trail head located within Green Oak Village Place. The final design plans were engineered and detailed to provide a path that is ADA compliant and meets AASHTO Standards.

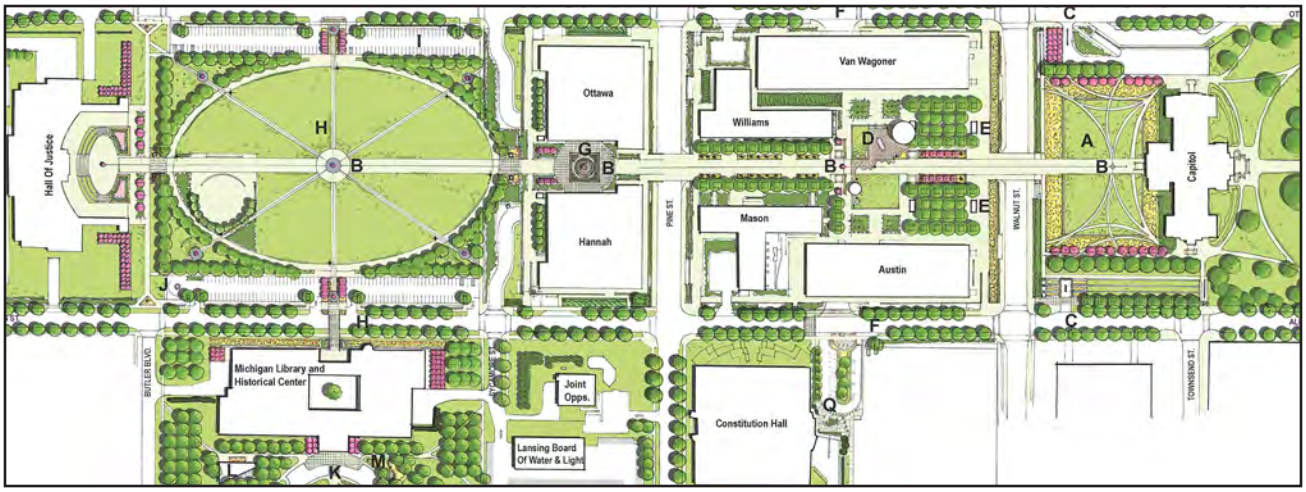
Island Lake Recreation Area is situated on 4,000 scenic acres with amenities, including hunting, canoeing, picnic shelters, swimming, a shooting range and cabins to rent. Its location in Livingston County provides an "up-north" experience without leaving Southeastern Michigan. One of the most popular features is biking along the park's roads and many existing trails. NFE's services allowed construction crews to connect existing paved trails within Island Lake to the trail head located along Fieldcrest Road in Green Oak Township.

NFE's expertise provided the attention to detail needed to honor environmental restorations, existing stewardship zoning requirements and designations, as well as challenges including natural rivers, steep slopes and unsafe biker/pedestrian/vehicular interaction. NFE "field identified" areas of the trail alignment that were sensitive to environmental and cultural landscape areas, ensured ADA requirements were met, and capitalized on the many beautiful scenic opportunities within the park.

STATE OF MICHIGAN CAPITOL COMPLEX MASTER PLAN AND IMPLEMENTATION

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS



Project Type
Master Plan
Master Plan Implementation

Project Location
Lansing, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget

Contact
Joel Gordon
Project Director
517-242-0761

Services Performed
Design and Planning Study
Schematic Design
User Survey
Final Design/Bidding Documents
Construction Administration

Estimated Construction Cost
$50,000,000

Service Budget
$700,000

Year Completed
2018

NFE Project No.
H471

The State of Michigan's Capitol Complex in Lansing is the symbolic center of the state's democracy. With over 1.5 million visitors per year and approximately 14,355 state employees, the desire was to develop a Master Plan that honors and uplifts visitors and employees, while also supporting state activities and programs.

NFE provided the Department of Technology. Management and Budget (DTMB) with design and implementation of the Capitol Complex Master Plan. NFE's design team used a creative approach for redeveloping the site, addressing elements such as pedestrian circulation, parking, irrigation and ornamental horticulture. In order to ensure the project would ultimately add value to the environment of everyday users, NFE's team performed a user survey of employees and staff, gaining insider knowledge of relevant services.

Top priorities for the design and implementation was considering cost, functionality and sustainability. The project created a safe, functional and aesthetically pleasing campus environment for government leaders, state employees and visitors.

Project Highlights
- Introduction of additional green space
- Integrate systems and technology
- Improved way-finding
- Additional aesthetic characteristics
- Simplify long-term maintenance
- Improved lighting, security and ADA access

LAKELAND CORRECTIONAL FACILITY SANITARY & WATER MAIN IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Sanitary Sewer
Water Main

Project Location
Coldwater, Michigan

Owner
State of Michigan
- Department of Technology Management and Budget
- Department of Corrections

Contact
Chris Parsons
Project Director
517-256-5677

Services Performed
Land Surveying
Site Plan Documents
Construction Documents
Construction Administration

Estimated Construction Cost
$1,500,000

Service Budget
$168,000

Year Completed
Ongoing

NFE Project No.
K330

NFE was selected by the Department of Technology, Management and Budget (DTMB)/Department of Corrections (DOC) to assist with the process of updating the campus water and sewer system at Lakeland Correction Facility in Coldwater, Michigan. Due to the on-site aging sanitary system, and the state's concerns with PFAS contamination, DOC was interested in closing their on-site systems and connecting to both the water and sewer systems owned and operated by the Coldwater Board of Public Utilities (CBPU). NFE was tasked with assisting DTMB/DOC with the negotiation process with CBPU and to review options, connection fee costs, operations and maintenance agreements, etc. associated with the potential connections.

Full design documents were completed by NFE for the development of a new meter house/municipal water connection, new monitoring equipment for water tower use, new sanitary grinding/screening equipment, and design of a new force main for sanitary sewer effluent.

BELLE ISLE PARK SHORELINE FISHING ACCESS IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Park Facilities

Project Location
Detroit, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Chris Bahjet, PE
Project Director
517-749-7519

Services Performed
Preliminary Study
Topographic Survey
Site Plans
Construction Documents
Contract Administration

Estimated Construction Cost
$230,000

Service Budget
$29,000

Year Completed
2017

NFE Project No.
J411

The Department of Technology, Management and Budget (DTMB)/Department of Natural Resources (DNR) contracted with NFE to perform a comprehensive study and design improvements for two fishing piers on Belle Isle Park. NFE was tasked with reviewing the conditions and ADA compliancy of the two piers to aid in improving the use at each location.

The first step was to perform an inventory and analysis of the overall pier locations. NFE inspected and recorded all visible infrastructure, including walks, railings, sea walls, sheet piling and parking facilities. Next a topographic survey was completed in order to outline the existing site layout, along with a geotechnical investigation done by Testing Engineers and Consultants (TEC) to determine underlying soil properties, pavement thickness and groundwater elevations.

Based on the review, the improvements to make at both sites included removing and replacing handrails, removing and replacing the existing pathway leading to each shelter and replacing with ADA compliant concrete pathways, and removing and replacing the concrete sidewalks adjacent to each fishing pier and replacing with 6-inch concrete sidewalks.

NFE prepared construction documents for the improvements and provided contract administration for all work, including inspection services. Construction included the removal of existing concrete walk/sea wall, removal of structural concrete and installation of new sidewalks, and installation of ADA compatible railings and benches. All work was done during the busy summer park season with minimal interruption to park goers.

POINTE MOUILLEE STATE GAME AREA DIKE REHABILITATION & WATER MAIN REPLACEMENT

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Water Control
Water Main

Project Location
Berlin Township, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Chris Bahjet, PE
Project Director
517-749-7519

Services Performed
Surveying
Engineering Design
Construction Administration

Estimated Construction Cost
$600,000

Service Budget
$45,000

Year Completed
2013

NFE Project Nos.
G718 & H036

NFE provided surveying, design and construction administration assistance to the Department of Technology, Management and Budget (DTMB)/Department of Natural Resources (DNR) for the construction/refurbishment of 2.5 miles of earthen dike within the Pointe Mouillee State Game Area, one of the largest freshwater marsh areas in the world. NFE worked closely with the DTMB/DNR staff to design a project that both met the requirements of the federal grant used to fund the project and fully maximize those grant funds to meet the needs of the owner.

In addition, NFE designed an improved water main to repair a failing line servicing the game area headquarters building. NFE coordinated with both the MDEQ and the U.S. Army Corps of Engineers to permit the installation of this line across wetland bodies and a direct tributary to Lake Eric, along the project route.

LAKELAND CORRECTIONAL FACILITY SANITARY SEWER IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Sanitary Sewer

Project Location
Coldwater, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Corrections

Contact
Chris Parsons, DTMB
517-256-5677
Trever LeBarre, DOC
517-373-4483

Services Performed
Topographic/Geotechnical Survey, Engineering Study, Preliminary Design, Final Design. Construction Administration (Office and Field)

Estimated Construction Cost
$1,200,000

Service Budget
$57,840

Year Completed
On-going

NFE Project No.
K330

The Michigan Department of Corrections (DOC) is responsible for maintaining sanitary sewer service within the Lakeland Correctional Facility located in the City of Coldwater, Michigan. Lakeland is a level II facility which includes 16 dormitory-style housing units shared by approximately 1,500 prisoners. The campus sits on 280 acres and includes other buildings for educational purposes.

Lakeland's sanitary sewer effluent is collected at a central sewer pumping station, and then was pumped via a 10-inch force main going 1,700 linear feet south through the Lakeland site to the public right-of-way. From there, sewage traveled along a 4-mile force main, installed in the 1970's by the Coldwater Board of Public Utilities (CBPU) for sole use by the facility. This offsite force main was nearing its lifespan and required an ever-growing need for maintenance.

In 2017, CBPU constructed an 18-inch force main that runs along the north side of State Street adjacent to the Lakeland site with a tap installed for possible connection to the site. NFE was retained by DTMB/DOC to study the best way for the facility to continue with their sewer outflow. From the study, NFE was then contracted to design a new on-site force main and a sewage grinding/filtering station to meet CMPU requirements.

LAPEER STATE GAME AREA SHOOTING RANGE IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Park Facilities

Project Location
Lapeer, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Bruce Watkins, PE
Project Director
517-242-7882

Services Performed
Study
Engineering Design
Construction Administration

Estimated Construction Cost
$532,000

Service Budget
$75,000

Year Completed
2020

NFE Project No.
K762

NFE was selected by the Department of Technology, Management and Budget (DTMB)/Department of Natural Resources (DNR) to provide a study as well as engineering design and construction administration services for a major overhaul to a 70-year old shooting range in Lapeer, Michigan. Improvements included sound abatement, driveway approach and parking, range fencing, drainage, pathways, monitoring wells and vault toilets. Two new shooting structures were included with the following stations: three 100-foot and eight 10-yard/50-yard. After the improvements, the facility was fully ADA compliant. The project was completed in 2020.

LEWIS CASS PARKING LOT IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Parking Lot

Project Location
Lansing, Michigan

Owner
State of Michigan
- Department of Technology Management and Budget

Contact
Chris Parsons
Project Director
517-256-5677

Services Performed
Engineering Design
Construction Administration

Estimated Construction Cost
$165,000

Service Budget
$21,500

Year Completed
2018

NFE Project No.
K349

NFE provided design and construction administration services to the Department of Technology, Management and Budget (DTMB) for this 345-vehicle employee parking lot located west of the Cass Building within the Capital area.

NFE designed plans and specifications for “Heavy Maintenance” conditions to extend the life of the pavement system by approximately 5 years. Also, NFE addressed ADA accessibility in the design to bring the parking area to current compliance standards.

Due to demand for this parking area, all construction had to be started after 6:00 p.m. on Friday and completed by 5:00 a.m. on Monday. NFE oversaw the crack sealing, seal coating, pavement repairs and parking lot striping by the construction company for DTMB.

The result was a new parking lot for the employees working in the Cass Building with little inconvenience to their daily work life.

LEXINGTON HARBOR BOATING ACCESS SITE IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Park Facilities

Project Location
Village of Lexington, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Bruce Watkins
Project Director
517-242-7882

Services Performed
Surveying
Engineering Design
Construction Administration

Estimated Construction Cost
$881,000

Service Budget
$51,000

Year Completed
2021

NFE Project No.
K803

Lexington State Harbor has 108 slips and is on beautiful Lake Huron, approximately 20 miles north of Port Huron. The harbor was due for some long overdue improvements. The Department of Technology, Management and Budget (DTMB) and Department of Natural Resources (DNR) contracted with NFE to provide surveying, engineering design, and construction administration for the improvements.

Improvements included parking lot, storm drainage, sidewalks, floating dock, kayak launch, and landscaping together with access management solutions with Village own lands to the east of the Boat Access Site. Additionally, NFE assisted with the design of sanitary sewer facilities associated with a failed sanitary sewer system supporting the BAS.

Construction for the project was completed in summer of 2021.

MICHIGAN STATE POLICE
GRAND RAPIDS CONSOLIDATION

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Police Facility

Project Location
Walker, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Michigan State Police

Contact
Joel Gordon
517-242-0761

Dawn Davis
517-384-3151

Services Performed
Land Surveying
Study
Engineering Design

Estimated Construction Cost
$57,000,000

NFE Service Budget
$400,000

Year Completed
2021

NFE Project No.
J184

The Department of Technology, Management and Budget (DTMB)/Michigan State Police (MSP) contracted with Hobbs + Black for the planning, programming and evaluation options associated with consolidating the Grand Rapids Forensic Lab, 6th District Headquarters and Rockford Post into a single location. Each MSP unit had its own location that was beyond its ability to support the operational mission that was currently assigned to it and had been for a long time.

Hobbs + Black in turn contracted with NFE to provide land surveying and civil engineering services for the development of a new facility for the consolidation of all three units. NFE was instrumental with developing the site selection criteria to determine a suitable site. A total of nine sites were identified and evaluated with a site in Walker, Michigan being determined to meet all identified site criteria.

NFE provided boundary, topographic, tree and wetland surveys for the Walker site together with Phase 100 feasibility reporting and Phase 200/300 programming and schematic design services. The project is now in the final stages of construction and should be completed in 2021.

When completed the new, modern law enforcement and forensic laboratory facility will serve a population of 2.2 million.

O'NEAL LAKE DAM RESTORATION

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Dam

Project Location
Bliss Township, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Joel Gordon
Project Director
517-242-0761

Services Performed
Topographic Survey
Study and Evaluation
Engineering Plans
Construction Administration

Estimated Construction Cost
$350,000

Service Budget
$90,000

Year Completed
2017

NFE Project No.
I351

O'Neal Lake Dam was installed in 1952 by the Department of Natural Resources (DNR) to aid in water control and create a wildlife haven. The dam formed O'Neal Lake which was approximately 150 acres in size and became a much-loved paradise for the residents close to the lake and for nature lovers visiting the surrounding Wilderness State Park.

In September 2014, the dam failed when a large portion of the southerly section of the earthen-berm structure was washed away by heavy rains. The lake overtopped the sides of the dam, causing O'Neal Lake to shrink. In November, NFE was retained by the Department of Technology, Management and Budget (DTMB) to investigate the failure of the dam and develop options to repair it.

After careful study and evaluation of the dam, NFE proposed five options for repairing the control structure. The option chosen by DTMB/DNR entailed placing steel pilings to form a wall in front of the existing dam and adding measures to control the lake level. Additionally, the existing bridge was rehabilitated to accommodate pedestrian crossing in this area of the park.

NFE prepared engineering plans for demolition, structure improvement, area earthwork and boat launch improvements, as well as construction documents. After DTMB/DNR secure funding for the project, construction started in October 2017. During construction, NFE provided both office and site construction administrative services until December when the dam was completed.

NFE is proud to have been involved with this project that brought the lake back to the area and its residents, as well as aid in the restoration of a wildlife sanctuary.

PETOSKY STATE PARK CAMPGROUND ELECTRICAL SYSTEM IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Electrical Distribution

Project Location
Petosky, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Gerald Gregorski
Project Director
517-241-4499

Services Performed
Land Surveying
Study and Evaluation
Site Plan Documents
Construction Documents
Construction Administration

Estimated Construction Cost
$500,000

Service Budget
$57,000

Year Completed
2020

NFE Project No.
I800

NFE was retained by the Department of Technology, Management and Budget (DTMB)/Department of Natural Resources (DNR) to perform a study and provide design and construction administration services for improvements to Petosky State Park's campground electrical system. NFE teamed with J. A. Lombardo & Associates from Rochester Hills to assist in the overall design development process.

The Petosky campground has two modern campgrounds – the Tannery Creek with 100 sites and the Dunes with 78 sites. The electrical panels at Dunes and Tannery were in good condition; however, the feeders and camper pedestals were in poor condition at Dunes, and to meet the National Electrical Code, eleven sites in the Tannery needed to be upgraded to 50A.

The following tasks were performed for this project: detailed infrastructure evaluation of electrical supply, reviewed proposed programming and system requirements, developed a Phase 100 study report with detailed recommendations and cost estimates, prepared Phase 400 preliminary design documents, and prepared Phase 500 final design documents for construction as well as provided construction administration services, both in-house and field.

The result was electrical improvements to each campground that provided reliability and safety to the electrical system.

PONTIAC LAKE RECREATION AREA SHOOTING RANGE IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Park Facilities

Project Location
Waterford Township, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Bruce Watkins, PE
Project Director
517-242-7882

Services Performed
As-Built Survey
Schematic Design
Final Design/Bidding Documents
Construction Administration

Estimated Construction Cost
$150,000

Service Budget
$35,000

Year Completed
2017

NFE Project No.
I997

NFE was selected by the Department of Technology, Management and Budget (DTMB)/Department of Natural Resources (DNR) to prepare schematic design documents, final design documents and construction administration for improvements to a shooting range facility located in Waterford Township. The existing facility was expanded to include a 10-station pistol range as well as ADA improvements, parking improvements, shed relocation and storm water management facilities. NFE verified and incorporated details for ricochet baffle, benches and structures. The project was completed in 2017, and the improvements helped to create a fully functional gun range.

QUANICASSEE RIVER BOATING ACCESS SITE IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Park Facilities

Project Location
Essexville, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Bruce Watkins
Project Director
517-242-7882

Services Performed
Surveying
Engineering Design
Construction Administration

Estimated Construction Cost
$150,000

Service Budget
$20,000

Year Completed
Construction on Hold

NFE Project No.
K084

The Quanicassee River Boating Access Site (BAS) is located near the mouth of the Quanicassee River where it discharges into Saginaw Bay. This is a popular launch site for fisherman and boaters. The site has a paved launch, 150 foot long seawall with railing, and parking. Boaters can head out to the Saginaw Bay or go inland to explore the Quanicassee River.

The Department of Technology, Management and Budget (DTMB) and Department of Natural Resources (DNR) contracted with NFE to provide design services to remediate the boat launch which included replacement of retaining walls, repair to setting sidewalks and platforms, remediation to existing parking lot, ADA improvements and other miscellaneous services.

Construction for the project was scheduled for 2020, but due to high water levels in the Great Lakes, the project has been put on temporary hold.

SLEEPY HOLLOW STATE PARK CAMPGROUND ELECTRICAL SYSTEM REPLACEMENT

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Electrical Distribution

Project Location
Laingsburg, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Gerald Gregorski
Project Director
517-241-4499

Services Performed
Land Surveying
Study and Evaluation
Site Plan Documents
Construction Documents
Construction Administration

Estimated Construction Cost
$650,000

Service Budget
$120,000

Year Completed
2020

NFE Project No.
I804

NFE was retained by the Department of Technology, Management and Budget (DTMB)/Department of Natural Resources (DNR) to perform a study and provide design and construction administration services for the replacement of Sleep Hollow State Park's campground electrical system. NFE teamed with J. A. Lombardo & Associates to assist in the overall design development process.

The Sleep Hollow campground contains 181 modern campsites, two toilet/shower buildings, sanitation lift station and a campground office. The original campground electrical services was installed in the 1980's, and had served its purpose and needed to be upgraded.

The following tasks were performed for this project: detailed infrastructure evaluation of electrical supply, reviewed proposed programming and system requirements, developed a Phase 100 study report with detailed recommendations and cost estimates, prepared Phase 400 preliminary design documents, and prepared Phase 500 final design documents for construction as well as provided construction administration services, both in-house and field.

The result was a reliable and safe electrical system for the campground.

STATEWIDE STATE PARKS UTILITY STUDY AND IMPLEMENTATION

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Utility Infrastructure

Project Location
Eight Locations in Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Gerald Gregorski, PE
Project Director
517-241-4499

Services Performed
Surveying
Schematic and Final Design
Construction Administration

Estimated Construction Cost
$4,100,000

Service Budget
$480,000

Year Completed
2016

NFE Project No.
H603

NFE was retained by the Department of Technology, Management and Budget (DTMB)/Michigan Department of Natural Resources (DNR) to conduct a comprehensive study, design evaluation and construction implementation of below ground sewer and water systems at the following eight state parks:

- Burt Lake State Park
- Petosky State Park
- Mitchell State Park
- Seven Lakes State Park
- Otsego Lake State Park
- Ionia State Park
- Pontiac Lake State Recreation Area
- Hayes State Park

The overall goal of the Statewide Utility Study and Implementation project was to evaluate each park's existing ground water and sewer infrastructure; make recommendations for short-term and long-term solutions; provide preliminary layouts and cost for proposed upgrades, repairs and improvements; and finally implement the construction portion of the proposal. Specifically, NFE focused on water wells, water distribution systems, sanitary systems, lagoons, septic systems, barrier-free access and site drainage.

Each park project was successfully completed within, or under, budget and schedule.

TRAVERSE CITY STATE PARK CAMPGROUND ELECTRICAL SYSTEM REPLACEMENT

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Electrical Distribution

Project Location
Traverse City, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Gerald Gregorski
Project Director
517-241-4499

Services Performed
Land Surveying
Study and Evaluation
Site Plan Documents
Construction Documents
Construction Administration

Estimated Construction Cost
$1,500,000

Service Budget
$87,000

Year Completed
2020

NFE Project No.
I802

NFE was retained by the Department of Technology, Management and Budget (DTMB)/Department of Natural Resources (DNR) to perform a study and provide design and construction administration services for the replacement of Traverse City State Park's campground electrical system. NFE teamed with J. A. Lombardo & Associates to assist in the overall design development process.

The Traverse City campground contains 349 modern campsites, cottage, two mini cabins, tepee, youth organizational site, three toilet/shower buildings, sanitation station, and a campground office. The original campground electrical services was installed in the 1980's, and had served its purpose and needed to be upgraded.

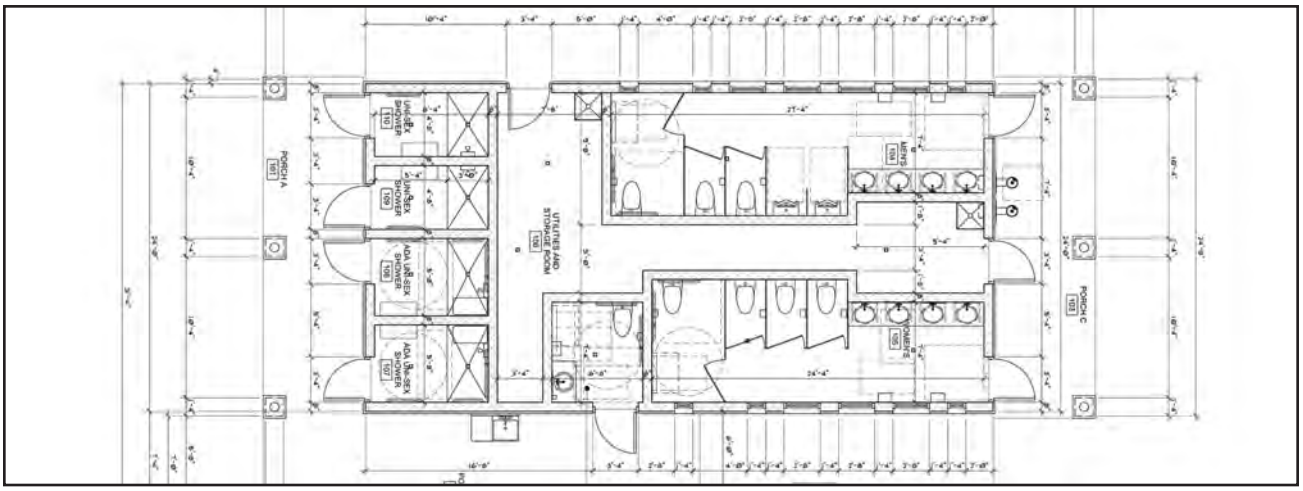
The following tasks were performed for this project: detailed infrastructure evaluation of electrical supply, reviewed proposed programming and system requirements, developed a Phase 100 study report with detailed recommendations and cost estimates, prepared Phase 400 preliminary design documents, and prepared Phase 500 final design documents for construction as well as provided construction administration services, both in-house and field.

The result was an updated electrical system for the campground and its supporting buildings that was reliable and safe.

WILSON STATE PARK TOILET/SHOWER BUILDINGS IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS



Project Type
Park Facilities

Project Location
Harrison, Michigan

Owner
State of Michigan
- Department of Technology, Management and Budget
- Department of Natural Resources

Contact
Bruce Watkins
Project Director
517-242-7882

Services Performed
Topographic Survey
Site Engineering Design
Archeological Investigation
Construction Documents
Construction Administration

Estimated Construction Cost
$1,600,000

Service Budget
$175,000

Year Completed
2019

NFE Project No.
K502

Wilson State Park is a 36-acre facility situated on the north end of Budd Lake in Harrison, Michigan. The area is mostly wooded with a sandy beach area. The park contained two toilet/shower buildings that were outdated and needed to be replaced. DTMB/DNR contracted with NFE for designs to replace the two toilet/shower buildings.

NFE subcontracted with TDG Architects to provide architectural designs for the new buildings. NFE provided engineering plans for all paving, sidewalks, drainage structures and utilities to accommodate the two new buildings, along with storm water management facilities. Plans also included demolition of the existing buildings and ADA accessibility.

The park is designated as historic so all work outside of five feet of each new building footprint needed to be reviewed by the DNR Stewardship Section. To aid in this requirement, NFE partnered with an archaeological sub-consultant to review and perform an on-site dig, to review for historical remnants.

NFE also performed construction administration services for both office and field work. The NFE team is proud to have developed state-of-the-art facilities that meet the current recreational needs of today's users.

WOODLAND CENTER CORRECTIONAL FACILITY ROADWAY/PARKING AREA IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Roads and Parking Lots

Project Location
Whitmore Lake, Michigan

Owner
State of Michigan
- Department of Technology Management and Budget
- Michigan Department of Corrections

Contact
Susan Wheaton, RA, Project Director
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Services Performed
Surveying
Site Plan
Construction Documents
Construction Administration

Estimated Construction Cost
$2,600,000

Service Budget
$125,000

Year Completed
2019

NFE Project No.
K648

The facility was original built to house juvenile inmates and known as the Maxey School for Boys. In 2015, the school was closed and taken over by Michigan Department of Corrections (MDOC) to house the Inpatient Mental Health and Crisis Stabilization Program and was renamed the Woodland Center Correctional Facility. Parts of the approach drives, parking lots, walkways and security roadways were in poor condition and needed improvements.

The Department of Technology, Management and Budget (DTMB)/MDOC contracted with NFE to provide full design and construction administration services for improvements to roadways, walkways and parking lots as well as expand parking at multiple locations. NFE provided study, preliminary design, final design, and both office and field construction administration services for the project. Engineering design included associated ADA access improvements.

NFE worked with both the contractor and MDOC staff to provide for the continued security that is necessary for a prison setting.

REPRESENTATIVE PROJECT DESCRIPTION OF SERVICES

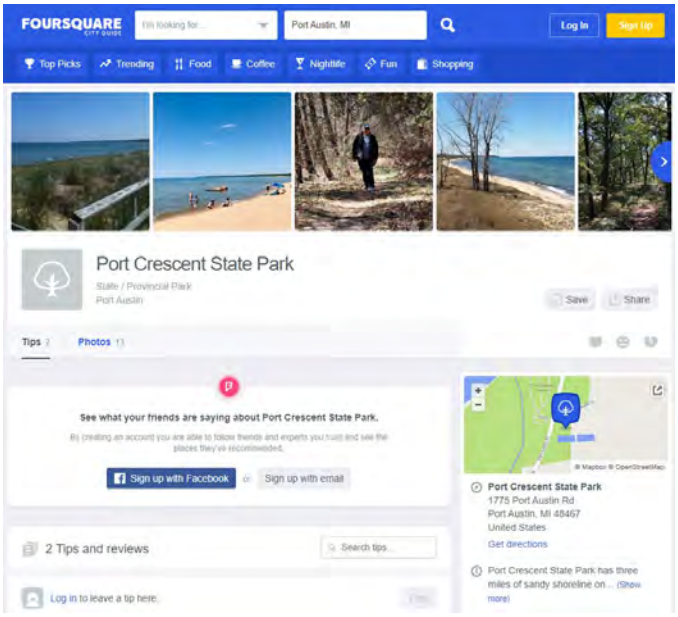
The following information is selected to give the reviewer a representative sample of NFE's descriptions of services for a typical DTMB project. The description of service is very detailed and leads to action items that will carry over to the proposed work plan so that specific dates can be identified. We believe this sample description of service is all encompassing as it relates to a typical DTMB assignment. Also, this description of service will be modified and edited to a specific project assignment as required by the DTMB.

UNDERSTANDING OF PROJECT AND TASKS

(Excerpt from Port Crescent State Park)

The NFE team understands that the Department of Natural Resources (DNR) is responsible for maintaining the existing campground and Day Use area within the Port Crescent State Park (PCSP) located just outside of the town of Port Austin on the tip of Michigan's "thumb". PCSP has three miles of sandy Lake Huron shoreline that creates a family friendly environment for those who want to escape the lights and noise of the city. The park is home of a dark sky preserve, a modern campground with waterfront views and a camper cabin. It also offers 5 miles of hiking and cross-country trail, breathtaking sunsets and opportunities for fishing, canoeing, birding, and hunting.

The park is developed on 640 acres of land and features 147 modern camp sites including 8 cabins and 2 dome sites. Surfing social media concerning PCSP concludes that camping at this park is highly desirable due to the family friendly environment and sandy beach.



Social Media Post from Foursquare

At this time, it is contemplated that a Professional Service Consultant (PSC) will prepare Phase 300 (Schematic Design) and Phase 500 (Final Design) documents for the rehabilitation of various systems of park infrastructure including paving systems, electrical system, sanitary system, and water distribution system. Additionally, the day use bath house and parking lots/roads will also be renovated along with the water and sewer service to the bath house. It is understood that required construction administration services for Phase 600 (Office) and 700 (Field) will be quoted after the design of the project is complete.

Addendum No. 1 clarified that: the scope of the work was to include Phase 300 and Phase 500 only and that existing abandoned electrical pedestals are to be removed as a part of the scope of work.

Addendum No. 2 clarified that: the State desires the sanitary sewer lines to be televised, surveyed and added to the base maps.

DETAILED SCOPE OF WORK

At this time, DTMB/DNR is seeking proposals from qualified candidates to provide Schematic Design (Phase 300), as needed, and Final Plans and Specifications (Phase 500). Below is a list of scope items that were discovered during the mandatory walk through:

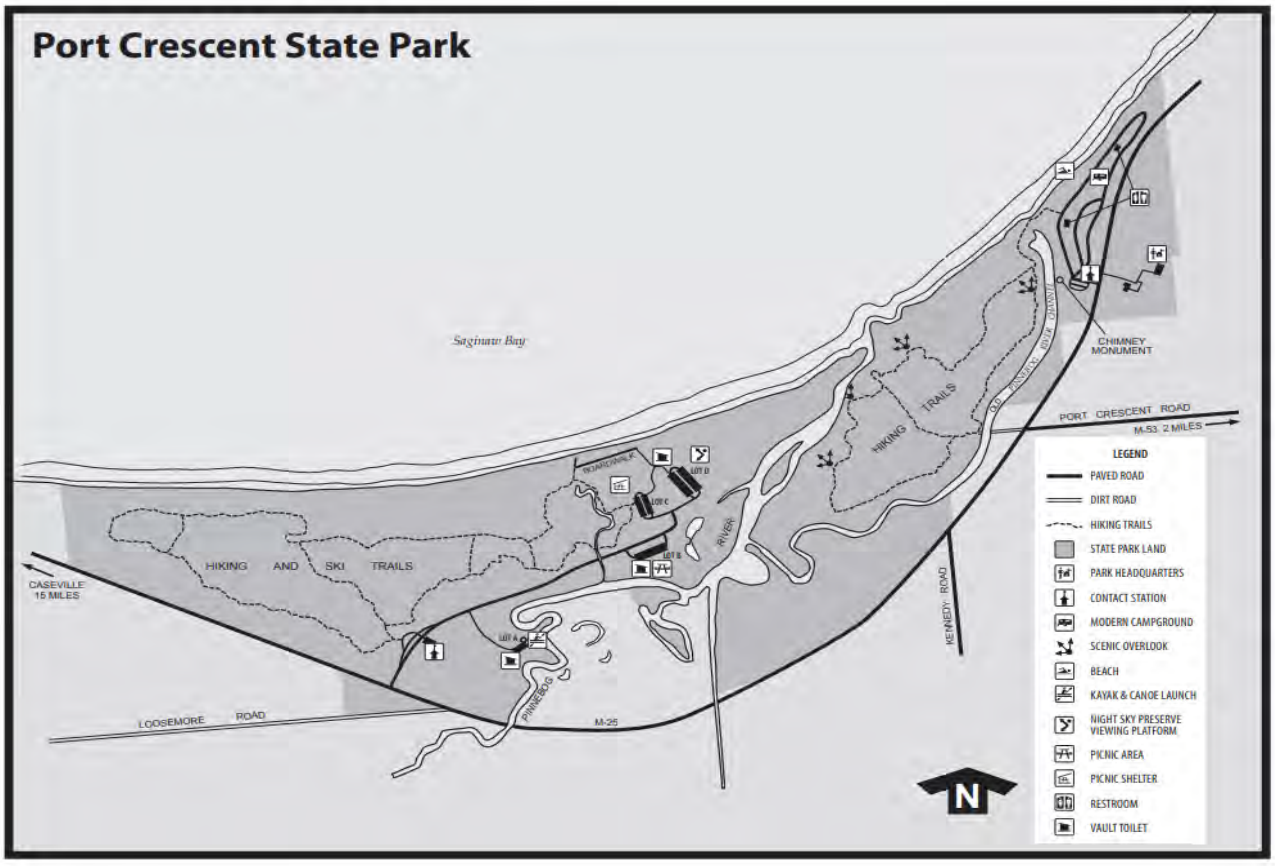
- Contact Station: There is a problem in the park with sand accumulating on the contact station pavement. This required routine maintenance and it is desired that a solution be implemented to mitigate sand accumulation.
- Entry Stacking: Due to the proximity of the contact station in relation to M-25, there is insufficient stacking during peak use periods of the park. Generally, vehicles/campers are required to stage on M-25 before they gain entry into the park. It is desired that geometric changes be made to accommodate additional staging/stacking to mitigate this issue.

- Sanitary Sewer Dump Station: The sanitary sewer dump station does not have the capacity to handle the park's needs during peak use season. It is requested that the geometrics of the sanitation station be modified to include an additional lane for sanitary dump and water fill.
- Existing Water Infrastructure: The extents of the existing water infrastructure are not entirely known. It is understood that there are multiple wells on site, and they are all turned on during the camping season without a detailed understanding of how the system operates. It is desired that water infrastructure be mapped out and a condition assessment be made of the system for possible upgrades and improvements. Also, it was requested that a foot washing station be installed at an appropriate location to mitigate sand in the sanitary sewer system. Lastly, it is requested that the water distribution system together with all jug fillers be replaced with a new system that is ADA compliant.
- Existing Sanitary Infrastructure: There are two sanitary sewer lift stations that exist on site. The controls for station 1 are antiquated and need of rehabilitation. Additionally, it is understood that the lift stations regularly have to be maintained for sand in the system. It is not entirely know if the sand is from use or if there is a problem in the existing pipe system. It is requested that the sanitary system be mapped out, televised, a condition assessment done, and recommended repairs be implemented.
- Campground Electrical: the campground electrical system is at the end of its life expectancy and needs replacement. The electrical system shall be evaluated for loading and possibly service improvements and a new system shall be implemented to brings the campground into compliance with existing codes. Also, 50 ampere sites shall be constructed in accordance with code requirements.
- Exiting Campground Buildings: existing buildings shall be serviced with new water, sewer and electrical service. Paving around existing structures will evaluated for ADA compliance and required ADA improvements will be implemented. No modifications to existing toilet shower buildings are a part of the project scope of work.
- Drainage: There is an exiting culvert under M-25 that extends from the road towards Lake Huron. There is no specific information as to the location of this culvert and it is a part of this project to locate, provide a condition assessment and design appropriate modifications to this system. Other site grading and drainage will be evaluated as a part of the overall paving improvements for the site. Address overall runoff concerns within the campground proper.
- Retaining Wall: There is an existing retaining wall that is requested to be evaluated for replacement. The existing wall if nearing the end of its life expectancy and is leaning. Geotechnical investigation, design recommendations and design implementation is needed for this element of work.
- Campground Roads: it is desired that all campground roads be evaluated for condition and a pavement rehabilitation program be implemented. Also, the campground shall be evaluated for ADA compliance and be brought up to code for ADA compliance. Consideration should be given to paving existing campsites.
- Day Use Beach House: this structure is in poor condition and in need of rehabilitation and/or replacement. The structure is serviced by an existing septic field and the plumbing within the structure does not work.
- Day Use Roads: There is a roughly 1200-foot-long portion of the day use road that was relocated due to river erosion. This relocated portion of the road needs to be paved consistent with other roadway infrastructure within the park. No other paved infrastructure within the day use area is proposed to be replaced/repaved.
- Additional meetings should be anticipated to address some of the conceptual elements of the park such as entry off of M-25 and water system requirements.
- Anticipate kickoff meeting on August 31, 2022

The following is an overview of each required component of the project along with specific project action items that address concerns and/or requirements.

SCHEMATIC DESIGN PHASE 300

Our team will complete all tasks required under Phase 300 (Schematic Design) services as defined in the General Services Contract for all site and building components. The Schematic Design phase will focus on Schematic design concepts (or combination of elements) to complete a schematic design for the park campground and day use paving, sewer, water, and electrical improvements. All critical elements of the project will be expanded in context and detail to provide DTMB/DNR a sound understanding of project design elements. During this phase of work, the design team will calculate expected electrical loads, review expected water consumption, determine a sanitary sewer basis of design, review existing water well capacities, perform a pavement evaluation and condition analysis, and prepare basic engineering design. Below is a highlight of specific project elements that will be addressed as a part of the Schematic Design phase of work.



REDEVELOPMENT GOALS/PROJECT INITIATION

Design assistance has been requested by the DNR Parks and Recreation Division (PRD) to look at specific design development requirements and objectives. We have assembled a team of highly qualified professionals to perform the requested tasks outlined in the RFP. Our project team can creatively think out of the box while understanding the realities and inherent intricacies of implementation. Our goal is to assist

the DNR-PRD with developing a state-of-the-art 21st century campground that meets the current recreational and camping demands of today's users, keeping in mind costs associates with such facilities and budgetary constraints. We will also focus our study, design and planning efforts around current campground sustainability and low impact development (LID) initiatives being practiced throughout the country.

Action Items – Project Initiation:

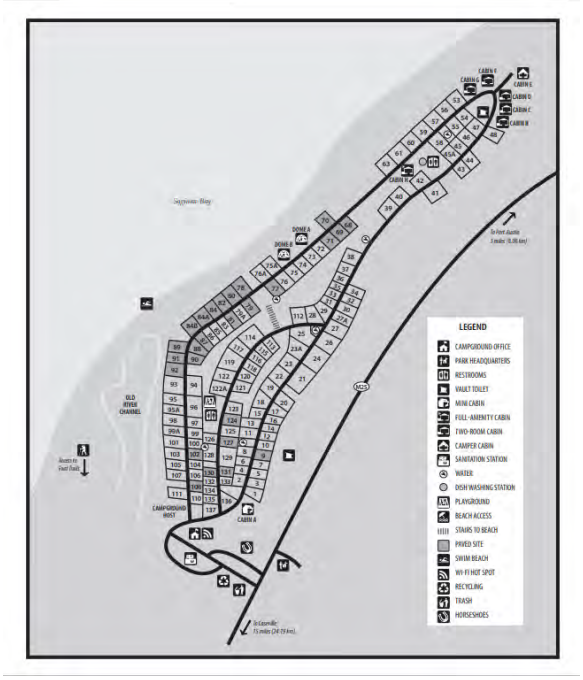
- *Key project team members to attend a kick-off meeting with Client representatives and stakeholders.*
- *Obtain available background information from Client.*
- *Review development goals and project timelines.*
- *Comprehensive site review/photo analysis with team members.*

EXISTING CONDITIONS DETAILED ANALYSIS

The development of this project relies upon the development and analysis of the existing conditions within the campground and day use areas together with surrounding areas within the park. Our findings through this process shall be integrated into detailed inventory, analysis exhibits and formal reports. Our team places great emphasis on this phase of work as it will be the foundation to guide the design team through the design development process. Having an in-depth understand of the site and the existing conditions is critical for crafting and testing design alternatives. Our analysis approach will consider all information as requested in the RFP as well as other factors we feel are necessary and pertinent.

Site Specific Research

The NFE team will perform research of existing records available from DTMB, DNR, and other jurisdictions and obtained existing records that were available regarding the existing site improvements and/or conditions. Our analysis and design shall review the proposed improvements from a historical perspective as there may be issues that should be addressed as a part of the overall design.



Action Items – Research:

- *Review historical maps and aerial photographs to ascertain how campground/day use design may be impacted based on historical improvements at the park.*
- *Obtain testimony from user groups and the DNR staff, as required, to identify any specific items of concern that should be addressed as a part of the design process.*
- *Gather water distribution system data including size, depth, location, proximity to existing facilities, proximity to environmentally sensitive areas, pump data, pump run times, etc.*
- *Other: TBD.*

Electrical Infrastructure Evaluation

Photo represents an aged electrical system at the end of its useful life and required replacement

The Project Team Coordination meeting will review electrical content for the project to ensure scope is defined and understood by all and no items are omitted. At this time, the project team and site personnel will identify historical problems and maintenance issues experienced so they may be incorporated in the project.

Electrical research will be performed in two phases, physical on-site investigation of campground/day use equipment and off-site analysis of additional power consumption, and exploration for proposed materials and methods to achieve project requirements. On-site research will evaluate location and condition of existing park equipment, conductor and transformer sizes and available utility company service points. The power source for each of the existing structures will be confirmed and documented for design load calculations. Off-site activities will include cost and power consumption analysis of 50 ampere site hookups, research of equipment capabilities and options, as well as code compliance will be performed at the engineer's office.

The electrical system analysis will focus on power capacity and availability, existing equipment and system conditions, effective power distribution and possible enhancements. Current and proposed electrical loads will be documented to determine the existing system load and capacity, or if additional power is required. All load calculations and electrical distribution design shall follow the National Electrical Code Article 551 – Recreational Vehicles and Recreational Vehicle Parks.

We will evaluate the data gathered from field research and determine if existing equipment can be utilized or must be replaced. Economical and efficient options or methods to energize electric hookups and buildings will be investigated during the system analysis. A separate evaluation will be performed for 50 ampere campsite connections. The evaluation will compare installation and power consumption costs along with campsite fees for different 50 ampere site quantities.

The NFE team will identify any issues or problem implementing the scope of work for PCSP. The information obtained from electrical research and analysis of data will identify what modifications or enhancements are required for the electrical service and distribution at the campground. Additional recommendations for enhancing the campground experience or energy conservation will be included for discussion. Information from the 50-ampere campsite analysis will be used to determine the exact number of sites for the optimal design. The NFE team will provide options and a recommendation for the electrical utility upgrade at PCSP.

Action Items – Electrical:

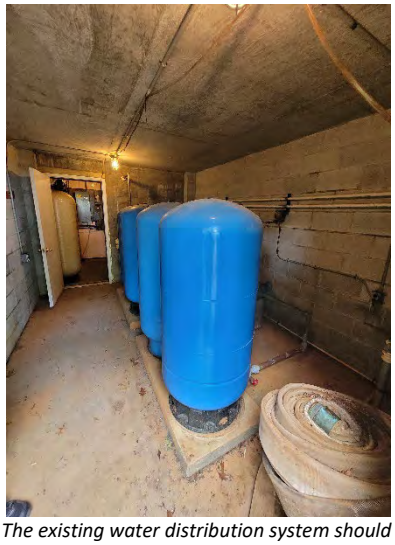
- *Identify electrical capacity and condition for two metered panel boards at campground.*
- *Initiate contact with electric utility company.*
- *Document electrical equipment and loads at buildings/pump stations.*
- *Perform electrical load calculations to determine current and proposed site load.*
- *Perform cost analysis for various quantities of 50 ampere campsites.*
- *Develop conceptual electrical distribution system options.*
- *Prepare conceptual electrical opinion of construction cost.*
- *Provide recommended solution for project scope of work.*

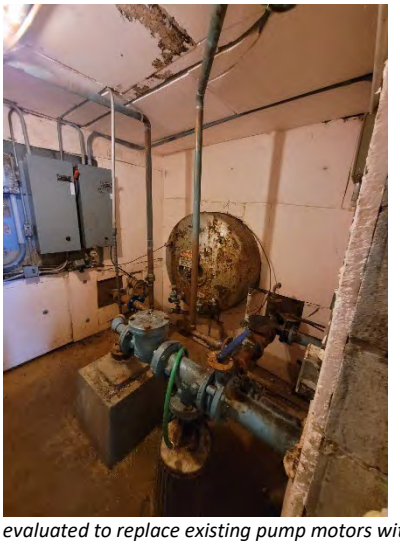
Water System Infrastructure Evaluation

The NFE team will perform research of existing records available from MDEQ, County Health Departments and other jurisdictions to obtain any existing records that may be available regarding the existing well and/or water systems. Specifically, NFE will obtain the existing well logs to determine depth of the existing well, initial testing results for flow and capacity, original system design parameters, and any ongoing testing for water quality results. This data will be utilized for comparison to current well conditions to determine the long-term viability of the existing wells. Any significant deviation from historical testing values will be noted and reviewed in a detailed analysis.

This existing jug filler is not ADA compliant and required replacement to meet ADA requirements

Additionally, existing wells will be reviewed by a qualified well driller to determine expected flow rates and capacity of the existing system. These variables will be reviewed in conjunction with preliminary water consumption and usage calculations for system sizing to assure there is adequate capacity within the existing system to service the two campgrounds.





The existing water distribution system should be evaluated to replace existing pump motors with a VFD system to accommodate better system pressures and water reliability. Additionally, wells should be evaluated for new controls that will bring efficiencies to the water system.

As a part of Phase 300, NFE will have a qualified well driller conduct draw down test for existing wells to provide the necessary design information for the new system. In addition, water samples will be obtained and tested for turbidity, water hardness, and other water quality related concerns in accordance with County and State Health Department guidelines. The NFE team will evaluate existing water system distribution infrastructure and maintenance records to determine anticipated system design requirements. Of specific note will be to develop an understanding of how the various wells work in conjunction with the water distribution system. Opinions will be developed on how a reconfigured/reimagined system may function better for the park. All findings will be documented in the Phase 300 – Schematic Design process.

Action Items – Potable Water Well System Research and Testing:

- *Perform research of existing MDEQ and health department records to obtain existing well logs and historical system testing results*
- *Perform flow/capacity tests of existing well systems*
- *Pull water samples and perform water quality tests on the existing well systems*
- *Perform preliminary water consumption and usage calculations for system sizing*
- *Prepare schematic layout for proposed water facilities*
- *Clearly define all recommendations and present to DTMB/DNR staff*
- *Coordinate with all stakeholders to incorporate all project related concerns into the completed report*
- *Prepare conceptual water system opinion of construction costs*

Sanitary Infrastructure Evaluation

The proposed sewer system has a significant amount of infrastructure supporting the overall collection and treatment system. Restroom facilities, sewer pipes, manholes, pump stations, force mains, sewer lagoon, sand infiltration basins, aeration system, effluent pumps, valving, etc. all support the overall infrastructure of the sewer system. A detailed analysis of existing infrastructure is important in understanding existing conditions, capacity of systems, and how the proposed facility will be used and/or modified under a redesigned/rehabilitated system. It is expected that pumps in station 1 will be replaced with pumps that can better manage grit within the system.

Action Items – Sanitary Infrastructure Evaluation:

- *Review existing pump stations and pump components to determine base line existing conditions. Determine extent of repairs necessary for an updated system*
- *Review existing pump system controls and make recommendations for improvement*
- *Review existing piped infrastructure (gravity line, force mains, etc.) and make determinations for replacement based on system age and lifecycle analysis*
- *Review suitability of soils to support the proposed improvements*
- *Review site and make opinions on method of sewer construction (directional drill, open cut, pipe burst, etc.)*
- *Prepare consumption and usage calculations for system sizing*

Paved Infrastructure Evaluation

The existing condition of the campground roads and day-use roads (1200 food section) are generally fair to poor. The existing pavement is at the end of its life expectancy and requires replacement. There was discussion about saving and/or rehabilitating the existing pavement, but based on our visual observation, we do not believe the pavement is worth saving. Instead, we expect that a pulverize and

shape together with some base condition would be more appropriate. Based on our preliminary investigation, we do not expect large expanses where there are poor base conditions. Rather, we fully expect the existing base and subgrade to support the proposed improvements. In areas where poor base or subbase conditions exist, it will be recommended to undercut these areas and replace them with new base and geogrid, as required. Additionally, there are areas where minor grading modifications will be recommended to promote better drainage within the paved systems.

As it relates to pavement slopes, generally there is good longitudinal and transverse drainage. Only minor improvements will be required in areas of low points to assure drainage is received by existing drainage facilities and does not stand on (or adjacent to) the pavement surface.

The existing day use road needs to be paved for approximately 1200 feet where the old road succumbed to river erosion

Action Items for understanding existing conditions:

- *Perform a walking analysis of the existing conditions whereby existing conditions and commentary are memorialized for future reference and work.*
- *Perform topographic survey of areas where detailed design is required obtaining critical existing conditions, and field locating expanses of failure areas.*
- *Field locate and identify all proposed repair areas.*
- *Based on preliminary findings, prepare a preliminary cost estimate for anticipated work.*

Site Drainage

Drainage from M-25 is conveyed through a earth ditch/swale and discharges into the campground

The site has multiple locations where drainage and/or soil erosion is a significant concern. The paving/repaving of roadway infrastructure will add to the concerns as a hard edge provides a source for erosion to become accelerated. Additionally, increases in impervious area will also contribute to the amount of runoff generated from the site. Where there are locations that are evident that drainage problems exist, NFE will appropriately address drainage routes and make recommendations for corrective action. Of specific note is the culvert that extends from M-25. This culvert needs to be mapped out and a condition assessment conducted where recommendations for replacement and/or rehabilitation can be addressed.

NFE expects that a variable range of drainage devices may be required to adequately address drainage concerns throughout the roadway system. Specifically, culverts will be strategically located, drainage swales and/or spillways may be implemented, and roads will be re-profiled to adequately address overall site drainage. Facilities will be appropriately sized in accordance with best practices.

Action Items – Site Drainage:

- *Perform drainage analysis of the proposed roadway and parking lot system to identify areas of concern.*
- *Design corrective measures into the proposed plans and specifications.*

Non-Conforming Parking Areas/ADA Issues

In review of the project area, it is noted that portions of the site do not conform to ADA standards. There is a specific concern relative to pavement slopes in proximity to accessible parking spaces together with a lack of lawful signage. It is believed that these parking spaces may not be compliant with respect to pavement slopes. In addition, many of the sidewalk ramps for the site are not ADA compliant. ADA compliance issues must be resolved as a part of this project and corrective action must be taken to address these deficiencies.

NFE believes that with some alternate construction techniques, sidewalk reconfiguration, re-grading of deficient areas, and grading improvements, the deficient areas can be addressed. Once the topographic survey is prepared, deficient areas will be identified and brought to DTMB's attention with a recommendation for corrective action. As it relates to ADA compliance, it will be required to identify all accessible routes to facilities and ADA modifications shall be made to assure ADA code compliance is addressed. Specifically, NFE will identify on the paving and grading plan all ADA compliant parking spaces together with accessible routes into the facilities. All existing accessible routes will be surveyed and verified for compliance with existing codes. Corrective measures will be recommended and/or implemented as a part of the design. Some specific design elements to consider assuring code compliance are:

- Detectable warning domes with an appropriate color contrast constructed at the proper locations and dimensions for all sidewalk ramps.
- ¼-inch maximum lip at curbed transitions for ramps.
- 6-inch maximum rise in 6 feet for curbed ramps.
- 5% maximum running slope with special consideration of how transverse slope affects the running slope and calculation of the diagonal slope.
- 42-inch clear width requirements for accessible routes which impacts placement of landscape amenities furniture and other accessories.

Action Items for understanding ADA issues:

- *Identify accessible routes within the parking facility.*
- *Perform an ADA compliance audit to identify all ADA non-compliance issues and memorialize findings within a written report.*

Surveying Processes and Procedures

As it relates to the overall survey plan for this project, it is important to complete a topographic survey of the entire project area to serve as a base drawing for the required site planning and detailed design documents. We understand that most paved infrastructure within the park requires a condition assessment and possibly replacement. We expect that a full survey of the paved infrastructure will be required to locate and record existing site improvements/electrical pedestals, campsite pads, sanitary system elements and water system elements. Additionally, there are sites that will be improved to address ADA compliance. According to State/Federal requirements, five percent of the campsites (or eight campsites) will be required to be ADA compliant. These sites will be identified with the assistance of park staff and surveyed to facilitate the design of these modified facilities.

Once all features are clearly demarked in the field, surveying will be completed to locate all topographic features within the existing campground and a comprehensive topographic survey will be prepared of all areas within the project limits. Specifically, surveying data secured as a part of this project will be used for detailed design services by the design team and will include sufficient data to support determination of ADA compliance where applicable. In addition, it is recommended that FGDC compliant Metadata be procured for all permanent geospatial datasets produced under this project. All work will be prepared within the Michigan State Plane Coordinate system under the NAD 1983 datum.

Survey control for this project will come from elevations previously established for other permanent improvements within the park or based on CORS Station variables where existing reference systems are not available. We will establish a benchmark system for use in future projects as a part of this contract in conjunction with obtaining the existing conditions survey of the development areas. To achieve the desired results, it will be required to utilize state-of-the-art RTK GPS equipment. A permanent coordinate system shall be established within the project limits for purposes of perpetuating the design through the construction process.

Action Items – Surveying:

- *Research and recover existing benchmark reference system.*
- *Prepare detailed survey plan which includes ADA review of existing facilities.*
- *Establish new site benchmarks for use by contractor, and for future projects in NAVD 88 Datum.*
- *Establish ground control and elevation reference system utilizing state-of-the-art RTK GPS procedures and by establishing connection to the Michigan Department of Transportation CORS reference system.*
- *Perform required mapping of existing campground and associated areas.*
- *Post process all collected data utilizing GPS Least Squares Adjustment software.*
- *Prepare tree condition assessment and recommendations.*
- *Memorialize all survey data and measurements into a completed topographic survey.*

Geotechnical Investigation

As a part of the walking analysis identified above, a geotechnical/pavement engineer will perform a visual survey of the pavement to better define the areas of distress and determine the best locations to perform soil borings and pavement cores. The previous development at the site will also be considered in determining sampling locations. We propose a combination of pavement cores, and five-foot-deep soil borings in areas of existing pavement. It is estimated that twenty borings and pavement cores will be required in this classification. In areas where there is no existing pavement, we proposed 10-foot-deep borings. This includes the day use road area. In these areas, we expect an additional 12 soil borings to be completed for the purposes of designing the various utility systems.

The NFE team will then collaborate regarding the findings and SAS will document the analysis in a report of the recommended geotechnical design parameters and pavement reconstruction including:

- Evaluation of existing pavement and base thicknesses.
- Stabilization requirements for subgrade materials.
- Recommended pavement types and thicknesses.
- Evaluation of ground water conditions and its effect on construction and the design of the parking lot and roadways.
- Parameters affecting site grading and drainage.
- Parameters for excavation slope design.
- Geotechnical factors affecting construction of the project.
- Gradation analysis of existing soils and base proposed to be incorporated into the project.

Action Items for geotechnical investigation:

- *Perform condition survey and identify boring and core locations.*
- *Obtain MISS DIG clearance, mobilize and perform subsurface exploration.*
- *Perform a laboratory investigation to determine the strength, compressibility and physical characteristics of the soils encountered and analyze the results of the field and laboratory investigation.*
- *Provide recommendations for utility system construction*
- *Memorialize all findings and recommendations in a written report.*

SCHEMATIC ELECTRICAL DESIGN

The Schematic Electrical Design will be based on selected analysis and preliminary recommendations. We will contact the local utility company to notify them of our project and any potential changes to the utility electrical services. During this phase, we will create electrical drawings and perform detailed load calculations and preliminary conductor sizes for feeders. At this point, electrical demolition and distribution plans will show location of major pieces of equipment and electrical services, as well as proposed campsite hookup. New electrical services or increased capacity at existing panel boards will be addressed during this phase. Surge protection devices will be installed at each service entrance for protection against voltage transients. Detailed electrical load calculations will be performed to determine the quantity of campsite hookups per circuit and the total panel board/electrical service load.

Any utility conflicts will be identified and addressed by the design team during this phase.

Action Items – Electrical Schematic Design:

- *Identify preliminary quantity of electrical drawings required for the project.*
- *Contact utility company service planner to coordinate service modifications.*
- *Develop load tabulation for each electrical service and panel board.*
- *Identify preliminary size feeder conductors to new campsite hookups.*
- *Create the following electrical drawings:*
  - *One-line diagrams for campground distribution system*
  - *Electrical demolition plan*
  - *Electrical distribution plan*
  - *Electrical details*

SCHEMATIC WATER SYSTEM DESIGN

The Schematic Water System Design will be based on selected analysis and preliminary recommendations. We will work with Huron County and MDNR to understand how the existing system operates and determine recommendations for improvements that provide both water quality and water reliability. Well controls will be reviewed in conjunction with providing a system that is "smart" and that can accommodate ease of maintenance. Where feasible, recommendations will be made to connect water wells through piping and controls to address water redundancy and better pressures within the system. We will work with Huron County and EGLE to address proper permitting and overall system functionality.

As it relates to water system layout, NFE will work with MDNR staff to identify jug filler locations and develop an overall efficient pipe network layout. Jug fillers will be relocated from existing positions to better accommodate accessibility by campers. Dead end lines will be eliminated in favor of a looped system that provides better water quality and ease of maintenance.

The well house will be reviewed for overall system design and recommendations for better controls and system alerts will be implemented. If feasible and appropriate, wells will be reviewed for Variable Frequency Drive (VFD) pump systems that will eliminate the need for pressure tanks and the constant maintenance associated with this system. VFD pumps that can communicated based on pressure within various zones of the system should be desirable and implemented.

Action Items – Water System Schematic Design:

- *Work with Health Department and EGLE to develop a schematic design that provides ease of maintenance together with better water quality and water reliability*
- *Prepare layout for new system controls and VFD pumps that communicate bringing better system efficiencies*
- *Prepare efficient layout of underground pipe network distribution lines and jug filler locations*
- *Prepare overall water system usage calculations and ascertain that existing well systems have adequate capacity to deliver clean water through the water distribution system*
- *Identify optimal location for foot washing / outdoor shower station*
- *Provide for water system improvements at sanitation dump station and for an expanded system*
- *Prepare preliminary cost estimate for presentation*

SCHEMATIC SANITARY SYSTEM DESIGN

The Schematic Sanitary Design will be based on selected analysis and preliminary recommendations. We will work with MDNR and EGLE to understand how the existing system operates and determine recommendations for improvements for pump station 1. The overall system will be evaluated for capacity and recommendations will be determined for underground piping replacement based on the existing condition analysis.

NFE will work with pump manufactures to develop a system that meets the park's requirements for sewage pumping while also considering similar systems within the MDNR's overall park system to accommodate ease of maintenance for common facilities. NFE will prepare a system basis of design that will be needed for project permitting and to assure new systems are appropriately sized for capacity. Electrical service will be reviewed and upgraded as appropriate.

Action Items – Sanitary System Schematic Design:

- *Work with MDNR and EGLE to develop a schematic design that provides ease of maintenance and system reliability*
- *Work with pump suppliers to prepare layout for new system controls*
- *Prepare efficient layout of underground pipe network*
- *Prepare overall sanitary sewer basis of design and ascertain that existing pump station 2 has adequate capacity to address improvements to upstream system*
- *Provide for an expanded sanitary dump station and associated calculation*
- *Prepare preliminary cost estimate for presentation*

SCHEMATIC PAVEMENT AND DRAINAGE SYSTEM DESIGN

The Schematic Pavement & Drainage Design will be based on selected analysis and preliminary recommendations. We will work with MDNR and EGLE to develop an overall pavement and drainage system design that respects environmental features of the site while increasing the overall camper experience. It is expected that existing paved infrastructure within the campground will be pulverized in place and reshaped to provide necessary enhancements in overall site drainage and park use.

As it related to the visitor entry experience, NFE will prepare multiple schematic options for corrective action to address peak park use season and the staging of campers within the M-25 right-of-way. Elements that will be considered include an entry drive relocation, expanded paved shoulders on M-25 and relocation of the contact station. A pro-con list will be developed together with conceptual cost estimates to better position the project team in deciding on how best to proceed with entry solutions. Where appropriate, NFE will design modifications to the campground drainage system to create a well-drained park and to mitigate any scenarios where campsites are not available for camping after a storm event.

As it relates to other park infrastructure, NFE will prepare recommendation and schematic design for retaining wall replacement, day-use road paving, ADA compliant access to campground and day use facilities, and other paving improvements as may be required.

Action Items – Pavement System Schematic Design:

- *Work with MDNR and EGLE to develop a schematic design that provides ease of maintenance and system reliability*
- *Prepare three (3) options to improve overall site entry and staging within M-25*
- *Provide better options for site drainage and storm water quality*
- *Review site to accommodate overall ADA compliant camp sites (8 required)*
- *Prepare efficient layout of new pavement systems*
- *Prepare preliminary cost estimate for presentation*

SCHEMATIC DESIGN – DAY USE BATH HOUSE

It is understood that the it is unknown of the existing bath house structure can be salvaged. Instead, the Phase 300 services under this element of work will be to perform a field investigation and/or visual assessment of the existing structure, prepare a "field measured" floor plan drawing of the exiting layout, photo document and take notes on the overall condition of the existing structure, and then prepare a written condition assessment report. The condition assessment report will contain photographs of existing conditions, drawings, findings and recommendations for rehabilitation.

As it is unknown if this structure will be rehabilitation or replaced, services for this scope item end at Phase 300. Once the report is published, a determination can be made by the DTMB/MDNR team as to how best to proceed and a modification will then be prepared for continued work in Phase 300/500.

Action Items – Day Use Bath House Schematic Design:

- *Perform site visit and document all existing conditions.*
- *Prepare written report documenting findings and recommendations for bath house renovation or replacement*

SCHEMATIC PLAN REFINEMENT/DETAILS AND COST ESTIMATES

Based upon overall findings and recommendations, prepare a Schematic design package, evaluation reports, and preliminary cost estimate for construction of all recommended improvements. Where appropriate, refine schematic designs for the various elements of work to develop a cohesive and comprehensive schematic design that meets DTMB/MDNR/EGLE/Huron County requirements for overall park improvements. A written recommendation of what baseline system replacements are required based upon current needs, including a cost estimate and estimated lifecycle costs, will be provided.

The written report will include a schematic design of the proposed systems. The team will meet to review the preliminary report and recommendations, and then a final report will be prepared incorporating any concerns expressed by the Client to assure all Client comments are addressed at this stage of the project. This plan will have a higher level of detail and illustrate all the proposed physical improvements of the various systems, along with a phasing strategy to accommodate development. Following a sign-off of the Schematic Plan by the Client at 50% completion of this phase of work, a detailed summary of the improvements will be prepared and become the basis for preparing a detailed estimate of probable construction costs/project budget. Additionally, various preliminary details, illustrations and other necessary material will be prepared to complete the project budget and projected lifecycle costs. All work shall be packaged in a summary report and a final presentation shall be given to the Client and invited stakeholders.

Action Items:

- *Develop 50% complete schematic design document for owner review which will include all pavement and utility systems*
- *Conduct Phase 300 50% complete meeting with owner (in person)*
- *Prepare 90% complete schematic design document together with draft written report, cost estimate and lifecycle analysis*
- *Submit 90% complete Schematic design package to owner for review*
- *Conduct Phase 300 90% complete meeting with owner (in person)*
- *Prepare final Schematic Design report/summary*

ADA COMPLIANCE/SITE IMPROVEMENTS

In review of the project area, it is noted that ADA compliance within the existing campground is substandard and does not meet current ADA guidelines. As a part of the proposed paving and utility work, it is required that all public infrastructure, structures, and amenities be accessible and that accessible campsites shall be provided. Considering that DTMB/DNR is investing heavily in this project, it is strongly advisable that all ADA issues are investigated, and corrective action is taken to address any deficiencies.

As it specifically relates to ADA compliance, it will be required to identify all accessible routes to proposed facilities and that ADA compliant designs shall be made to assure ADA code compliance is addressed. Specifically, all ADA compliance review will be done to assure the campground complies from an ADA standpoint. Corrective measures will be recommended and/or implemented as a part of the design. Additionally, design for other site improvements as outlined in the RFP will be addressed within the overall comprehensive design. As noted above, eight campsites (five percent) are required to be ADA campsites. This work is required as a part of this project. We note that there are multiple sites that can be converted to ADA compliant sites without significant cost or effort. We would also note that the camper cabins that have been installed are not ADA compliant. This should be reviewed for compliance as a part of this project. NFE will coordinate all ADA design efforts with the pending paving project contemplated at this park.

Action Items for Understanding Paving, Grading and ADA Issues:

- *Identify areas of concern with respect to ADA compliance for proposed facilities.*
- *Determine other ADA accessible opportunities, systems, and routes.*
- *Identify and design eight (8) ADA compliant campsites.*
- *Coordinate ADA design efforts with the road paving project*

EFFECTIVE COORDINATION

The NFE team understands that a spotlight will be cast upon this project, as it is a significant improvement for this park. We also understand that multiple individuals and user groups will have questions relative to the project development. We understand that a clear line of communication is important for a successful completion of this project. Additionally, we understand that the DNR/DTMB staff will be questioned from time to time with respect to the progress of the work and schedule of activities. Considering the above, our team will implement an effective communication plan that engages all stakeholders throughout the project development, and all project elements will be coordinated at all levels.

Action Items – Effective Coordination:

- *Effectively communicate with all stakeholders throughout the entire Schematic Design Development process*
- *Establish email contact list for email list serve distribution*

FINAL DESIGN PHASE 500

Our team will complete all tasks required under Phase 500 (Final Design) services as defined in the General Services Contract for all site and building components. The final design phase will effectively expand upon the Schematic design to complete one (1) set of contract bidding documents for the overall park improvements. All critical elements of the project will be expanded in context and detail to effectively communicate to all stakeholders and project bidders a thorough understanding of construction requirements. During this phase of work, the design team will prepare final specifications for all required electrical work and related items, prepare final construction plans for MEP and Civil systems, complete all QA/QC checks, complete all construction code reviews, apply for and procure all required construction permits, prepare final project cost estimate, prepare a construction schedule, assist DTMB/DNR with construction bidding, and perform all final design correction procedures. Below is a highlight of specific project elements that will be addressed as a part of the final design phase of work.

DESIGN AND PERMITTING

Prepare all necessary design and bidding documents following DMTB guidelines for project development building upon the design process completed to date. Prepare submittal documents for owner review at 50% complete and 90% complete. Both plans and specifications will be included on 50% complete documents. All documents shall be submitted for owner review at least two weeks prior to owner review meetings.

DTMB is an authorized agency under the Environmental Protection Act to administer the SESC program on behalf of State of Michigan projects. As such, plans and permit application shall be submitted to DTMB for the SESC permit. NFE will prepare all required plans and permit applications for that purpose. Additionally, since this project is within 500 feet of Lake Huron, the SESC plan shall also be submitted to EGLE for a NPDES permit (permit by rule).

This project may involve work within proximity to Lake Huron which may require a joint EGLE /ACE permit under Part 301/303 of Michigan Compiled Laws. Also, as this project involves modifications to the existing campground, a Campground Permit will be required from EGLE. Lastly, a DLARA code compliance review will also be required for this project.

Action Items:

- *Secure EGLE Part 301/303 permit (if required)*
- *Secure DLARA permit*
- *Secure DTMB SESC permit*
- *Secure EGLE NPDES permit*
- *Secure EGLE Campground permit*
- *Provide all required permit assistance as necessary to secure required approvals*

CONTRACT TIME, PHASING AND COST ESTIMATE

We understand that the priority of the Phase 300 and 500 analysis is to identify costs and priorities for implementation and/or project sequencing. As such, NFE will assist the owner in developing a project phasing strategy that addresses overall construction related issues while balancing the needs of the public. Strategies such as partial campground closures, full campground closures, construction outside of traditional camping season, etc. will all be considered in developing an overall construction sequencing strategy.

Action Items – Contract Time and Phasing:

- *Develop and document opinions associated with project phasing for consideration by park staff and DTMB*
- *Update electrical progress with engineering team. Estimate construction schedule based on electrical bid documents.*

PERMITTING

There will be multiple permits required as a part of this project including EGLE Campground Unit Permit and LARA Construction Code Review. We also understand that DTMB is an authorized agency under the Environmental Protection Act to administer the SESC program on behalf of State of Michigan projects. As such, plans and permit application shall be submitted to DTMB for the SESC permit. NFE will prepare all required plans and permit applications for that purpose. The NFE team is fully familiar with permit requirements for this project and will help the DNR and Port Crescent State Park campground staff navigate through these processes to secure the required permits.

Action Items – Permitting:

- *Submit to DTMB for required SESC permit.*
- *Submit and secure the EGLE Campground Unit permit.*
- *Provide all required permit assistance as necessary to secure required approvals.*

EFFECTIVE COMMUNICATION PLAN/COORDINATION

The NFE team understands that a spotlight will be cast upon this project as it is a significant improvement for this park. We also understand that multiple individuals and user groups will have questions relative to the project development. We understand that a clear line of communication is important to a successful completion of this project. Additionally, we understand that the DTMB/DNR staff will be questioned from time to time with respect to the progress of the work and schedule of activities. It will be very important to identify all logistical issues and adequately address them in the proposal documents.

In addition, NFE has successfully prepared specifications that effectively require the contractor to adequately coordinate their activities with stakeholders that are being impacted. In these cases, if the contractor does not perform in these elements of work, then there were substantial penalties built into the contract. For this project, it is highly advisable that daily briefings be implemented either by conference, or by electronic media to keep the DTMB/DNR staff appraised as to the progress of the work. Additionally, conferences can be held to address specific issues that may arise.

Action Items – Effective communication:

- *Effectively communicate with all stakeholders throughout the entire design development process.*
- *Establish email contact list for email distribution.*
- *Prepare specifications that require effective communication from the contractor.*

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

SECTION 2 - PERSONNEL

TEAM ORGANIZATION CHART

Rob Gruesbeck
DCD Project Director

MDOC
Rob Weems

NFE - TEAM LEADERSHIP

Jeffrey J. Huhta, PE, PS
Project Manager
Overall Point of Contact

PROJECT TEAM

SURVEYING/BASEMAPS
Jeff Huhta, PE, PS
Project Manager
Mark Owens, PS
Survey Crew Chief
(Additional Staff As Required)

DESIGN/ PARKING ANALYSIS
Jeff Huhta, PE, PS
Project Manager
Steve Sutton, PE, LSIT
Project Engineer
Petr Kotrba
Design Engineer
Mark Wilson
Design Engineer
Tim Wood
Design Engineer
(Additional Staff As Required)

LAND PLANNING/ LANDSCAPE DESIGN
George Ostrowski, LLA, LEED AP
Lead Landscape Architect

CONSTRUCTION ENGINEERING
Steve Sutton, PE, LSIT
Project Engineer
Jim Jenna
Senior Inspector

REVIEW/BUDGET/ SPECIFICATIONS
Jeff Huhta, PE, PS
Project Manager
Steve Sutton, PE, LSIT
Project Engineer

BUILDING ARCHITECTURE - LARGE &/OR COMPLEX ARCHITECTURE ASSIGNMENTS
HOBBS + BLACK ARCHITECTS
Martin H. Ruiter, AIA, LEED AP
Project Manager/ Architect
James E. Doby, PE
Structural Engineer
(Additional Staff As Required)

BUILDING INFRASTRUCTURE EVALUATION - SMALL ARCHITECTURE PROJECTS & REPAIRS
Derek Slupka, AIA
Architect
Brian O'Neill
Technician III
Kyle Morang
CAD Technician II
Allison Miller
CAD Technician I

LARGE AND/OR COMPLEX ARCHITECTURE PROJECTS
Sidock Group, Inc.
Bradley J. Butcher, AIA
Senior Projct Manager
Robert M. Roth, PE
Senior Project Manager
Timothy J. Miller, AIA
Architectural Project Leader
Gint A. Gaska, AIA
Project Manager - Architectural
(Additional Staff As Required)

ADDITIONAL PROJECT TEAM

GEOTECHNICAL/ ENVIRONMENTAL - METRO DETROIT MICHIGAN REGION
Carey Suhan, PE
Lead Geotechnical Engineer
Gary Putt, PE
Geotechnical Engineer

BIOLOGICAL ENGINEERING
ASTI Environmental
Dianne C. Martin
Director
Kyle A. Hottinger
Wetland Ecologist
Dana R. Knox
Wetland Ecologist
Jeremiah W. Roth
Wetland Ecologist, Arborist

NOISE/ ACOUSTICAL STUDIES
SIEBEIN ACOUSTIC
ARCHITECTURAL | ENVIRONMENTAL
Gary Siebein
Director

MECHANICAL ELECTRICAL & PLUMBING EVALUATION DESIGN
MATRIX CONSULTING ENGINEERS, INC.
Joseph F. Sovis, PE
Vice President

LAND PLANNING/ LANDSCAPE DESIGN
design studio LAND landscape architecture / land planning
"Defining community, lifestyle and place"
Tad Krear, LLA
Lead Landscape Architect
Charles Elias, LLA
Landscape Architect

TOILET SHOWER BUILDINGS
TDG Architects
Brian S. Gill, AIA NCARB
Principal
Ronald Clisby
Designer
Matthew Terenzi
Project Manager
Matthew Hoener
Project Architect
Chris Westerlund
Architectural Designer

GEOTECHNICAL/ ENVIRONMENTAL - WESTERN & NORTHERN MICHIGAN
SOILS & STRUCTURES
David Hohmeyer, PE
President
Chris Gates, PE
Structural Engineer
Kristofor Twining, PE
Structural Engineer
Malcolm Thompson, PE
Geotechnical Engineer
Michael Partenio, PE
Geotechnical Engineer

STRUCTURAL/ FOUNDATION DESIGN
JDH Structural Engineering
Keith Ritsema, PE
Principal
David Bendert, PE
Senior Engineer
Jonathan Vergunst
Project Engineer
Matthew Candela, EIT
Project Engineer

Jeffrey J. Huhta, PE, PS

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NF ENGINEERS

YEARS OF EXPERIENCE
Industry – 33
NFE – 33

TITLE
Managing Partner

PROJECT ROLE
Project Manager

EDUCATION
Bachelor of Science
Michigan Technological University, 1991
Civil Engineering

Extended University Program for Surveying
Michigan Technological University

LICENSES
Professional Engineer, State of Michigan, 1995

Professional Engineer, State of Ohio, 2009

Professional Surveyor, State of Michigan, 2005

Mr. Jeffrey Huhta is a Managing Partner at NFE with over 34 years of civil engineering and land surveying experience. Jeff joined NFE in 1989 while earning his Bachelor of Science degree in civil engineering from Michigan Technological University, and has held the positions of project engineer, project manager, vice president and principal. In 2015, Jeff was promoted to Managing Partner and Executive Committee member, overseeing the firm's practice, management, and daily operations with two other managing partners.

With both civil engineering and land surveying expertise, Jeff oversees the full project delivery process from conception through completion on behalf of clients and has also been influential in seeing that the firm's project delivery system operates in an efficient manner. He is responsible for NFE's QA/QC systems and policies and serves as a mentor to many of the young engineers on the NFE team.

In designing and managing a wide range of projects, Jeff has included sound value engineering principles that were in the best interest of clients. Together with his team, he has worked on public works projects exceeding $200 million in value as well as private land development projects exceeding $500 million in value.

PROJECT EXPERIENCE

Lead Consultant/Project Manager – State of Michigan – Department of Corrections

- DTMB, Central Michigan Correctional Facility Paving Improvements, St. Louis, Michigan
- DTMB, Woman's Huron Valley Correctional Facility Paving Improvements, Commerce, Michigan
- DTMB, Lakeland Correctional Facility Sanitary Improvements, Coldwater, Michigan
- DTMB, Lakeland Correctional Facility Water System Improvements, Coldwater, Michigan
- DTMB, Egeler Correctional Facility Paving Improvements, Jackson, Michigan
- DTMB, Ionia Correctional Facility Paving Improvements, Ionia, Michigan
- DTMB, Woodland Correctional Facility Paving Improvements, Northville, Michigan
- DTMB, Woodland Correctional Facility Water System Improvements, Northville, Michigan
- DTMB/DOC, Lakeland Correctional Facility Shooting Range Improvements, Coldwater, Michigan
- DTMB/DOC, McCoy Gun Range, Jackson, Michigan
- DTMB/DOC, Thumb Correctional Facility, Shooting Range Improvements, Lapeer, Michigan
- DTMB/DOC, Carson City CF, Paving Improvements, Carson City, Michigan

Lead Consultant/Project Manager – State of Michigan – Shooting Ranges

- DTMB/DNT, Echo Point Shooting Range, Allegan, Michigan
- DTMB/DNR, Lake Superior Sportsman Club Shooting Range, Ontonagon, Michigan
- DTMB/DNR, Marquette Shooting Range, Marquette, Michigan
- DTMB/DNR, Grand Travers Shooting Range, Grand Traverse, Michigan
- DTMB/DNR, Pontiac Lake Recreation Area, Waterford, Michigan
- DTMB/DNR, Sharonville Shooting Range, Sharonville, Michigan
- DTMB/DNR, Algonac Shooting Range, Algonac, Michigan
- DTMB/DNR, Lapeer Shooting Range, Lapeer, Michigan

- DTMB/DNR, Barry State Forest Game Area Shooting Range, Middleville, Michigan
- DTMB/DNR, Roscommon State Forest Shooting Range, Roscommon, Michigan
- DTMB/DOC, McCoy Gun Range, Jackson, Michigan
- DTMB/DOC, Thumb Correctional Facility, Shooting Range Improvements, Lapeer, Michigan
- DTMB/DOC, Lakeland Correctional Facility, Shooting Range Improvements, Coldwater, Michigan

Lead Consultant/Project Manager – State of Michigan/Department of Natural Resources – Paving Projects

- DTMB, Pine Street Parking Area Design, Replacement and Construction, Lansing, Michigan
- DTMB/DNR, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Warren Dunes State Park Master Plan Implementation, Sawyer, Michigan
- DTMB/DNR, Highland Recreation Area Roadway Repairs, Highland Township, Michigan
- DTMB, Central Michigan Correctional Facility Paving Improvements, St. Louis, Michigan
- DTMB, Woman's Huron Valley Correctional Facility Paving Improvements, Commerce, Michigan
- DTMB, Egeler Correctional Facility Paving Improvements, Jackson, Michigan
- DTMB, Ionia Correctional Facility Paving Improvements, Ionia, Michigan
- DTMB, Woodland Correctional Facility Paving Improvements, Northville, Michigan
- DTMB/DNR, Pontiac Lake Recreation Area Day Use Area Improvements, White Lake Township, Michigan
- DTMB, Roscommon Airport Paving Improvements, Roscommon, Michigan
- DTMB/DNR, Lexington Harbor BAS Paving Improvements, Lexington, Michigan
- DMTB/DNR, Quanicassee River BAS Paving Improvements, Essexville, Michigan
- DTMB, Michigan State Police Forensic Lab, District Headquarters and Rockford Post Consolidation, Walker, Michigan
- DTMB, Michigan State Police Paving Improvements, Niles, Michigan
- DTMB/DNR, Maybury State Park Parking Lot Reconstruction, Northville, Michigan
- DTMB/DOC, Carson City CF, Paving Improvements, Carson City, Michigan
- DTMB/DNR, Brighton Recreation Area, ARPA Electrical and Paving Improvements, Brighton, Michigan
- DTMB/DNR, Seven Lakes Recreation Area, ARPA Paving and Shelter Improvements, Holly, Michigan
- DTMB/DNR, Island Lake Recreation Area, ARPA Paving Improvements, Brighton, Michigan
- DTMB/DNR, Bald Mountain Recreation Area, Culvert Replacement and Paving Improvements, Lake Orion, Michigan
- DTMB/DNR, Twin Lakes State Park Paving Improvements, Toivola, Michigan

Lead Consultant/Project Manager – State of Michigan – Department of Natural Resources – Studies/Utility Improvements

- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan

- DTMB/DNR, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Warren Dunes State Park Master Plan Implementation, Sawyer, Michigan
- DTMB/DNR, Statewide Electrical Improvements, 8 State Parks throughout Michigan
- DTMB/DNR, Statewide Utility Improvements, 8 State Parks throughout Michigan
- DTMB, Lakeland Correctional Facility Sanitary Improvements, Coldwater, Michigan
- DTMB, Bay City State Park Connectivity Study, Bay City, Michigan
- DTMB, Michigan State Police Forensic Lab, District Headquarters and Rockford Post Consolidation, Walker, Michigan
- DTMB/DNR, Roscommon State Forest Shooting Range, Roscommon, Michigan
- DTMB/DNR, Bald Mountain Recreation Area, Culvert Replacement and Paving Improvements, Lake Orion, Michigan
- DTMB/DNR, Twin Lakes State Park Utility Improvements, Toivola, Michigan

Lead Consultant/Project Manager – State of Michigan – Department of Natural Resources – Toilet/Shower Buildings & other Structures

- DTMB/DNR, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Warren Dunes State Park Master Plan Implementation, Sawyer, Michigan
- DTMB/DNR, Pontiac Lake Recreation Area Day Use Area Improvements, White Lake Township, Michigan
- DTMB/DNR, Wilson State Park Toilet Shower Building Replacement, Harrison, Michigan
- DTMB/DNR, Brimley State Park Toilet Shower Building Replacement, Brimley, Michigan
- DMTB/DNR, Straits State Park Toilet Shower Building Replacement, St. Ignace, Michigan
- DTMB/DNR, North Higgins Lake State Park Toilet Shower Building Replacement, Roscommon, Michigan
- DTMB/DNR, Roscommon State Forest Shooting Range, Roscommon, Michigan
- DTMB/DNR/Michigan Army Reserve National Guard
  - Otsego Lake State Park Upgrades & Improvements, Gaylord, Michigan
  - Young State Park Upgrades & Improvements, Boyne City, Michigan
- DTMB/DNR, Belle Isle Shelter Replacement, Detroit, Michigan
- DTMB/DNR, Twin Lakes State Park Toilet Shower Building Replacement, Toivola, Michigan

Lead Consultant/Project Manager – State of Michigan – Department of Natural Resources – Trails/Recreational Facilities/Boat Access Sites

- DTMB/DNR, Kal-Haven State Park Linear Trail from South Haven to Kalamazoo, Michigan
- DTMB/DNR, Highland Recreation Area Regional Trail (Cedar Creek Trail), Highland Township, Michigan
- DTMB/DNR, Island Lake Regional Trail, Brighton/Green Oak Township, Michigan
- DTMB/DNR, Belle Isle State Park Kayak and Canoe Launch, Detroit, Michigan
- DTMB, Bay City State Park Connectivity Study, Bay City, Michigan
- DTMB/DNR, Lexington Harbor BAS Paving Improvements, Lexington, Michigan

- DMTB/DNR, Quanicassee River BAS Paving Improvements, Essexville, Michigan
- DTMB, Pointe Mouillee State Game Area Dike Improvements, Berlin Township, Michigan
- DTMB/DNR/Michigan Army Reserve National Guard
  - Otsego Lake State Park Upgrades & Improvements, Gaylord, Michigan
  - Petoskey State Park Upgrades & Improvements, Petoskey, Michigan

Lead Consultant/Project Manager – State of Michigan – DTMB/MSP/DMVA Facilities

- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB, Michigan State Police Forensic Lab, District Headquarters and Rockford Post Consolidation, Walker, Michigan
- DTMB, Michigan State Police Paving Improvements, Niles, Michigan
- DTMB, Michigan State Police Utility Improvements, Coldwater, Michigan
- DTMB, Capital Complex Directional Study, Lansing, Michigan
- DMTB, Capital Complex Revenue Collection System Upgrade, Lansing, Michigan
- DMVA – Albion Armory Site Improvements, Albion, Michigan
- DMVA – Shiawassee Armory Site Improvements, Shiawassee, Michigan

Steve W. Sutton, PE, LSIT

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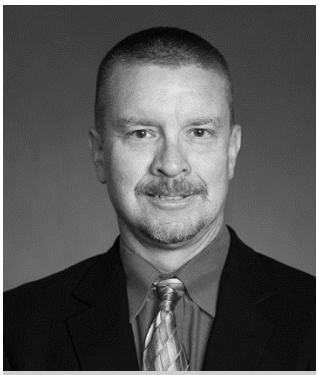
NF ENGINEERS



YEARS OF EXPERIENCE
Industry – 24
NFE – 24

TITLE
Principal

PROJECT ROLE
Project Manager

EDUCATION
Bachelor of Science
Michigan Technological University, 1999
Civil Engineering

Extended University Program for Surveying
Michigan Technological University

LICENSES
Professional Engineer, State of Michigan, 2003

Passed Professional Surveyor Exam – Part 1

Mr. Steve Sutton began his career at NFE in 1998, and after several promotions, currently serves as Principal for the firm with over 24 years of civil engineering experience. His main role is Project Manager for the design and construction administration of numerous municipal engineering and private land development projects. His municipal engineering experience includes roadway and utility system projects, and his private land development experience includes retail, industrial and residential projects.

Steve provides engineering consulting services to City of Rochester Hills and the Michigan Department of Management & Budget (DTMB), serving multiple state agencies. He is responsible for the design, management and construction administration for building developments and municipal roadway/utility system (water main, sanitary sewer and storm drain) projects.

PROJECT EXPERIENCE

Project Engineer – State of Michigan – Department of Corrections

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- DTMB/DOC, Carson City CF, Paving Improvements, Carson City, Michigan

Project Engineer – State of Michigan – Shooting Ranges

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Project Engineer – State of Michigan/Department of Natural Resources – Paving Projects

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- DTMB, Michigan State Police Paving Improvements, Niles, Michigan
- DTMB/DNR, Maybury State Park Parking Lot Reconstruction, Northville, Michigan
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Project Engineer – State of Michigan – Department of Natural Resources – Studies/Utility Improvements

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- DTMB/DNR, Statewide Utility Improvements, 8 State Parks throughout Michigan

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- DTMB/DNR, Bald Mountain Recreation Area, Culvert Replacement and Paving Improvements, Lake Orion, Michigan
- DTMB/DNR, Twin Lakes State Park Utility Improvements, Toivola, Michigan

Project Engineer – State of Michigan – Department of Natural Resources – Toilet/Shower Buildings & other Structures

- DTMB/DNR, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Warren Dunes State Park Master Plan Implementation, Sawyer, Michigan
- DTMB/DNR, Pontiac Lake Recreation Area Day Use Area Improvements, White Lake Township, Michigan
- DTMB/DNR, Wilson State Park Toilet Shower Building Replacement, Harrison, Michigan
- DTMB/DNR, Brimley State Park Toilet Shower Building Replacement, Brimley, Michigan
- DMTB/DNR, Straits State Park Toilet Shower Building Replacement, St. Ignace, Michigan
- DTMB/DNR, North Higgins Lake State Park Toilet Shower Building Replacement, Roscommon, Michigan
- DTMB/DNR, Roscommon State Forest Shooting Range, Roscommon, Michigan
- DTMB/DNR/Michigan Army Reserve National Guard
  - Otsego Lake State Park Upgrades & Improvements, Gaylord, Michigan
  - Young State Park Upgrades & Improvements, Boyne City, Michigan
- DTMB/DNR, Belle Isle Shelter Replacement, Detroit, Michigan
- DTMB/DNR, Twin Lakes State Park Toilet Shower Building Replacement, Toivola, Michigan

Project Engineer – State of Michigan – Department of Natural Resources – Trails/Recreational Facilities/Boat Access Sites

- DTMB/DNR, Kal-Haven State Park Linear Trail from South Haven to Kalamazoo, Michigan
- DTMB/DNR, Highland Recreation Area Regional Trail (Cedar Creek Trail), Highland Township, Michigan
- DTMB/DNR, Island Lake Regional Trail, Brighton/Green Oak Township, Michigan
- DTMB/DNR, Belle Isle State Park Kayak and Canoe Launch, Detroit, Michigan
- DTMB, Bay City State Park Connectivity Study, Bay City, Michigan
- DTMB/DNR, Lexington Harbor BAS Paving Improvements, Lexington, Michigan
- DMTB/DNR, Quanicassee River BAS Paving Improvements, Essexville, Michigan
- DTMB, Pointe Mouillee State Game Area Dike Improvements, Berlin Township, Michigan
- DTMB/DNR/Michigan Army Reserve National Guard
  - Otsego Lake State Park Upgrades & Improvements, Gaylord, Michigan
  - Petoskey State Park Upgrades & Improvements, Petoskey, Michigan

Steve W. Sutton, PE, LSIT

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Project Engineer – State of Michigan – DTMB/MSP/DMVA Facilities

- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB, Michigan State Police Forensic Lab, District Headquarters and Rockford Post Consolidation, Walker, Michigan
- DTMB, Michigan State Police Paving Improvements, Niles, Michigan
- DTMB, Michigan State Police Utility Improvements, Coldwater, Michigan
- DTMB, Capital Complex Directional Study, Lansing, Michigan
- DMTB, Capital Complex Revenue Collection System Upgrade, Lansing, Michigan
- DMVA – Albion Armory Site Improvements, Albion, Michigan
- DMVA – Shiawassee Armory Site Improvements, Shiawassee, Michigan

Petr Kotrba, PE

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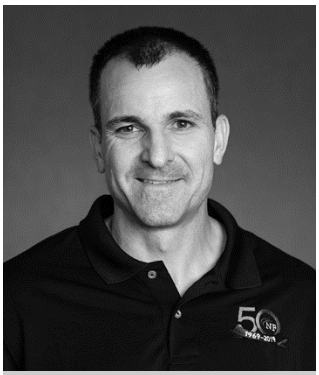

YEARS OF EXPERIENCE
Industry – 26
NFE – 20

TITLE
Project Manager

PROJECT ROLE
Project Manager

EDUCATION
Civil Engineering

Master of Science
Czech Technical University, Prague, Czech Republic, 1998

Bachelor of Science
Czech Technical University, Prague, Czech Republic, 1996

LICENSES
Professional Engineer
State of Michigan, 2009

Mr. Petr Kotrba began his career at NFE in 2002, and currently serves as a Project Manager for the firm with over 26 years of civil engineering experience. His main responsibility is preparing site plans, construction documents and land surveys for municipal, institutional and private land development projects that vary in size, scope and complexity.

Petr has been responsible for the design and preparation of complete construction packages, including land surveys, site planning, design and construction layout for several programs on a state and national level. Whatever project he is working on, Petr can be relied upon to provide a high level of service in a cost-effective way.

PROJECT EXPERIENCE

Project Manager – Municipal/Government

- City of Rochester Hills, School Road and John R. Road Improvements, Rochester Hills, Michigan
- DTMB/DNR, Island Lake Recreation Area Connector Multi-Use Trail, Green Oak, Michigan
- DTMB/DOC, Lakeland Correctional Facility Sanitary Sewer and Water Main Improvements, Coldwater, Michigan
- DTMB/MSP, New Michigan Center for Defensive Driving Facility, Dimondale, Michigan
- DTMB/MSP, Niles Post Parking Improvements, Niles, Michigan
- DTMB/DNR, Multiple Gun Range Developments, Grand Traverse County, Echo Point, Algonac State Park, Pontiac Lake State Recreation Area, Marquette County, Lake Superior Sportsman's Club, Lapeer State Game Area and Sharonville State Game Area, Michigan
- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB/DNR, Wilson State Park Toilet/Shower Building Replacement, Harrison, Michigan
- DTMB/DNR, Multiple Campsite Electrical Improvements, Eight Locations in Michigan
- City of Detroit, I-94 Industrial Corridor Survey, Detroit, Michigan
- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB/DNR, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Highland Recreation Area Regional Trail Design, Highland, Michigan
- DTMB/DNR, Water System Upgrades and Improvements for Highland Recreation Area (White Lake, Michigan), Proud Lake Recreation Area (Commerce Township, Michigan) and Pontiac Lake Recreation Area (White Lake Township, Michigan)
- Highland Downtown Development Authority, Milford & Livingston Road Streetscape Improvements, Highland Township, Michigan
- City of Royal Oak, Normandy Oaks Park, Royal Oak, Michigan
- DTMB/DNR, Lexington Boat Access Site, Lexington, Michigan
- DTMB/DOC, Lakeland Shooting Range, Cold Water, Michigan
- DTMB/DOC, Egeler Corrections and Woodland Corrections Pavement Improvements, Jackson and Whitmore Lake, Michigan
- DTMB/DOC, Ionia Corrections Pavement Rehabilitation, Ionia, Michigan
- DTMB/DOC, Woodland Lift Station, Whitmore Lake, Michigan
- DTMB/DOC, Central Michigan Corrections Generator Building, St. Louis, Michigan

- DTMB/DNR, Higgins Lake State Park Toilet Shower Building, Beaver Creek Twp., Michigan
- DTMB/DNR, Brimley State Park Toilet Shower Buildings, Superior Twp., Michigan
- DTMB/DNR, Straits State Park Toilet Shower Buildings, St. Ignace, Michigan
- DTMB/DNR, Warren Dunes State Park Toilet Shower Buildings, Sawyer, Michigan
- DTMB/DNR, Belle Isle Boat Launch, St. Ignace, Michigan
- DTMB/DNR, Traverse City State Park Improvements, Traverse City, Michigan
- Independence Township, Clarkston Road Pathway, Clarkston, Michigan
- DTMB/DNR, Roscommon Conservation Airport, Higgins Twp., Michigan
- City or Rochester Hills, Concrete Pavement Rehabilitation Program, Rochester Hills, Michigan
- Oakland County Parks & Recreation, Waterford Oaks Lift Station, Waterford, Michigan
- City of Rochester Hills, Michelson Rd. and Bolinger St. Improvements, Rochester Hills, Michigan
- Village of Franklin, Franklin Road Streetscape Improvements, Franklin, Michigan
- Village of Franklin, Franklin Road Streetscape Improvements, Franklin, Michigan
- Oakland County Parks & Rec, Red Oaks Park Sanitary Forced Main & Lift Station, Madison Heights, Michigan
- DTMB, MSP Headquarters and Forensic Laboratory, Grand Rapids, Michigan
- DTMB, Capitol Complex Traffic Study and Road Improvements, Lansing, Michigan
- DTMB, Belle Island Kayak Launch Access and Parking, Detroit, Michigan
- City of Rochester Hills, Hamlin Road Reconstruction, Rochester Hills, Michigan
- DTMB/DNR, Warren Dunes State Park Toilet Building Replacement, Sawyer, Michigan
- DTMB/DNR, Warren Dunes Bus & RV Parking, Sawyer, Michigan
- DTMB/DNR, Paint Creek Bridge, Bald Mountain State Park, Oakland Township, Michigan
- DTMB/DNR, North Higgins Lake State Park Toilet Shower Building and Sanitary Sewer Improvements, Elm River Township, Michigan
- DTMB, O'Neal Lake Dam Restoration, Bliss Township, Michigan
- Oakland County Parks and Recreation, One Mile Sashabaw Road Safety Pathway, Independence Township, Michigan
- City of Fenton/MDOT, Silver Lake Road / State Bank Trail, Linden & Fenton, Michigan
- City of Rochester Hills, Adams Road Pathway, Rochester Hills, Michigan
- City of Rochester Hills, Old Perch Road Reconstruction, Rochester Hills, Michigan
- DTMB/DNR, Twin Lakes State Park Toilet Shower Building and Campsite Improvements, Beaver Creek Township, Michigan

Project Manager – Institutional

- DTMB, Walter Reuther Hospital Parking Lot Improvements, Westland, Michigan
- Romeo Schools, Transportation Site Improvements, Romeo, Michigan
- DTMB/DMVA, Albion Armory Site Improvements, Albion, Michigan

Mark Wilson

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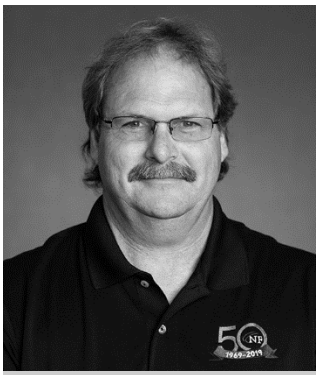

YEARS OF EXPERIENCE
Industry – 39
NFE – 10

TITLE
Engineer III

PROJECT ROLE
Senior Construction Observation Technician

EDUCATION
Bachelor of Science
Lawrence Technological University, 1987
Construction/Civil Engineering

Macomb Community College, 1981-1983
Emphasis on Construction Management

CERTIFICATIONS
ACI Concrete Field Testing Technician – Grade I

MCA Concrete Field Testing Technician – Level I

MDOT Certified Bituminous Technician

MDOT Certified Aggregate Technician

MDOT Certified Density Technician

MDEQ Storm Water Operator

Nuclear Density Field Testing Technician

Mr. Mark Wilson began his career at NFE in 2012, and currently serves as Senior Construction Observation Technician for both municipal improvement and private land development projects, along with providing civil engineering and AutoCAD assistance when needed. Mark has 38 years of engineering and field experience in the construction industry. His experience includes preliminary design, construction plans, engineering estimates, specifications, and contract and construction administration for water main, sanitary sewer and storm water design projects. Mark's experience also includes plan reviews for numerous communities; working directly with local, county and state agencies, including MDOT; acquisition of permits; community block grants; tri-party funding; and MDOT/federal funding.

PROJECT EXPERIENCE

Senior Construction Observation Technician – Municipal

- DTMB/DNR, Muskallonge Lake State Park Electrical Improvements, Luce County, Michigan
- DTMB/DNR, Algonac State Park Shooting Range, Algonac, Michigan
- DTMB/DNR, Lakeport State Park Electrical Improvements, Lakeport Village, Michigan
- City of Rochester Hills, Eddington Boulevard Road Realignment, Rochester Hills, Michigan
- City of Rochester Hills, Hamlin Road Reconstruction, Rochester Hills, Michigan
- City of Rochester Hills, School Road and John R Road Improvements, Rochester Hills, Michigan
- DTMB/DNR, Belle Isle Shoreline Fishing Access Improvements, Detroit, Michigan
- DTMB/DNR, Pontiac Lake State Park Water System and Sanitary Sewer Improvements, Pontiac, Michigan
- DTMB, Capital Complex Site and Landscaping Improvements, Lansing, Michigan
- DTMB, Governor's Residence Site and Landscaping Improvements, Lansing Michigan
- DTMB/DNR, Wilderness State Park Contact Station and Rustic Campground Area, Carp Lake Township, Michigan
- DTMB/DNR, Holly Recreation Area Campground Road Restoration – Phase II, Holly, Michigan
- DTMB/DNR, Burt Lake Campground Sanitary Sewer Improvements, Indian River, Michigan
- DTMB/DNR, Highland Recreation Area Multi-Use Trail, White Lake, Michigan
- DTMB/DNR, Highland Recreation Area Road Improvements, White Lake, Michigan
- DTMB/DNR, Hayes State Park Water System Improvements, Onsted, Michigan
- DTMB/DNR, Mitchell State Park Drainage Improvements, Cadillac, Michigan
- DTMB/DNR, Petoskey State Park Sanitary Sewer Improvements, Petoskey, Michigan
- DTMB/DNR, Wilderness State Park Campground Improvements, Carp Lake Township, Michigan
- DTMB/DOC, Women's Huron Valley Correctional Facility ADA Compliance Upgrades – Walkways and Paving, Ypsilanti, Michigan
- DTMB/DNR, Belle Isle State Park Canal Kayak and Canoe Development, Detroit, Michigan
- Ultimate Soccer Arenas, LLC, Expansion at Ultimate Soccer Arenas, Pontiac, Michigan

- DTMB/DNR, Statewide Electrical Investigation – 8 Campground throughout Lower and Upper Michigan
- DTMB/DNR, Orchard Beach State Park Site Improvements, Manistee, Michigan
- Highland DDA, Milford Road/Livingston Road Streetscape Improvement, Highland Township, Michigan
- DTMB/DNR, Wilderness State Park Site Improvements, Carp Lake Township, Michigan
- DTMB/DNR, Holly State Recreation Area Site Paving/Parking Lot Improvements, Berlin Township, Michigan
- Charter Township of West Bloomfield, Civic Center Improvements, West Bloomfield Township, Michigan
- DTMB/DNR, Proud Lake Recreation Area Site Improvements, Commerce Township, Michigan
- DTMB/DNR, Grand Traverse County Shooting Range, Union Township, Michigan
- DTMB/DNR, Algonac State Park Shooting Range Improvements, Clay Township, Michigan
- DTMB/DNR, Belle Isle Shoreline Fishing Access at Shelter 19/20, Detroit, Michigan
- DTMB/DOC, Ionia Correctional Facility Pavement Rehabilitation, Ionia, Michigan
- DTMB/DOC, Central Michigan Correctional Facility Parking Lot Paving Repair/ Replacement, St. Louis, Michigan
- DTMB, Cass D Parking Lot Repairs, Lansing, Michigan
- DTMB, Michigan Law Enforcement Officers Memorial Monument, Lansing, Michigan
- DTMB/DNR, Sleepy Hollow Electrical and Site Improvements, Laingsburg and Ovid, Michigan
- DTMB/DOC, Woodland Correctional Facility Roadway and Parking Area Improvements, Whitmore Lake, Michigan
- City of Royal Oak, Normandy Oaks Park Development, Royal Oak, Michigan
- Romeo Community Schools, Powell 9th Grade Academy Remodel, Romeo, Michigan
- Village of Franklin, Franklin Road Streetscape Improvements, Franklin Village, Michigan.
- DTMB/DNR, Western Upper Peninsula Shooting Facility, Ontonagon County, Michigan
- DTMB/DNR, Lexington Harbor Boat Access Site Parking Lot Improvement, Lexington Village, Michigan

Timothy D. Wood, PE

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YEARS OF EXPERIENCE
Industry – 9
NFE – 8

TITLE
Engineer III

PROJECT ROLE
Project Engineer

EDUCATION
Bachelor of Science
Wayne State University, 2014
Civil Engineering with focus in structural and transportation design

LICENSES
Professional Engineer, State of Michigan, 2020

CERTIFICATIONS
MDOT Office Technician

Mr. Timothy Wood began his career at NFE in 2015, and currently serves as an Engineer III. Tim is responsible for the preparation of site plans and construction documents for both municipal/MDOT improvement and private land development projects. He also serves as a seasonal construction office technician and seasonal construction inspector. Tim is computer-proficient with AutoCAD Civil 3D, Microsoft Office Programs, and Field Manager.

PROJECT EXPERIENCE

Project Engineer – Municipal Consulting Services

- Charter Township of West Bloomfield, Michigan, Client Since 2009, Ongoing
  - Rutledge Park Pavement Repair
  - Locklin Pines Storm Sewer Evaluation
  - Orchard Lake Road Streetscape
  - Drake Sports Park – Detention Basin Remediation
  - Pebble Creek Vehicle Bridge Replacement, West Bloomfield Twp., Michigan

Project Engineer – Municipal/Government

- Oakland County Parks and Recreation Commission, Sashabaw Road Safety Pathway, Independence Township, Michigan
- Independence Township, Clintonville Road Safety Pathway, Independence Township, Michigan
- DTMB/MDOC, Central Michigan Correctional Facility Parking Lot Repair, St. Louis, Michigan
- DTMB/MSP, Michigan Law Enforcement Officers Memorial Monument, Lansing, Michigan
- Addison Township, Addison Library, Addison Township, Michigan
- Frankel Associates, Clarkston Road Paving, Oakland Township, Michigan
- Redford Library, Redford, Michigan

MDOT/Local Agency Office Technician – Municipal/Government

- City of Royal Oak, South Washington Avenue Reconstruction, Royal Oak, Michigan
- City of Hazel Park, Couzens Avenue Reconstruction, Hazel Park, Michigan
- City of Birmingham, West Maple Reconstruction, Birmingham, Michigan
- City of Birmingham, West Maple Concrete Pavement Patch Repair, Birmingham Michigan
- City of Rochester Hills, Eddington Boulevard Realignment, Rochester Hills, Michigan
- City of Royal Oak, South Washington Avenue Reconstruction, Royal Oak, Michigan
- City of Royal Oak, Stephenson Highway Reconstruction, Royal Oak, Michigan
- City of Madison Heights, 13 Mile Road Reconstruction, Madison Heights, Michigan

George Ostrowski, LLA, LEED AP

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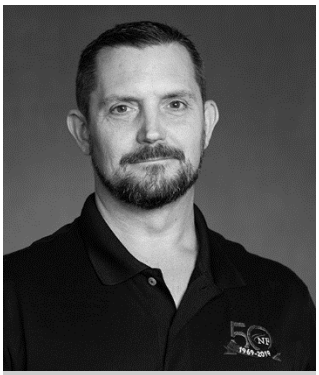

YEARS OF EXPERIENCE
Industry – 28
NFE – 19

TITLE
Associate

PROJECT ROLE
Landscape Architect

EDUCATION
Bachelor of Landscape Architecture
Michigan State University, 1994

LICENSES
Licensed Landscape Architect, State of Michigan, 2000

LEED Accredited Professional, 2009

Mr. George Ostrowski joined NFE in 2003 as Manager of the newly formed Land Planning and Landscape Architecture Department. George has over 27 years as a Landscape Architect and is proficient at providing land planning and landscape architecture services for municipal agencies, as well as private land developers. In addition to his leadership duties, he works closely with the NFE team and clients as a Project Manager, preparing site and landscape plans from concept through final construction documents.

George also provides environmental planning services, including wetland mitigation plans and woodland preservation plans, and oversees and assists with LEED compliance issues on projects when needed. Throughout his career, George has developed an extensive knowledge and understanding of local municipal ordinances and has established relationships with many local officials.

PROJECT EXPERIENCE

Landscape Architect – Municipal/Government

- DTMB/DNR, Highland State Recreation Area Regional Trail, White Lake, Michigan
- USACE, Detroit Arsenal Improvements, Warren, Michigan
- City of Birmingham, Pocket Parks, Birmingham, Michigan
- City of Mt. Clemens, Crocker Street Pedestrian Pathway, Mt. Clemens, Michigan
- City of Birmingham, Woodward Avenue Median Improvements, Birmingham, Michigan
- City of Birmingham, Old Woodward Streetscape Enhancements, Birmingham, Michigan
- City of Birmingham, Maple Road Improvements, Birmingham, Michigan
- DTMB/MSP, Michigan State Police Post, Walker, Michigan
- Kent County Road Commission, Central Complex, Walker, Michigan
- Clinton County Transit Area Building, Clinton County, Michigan
- Twin Lakes State Park, park improvements planning, Elm River Twp, Michigan

Mark A. Owens, PS

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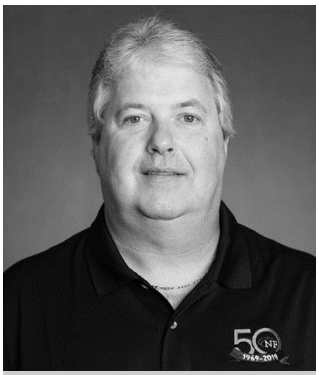

YEARS OF EXPERIENCE
Industry – 33
NFE – 33

TITLE
Survey Crew Chief

PROJECT ROLE
Survey Crew Chief

EDUCATION
Bachelor of Science
Michigan Technological University, 2009
Land Surveying

Associates Degree
Macomb Community College, 2002
Land Surveying

Associates Degree
Lake Superior State University, 1987
Building Construction Management

LICENSES
Professional Surveyor, State of Michigan, 2009

Residential Builders & Alternation Contractor License, State of Michigan, 1990

Mr. Mark Owens began his career in 1989 at NFE and has over 32 years of land surveying experience with most of those years serving as Survey Crew Chief. Over the course of his career, Mark has completed hundreds of public improvement and private land development projects, involving surveys for boundary/easement, topographic, road design, right-of-way, feature identification, drainage, public and private utilities, and floodplain. He has experience in performing surveys involving the U.S. Rectangular Survey System, private (French) claims, subdivision of standard sections, subdivision of fractional sections, and restoration of lost or obliterated corners.

Mark is knowledgeable in global positioning system (GPS), geodetic coordinate system, local space rectangular coordinate system, and Michigan State Plane Coordinate System. He understands all aspects of surveying, including angular, linear, area and volume measurement; bearings and azimuths; horizontal and vertical control and measurement; horizontal and vertical angles by repetition; specifications for vertical and horizontal accuracy; brenchmark loops; coordinates and map projections; least squares adjustments and analysis of networks; reconnaissance and monumentation; and witnessing control points.

PROJECT EXPERIENCE

Survey Crew Chief – Municipal Consulting Services
- City of Madison Heights, Client since 1977, Ongoing
- City of Huntington Woods, Client since 1980, Ongoing
- City of Royal Oak, Client since 2002, Ongoing
- City of Birmingham, Client since 1999, Ongoing

Survey Crew Chief – Municipal
- DTMB/DNR, Multiple Projects for Park Improvements, including trails, parking lots, water systems and master plans, Various locations in Michigan

DIANNE C. MARTIN

Director of Resource Assessment and Management
Corporate Vice President

PROFILE

Certifications
Professional Wetland Scientist #1313, Society of Wetland Scientists, 2001
Michigan DEQ Wastewater Treatment Operator for Classification C-2f, Constructed Wetlands
Michigan Department of Natural Resources Endangered Species Permit #TE060
HAZWOPER Certification and 8 Hour Refresher
United States Army Corp of Engineers Wetland Delineation Training

Education
Eastern Michigan University, M.S., 1996, Aquatic Ecosystem Biology
Western Michigan University, B.S., 1993, Biology and Environmental Studies

Experience History
Director, ASTI ENVIRONMENTAL
Ecologist, ASTI ENVIRONMENTAL
Field Supervisor, Missouri Department of Conservation
Teaching Assistant, Eastern Michigan University

Professional Memberships
Society of Wetland Scientists
Michigan Wetlands Association

Professional Background
Ms. Martin has significant experience in ecological assessment, with an emphasis on aquatic ecosystems. Her work includes wetland delineation, wetland mitigation design, wetland restoration, habitat management plans, endangered species surveys, natural features inventories, and environmental assessments and impact statements, as part of the NEPA compliance process.

Years' Experience:

24—ASTI ENVIRONMENTAL
3—other firms, government

WETLAND MANAGEMENT

Wetland Inventories
Oversaw ASTI staff in conducting wetland inventories for the City of East Lansing and for the Charter Township of Clinton, using GIS and field assessment.

City/Township Wetland/Environmental Consultant
Acts as environmental consultant for the City of Orchard Lake Village (Oakland County), Oakland Township (Oakland County), City of East Lansing (Ingham and Clinton Counties), and Putnam Township (Livingston County). Verifies delineations, reviews site plans, permits and mitigation plans, and resolves violations. Has also provided expert testimony and contested case support.

Wetland Delineations
Performed wetland delineations on sites from 1 acre to over 900 acres in size throughout the Midwest, including linear projects for MDOT and various trail way organizations.

Wetland Mitigation
Designed mitigation wetlands up to 60 acres in size. Located mitigation sites, oversaw construction, including seeding and planting of vegetation, and developed monitoring criteria.

Wetland Permits, State and Federal
Wrote wetland permit applications for commercial and residential sites in the Midwest. Obtained a wetland permit for 30 acres of wetland fill for a landfill expansion project in southern Michigan.

ENVIRONMENTAL ASSESSMENTS

Ecological Assessment & Inventory, Baraga County Airport Expansion, 285 acres
Inventoried plant communities, delineated and assessed streams and wetlands, and conducted threatened and endangered species assessment on a 285-acre parcel in Michigan's Upper Peninsula. This ecological assessment information was compiled into an Environmental Assessment for MDOT.

Ecological Assessment & Inventory, Sanilac County, Marlette Municipal Airport Expansion, 200 acres
Inventoried plant communities, delineated and assessed streams and wetlands, and conducted threatened and endangered species assessment on a 200-acre parcel near Marlette, MI. This information was compiled into an Environmental Assessment for MDOT.

THREATENED AND ENDANGERED SPECIES

Survey, Belle River at Weber Road, Macomb County
Surveyed project area for all state and federally protected freshwater mussels.

Survey, Huron-Clinton Metropolitan Authority, Hudson Mills Bike Path
Surveyed project area for all known threatened, endangered and special concern species.

Indiana Bat Habitat Surveys, Various Townships, Various Counties
Surveyed project areas for the state and federally protected Indiana bat habitat.

HABITAT RESTORATION / MANAGEMENT

Great Lakes Restoration Initiative: 500 Acre Coastal Wetland Restoration at Lake St. Clair Metropark
Acted as project manager for the restoration of 500 acres of Great Lakes marsh at Lake St. Clair Metropark in Harrison Township, MI. This $1.5 million dollar project includes design, construction, and monitoring components (in progress). Wrote a successful grant application to obtain additional GLRI funding for additional work to continue restoration efforts at the Park.

Habitat Management Planning, Rouge Green Corridor, Oakland County, Michigan
Acted as project manager for the habitat inventorying and management planning for riparian lands within the RGC communities of Southfield, Birmingham and Beverly Hills.

Monguagon Drain Day-Lighting and Treatment Wetland Design, Wayne County Parks and Recreation, Trenton, Michigan
Evaluated the ecological restoration potential of the former Chrysler facility, which serves as the Gateway to the Detroit River International Wildlife Refuge. Developed plans for "daylighting" the Monguagon Drain, restoring emergent wetland, and constructing wetland for stormwater treatment.

NATURAL FEATURES INVENTORIES

Botanical Inventory, Detroit River International Wildlife Refuge, Humbug Marsh Unit, Wayne County, Michigan
Conducted a comprehensive botanical inventory on the 410-acre site and evaluated the ecological integrity of each habitat type. Provided management recommendations to the USFWS and assisted with site master planning.

DANA R. KNOX
Wetland Ecologist

PROFILE

Certifications
Certified Professional Wetland Scientist - #213, Society of Wetland Scientists
HAZWOPER Certification and 8 Hour Refresher, 1991 to Present
United States Army Corps of Engineers Wetland Delineation Training

Education and Training
Eastern Michigan University, M.S., 1999, Geology/Geography concentration in Hydrogeology
University of Rhode Island, B.S., 1986, Natural Resource Management/Wildife Biology and Management

Experience History
Wetland Ecologist, ASTI ENVIRONMENTAL
Principal, Professional Wetland Scientist, Ecological Services LLC
Senior Project Manager, Professional Wetland Scientist, Insight/BCI Engineers and Scientists
Senior Wetland Scientist, Tetra Tech MPS
Project Manager, Professional Wetland Scientist, Insight Environmental Services, Inc.
President, Professional Wetland Scientist, Ecolgical Services, Inc.
Project Scientist, Professional Wetland Scientist, G.R. Kunkle and Associates, Inc.
Environmental Scientist, Spotts, Steven and McCoy, Inc.
Environmental Planner, A.D. Marble and Company
Forest Technician, USDA Forest Service-Morgantown, WV District Office

Professional Memberships
Society of Wetland Scientists
Association of State Wetland Managers
Michigan Wetlands Association

Professional Background
Ms. Knox has over 36 years of experience in wetland delineation, permitting, functional assessment, mitigation design, and mitigation monitoring. Her technical expertise includes wetland delineations, baseline ecological assessments, and ground water evaluations related to natural and created wetlands.

Years Experience: 13—ASTI ENVIRONMENTAL
23—other firms

WETLAND DELINEATION, PERMITTING & MITIGATION

Wetland Delineation, Michigan, Pennsylvania, New Jersey, Delaware, and Maryland
Routinely provides wetland delineation and permitting services for municipal, private, and industrial clients throughout Michigan. Completed delineation of sites from <1 to >400 acres in size in Michigan, as well as throughout the east coast including Pennsylvania, New Jersey, Delaware, and Maryland.

Wetland Permits, Government, Transportation, Commercial, and Residential Development
Prepared wetland permit applications for small and large sites in southern Michigan including Genesee, Ingham, Lapeer, Livingston, Macomb, Monroe, Oakland, St. Clair, and Wayne Counties, Michigan. Permits were obtained from both EGLE and the US Army Corps of Engineers (ACOE). Also prepared permits for sites throughout Pennsylvania, New Jersey, Delaware, Maryland, and North Carolina.

Wetland Mitigation
Identified potential wetland mitigation sites, developed water budgets, designed wetland mitigation projects, and conducted biomonitoring to track wetland establishment success throughout Michigan and Pennsylvania.

Residential Development, Putnam Twp., MI
Managed wetland delineation activities on 1,000 acres of land formerly used as a girl scout camp. The property represents pre-settlement conditions with high quality upland and wetland habitats. The owner is proposing and equestrian development with 100 homes. Threatened and endangered (T&E) species and protection of pre-settlement conditions are paramount concerns requiring analysis. Identified potential impacts from the project and developed recommendations for impact minimization including use of best management practices. While proposed wetland impacts are minimal, EGLE permitting with EPA oversight will largely be based on the T&E/habitat assessment and impact minimization.

Fremont Public Schools, Fremont, MI
Responsible for wetland delineation, permitting, and mitigation on a 138-acre property planned for construction of the new Fremont High School. The permit application was complex due to significant grading and drainage requirements in addition to extensive wetland. Additional complications arose due to construction without benefit of permit, requiring negotiation with the state to finalize and eventually receive a wetland permit. Construction of the 3-acre wetland mitigation site and mitigation monitoring are complete. State has signed off on the project.

Commercial Development, St. Clair County, MI
Prepared and submitted a permit application, including a conceptual wetland mitigation plan, required for the relocation of 900 feet of county drain and filling of 2.85 acres of wetland required for the commercial development of a property. Due to the impacts, both the State and the EPA had concerns. A permit was granted by the State after EPA concerns were satisfactorily addressed.

NATURAL FEATURES INVENTORIES

Ecological Assessment, Troy, MI
Completion of a baseline ecological assessment required for an 80-acre property proposed for preservation in lieu of wetland creation. The project required completion of wetland identification and classification, identification of potential T&E species or suitable T&E habitat, and demonstration that the property met the regulatory requirements for preservation as mitigation. Required MDNR's Floristic Quality Assessment (FQA) methodology to quantify the habitat value for consideration of conservation.

Ecological Assessment, Huron County, MI
Completion of an ecological assessment and subsequent Baseline Documentation Report (BDR) required for two properties on North Island, Huron County. The purpose of the BDR was to meet the requirements of the Land Trust Accreditation Commission (LTAC) in order to establish a land trust and conservation easement for two, 10-acre properties. An extensive evaluation of existing plant and wildlife communities, as well as historic land uses of the subject properties was completed and made part of the BDR. Required MDNR's FQA methodology to quantify the habitat value for consideration of conservation.

ENVIRONMENTAL ASSESSMENTS/PLANNING

Environmental Assessment, Van Buren Twp., MI
Developed the Environmental Assessement required for the expansion of an existing landfill. The Environmental Assessment was required as part of the landfill construction permitting.

Environmental Assessment, Lenox Twp., MI
Developed the Environmental Assessement required for the expansion of an existing landfill. The Environmental Assessment was required as part of the landfill construction permitting and was accepted by EGLE.

Jeremiah W. Roth
Wetland Ecologist, Arborist

PROFILE

Certifications
Professional Wetland Scientist - #3291, Society of Wetland Scientists (2020 to current)
HAZWOPER Certification and 8 Hour Refresher, (2019 to Present)
ISA Certified Arborist - #OH-6162A, International Society of Arboriculture (2009 to current
Michigan Certified Commercial Pesticide Applicator # 003200090 (Category 5 Aquatic, Category 6 ROW Pest), (2020 to current)
Ohio Certified Commercial Pesticide Applicator #128950 (Category 5 Industrial, Category 3A Aquatic), (2014 to current)
Qualified Running Buffalo Clover Surveyor, U.S. Fish and Wildlife Service (2018)

Education and Training
Kent State University, B.S., 2008, Conservation Biology
Midwest Biodiversity Institute, Qualitative Habitat Evaluation Index (QHEI) - Ohio EPA
Midwest Biodiversity Institute, Ohio Rapid Assessment Method for Wetland (ORAM) - Ohio EPA
Midwest Biodiversity Institute, Primary Headwater Habitat Evaluation Index (HHEI) - Ohio EPA
Midwest Biodiversity Institute, Vegetation Index of Biotic Integrity (VIBI) - Ohio EPA
Richard Chinn Environmental Training, Inc, Wetland Delineation Training & Wetland Permitting
Swamp School, Wetland Delineation, LLC, Wetland Delineation and Regional Supplement Training

Experience History
Wetland Ecologist, ASTI ENVIRONMENTAL
Project Environmental Scientist, Environmental Design Group
Preserve Manager, Northeast Ohio Natural Areas, The Nature Conservancy
Biologist/ Field Crew Leader, Resource Environmental Solutions, Inc
Consulting Utility Forester/ Project Lead, CN Utility Consulting
Environmental Scientist/ Biologist, Tetra Tech, Inc
Project Environmental Scientist, BL Companies
Consulting Utility Forester/ Biologist/ Arborist, The Davey Tree Expert Company, Davey Resource Group
Natural Resource Biological Technician, Cleveland Metro parks

Professional Memberships
Society of Wetland Scientists, Association of State Wetland Manager, Utility Arborist Association, International Society of Arboriculture, Ohio Chapter - Society of Arboriculture, Natural Areas Association, Botanical Society of America

Professional Background
Mr. Roth has over ten years of experience in natural resource assessment. His technical experience includes wetland delineation, wetland, lakes and stream quality assessments, wetland mitigation monitoring, ecological inventories, threatened and endangered species surveys, and ecological restoration management.

Years' Experience:

3—ASTI ENVIRONMENTAL
10—other firms, government

ECOLOGICAL RESTORATION AND HABITAT MANAGEMENT PLANS

Upland Ecological Restoration and Wildlife Enhancement, Muskingum County, OH
Restoration plans included implementation of nonnative control of woody and herbaceous vegetation for wildlife enhancement on previous mining site.

Walnut Beach Ecological Restoration and Invasive Species Management Coastal Wetland
Served as Field Biologist and conducted invasive species control and eradication of non-native common reed grass and European black older within a coastal wetland community.

WETLAND DELINEATION, PERMITTING & MITIGATION

Wetland Delineations, Midwest,
Conducted wetland delineation, determination, and functional assessment and permitting for local governments, municipal, and private developers throughout Ohio, Pennsylvania, Michigan, and Illinois.

Treatment Wetland
Performed routine wetland monitoring for a constructed treatment wetland. Additional tasks included invasive species assessment and treatment management. Oversaw subcontractor completion of herbicide application.

RIVER & STREAM RESTORATION

Ecological Restoration of Stream in Summit County, Ohio
Served as Field Biologist implementing seeding, live stake, and woody vegetation planting abutting newly constructed stream. Performed monthly monitoring of woody vegetation and stream conditions.

THREATENED AND ENDANGERED SPECIES

Survey Threatened and Endangered Species
Conducted threatened and endangered species habitat evaluation and surveys for state listed threatened and endangered plant species throughout southeast Michigan.

Detroit Metropolitan Airport, Survey Threatened and Endangered Species
Conducted threatened and endangered species surveys for two state listed plant species, Sullivant's Milkweed (*Asclepias sullivantii*) and Three-awned grass (*Aristida longespica*).

Indiana Bat and Long-eared Bat Habitat Surveys,
Surveyed various project areas for the state and federally protected Indiana and Long-eared bat habitat in various counties in Southeast Michigan.

BIOLOGICAL, BOTANICAL, AND NATURAL FEATURES INVENTORIES

Botanical and Natural Communities Inventory Wayne County, MI
Surveyed a proposed preservation site by collecting plant species and evaluating habitat composition and structure.

Botanical and Biological Inventory, local Metropolitan Metro park, Northeast Ohio
Conducted comprehensive biological, botanical, and natural plant community inventories which were surveyed within major Metropolitan Metroparks. Sites varied in size from 1 acre up to 400 acres in size.

Ecological Assessments and Surveys for Transportation Corridors
Served as Wetland Scientist. Conducted aquatic (wetlands and surface waters) and terrestrial surveys and assessments along <1 up to 10 miles linear corridor.

AQUATIC ECOLOGY

Watershed Assessment, Oakland Township, MI
Conducted and evaluated conditions of stream bank erosion on Stony Creek. Additional field task involved sampling two streams within the Stony and Paint Creeks for macroinvertebrate to determine water quality.

FORESTRY SERVICES

Evaluation of Vegetation Management Practices for Woody and Herbaceous Vegetation along Transportation Corridor
Served as Field Biologist/Arborist responsible for conducting field tasks, objectives, and project goals. Assessed woody and herbaceous vegetation along transportation corridor for proposed research sites.

Urban Forestry Services and Tree Surveys
Served as Arborist/Urban Forester, conducted tree surveys along street corridors for metropolitan and municipalities in Illinois, Michigan, Ohio, Pennsylvania, New York, and Virginia.

KYLE A. HOTTINGER

Wetland Ecologist

PROFILE

Certifications/Training
Professional Wetland Scientist #2927
40HR-HAZWOPER Certification, June 2004 (current)
Wetland Plant Identification Certification, Wetland Training Institute, August 2005
MDEQ Storm Water Management Operator – Construction Site, September 2005 (current)
Planning for Constructed Wetlands, Wetland Training Institute, September 2007
Planning Hydrology, Vegetation, and Soils for Constructed Wetlands, Wetland Training Institute, October 2010
EPA Watershed Management Training Certificate, March 2011
Advanced Principles of Wetland Hydrology, Wetland training Institute, June 2011
Hydric Soils, Michigan Wetlands Association, October 2013
Wetland Mitigation and Monitoring, Michigan Wetlands Association, September 2014
Certified Commercial Pesticide Applicator February 2015 (current)
Wetland Grasses of Southern Michigan, Michigan Wetlands Association, September 2016

Education
University of Michigan - Flint, B.S., Resource Ecology

Experience History
Wetland Ecologist, ASTI ENVIRONMENTAL
Environmental Scientist, Insight Environmental Services
Land Surveyor/Wetland Consultant, Kraft Engineering
Land Surveyor, Flint Surveying and Engineering

Professional Memberships
Society of Wetland Scientists
Michigan Wetlands Association

Professional Background
Mr. Hottinger has extensive experience in wetland delineation; natural resource permitting; floristic quality assessments; and wetland mitigation design, construction, and monitoring. He is also ASTI's field lead for linear transportation projects, conducting numerous wetland assessments for MDOT and local Road Commissions. He has been conducting wetland delineations and site plan reviews for the City of Rochester Hills, as their wetland consultant, since 2004. Mr. Hottinger also has extensive experience conducting threatened/endangered species surveys for state-listed plants and animals, natural features assessments, and tree surveys.

Years' Experience

18 years—ASTI ENVIRONMENTAL
5 years—other firms

WETLAND SERVICES

Wetland Delineations/Wetland, Inland Lakes and Streams Permits/Mitigation Monitoring
Completed over 600 wetland delineations and multiple permit applications for commercial and residential development sites of all sizes throughout Michigan.

Wetland Consultant, City of Rochester Hills
Primary performer of wetland delineations and verifications and site plan reviews. Consultant for various natural resource issues for the City of Rochester Hills based on up-to-date State and City ordinances from 2004 to present.

Wetland Mitigation Design, Huron Township
Obtained wetland permits for commercial development in Canton, MI; evaluated "mitigation pseudo-bank" and designed mitigation wetland in Huron Township. Currently conducting mitigation wetland monitoring required by EGLE including annual FQA assessments.

Bay Region MDOT Wetland Delineations
Completed wetland delineations within the right-of-way of over 80 miles of MDOT roadways in the Bay Area Region for MDOT. All wetlands were located with GPS and reports issued to MDOT.

I-94 Wetland Delineations
Completed wetland delineations within the right-of-way of over 10 miles of MDOT roadways in Jackson County. All wetlands were located with GPS.

US127/US223 Wetland Delineation
Completed wetland delineation within the right-of-way of over 15 miles of US 127/US2233 in Lenawee County for OHM. All wetlands were located with GPS.

Woodland Meadows Landfill
Completed wetland delineation over 200 acres within Woodland Meadows Landfill expansion area for Waste Management utilizing GPS.

Barrett Paving Materials
Completed a wetland delineation utilizing GPS over 600 acres in Washtenaw County to determine minable areas for sand and gravel facility.

Wetland Delineations in Michigan's Upper Peninsula (various counties)
Completed over 20 wetland delineations between 40 and 1,800 acres for private interests in multiple counties of Michigan's Upper Peninsula.

Complex Wetland Delineation and Regulatory Review
Completed a wetland delineation on over 200 acres on a former landfill along Lake Erie. Worked with client and state and federal regulators over multiple years over regulatory status due to historical site conditions.

ECOLOGICAL ASSESSMENTS & INVENTORIES

Ecological Assessments in Michigan's Upper Peninsula
Conducted vegetation and landform assessment inspections (upland and wetland areas) of over 10,000 acres for private interests.

Camp Innisfree
Completed a wetland delineation over former camp in Livingston County covering over 900 acres. Also completed a natural features assessment and mapping, as well as an endangered species survey.

Tree Surveys
Identified and tagged trees on multiple sites throughout Michigan to identify developmental constraints present on site based on local, state, and federal regulations to aid in determining site natural resource value.

Three Rivers Pathway TAP Grant Threatened and Endangered Species Assessment
Completed threatened and endangered species assessment for the 1 mile long Three Rivers Pathway. Wetland Delineation also completed during the assessment.

Clinton Township Shared Use Pathway TAP Grant Threatened and Endangered Species Assessment
Completed threatened and endangered species assessment for the 2-mile-long Clinton Township Shared Use Pathway. Wetland Delineation also completed during the assessment.

South Lyon Township Senior Housing Project Completed
Completed threatened and endangered species assessment for 18-acre land using federal funds through NEPA in Oakland County. Wetland Delineation also completed during the assessment.

Atlas County Park Threatened an Endangered Species Assessment and Natural Features Assessment
Completed a Threatened and Endangered Species Assessment and Natural Features Assessment for a proposed Genesee County Road Commission Wetland Mitigation Preservation Area in a Genesee County park over 150 acres. A Wetland Delineation using GPS was also completed.

DS ARCHITECTS, INC.

Interior Planning / Architecture / Design

Derek's Profile

Derek Slupka, Architect, AIA, LEED AP

Mr. Slupka is a life-long resident of the State of Michigan. He has over 30 years of experience in the architectural field with a master degree from the University of Detroit. He has been a licensed architect in the State of Michigan since 1991. In addition to Michigan he also holds an architectural license in the State of Florida. With a proven track record of client service and unique problem solving capabilities Mr. Slupka has amassed an experience as *Architect of Record* on nearly a thousand architectural projects in the State of Michigan over his career. His experience includes architectural design, space planning, contract management, contract document preparation, code compliance, specifications, procurement and coordination of consultant services, pre-construction phase, construction phase services, post-construction phase services, leadership roles, staff management, supervision and training. He has an intimate knowledge of the Michigan Building Code, Michigan Barrier Free Design and ADA requirements.

EDUCATION

Bachelor of Architecture - University of Detroit 1988

Master of Architecture - University of Detroit Mercy 2006

LICENSES & CERTIFICATIONS

Licensed Architect - State of Michigan

Licensed Architect - State of Florida

LEED AP

PROFESSION AFFILIATIONS

Member of the American Institute of Architects

Member of the International Code Council

Former Chairman of the Village of Holly Zoning Board of Appeals

Former Vice Chairman of the Village of Holly District Commission

DS ARCHITECTS, INC.

Interior Planning / Architecture / Design

EDUCATION

Associates in Applied Science
- Oakland Community College

Brian's Profile

Brian O'Neill, Technician III

Mr. O'Neill is a life-long resident of the state of Michigan. He has 28 years of experience in the architectural and design fields. He has been an Auto-CAD Technician since 1996. He has experience in field investigation, product selection and specifications, space planning, construction detailing, contractor coordination, construction document preparation and construction administration services. He has completed construction documents for hundreds of projects over his career.

DS ARCHITECTS, INC.

Interior Planning / Architecture / Design

EDUCATION

Associates in Applied Science and CAD Engineering - Alpena Community College

Bachelor in Architecture and Design - Lawrence Technological University

Kyle's Profile

Kyle Morang, CAD Technician II

Mr. Morang is a life-long resident of the state of Michigan. He is the newest addition to the team in 2016. He has 3 years of experience in design and graphic works. He has experience in field investigation, product selection and specifications, space planning, construction detailing, contractor coordination, construction document preparation and construction administration services. He has completed volunteer work on design/construction projects in Northeastern Michigan and is an Alumni of MCCC.

DS ARCHITECTS, INC.

Interior Planning / Architecture / Design

EDUCATION

Bachelor of Fine Arts in Interior Design from College for Creative Studies.

Allison's Profile

Allison Miller, CAD Technician I

Ms. Miller is a life-long resident of the state of Michigan. She is the newest addition to the team in 2019. She has worked on various projects with multiple Michigan based companies specializing in construction documents, product selections/specifications, 3D modeling/rendering, space planning, and design development.

John J. Hinkley, AIA, NCARB Certified

Executive Vice President | Principal In Charge

As Principal-in-Charge, John Hinkley uses his expertise to ensure that all projects in the office are adequately staffed to meet all deadlines. As Principal, he also resolves any project specific contract issues.

John Hinkley, Executive Vice President, has over 42 years of experience and directs design development and contract document administration for Hobbs+Black. He is a specialist in the synthesis of unique conceptual design into practical, cost-effective structures and has served as design team leader for a broad range of projects including retail, government, industrial and commercial facilities.

John's professional and civic affiliations include the American Institute of Architects and he was recently awarded with a 20+ Years of Service Award from the Huron Valley Chapter. John is the former Mayor of the Village of Manchester and currently serves as the Chairperson of the Planning Commission for over twenty years and is a member of the Historic District Commission.

Relevant Experience

Hooper, Hathaway, Price, Beuche and Wallace
Historic Renovation of Law Offices
Ann Arbor, MI

Atrium Office Center
Historic Renovation / Adaptive Reuse
Lansing, MI

Ann Arbor Transportation Authority
Bus Maintenance, Storage and Administration Facility
Ann Arbor, MI

City of Ann Arbor
W.R. Wheeler Service Center
New Operations and Maintenance Facility
Ann Arbor, MI

Manchester Township
Township Offices and Fire Station
Manchester, MI

Manchester District Library
Historic Renovation / Adaptive Reuse
Manchester, MI

Pittsfield Charter Township, MI
Administration Building Post-Occupancy Needs Assessment
Subcenter and Fire Station

Washtenaw County
General County Government Center
Ypsilanti, MI

Washtenaw County
Joint City / County Hall of Justice Study
Ann Arbor, MI

State of Michigan: Department of Military and Veterans Affairs
- Multi-Unit Readiness Center, Lansing, MI
- Detroit Lightguard Armory Renovation, Detroit, MI
- North Lansing Complex Renovations: Lansing Baker-Olin West, Lansing, MI

Western Michigan University, Kalamazoo, MI
- Renovation Program Study / East Campus Planning
- Spindler Hall
- Vandercook Hall
- Walwood Union/ McKee Alumni Center

Central Michigan University
Indoor Athletic Complex and Football Stadium Expansion
Mt. Pleasant, MI

Education:

- Master of Architecture
  University of Michigan, 1972
- Bachelor of Architecture
  University of Michigan, 1970

Registrations:

- Registered Architect, MI, 1974
- Registered Architect, Utah, Puerto Rico, Connecticut and South Carolina
- NCARB Certified
- International Council of Shopping Centers

Honors:

- 20+ Years of Service Award, AIA Huron Valley, 2007

Martin H. Ruiter, AIA, LEED AP

Senior Associate | Project Manager / Architect

Mr. Ruiter is a Senior Associate for Hobbs+Black with over 22 years of experience in architecture. His responsibilities have involved a full range of design processes including initial planning and programming, design development, construction documentation and construction administration on educational, office, municipal, religious and recreational projects. He utilizes his design talents, technical expertise and project management skills to interpret client's needs and translate them into functional and aesthetic solutions. Ruiter is also a LEED Accredited Professional.

Relevant Experience

Ottawa County Road Commission
New Operations and Maintenance Facility
Holland, MI

Clare County Transit
New Facility
Clare, MI

St. Ignace Intercity Bus Transportation
New Facility
St. Ignace, MI

Upper Peninsula Gateway Discovery Center
Master Planning and Concept Design
New MDOT Welcome Center
St. Ignace, MI

Allegan County Road Commission
Master Planning and Concept Design
Allegan, MI

City of Lansing
Relocation of City Offices and Departmental
Reorganization of City Hall
Lansing, MI

City of Kentwood
City Hall Addition
Kentwood, MI

City of Kentwood Dept. of Public Works
New Main Building, Cold Storage Building and Salt Storage Barn
Kentwood, MI

City of Detroit Water Department
Springwells Water Treatment Plant
Dearborn, MI

Community Outreach Center
Additions and Remodeling
Fulton, MI

New Community Health Center Facility
New Construction
Fulton, MI

Ottawa Area Intermediate School District
Holland, MI
- Careerline Tech Center Renovation & Addition
- Educational Services Building Renovation & Addition

Lansing School District, MI
- Relocation Feasibility Study: Administration & Education Center
- Bond Program
- Roof Replacement: Everett High School, Gardner Middle School, Wexford Elementary, Willow Elementary

Zeeland Public Schools, MI
New High School

Kentwood Public Schools, MI
New Alternative Education Building

Boyne Falls Public School
Bond Program
Boyne Falls, MI

Chippewa Hills School District
Bond Program including new Middle School and High School Renovations
Remus, MI

Hartford Public Schools, MI
High School and Elementary Renovations

Education:

- Bachelor of Architecture
  University of Detroit, 1991
- Associate of Architecture Technology
  Ferris State University, 1987

Registrations:

- Registered Architect, MI, 2000
- LEED Accredited Professional

Professional and Civic Affiliations:

- American Institute of Architects
- U.S. Green Building Council

*With Other Firms

John Mortimore

Associate | Assistant Project Manager

John Mortimore is an Associate with Hobbs+Black. He is well-versed in the technical aspects of the construction industry. With more than 27 years of production experience, he is responsible for scheduling and overseeing construction document developments within the firm. His wide range of experience includes staff management, supervision and training, and coordination of mechanical and electrical consultant documents with architectural documents.

Relevant Experience

City of Ann Arbor
W.R. Wheeler Center
New Operations and Maintenance Facility
Ann Arbor, MI

City of Mason
Study for Consolidation of City Hall, Police and Library
Mason, MI

Fenville Maintenance Garage
New Garage Facility
Fenville, MI

Michigan State Police Headquarters Building
Lansing, MI

Clare County Transit Corporation
Renewable Green Systems
Harrison, MI

State of Michigan: Department of Military and Veterans Affairs
North Lansing Complex Renovations:
Baker-Olin West
Lansing, MI

State of Michigan: Department of Management and Budget
G. Mennen Williams Building Window Replacement
Lansing, MI

Spring Arbor University
Residence Hall
Spring Arbor, MI

Mid Michigan Community College
HRA Building Renovations
Harrison, MI

Lansing Community College, Lansing, MI
- Gannon Vocational Technical Building Vacated Space Renovations
- IDS Laboratory
- Interior Design: Gannon Vocational Technical Building
- New Health and Human Services Building

Michigan State University
Kellogg Center Bathroom Renovations
East Lansing, MI

Charlotte Public Schools, Charlotte, MI
- High School Additions and Renovations
- Parkview Elementary Renovations
- Washington Elementary Renovations
- Weymouth Early Childhood Center

Morrice Area Schools, Morrice, MI
- Junior/High School Additions and Renovation
- Elementary School Addition and Renovation

Ingham Intermediate School District
Captial Area Career Center Energy Updates
Mason, MI

DeWitt Public Schools
Fuerstenau Kindergarten Center Renovation and Addition
DeWitt, MI

Education:

- Bachelor of Science Industrial Education Technology
  Central Michigan University, 1982
- Associate in Architectural Drafting Technology
  Ferris State University, 1977

Russell A. Meyer

Senior Associate | Mechanical Designer

As a Mechanical Designer at Hobbs+Black, Russell's duties include design and issuance of construction documents for HVAC, plumbing and fire protection systems. He is responsible for mechanical design, specification writing, supervision of assigned design and drafting staff and coordination with other disciplines. Project responsibilities include project design from schematic layout to final construction drawings, coordination with clients, and field inspection during construction.

Relevant Experience

State of Michigan, Department of Management and Budget
Romney Building, Renovation of Main Entrance
Lansing, MI

Michigan Department of Transportation (MDOT)
Oakland Transportation Service Center
Waterford,MI

Clare County Transit Corporation
New Transit Facility
Harrison, MI

Macomb County
Macomb County Juvenile Justice Center
Macomb, MI*

City of Ludington
Ludington Mass Transit Facility
Ludington, MI*

Commerce Township Hall
New Township Hall
Commerce Township, MI

Spring Arbor University
Kresge Student Center
New Residence Hall
Spring Arbor, MI

Lansing Community College
Health and Human Services Building
Lansing, MI

Lansing Community College
Child Care Center
Lansing, MI

Lansing Community College
Gas/Steam Conversion
Lansing, MI

Oakland University
Advising Suite Renovation
Rochester, MI

Lodgco-Central Michigan University
New Hotel and Stadium Improvements
Mt. Pleasant, MI

Washtenaw Community College
Skilled Trades Annex
Ann Arbor, MI

Washtenaw Community College
Storage and Receiving Building Addition
Ann Arbor, MI

Saginaw Valley State University
Living Center North
Saginaw, MI. *

Saginaw Valley State University
Living Center South
Saginaw, MI. *

Education:

> Associates Degree
Lansing Community College, 1987

*With other firms

Dion P. Dixon, PE

Associate | Electrical Engineer

Mr. Dixon is a resourceful, hands-on professional engineer with exceptional success in the design/redesign of engineering projects that increase customer satisfaction, improve project management, improve quality and reduce costs. Dion has a proven track record of project management, including directing teams of cross-functional experts, diverse staff, and effectively communicating with all levels of corporate management, employees, customers, and suppliers.

Relevant Experience:

State of Michigan: Department of Military and Veterans Affairs
Multi-Unit Readiness Center
Lansing, MI

Northeast Ingham Emergency Service Authority
New Fire Station
Williamston, MI

City of Ann Arbor
New Operations and Maintenance Facility
Ann Arbor, MI

Clinton Township
Fire Station #5
Mount Clemens, MI*

Mount Pleasant Public Safety
Fire Department
Mount Pleasant, MI*

Clinton County, St. Johns, MI
- Livestock Barn
- Maintenance Building
- New Health Department Building

State of Michigan: Department of Management and Budget
Romney Building Entrance Renovation
Lansing, MI

Spartan Motors, Charlotte, MI
Mikesell Buildings
- Plant 1: Manufacturing and Inspection Facility
- Plant 2
- Plant 4 Toilet Room Additions
- Plant 4: Office Building

Lansing Community College
- Health and Human Services Building: Ingham County Clinic Study, Lansing, MI
- IDS Laboratory, Lansing, MI
- New Technical Training Center/ MTEC Building, Delta Township, MI
- Technical Training Center Alterations, Delta Township, MI
- Travel & Tourism and Mixology Lab Renovations, Lansing, MI

Michigan State University
Kellogg Center Bathroom Renovations
East Lansing, MI

Michigan Restaurant Association
New Headquarters
Lansing, MI

Education:

- Bachelor of Science, Electrical Engineering, Michigan Tech University

Registrations:

Professional Engineer
- MI, VA

* With Other Firms

James E. Doby, PE

Senior Associate | Structural Engineer

James Doby, PE, is a structural engineer with over 34 years of experience in engineering design and construction of building projects. He has experience in construction quality assurance/observation, construction engineering, structural design in steel, concrete, masonry, and timber materials. He has performed designs of numerous underground structures for site utilities and process system needs.

Relevant Experience

Department of Military and Veterans Affairs
Selfridge Air National Guard Base Improvements
Harrison Twp, MI

Department of Military and Veterans Affairs
Sault Ste. Marie Armory
Sault Ste. Marie, MI

Village of Pleasant Hill
WWTP Study & Design
Pleasant Hill, OH*

Village of Bradford
WWTP Case Study
Bradford, OH*

City of Celina
Structural Analysis of Electrical Distribution/ Storage Building/Storage Decks
Celina, OH*

City of Charlotte, MI*
Wastewater Treatment Plant Additions and Renovations
Charlotte, MI

City of Gaylord, MI*
Wastewater Treatment Plant Additions and Renovations
Gaylord, MI

Michigan City Public Library
New Storage Building
Michigan City, IN*

City of Battle Creek, MI*
Washington Avenue over the Kalamazoo River and GTW RR
Battle Creek, MI

City of Battle Creek, MI*
Union Street over the Battle Creek River
Battle Creek, MI

City of Charlotte, MI *
Wastewater Treatment Plant Additions and Renovations
Charlotte, MI

City of East Lansing, MI *
Renovation of Pedestrian over the Red Cedar River at Hagadorn Street
East Lansing, MI

City of East Lansing, MI *
Renovation of Pedestrian over Saginaw Highway at Harrison Street
East Lansing, MI

City of Lansing, MI*
Washington Avenue over the Grand River
Lansing, MI

City of Otsego, MI*
Farmer Street over the Kalamazoo River
Otsego, MI

City of Gaylord, MI*
Wastewater Treatment Plant Additions and Renovations
Gaylord, MI

Detroit Water and Sewerage Department, Detroit, MI *
Pumping Station 2A
Detroit, MI

Education

> Bachelor of Science
Civil Engineering
Michigan State University, 1978

Registrations

> Registered Professional Engineer
Michigan, Arkansas, Indiana, North Carolina, Ohio

*With Other Firms

Betsy Hobbs Wagner, IIDA

Vice President-Director of Interior Design | Interior Designer

Betsy Hobbs Wagner is Vice President and Director of Interior Design at Hobbs+Black Associates. With over 14 years of interior design experience, she specializes in hospitality, housing and commercial design, with experience in space planning, furniture specification, finish specification, color scheming, design development and construction documentation. Her experience is focused on intense design which captures, intrigues, and moves the user.

Relevant Experience

Clare County Transit Center
New Transit Center and Offices
Clare, MI

Pittsfield Charter Township
Administration Building Post Occupancy Needs Assessment
Pittsfield Twp, MI

Commerce Township
New Township Hall
Adaptive Reuse
Commerce Twp., MI

Ingham County Health Department
Remodel of Public Health Offices & Clinics
Mason, MI

Agro-Culture Liquid Fertilizers
New Headquarters
St. Johns, MI

Two Men and a Truck International
New Headquarters & Expansion
Lansing, MI

The Eyde Company
Lobby Improvements
Lansing, MI

First Step
New Women's Shelter
Canton, MI

Washtenaw County United Way
New Office Center
Ann Arbor, MI

Lansing Community College
Early LCC Child Care
Lansing, MI

University of Michigan
Dental School Laboratory Renovation
Ann Arbor, MI

Washtenaw Community College, Ann Arbor, MI
- Morris Lawrence Building Lobby Renovations
- Occupational Education Building
- Student Center Building Renovations
- TI & Occupational Career Center
- ED Lobbies
- Morris Lawrence Building
- Seminar Room Upgrades
- Liberal Arts and Science Building

Macomb Community College
- Space Planning, Relocation and Renovation Program
- SC Building - Workforce and Continuing Education Renovation
  SK Building - Student Dining
- SE Building Renovations
- UC-4 Building Renovation
- E&L Center Campus Buildings Roof and Skylight Renovations
- Performing Arts Center Renovations
- SD Building - Room 302 Renovation
- G/H South Campus Building Renovation

Spring Arbor University
Kresge Student Center
Spring Arbor, MI

Kalamazoo College
New Fieldhouse
Kalamazoo, MI

Education:

- Associate of Interior Design
  Harrington College of Design
  Chicago, 1998
- Bachelor of Art / Art History
  Kalamazoo College, 1994
- Instituto Internacional
  Madrid, Spain 1992-1993

Professional and Civic Affiliations:

- Int'l Interior Design Association
  Michigan Chapter
- Eastern Michigan University Adjunct Professor of Interior Design, Winter 2013

David A. Bendert, PE

Senior Engineer

EDUCATION

Michigan State University, BSCE & MSCE

REGISTRATION

Michigan

PROFESSIONAL EXPERIENCE

After graduating from Michigan State University with BS and MS degrees in civil engineering David worked for LS Engineering/Scott Civil Engineering in Grand Rapids, MI doing bridge designing and bridge inspection as a certified bridge inspector. He then worked for AECOM (URS) for 3 years as a structural engineer. In June of 2015 he joined the JDH team, doing structural engineering.

As a Structural Engineer, David has designed buildings ranging in size from small additions to 17 story mid-rise structures, utilizing steel, concrete (including post tensioned concrete), wood (including Mass Timber), and masonry. His focus has been on mixed use structures, often utilizing a podium level that allows for light framed construction on the upper levels. Post tensioned concrete and parking structures are other areas of emphasis in David's expertise. His duties have included structural design, plan preparation, shop drawing review, and site visits.

In addition, David has designed bridges using steel, concrete, and wood materials. As part of his bridge structures experience, he has performed bridge load ratings and bridge inspections.

Notable municipal projects include:

- Bridge design and inspections throughout west and mid-Michigan (LS Engineering)
- Muskegon Area Transit System Terminal (AECOM)
- Bridge inspection Load Rating (JDH)
- Kent County Jail Addition (JDH)

PROFESSIONAL AFFILIATIONS

American Concrete Institute – West MI Chapter ACIWMC
American Institute of Steel Construction AISC
American Society of Civil Engineers ASCE
Masonry Institute of Michigan MIM

JDH Structural Engineering

Jonathan T. Vergunst

Project Engineer

EDUCATION

University of Canterbury, New Zealand – BE(Hons) 2014

PROFESSIONAL EXPERIENCE

Jonathan began practicing structural engineering in 2013 as an intern at Eastern Consulting Ltd in Masterton, NZ before completing his final year at the University of Canterbury in Christchurch, NZ. After graduating, he worked for LGE Consulting Ltd as a structural engineer for approximately 2 years, working on a variety of projects from seismic assessments to new construction.

Jonathan has experience working with steel, concrete, masonry, and timber mainly in the commercial and residential sectors. In January 2017, Jonathan joined JDH as a structural engineer and has since worked on various projects, including extensive experience with municipalities and existing building renovations.

Jonathan was a key team member on a structural rehabilitation project for the City of Jackson's Masonic Temple building, originally constructed in the early 1900s. This challenging project required the use of software to aid in analysis and the use of reasoning skills applied to unique situations. He also produced exceptional work on the Michigan State Police/Kent County Forensics Consolidation project in Walker and has been the lead project engineer on large projects for the Kent County Road Commission and Clinton County Road Commission.

PROFESSIONAL AFFILIATIONS

American Concrete Institute ACI West MI
American Institute of Steel Construction AISC
Masonry Institute of MI MIM

RESPONSIBILITIES

Jonathan leads the detailed aspects of the engineering design, including developing the analytical software models and he is responsible to compile contract documents, under the direction and oversight of one of JDH Engineering's senior engineers. His responsibilities also include interfacing with clients and contractors, shop drawing review, and construction observation.

JDH Structural Engineering

Keith A. Ritsema, PE

Principal & Senior Project Manager

EDUCATION

Calvin College - BSCE
North Carolina State University - MCE
Cornerstone University – MBA

PROFESSIONAL ENGINEER REGISTRATIONS

Maryland	Missouri	Ohio
Michigan	North Carolina	

PROFESSIONAL EXPERIENCE

Keith joined JDH Engineering in the spring of 2001, performing project engineering duties on a variety of industrial, commercial, and educational projects. He soon displayed the ability to manage all aspects of structural engineering on complex projects, from conceptual phases through construction. Beginning in January of 2012, Keith became a Principal within the firm and has taken on business management and development responsibilities in addition to providing structural engineering & project management.

Keith is a first line liaison with the client through the design and construction process. He is responsible for development of the structural system and its interface with other design disciplines, coordinating of the preparation of structural contract documents, and contract administration. In addition, Keith has developed extensive expertise in investigate and evaluation of existing structures. This experience includes evaluation of homes for hurricane and flood damage, load rating of existing structures, and investigation of building failures during or post-construction.

Notable municipal projects include Kent County Road Commission, Clinton County Road Commission, Washtenaw County Road Commission, Gladwin County Road Commission, Kalkaska County Road Commission Salt Storage, Genesee County Salt Storage, Muskegon County Salt Storage, and MSP/Kent County Forensics facility in Walker

PROFESSIONAL AFFILIATIONS

American Institute of Steel Construction AISC
Masonry Institute of Michigan MIM
National Council of Examiners for Engineering & Surveying NCEES
Structural Engineers Association of Michigan SEAMi

JDH Structural Engineering

Matthew Candela, EIT

Project Engineer

EDUCATION

Lawrence Technological University – MSArE 2022

PROFESSIONAL EXPERIENCE

Matt joined JDH in June 2022 shortly after graduation. He also gained previous engineering experience at various discipline firms while obtaining his degree. Matt has experience designing structures across the Midwest, including seismic design of buildings in IL. His experience has included design work for buildings using steel, concrete, masonry, and timber construction. Projects have included building additions, remodels, new construction, and structural consulting.

PROJECT EXPERIENCE

Matt has gained valuable experience in a range of projects including industrial, commercial, retail, and residential. Some notable projects include:

St. Clair Performing Arts Center – Project Engineer for a theatre-type space located on Lake St. Clair in metro-Detroit, including high wind design and intricate stage hoist system.

St. Clair EDA – Project Engineer for a new 6,000 sq-ft building to house the St. Clair environmental development agency located on the shores of Lake St. Clair.

RESPONSIBILITIES

Matt is a project engineer assisting senior engineers and project managers at JDH performing analysis and design of structural systems. His responsibilities include structural analysis and design, structural modeling in Revit, construction document preparation, shop drawing review, and conducting site visits.

WILLIAM TAD KREAR, RLA

Principal – Land Design Studio

PROFESSIONAL BACKGROUND

Mr. Krear is a registered landscape architect with over 20 years of combined experience in land planning, master planning, streetscape design, and environmental planning and site design. Clients serviced include municipalities, private developers, corporations, non-profits and special interest groups. He specializes in land planning, which engages stakeholders in the design process, with an emphasis on defining the unique characteristics of specific regions and community values in which his firm's work takes place. With an interest in resource management and sustainability, he places much emphasis on environmental preservation and cultural landscape enhancement. Mr. Krear endorses a multidisciplinary approach in developing creative planning solutions which are guided by a sound understanding of engineering, environmental and market awareness, cultural and historic preservation and civic responsibility. Most recently, Mr. Krear has been active in planning and landscape architectural services for new community developments in the region of Charlotte, North Carolina. Additionally his experience has included recreational design and planning, retail planning, zoo exhibit design, corridor studies, research and development and mine reclamation.

SELECTED EXPERIENCE

Master Planning:
Historic Highland Station Master Plan, Highland Township, Michigan
City Centre Planning Consultant; Southfield, Michigan
Regional Area Analysis; Pittsfield Township, Michigan
Water Street Redevelopment, Ypsilanti, MI (Brownfield Site)
Downtown Redevelopment Master Plan; Bay City, MI

Community and Neighborhood Planning:
Tribute Traditional Neighborhood Development; Wixom Village Center, MI
Christenbury Master Planned Community, Concord, NC
Hidden Lake Resort Community; Green Oak Township, MI
Conservatory; Charlotte, NC

Streetscape Design:
Orchard Lake Road Corridor Landscape, West Bloomfield, MI
Michigan Avenue Corridor Improvements; Saline, MI
Saginaw Streetscape; Pontiac Michigan
Scotia Road Streetscape; Huntington Woods, Michigan
Woodward Avenue Enhancement Plan; Birmingham, Mi
Oakland Avenue Median Enhancements; Highland Park, MI

EDUCATION, AFFILIATIONS & AWARDS

Registered Landscape Architect in the State of Michigan, 1995.
Registered Landscape Architect in the State of North Carolina, 2008.
Michigan State University – BLA (Bachelors of Landscape Architecture), 1991.
Minor in Resource Development / Ecology.
Lansing Community College –Associates of Applied Science in Landscape Architecture Technology, 1986
Lawrence Technical University College of Architecture and Design – Adjunct Professor
2000 MASLA Design Exhibition for Hidden Lake Planned Residential Community
Most Creative Design & Most Presentable Design
Certificate of Achievement – Advanced training program from Michigan Society of Planning for Improving community appearance, 1994
Honorable Mention from Michigan Chapter – American Planning Association
Bay City Riverfront Development, 1991.
Main Street Oakland County: Selection Committee 2004 & 2005
Michigan Nursery and Landscape Association (MNLA) 2003 Design Symposium presenter
"Creativity and Craftsmanship: from the Designers Perspective" – Defining Visions and Opportunities for Detailed Design through Innovative Site and Land Planning
"Doing it Right!" Moving the Green industry into the 21st Century, article co-authored with Michael Canteberry, The Landsculptor, December 2002

design studio
LAND
landscape architecture / land planning
"Defining community, lifestyle and place"

Charles B Elias

Landscape Architect

PROFESSIONAL BACKGROUND

Mr. Elias is a licensed landscape architect with over 20 years of combined experience in landscape, environmental and site design. He specializes in planting design and bases his designs on an in-depth knowledge of plants and their characteristics and environmental requirements. His environmental design work includes wetland mitigation and restoration, rain garden design and native restoration. In addition, he has designed several highly regarded memorial gardens. Chuck has developed and overseen all aspects of large scale projects from the initial design concept to the finished installation. He has extensive knowledge of landscape construction, including grading and drainage.

SELECTED EXPERIENCE

Institutional:
Henry Ford Hospital, Detroit, MI
Henry Ford West Bloomfield Hospital, West Bloomfield, MI
Schoolcraft College, Livonia, MI
University of Michigan – Dearborn, Dearborn, MI
Saint Dunstan Catholic Church, Garden City, MI

Commercial:
Gateway Center, West Bloomfield, MI
Cabela's, Dundee, MI
Magni Industries, Inc., Detroit, MI

Environmental:
Michigan Historical Museum and State Library, Lansing, MI
North Star Reach Camp, Pinckney, MI
Gateway Center – wetlands mitigation & restoration, West Bloomfield, MI

Multi-Family Residential:
Joliet Townhouses, Detroit, MI
Wellington Place Manor, Southfield, MI
Gardenview Estates, Detroit, MI

EDUCATION, AFFILIATIONS & AWARDS

Licensed Landscape Architect in the State of Michigan, 1997.
Member, International Society of Arboriculture
Michigan State University – Bachelors of Landscape Architecture, 1993.
Graduated with High Honor, Selected as Outstanding Senior.
University of Minnesota, Duluth – Bachelor of Arts, cum laude, 1980
Major: Biology Minor: Chemistry
Lawrence Technical University College of Architecture and Design – Adjunct Professor

JOSEPH F. SOVIS

VICE PRESIDENT, P.E.

BACKGROUND

Mr. Sovis is a Principal responsible for all electrical power, lighting, fire alarm systems, and sound & communication systems. He has extensive experience with high technology buildings and specialized systems, engine test cell facilities, security systems, sound reinforcing, uninterruptible power and emergency power generation systems.

EDUCATION

Bachelor of Science, Electrical Engineering, MSU, 1992 //
Attended Lansing Community College, 1988 - 1990 //
Associate of Applied Science, Architecture Ferris State University, 1986 //

EXPERIENCE

Matrix Consulting Engineers, Inc. (1999 - present)
Clark • Trombley • Randers (1986 - 1999)
Nequist & Son Electrical Contractors (1984 -1985)

REGISTRATION/AFFILIATIONS

Registered Engineer, Michigan, 1996
Registered Engineer, Wisconsin, 1996
Registered Engineer, North Carolina 2006
National Society of Professional Engineers
Illuminating Engineering Society

SELECTED PROJECT EXPERIENCE:

MASONIC PATHWAYS – SKILLED NURSING CENTER //
Alma, MI
Study and renovation of the entire 1st floor totaling approximately 17,000 sq. ft. with designs to modify all existing mechanical, electrical and plumbing.

LANSING COMMUNITY COLLEGE – STUDY //
Lansing, MI
This project included the study of 8 buildings on the campus, followed by cost estimates and mechanical and electrical designs.

FARM BUREAU INSURANCE – HEADQUARTERS RENOVATION //
Lansing, MI
The project included a 3-story renovation of approximately $140,000 sq. ft. Our designs included electrical, mechanical and plumbing.

HILLSDALE COLLEGE – PERFORMANCE AND CHURCH FACILITY //
Hillsdale, MI

MICHIGAN STATE UNIVERSITY – WHARTON CENTER COMISSIONING AND MODIFICATIONS //
East Lansing, MI

MICHIGAN STATE UNIVERSITY – SPARTAN STADIUM COMMISSIONING AND REDESIGN //
East Lansing, MI

DART CONTAINER – BUILDING 6 //
Mason, MI

MATRIX
CONSULTING ENGINEERS, INC.

David W. Hohmeyer, P.E.

dhohmeyer@soilsandstructures.com

POSITION: Principal / President

SPECIALIZATION: Geotechnical & Structural Engineering

QUALIFICATIONS:
Michigan Professional Engineering License #3289
Bachelor of Science Civil Engineering – 1982
University of Michigan
Masters of Science Civil Engineering – 1984
University of Michigan

EXPERIENCE:
1984 to Present – Soils & Structures, Inc.
Summer 1983 – Soils Engineering & Exploration, Chicago, Illinois
Summer 1982 - Soils & Structures, Inc.
Summer 1978 – 1981 – Soils & Structures, Inc.

PROJECT EXPERIENCE:

Miller Road Roundabout and Bridge Replacement
Geotechnical and structural engineer for a cofferdam. The purpose of the cofferdam is to allow the construction of bridge foundations below the water level. The cofferdam is constructed with steel sheet pile.
Scio Township, Michigan

Ganges Township Residences Seawalls and Revetments
Geotechnical and structural engineer for the design of a sheet pile seawall and revetment. The purpose of the seawall and revetment is to protect the shoreline and limit shoreline and bluff recession.
Ganges Township, Michigan

Grandville New Middle School Retaining Walls
Geotechnical and structural engineer for a modular concrete block wall for multiple retaining walls. The concrete block was Redi-Rock. The greatest wall height was is 21.0 feet.
Grandville, Michigan

U.S. 31 and M-104 Interchange Skywalk & Bike Path
Geotechnical and structural engineer for approximately 0.5 miles of segment block retaining wall that supports a non-motorized path adjacent to U.S. 31 and M-104.
Spring Lake, Michigan

David W. Hohmeyer, P.E.

dhohmeyer@soilsandstructures.com

Northshore Drive
Geotechnical and structural engineer for a precast concrete and soldier pile retaining wall ramp for two public parks.
Ferrysburg, Michigan

AFFILIATIONS:

American Society of Civil Engineers (ASCE)
American Society for Testing and Materials (ASTM)
American Concrete Institute (ACI)

TECHNICAL PAPERS:

"Augercast Pile Retaining Walls",
Proceedings of the Third International Conference on Case Histories in Geotechnical Engineering,
University of Missouri - Rolla (Publisher)
June 1993.

"Pile Capacity Predication", ASCE Geotechnical Special Publication No. 23, Proceedings of a symposium in conjunction with the 1989 Foundation Engineering Congress,
Northwestern University, ASCE (Publisher)
June 1989.

SHORT COURSES:

Concrete Slabs on Grade, ACI Seminar
Detroit, Michigan – December 1993
On day course covering design and construction of concrete slabs on grade.

Soil Dynamics, University of Missouri - Rolla
St. Louis, Missouri - July 1988
Three day course covering the design of machine foundations and earthquake engineering.

Geotechnical Analysis on Computers
University of Wisconsin – Madison, Wisconsin
January 1986
Two day course covering the use of computers for foundation design, slope stability and processing of test data.

Chris Gates, P.E.

cgates@soilsandstructures.com • soilsandstructures.com

POSITION: Structural Engineer

SPECIALIZATION:
Structural Design
Structural Evaluation

QUALIFICATIONS:
Bachelor of Science Civil Engineering
Calvin College
Grand Rapids, Michigan

REGISTRATION: Professional Engineer, State of Michigan

EXPERIENCE:
2008 to 2012 – Servinsky Engineering
2012 to Present – Soils & Structures, Inc.

PROJECT EXPERIENCE:

South Town Square II Apartments
Grand Rapids, Michigan

West Michigan Academy of Arts Auditorium
Spring Lake, Michigan

Tuckers of Northport
Northport, Michigan

MJR Grand Cinema 16
Troy, Michigan

Marquee Cinema 12
Bristol, Tennessee

Showplace Cinemas FEC Addition
Newburgh, Indiana

Sperry's Movie House & Retail
Holland, Michigan

Arcadia Bluffs South Course Club House
Arcadia, Michigan

Kristofor Twining, P.E.

ktwining@soilsandstructures.com • soilsandstructures.com

POSITION:
Director of Structural Services
Structural Engineer

SPECIALIZATION:
Structural Design
Structural Evaluation
Connection Design
Steel Shop Drawing Checking

QUALIFICATIONS:
Bachelor of Science Civil Engineering
Trine University (Formerly Tri-State)
Angola, Indiana

REGISTRATION:
Professional Engineer: MI, OH, VA, OK, MA

EXPERIENCE:
Intern – Fairfield Engineering
2000 to 2002 – Paul J. Ford and Company
2002 to Present – Soils & Structures, Inc.

PROJECT EXPERIENCE:

Holland Police Department
Structural Design
Holland, MI

Mead-Johnson Bowen Dryer Building
Structural Design
Zeeland, MI

Consumers Energy Unit 2-7 Evaluation
Structural Investigation
Armada, MI

White Pigeon Compressor Station
Structural Design
White Pigeon, MI

University of Michigan – Taubman Library
Connection Design/Checking
Ann Arbor, MI

Michigan State University – Breslin Center
Connection Design/Checking
Kalamazoo, MI

Malcolm Thompson, P.E.

mthompson@soilsandstructures.com

POSITION: Geotechnical Engineer, P.E.

SPECIALIZATION: Geotechnical Engineering

QUALIFICATIONS:
Bachelor of Science in Civil Engineering- 2018
University of Michigan
Master of Science in Civil Engineering- 2019
University of Michigan

REGISTRATION: Professional Engineer: Michigan

EXPERIENCE: 2019 to Present – Soils & Structures, Inc.

PROJECT EXPERIENCE:

Dollar General – Cooks
Geotechnical Investigation and Engineering
Cooks, Michigan

Blue Photon
Geotechnical Investigation and Engineering
Norton Shores, Michigan

Butternut Multi-Family
Geotechnical Investigation and Engineering
Park Township, Michigan

Packaging Corporation of America
Pile Inspection and Pile Load Test
Manistee, Michigan

Michael Partenio, P.E.

mpartenio@soilsandstructures.com • soilsandstructures.com

POSITION: Geotechnical Engineer

SPECIALIZATION: Geotechnical Engineering

QUALIFICATIONS: Bachelor of Science in Civil Engineering – 2015
University of Michigan, Ann Arbor

Master of Science in Civil Engineering - 2016
University of Michigan, Ann Arbor

REGISTRATION: Professional Engineer: Michigan

EXPERIENCE: 2016 – Somat Engineering, Inc.
2017 to 2018 – CTI and Associates, Inc.
2018 to Present – Soils & Structures, Inc.

PROJECT EXPERIENCE:

Dollar General - Alto
Geotechnical Investigation & Engineering
New Pre Engineered Store
Alto, Michigan

East Lansing Public Schools – Pinecrest Elementary
Geotechnical Investigation & Engineering
Elementary School Addition & Remodel
East Lansing, Michigan

Shoreline Protection
Geotechnical Investigation & Engineering
Design Shoreline Protection for Multiple Residences
Long Beach, Indiana

Muskegon County Channel Crossing
Geotechnical Investigation & Engineering
Directional Drilling of Watermain for Water Expansion
Muskegon, Michigan

Brian S. Gill, AIA NCARB

Principal, Corporate President

Registered Architect - State of Michigan

- Member: American Institute of Architects
- National Council of Architectural Registration Boards Certified
- Past President - Pontiac Downtown Business Association

Education:

Master of Architecture
The University of Michigan

Bachelor of Science in Architecture
Lawrence Technological University

Contact: (248) 874-1420 ext. 225
bgill@TDGArchitects.com

As TDG Architects principal, Brian leads a creative team of architects and designers through the design, production and project management of an array of project types. Brian also directs all aspects of business development and the financial health of the company.

In a career that spans more than 25 years, Brian's portfolio includes corporate workplace, financial institutions, retail spaces, healthcare offices, historic renovations and multi-family residential projects. Brian specializes in working with clients to manage space and provide planning that maximizes efficiency while providing design that define corporate image. Brian's talents go beyond basic architectural services. His expertise in developing project programming that aligns project goals with budgetary constraints has made him a valued partner to his clients.

TDG's philosophy is a direct reflection of the vision, determination and leadership of its principal.

"For me, the most satisfying thing about practicing architecture has been working with great clients and being a trusted partner to consider new and innovative ideas that help their businesses thrive.

Relevant Municipal Experience

- Michigan Department of Technology, Management & Budget - Wilderness State Park: Contact Station
- Michigan Department of Technology, Management & Budget - Wilderness State Park: Comfort Station
- Michigan Department of Technology, Management & Budget - Holly Recreation Area: Comfort Station
- Transportation Security Administration - Field Office, Southfield, Michigan
- County of Jackson - Historic Rehabilitation of County Offices
- City of Pontiac, Michigan - Renovation of Bowens Senior Center
- Michigan State Housing Development Authority - Technical Assistant

TDG Architects

79 Oakland Ave. Pontiac, Michigan
(248) 874-1420 TDGArchitects.com

Commercial • Office • Retail • Residential • Affordable Housing • Interiors • Planning

Licensed to practice architecture in Michigan, Ohio, Minnesota, Pennsylvania, Tennessee, Indiana, Texas.

Ronald Clisby - Resume

- 911 N. Lake George Road
  Attica MI 48412
  c. 586.883.2771

EDUCATION

Lawrence Technological University

- Bachelor of Science in Architecture

HONORS

Beautification Awards

- Nino Salvaggio's International Marketplace
  Clinton Township MI
- Grosse Pointe Residence
  Grosse Pointe Woods MI
- El Charros Mexican Restaurant
  St Clair Shores, MI

Published Projects

- Vince & Joe's International Marketplace
  Shelby Township, MI
- Nino Salvaggio's International Marketplace
  Clinton Township, MI
- Custom Automation Industrial Building
  Chesterfield Township, MI

EXPERIANCE

TDG Architects
Designer/Project Manager 2010 – Present

- Planning & Design
- Design Development
- Project Management
- Technical/Construction Detailing
- Architectural & Structural Detailing
- Intern Mentoring
- Firm Standards development & implementation

Quinlan Associates
Designer/Project Manager 1987 – 2010

Robert Stine Architect
Draftsman 1986 – 1987

Doug Warner, Inc
Interior Design/Graphic Design 1985 - 1986

Matthew E. Hoener
30665 Stellamar – Beverly Hills, MI 48025
734-560-2283

EXPERIENCED PROJECT ARCHITECT / CONSTRUCTION

Accomplished Project Architect / Construction Manager with national experience managing commercial and residential projects. Completion of over 400 architectural / construction projects. Extensive experience in all facets of architecture, construction project management, including due diligence, design, construction documents, budgeting, scheduling, zoning, permitting, bidding and construction management. Experience in managing multiple projects with a successful track record in leading a team to on-time, on-budget completion of projects. Highly skilled in client development including relationship selling.

EMPLOYMENT

TDG Architects, Pontiac, MI **2017 – Present**
Architectural Firm

Project Manager/Production Manager
Involved in all aspects of project development, from site selection through construction. Managed client relationships, including initial project development, client approval(s), and project tracking reports. Coordinated and obtained municipal and government approvals, including site plan approval, zoning board of appeals, architectural review board, historic commissions, road commissions, DOT and other required approvals and permits. Development of Construction Documents, Office Standards and oversight of projects.

Palmer Street Design, Plymouth, MI **2009 – 2017**
Architectural Design and Construction Management.

Owner
Design / Build Residential/Commercial Projects for builders and clients. Development of various size projects using AutoCAD and Chief Architect CAD software. Manage bidding with excel and Hometech software. Administer all aspects of project Construction including, sub-contracting selection and management, invoicing, budget tracking. Including hands on experience in field with all trade disciplines.

Superior Spray Solutions, Lapeer, MI **2012 – 2017**
Spray Foam Insulation, Spray Roofing, Cellulose and Fiberglass

Sales Manager
Sales, Project Management, Scheduling, Billing, Waivers, Trade Shows, Marketing, installation, Maintance and OSHA and MISHA manuals and employee training.

THE VELMEIR COMPANIES, West Bloomfield, MI **2006 – 2009**
Full-service commercial retail Development Company specializing in retail and suburban mixed-use developments for such customers as Office Depot, McDonald's and CVS.

National Director of Construction
Led a high-volume, six-person Construction Department, including all departmental planning, procedures, team management, and business outcomes. Managed an annual $196MM construction budget, while delivering 95% of projects on time (2008). Managed dozens of construction projects annually for major national clients such as CVS, Tim Horton's, and Crème

de la Crème childhood learning centers. Ensured client satisfaction throughout the build process, including initial project development, obtaining client approval(s), and project tracking reports. Oversaw all budgeting and scheduling, including reporting to upper management. Managed the development and output of five Project Managers, three of them virtually.

Coordinated and obtained municipal and government approvals which includes: site plan approval, zoning board of appeals, architectural review board, historic commissions, road commissions, DOT and other required approvals and permits for construction. Selection, approval and management of architects, civil engineers, traffic engineers, environmental Engineers and general contractors. Managed project bidding, bid review, awarding, and negotiation with consultants, general contractors and sub-contractors. Interviewed and hired local attorneys and expeditors to assist with project approvals. Negotiated 20 contracts/scopes of work with master developers/landlords annually. Reviewed and approved 50 purchase and lease agreements annually. Reviewed and approved site selection, design drawings, construction documents, developed risk assessment memorandums, and oversaw project construction, including turnover and close out. Frequently used Chief Architect AutoCAD, Microsoft Project, M-Color and StruCalc software programs.

NORR LLC, Detroit, MI **2006**
Global architectural and engineering design firm of commercial, lifestyle, and public buildings.

Production Manager
Developed project budgets and schedules for construction of CVS drug stores. Coordinated schedules and information with outside consultants. Assisted with the development of office standards, training, and management of three-member team. Developed Prototype drawings for CVS stores.

F. MATTHEW RAY, ARCHITECT, Berkley, MI **1995 – 2006**
Architectural design firm of commercial and residential projects.

Project Architect / Director of Professional Development
Oversaw a team that designed and built retail projects for such as clients as Arbor Drugs, Discount Tire, Burger King, and shopping centers. Involved in all aspects of project development, from site selection through construction. Managed client relationships, including initial project development, client approval(s), and project tracking reports. Coordinated and obtained municipal and government approvals, including site plan approval, zoning board of appeals, architectural review board, historic commissions, road commissions, DOT and other required approvals and permits.

Selected, approved and managed all civil engineers, mechanical engineers, structural engineers and general contractors for projects. Led bidding, bid awarding, and contract negotiation with contractors and consultants. Led all aspects of construction, including scheduling, budgets, turnover and close out. Trained, managed, and developed office standards for 20-person team. Completed capital improvement projects, from complex office renovations to simple condo improvements.

EDUCATION / LICENSES

Bachelor of Science in Architecture
Lawrence Technological University, Southfield, MI
Completed IDP requirements Arial Lift Certification
Builders Licenses 1997-2006 SPF – Certification

TECHNICAL PROFICIENCIES / EXPERIENCES

AutoCAD, Chief Architect, 3D Studio, ArchiCad, MS Project, MS Office, Comcheck, StruCalc, M-Color, Sketch-up, Adobe, Hometech, QuickBooks, limited ERP Software

- Retail, medical office, professional office, light industrial, restaurants and residential.
- On-time project completion
- Experienced in handling high workload and schedules.
- National and local contacts in the construction trades and related fields.
- Successfully working with zoning boards, review boards, road commissions, and DOT
- Completed projects in 11 states.
- Feasibility studies, Diligence forecast budgets and timelines.
- Experienced with national retails and large corporations.

MICHAEL D. TERENZI

54324 Jack Drive
Macomb, MI 48042

586.292.4683
md_terenzi@yahoo.com

DEMONSTRATED STRENGTHS

- **Management Skills**
- **Client Service/Support**
- **Budgetary Control**
- **Multi-task Abilities**
- **Problem Solving**
- **Research and Development**
- **Creative, Capable, Results Oriented**
- **Dependable, Trustworthy, Hard Working**
- **Multiple Computer Skills including proficiency in Microsoft Office Applications**
- **Proficient in Multiple Design Software Programs**
- **Proficient in 2nd Language - Italian**

PROFESSIONAL EXPERIENCE

TDG Architects **November 2012 – Present**
Pontiac, Michigan
Project Manager / Architectural Drafter

- Detailed Drawings per Specifications
- Scale Drawings for Building Contractors
- Contract Documents
- Drawing Modifications as Directed
- Project Design, Plan, and Rendering
- Project Management
- Problem Solving
- Budgetary Control
- Client Service/Support
- Client Bid Representation as Requested

Notable Projects:

- Swetech Medical Offices
- SilverPine Family Physicians Office Renovations
- Beaumont Urgent Care Facility Renovations
- Macomb Twp. Dental Office Renovation
- Ashley Capital Warehouse Interior Renovations
- WSU Nursing Practice Corporation

Christopher Enright Architects **March 2011 – May 2012**
Bloomfield, Michigan
Architectural Drafter

- Detailed Drawings per Specifications
- Scale Drawings for Building Contractors
- Drawing Modifications as Directed
- Automotive Dealership Renovations

MICHAEL D. TERENZI

54324 Jack Drive
Macomb, MI 48042

586.292.4683
md_terenzi@yahoo.com

Studio 5 Design **May 2007 – May 2010**
Birmingham, Michigan
Architectural Detailer

- Detailed Drawings per Specifications
- Scale Drawings for Building Contractors
- Contract Documents
- Drawing Modifications as Directed
- Project Design, Plan, and Rendering
- Project Management
- Problem Solving
- Budgetary Control
- Client Service/Support
- Client Bid Representation as Requested
- Personnel Training and Support
- Proficient use of AutoCad 2008, Autodesk Architectural Desktop 2005, Adobe Illustrator CS3/Adobe Photoshop CS3, Autodesk 3D Studio Max 8 (3D Renderer)

Ford & Earl Design **March 2000 – October 2005**
Troy, Michigan
Architectural Detailer

- Interior/Exterior Drawing Design
- Scale Drawings for Building Contractors
- Document Construction/Presentation
- Research/Recommendation
- Problem Solving
- Budgetary Control
- Graphic Presentation Coordinator
- Proficient use of AutoCad 2005/Autodesk Architectural Desktop 2005/Autodesk Viz 2005(3D Renderer)/ Adobe Illustrator/Adobe Photoshop/Corel Draw 11/Corel Paint 11

The Cummins Group **March 1996 – March 2000**
Utica, Michigan **October 2005 – February 2007**
Office Manager/CAD Specialist

- Project Management
- Project Coordination Client/City Planners
- Problem Solving
- Client Service/Support
- Staff Management (8 employees)
- Office Computer Specialist
- Office Training AutoCad

EDUCATION

Lawrence Technological University **September 1991 - December 1995**
Southfield, MI
Bachelor of Science Degree Architecture

COMPUTER SKILLS

- Microsoft Office 365
- Internet Proficient
- AutoCad 2022
- Autodesk Architectural Desktop 2022
- Autodesk 3D Studio Max (Renderer)
- Adobe Illustrator CS
- Adobe Photoshop CS
- Adobe Lightroom CS

REFERENCES & PORTFOLIO

- Available upon Request

Chris Westerlund

chris@make-lab.org
chriswesterlund.com
586-610-5924
420 Apt. 92 Rochester, MI 48307

ARE candidate *- 3 of 6 exams complete. Expected licensure by 2023*

Education

Lawrence Tech. University *– Architecture [BS | M.Arch] - 2014 - 2020*

- Three Presidential Undergraduate Research Awards - $3,000 of funded research
- Numerous study abroad trips - attending, leading, and creating workshops abroad
- Multiple Dean's list semesters - graduated with honors

Work

TDG Architects *– Architectural Designer - 2011 - Present*

- Develop design ideas & concepts to translate to built forms
- Produce & coordinate construction documentation
- Manage projects to meet clients' needs
- Manage company computers, software, & marketing efforts.

makeLab *– Director - 2020 - Present*

- Manage business & logistics of the nonprofit
- Coordinate vision of the makeLab with Board of Directors
- Collaborate with students & clients to achieve outcomes
- Fabricate projects through knowledge of digital fabrication tools

houm *– Architectural Designer - 2017 - 2021*

- Research on alternative construction methods in housing
- Create models to be translated to build form through digital fabrication
- Establish company standards & ideals around workflows & designs

Skills

Very Knowledgeable

AutoCAD
Rhino
Computer troubleshooting
Digital fabrication

Knowledgeable

Revit
Grasshopper
Adobe Suite
Enscape

Somewhat Knowledgeable

RhinoCAM
Grasshopper plug-ins
BIM
Energy simulation
GIS

Other

Computational Design Detroit (co.de.D) *– 2020 - Present*

- Planning Committee - Develop ideas to teach, share, & implement computational thinking.
- Communications Chair -Produce content promoting events & news. Manage social media channels.
- Host workshops teaching computational tools such as grasshopper

Clinton River Area Mountain Biking Association *– 2014 - Present*

- Membership Committee Chair - Manage 500 Memberships, recruit new memberships (+200/2years)
- Events Committee Chair - Manage eight events thought out the year (50-2,000 Attendees)
- Nation Mountain Bike Patrol - Assist in medical emergencies, Educate trail users of proper etiquette

CAREY J. SUHAN, PE

TITLE: Vice President - Geotechnical and Environmental Services

EDUCATION:
MS, Civil Engineering
(Geotechnical/Environmental Concentration)
Wayne State University, 1995

BS, Civil Engineering
University of Michigan, 1985

LICENSES/REGISTRATION:

Licensed Professional Engineer, State of Michigan, #2601036161, 1990
Licensed Professional Engineer, State of Ohio, #78837, 2014

PROFESSIONAL DEVELOPMENT:

Niton XRF Analyzer Operator's Training Certificate, 2010
FRA Contractors On Track Safety Training, 2009
MDEQ RBCA Training Course, 1995
40-Hour Hazardous Waste Training Certification (OSHA)
8-Hour Hazardous Waste Training Refresher, Annually
Hazardous Waste Refresher Course, 2002
8-Hour Hazardous Waste Supervisor Certification Training (OSHA)
Deep Foundations Institute Annual Conference, 1991
Environmental Site Assessment Seminar, PSI, 1987
Fundamentals of Deep Foundation Design, University of Missouri Rolla, 1989

EXPERIENCE:

Thirty-two (32) years' experience in geotechnical engineering, construction materials testing and environmental site assessment investigations and supervision of engineering and technical staff. Responsibilities include development of geotechnical exploration programs; field and advanced laboratory testing of soils and construction materials, preparation of foundation and construction recommendations including pile, caisson, and auger cast pile recommendations, and slope stability analysis. Also experienced in pavement consulting and underground design. Background in commercial, municipal, industrial, and residential projects. Supervises drilling crews performing geotechnical and environmental sampling, piezometer, and ground water monitoring well installation.

Buildings

- Macomb County Dept. of Roads; Proposed Salt Storage Dome – Shelby Twp., MI
- Enrico Fermi 2 Power Plant - Frenchtown Twp., MI
- Michigan State Police Building – Walker, MI
- MGM Grand Casino – Detroit, MI

Roads & Bridges

- RCOC; Kurtz Road Culvert Replacement – Holly Twp., MI
- Macomb County Dept. of Roads; Wireless Communications Towers (Nine Locations)
- Macomb County Dept. of Roads; 29 Mile Rd Bridge over Camp Brook – Ray Twp., MI

Slope Stability, Seawall Evaluations

- Erma Henderson Park Seawall Rehabilitation - Detroit, MI
- Rouge Steel Seawall Evaluation – Detroit, MI
- Harbor Reconfiguration and Seawall Evaluation – St. Clair, MI

Parks

- Metro Beach Metro Park Activity Center; Geotechnical Investigation
- Accessible path, fishing pier/overlook at Cass Lake along Dodge Park #4 – State of MI DTMB
- Highland Lake Recreation Area – Highland Twp., MI

GARY E. PUTT, PE

TITLE: Senior Project Engineer - Geotechnical Services

EDUCATION: BS, Construction Engineering; Lawrence Technological University, 1972

PROFESSIONAL DEVELOPMENT:

Fundamentals of Shallow Foundation Design, University of Missouri Rolla, 1981
Welding Inspection Technology, American Welding Society, 1986
Concrete Technology, Michigan State University, 1992
Storm Water Management, DEQ, 1996

LICENSES/REGISTRATION:

Licensed Professional Engineer, State of Michigan, 1992
Licensed Professional Engineer, State of Missouri, 1989
Storm Water Management Operator, State of Michigan, 2002

EXPERIENCE: Over 43 years' experience in geotechnical analysis, construction materials testing and inspection, construction management, structural design, and coordination of contractor activities. Performs all types of routine and advanced soil tests in lab and field. Performs all types of routine concrete and asphalt tests and inspections. Evaluates bearing capacity and settlement potential from geotechnical data. Determines scope of work and arranges geotechnical investigations. Supervises drilling crews on geotechnical and environmental projects. Managed field and laboratory technicians in construction services department and evaluated and resolved construction issues. Experienced with magnetometers and ground penetrating radar to determine the location of buried objects (utilities, drums and underground storage tanks), and to differentiate between fill material and natural soils.

SAMPLING OF PROJECTS:

Buildings & Structures

- Danielle Enterprises; Proposed Industrial Warehouse – Detroit, MI
- Novi Expo Center – Novi, MI
- General Motors Milford Proving Grounds - Milford, MI
- Ford Motor Company Assembly Plant - Wixom, MI
- Meijers Distribution Center - Newport, MI
- Proposed Salt Dome – Sterling Hgts., MI

Roads & Bridges

- M-53 & 26 Mile Road Intersection - Shelby/Washington Twps., MI
- Holly State Recreation Area – Holly, MI
- East Riverfront Roads and Infrastructure Reconstruction – Detroit, MI

Slope Stability / Seawall Evaluations

- Harbor Reconfiguration; Seawall Evaluation – Harrison Twp., MI

Storm Water Consultation

- South Pointe Apartments Complex; Southgate, MI
- Hampton Inn and Suites – Sterling Heights, MI
- Palmer Woods Estates – Sterling Heights, MI

TECHNICAL SOCIETY AFFILIATIONS:

American Society of Civil Engineers
American Welding Society
Engineering Society of Detroit (ESD)

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Bradley J. Butcher, AIA, NCARB
Senior Project Manager - Architectural, Client Manager

Mr. Butcher has over 37 years of experience in the design of military, municipal, commercial, resort, and residential projects. His expertise in design and planning has been refined by continued research into developing trends and expanding technologies in architectural design. Brad takes great pride in assisting Clients in developing ideas that accommodate their specific project needs and environments, along with enabling them to learn more about why quality architectural solutions enhance the project.

Credentials

- Licensed Architect - States of Michigan, Ohio, Indiana, New York, Florida and Pennsylvania
- President, Upper Great Lakes Chapter, AIA Michigan

Education

- Bachelor of Architecture, Lawrence Technological University
- Bachelor of Science - Architecture, Lawrence Technological University

Representative Projects *(select list)*

- Alcona County Commission on Aging, Senior Activity Center, Lincoln MI
- Alpena Combat Readiness Training Center, Alpena MI
  - Air-To-Ground Range Restroom/Shower Pavilion
  - Troop Quarters Building Repairs
  - ATG Target Storage and Maintenance Facility
  - Flightline Fence from B601 to Camp Collins
  - Replace Classroom Facility 116-120
  - Add/Alter Vehicle Maintenance Facility
  - Fire/Crash/Rescue Station
  - Add/Alter Petroleum Operations Facility
  - Replace Squadron Operations Complex
  - Visiting Unit Training Facility (Collins Center)
  - Replace Dining Hall Facility
  - Base Headquarters Facility
  - Buildings 1, 2 and 4 Upgrades
  - Camp Grayling Gunnery Range 40 Support Complex
- Alpena Veterinary Clinic Expansion, Alpena MI
- Bill Marsh Ford Dealership Improvements, Gaylord MI
- Cherry Capital Airport Passenger Bridge, Traverse City MI
- DTMB/DNR Toilet Shower Buildings/FEMA Safe Rooms at Various State Parks throughout Lower Peninsula, Michigan
- DTMB/DNR Ralph A. MacMullan Conference Center, Roscommon MI
  - Lake Erie Lodge Roof Replacement
  - Lake Huron Lodge Roof Replacement
  - Lake Erie & Lake Huron Lodges Renovations
- DTMB/DNR AuSable River Footbridges at Hartwick Pines State Park, Grayling MI
- DTMB/DOC Northern Training Academy Renovations, Kincheloe MI
- DTMB/DHHS Camp Shawono Center Upgrades, Grayling MI
- DTMB/DMVA Camp Grayling, Grayling MI
  - MATES Classroom Addition
  - Camp Commander's Quarters
  - Company Operations Building
  - Dining Hall
  - Live Fire Shoot House Complex
  - Vehicle Wash Facility
- DTMB/MSP Michigan State Police Training Facility, Dimondale MI
  - Outdoor Firing Range
  - Academy Improvements Study
- Gaylord Regional Airport, Gaylord MI
  - Box Hangar
  - General Aviation Terminal
- Gerrish Township Hall Upgrades - Critical Repairs, Roscommon MI
- Great Lakes Boat Building School, Educational Facility Expansion, Cedarville MI
- Great Lakes Energy Expansion, Boyne City MI
- Harrison City Hall/Department of Public Works Facility, Harrison MI
- Lake Superior State University Brady Hall Renovations, Sault Ste. Marie MI
- Northland Area Federal Credit Union, New Headquarters Facility, Alpena MI
- Otsego County, Gaylord MI
  - County Building Improvements
  - Courthouse Window and Roof Replacement
  - Public Library Expansion
- Pickford Township Fire Station, Pickford MI
- Presque Isle Electric & Gas Co-Op Facility New Headquarters & Vehicle Maintenance Facility, Onaway MI
- Sault Tribe Housing Authority, Odenaang Housing Sites, Sault Ste. Marie MI
- United States Coast Guard Duplex Building, Sault Ste. Marie MI
- Vanderbilt Public School Sinking Fund Repairs, Vanderbilt MI
- Veterans Administration - Traverse City MI Community-Based Outpatient Clinic
- War Memorial Hospital Sleep Center Renovations, Sault Ste. Marie MI
- Whitefish Township Community Schools, Paradise MI
  - Restroom/Shower Renovations
  - Biomass Storage Facility (design)
  - Transportation and Maintenance Facility (design)

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Robert M. (Mark) Roth, Jr., P.E.
Senior Project Manager - Engineering, Client Manager

Mr. Roth has over 40 years of experience in planning, civil and structural engineering for governmental, commercial, residential and aviation projects, from hangar facilities to fuel farms. His expertise encompasses steel, concrete, masonry and timber construction, as well as site design, storm water drainage and retention, utility design, asphalt and concrete pavement systems, and FAA Advisory circulars.

Credentials
- Licensed Engineer - States of Michigan, Ohio, Indiana, Wisconsin, Minnesota, Pennsylvania, New York, Tennessee, Kansas and Florida

Education
- Bachelor of Science - Civil Engineering, Michigan Technological University
- ACC Airport Pavement Design & Evaluation Workshop

Professional Affiliations
- NCEES Certified
- American Concrete Institute
- American Institute of Steel Construction
- American Society of Civil Engineers
- Engineering Society of Detroit
- International Building Council
- Michigan Society of Professional Engineers
- National Society of Professional Engineers
- Structural Engineering Association of Michigan

Presentations
- Lecturer to senior level airport managers and transportation officials from Eurasia on Airport Design, as part of a training program sponsored by the U.S. Department of Commerce:
  "Planning and Design of a New FBO Facility"
  "Aircraft Ramps and Parking Aprons"

Published Articles
- "Changes in the Food Warehousing and Distribution Industry" magazine article
- "What Does the Future Hold for Distribution?" magazine article

Representative Projects *(select list)*
- Allen Park DPW Facility, Allen Park MI
- Alpena CRTC Airforce Training Base, Alpena MI
  - Flightline Fence from B601 to Camp Collins
  - Air-to-Ground Range Target Storage Facility
- Anglin Aviation FBO, Willow Run Airport, Ypsilanti MI
- Assa Abloy, TAC Air Hangar Door Replacement, Centennial OH
- Atlantic Aviation
  - Sikorsky Memorial Airport Hangar Door Truss Repair, Stratford CT
- Canton Township Fire Station No. 2, Canton Twp MI
- Cherry Capital Airport Passenger Bridge, Traverse City MI
- Detroit Metro Wayne County Airport, Romulus MI
  - Aircraft Rescue and Firefighting Training Facility
  - McNamara Terminal Jet Bridge
  - ADA Review, North Terminal Building
- DTMB/DHHS Hawthorn Center Structural Analysis & Steel Beam Repair, Northville MI
- DTMB/DMVA Camp Grayling MATES Classroom Addition, Grayling MI
- DMF Bait Company, Waterford MI
  - Campus Plan Update/Master Plan
  - Storm Sewer Upgrade
  - New Truckwell and Building Addition
- Federal Express Break Room at Pellston Airport, Pellston MI
- Fischer Automotive Building Addition, Auburn Hills MI
- Gaylord Regional Airport Box Hangar, Gaylord MI
- Grosse Pointe MI, City of, New DPW, DPS & Court Building
- Harrison City Hall/Department of Public Works Facility, Harrison MI
- Hydra Zorb Manufacturing Facility, Auburn Hills MI
- Livonia Master Plan / New Water & Sewer Department Facility, Livonia MI
- Magnum Helicopters LLC, Hangar Renovation at Canton-Plymouth Mettetal Airport, Canton MI
- Millennium Aviation, Hangar Facility, Reading PA
- Otsego County Public Library Expansion, Gaylord MI
- Owens Corning Fuel Farm Upgrades, Toledo OH
- Peninsula Aviation, Oakland County International Airport, Waterford MI
  - New FBO Office and Terminal
- Pittsburgh Institute of Aeronautics, Youngstown-Warren Regional Airport, Vienna OH
  - Aircraft Maintenance Training School Addition & Renovation
- Polish Mission Galeria Project, Orchard Lake Schools, Orchard Lake MI
- PTK Airport Partnership, Oakland County International Airport, Waterford MI
  - Oakland Air - Building Condition Assessment
  - Taubman Hangar - Building Condition Assessment
- Rochester Hills New Fire Station No. 4, Rochester Hills MI
- Royal Oak Police Station, Royal Oak MI
- Synergy Group, Inc., New Hangar Facility, Mettetal Airport, Canton Township MI
- United Parcel Service
  - Mahoning Valley Facility Expansion, OH
  - Building Expansion, Shelby Township MI
- Westland Ice Arena Expansion, Westland MI

Timothy J. Miller, AIA, NCARB, SCIP-a
Architectural Project Leader

Mr. Miller has over 25 years of experience in project programming, scheduling, design, code analysis, construction document preparation, project management and specification writing. Tim is knowledgeable of construction budgets and contracts, coordinating with consultants, conducting owner/contractor meetings, and coordinating with local and State review agencies.

Credentials

Licensed Architect, State of Michigan

NCARB Certificate

Education

- Master of Architecture with Distinction; Lawrence Technological University
- Bachelor of Science - Architecture; Lawrence Technological University

Representative Projects *(select list)*

- Alcona County Commission on Aging Senior Center, Alcona County MI
- Bay Bluffs Medical Center Phased Construction, Emmet County MI
- Chippewa County Foster Care Family Project, Sault Ste. Marie MI
- DTMB/Michigan State Police
  - Training Academy Campus Improvement Studies, Dimondale MI
  - Training Facility Outdoor Firing Range, Dimondale MI
- DTMB/Department of Natural Resources
  - DNR Storage Building, Gaylord MI
  - Ralph A. MacMullan Conference Center Improvements, Roscommon MI
  - Toilet Shower Buildings/FEMA Safe Rooms
- DTMB/Department of Transportation
  - MDOT Exterior Siding Investigation, Gaylord
- DTMB/Department of Health & Human Services
  - Shawono Center Upgrades, Grayling MI
- DTMB MATES Components Cleaning Building, Camp Grayling, MI
- DTMB Alpena CRTC, Armory Addition and Renovation, Alpena MI
- Great Lakes Boat Building School Expansion, Cedarville MI
- Oscoda County Government Building and Sheriff's Department, Mio MI
- Presque Isle Electric & Gas Cooperative, New Headquarters Facility, Onaway MI
- Great Lakes Energy HQ, Boyne City, MI
- Saginaw Chippewa Indian Tribe of Michigan Tribal Aquatic Center, Mt. Pleasant MI

Personnel - Resume

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Gint A. Gaska, AIA, CSI, AIBD
Project Manager - Architectural

Mr. Gaska has over 35 years of experience in the architectural industry. He has a thorough understanding of the architectural practice and the technology necessary to promote efficient industry best practices and good design. Gint specializes in residential and commercial architectural design, multi-family project management and design, corporate space-planning and retail build-out. He is skilled in Revit and 3D architectural modeling in Chief Architect Pro and SketchUp, as well as marketing renderings in Lumion.

Credentials

Licensed Architect, State of Michigan

CSI/CDT

Education

Bachelor's Degree - Architecture;
University of Cincinnati

Representative Projects *(select list)*

DTMB/Department of Corrections
- Northern Training Academy Renovations, Kincheloe MI

DTMB/Department of Military & Veterans Affairs
- Alpena Armory Renovation, Alpena Combat Readiness Training Center, Alpena MI
- MATES Components Cleaning Building, Camp Grayling MATES Facility, Grayling MI

Moses Roses Commercial Building Renovation, Gaylord MI

Multi-Family Development Project, Muskegon MI

Pentastar Aviation FBO Upgrades at Oakland County International Airport, Waterford MI

Private Residences:
- Renovation, Thumb Lake, Charlevoix County MI
- Renovation, Alpena MI
- Expansion, Atlanta MI
- Restoration Evaluation, Mackinac Island MI

Song of the Morning Retreat, Wheelhouse Building Deck Reconstruction, Vanderbilt MI

Soo 20,000 SF Industrial Building Renovation, Sault Ste. Marie MI

Additional Project Experience *(prior to joining SGI)*

- Camp Dainava Pavilion Addition
- Dominican Sisters of Mary Lumen Ecclesiae Digital Recording Studios, Ann Arbor MI
- Huron Road Hospital Surgery/Recovery Addition
- MI HQubed Ann Arbor Campus Proposed Offices and Wet Labs

SIEBEIN ACOUSTIC

ARCHITECTURAL | ENVIRONMENTAL

ARCHITECTURAL AND ENVIRONMENTAL ACOUSTICS

Intelligently designing architectural, urbane and natural soundscapes for creative and healthy living.

Gary W. Siebein, FASA, FAIA, NCARB

Senior Principal Consultant

AREAS OF EXPERTISE

Soundscape Planning and Design, Environmental Noise; Architectural Acoustic Design of Indoor and Outdoor Performance Spaces; Mechanical System Noise & Vibration Control

EDUCATION

M.A. (Architecture), 1980
University of Florida

Bachelor of Architecture, 1978
Rensselaer Polytechnic Institute

B.S. (Building Science), 1972
Rensselaer Polytechnic Institute

REGISTRATION

Registered Architect Florida # 8846
Registered Architect Georgia #RA014816
NCARB # 86214

AFFILIATIONS

Fellow, American Institute of Architects
Fellow, Acoustical Society of America
Member, NCAC
Member, ASTM
Member, ASHRAE

PROFESSIONAL EXPERIENCE

40 Years

CONTACT INFORMATION

625 NW 60th Street, Suite C
Gainesville, Florida 32607
352-331-5111 x 16
gsiebein@siebeinacoustic.com

Gary W. Siebein, founder of Siebein Associates, has over 40 years' extensive experience in soundscape planning and design of communities and urban areas, acoustical design of performance spaces, environmental noise and assessment, human and community response to noise, and developing instrumentation for the measurement, monitoring and analysis of sounds in communities in the ways in which they are heard by people. He has completed work on over 2,300 projects worldwide for many clients including the NSF and other governmental agencies as well as clients in the private and public sectors. He is also a Professor Emeritus of the School of Architecture at the University of Florida where he directed a graduate program in building and environmental acoustics for 35 years. He is an international leader in acoustic and soundscape research. He has written five books, 16 book chapters, and over 200 technical papers and monographs in architectural and environmental acoustics that have been presented at regional, national and international professional society meetings.

Gary W. Siebein has consulted for military and law enforcement training facilities for over 40 years. He has designed methods to accurately measure, model and predict the effects of impulsive sounds such as gunfire and demolition blasts associated with military and police training activities on adjoining properties as part of environmental assessment and ICUZ processes. He has worked with the military, federal, state and local law enforcement agencies to develop comprehensive cost effective noise management plans for training facilities. This work has included design of baffled ranges, fully enclosed ranges, conducting community workshops and large scale experiments on sites to demonstrate acoustic effects of noise mitigation, computer modeling of noise contours, and auralization of sounds as they are heard at neighboring properties. He consults with communities to develop practical noise ordinances and is currently serving on an ANSI working group to develop a model community noise ordinance. He also serves on ASTM Committee E33 on Environmental Acoustics which develops testing standards for building and environmental acoustics.

EXPERIENCE

- Principal Consultant, Siebein Associates (1981-present)
  - ◊ Acoustical consulting commissions in private practice, including space shaping of theaters, interior and exterior noise control, mechanical system noise control, and sound system design.
- Faculty Member (Professor), University of Florida (1980-2015)
  - ◊ University Research Foundation Professor (1999-2002)
  - ◊ Director, Architecture Technology Research Center (1985-2015)
- Architectural design work in several small firms in southwestern Connecticut (1972-1980)

RELEVANT PROJECT EXPERIENCE (partial list)

- Albemarle Public Safety Training Facility Indoor and Outdoor Firearms Ranges, Roanoke, VA
- Blalock Lakes Clay Pigeon Range Noise Study, Blalock, GA
- Camp Lejeune USMC Firing Ranges, Camp Lejeune, NC
- Caseyville Outdoor Rifle and Pistol Club, Masacoutah, IL
- City of Omaha Outdoor Public Safety Training Center, Omaha, NE
- City of Phoenix Police Indoor and Outdoor Firing Ranges, Phoenix, AZ
- City of Virginia Beach Outdoor Firing Range, Virginia Beach, VA
- Clearwater Police Department Partially Enclosed Firing Range, Clearwater, FL
- Department of Defense Outdoor Firing Ranges, VA
- Dubuque County Sheriff's Outdoor Range, Dubuque, IA
- Duncan Farms Outdoor Firing Range, Beaufort County, SC
- Duval County Sheriff's Office Indoor and Outdoor Firing Ranges Noise Impact Study, Jacksonville, FL
- Everglades Youth Ranch Outdoor Firing Range, Palm Beach, FL
- FBI Indoor and Outdoor Firing Ranges Acoustical Study, Quantico, VA
- FBI Proposed 500 Yard Precision Rifle Deck Environmental Acoustic Assessment, Quantico, VA
- Federal Law Enforcement Indoor and Outdoor Training Center Firing Ranges, GA, MD, SC
- Georgia Department of Natural Resources Union County Outdoor Shooting Ranges, Blairsville, GA
- Island Lake Outdoor Recreational Shooting Range Noise Impact Analysis, Brighton, MI
- Maxwell Air Force Base Partially Enclosed Firing Range, Montgomery, AL
- Maumee Proposed Fire and Police Training Facility, Maumee, OH
- McConnell AFB Combat Arms Training Facility, Wichita, KS
- Michigan Department of Natural Resources Statewide Outdoor Firing Ranges, MI
- Pedlar Mountain Wildlife Management Area Shooting Range, Monongalia, WV
- Rhino Outdoor Open Gun Range, Williston, FL
- Summit County Outdoor Shooting Range, Dillon, CO
- Tampa Police Department Partially Enclosed Firing Range, Tampa, FL
- United States Army Training Complex Outdoor Firing Range, Okinawa, Japan

SECTION 3 - MANAGEMENT SUMMARY, WORK PLAN & SCHEDULE

3. MANAGEMENT SUMMARY, WORK PLAN AND SCHEDULE

MANAGEMENT SUMMARY

The NFE Team will assign highly qualified personnel and experts in their respective fields to perform all design services with respect to this important account. Below, we have identified key individuals, and their area of expertise, who will be assigned to this account.

Team Member:	Jeffrey Huhta, PE, PS (NFE)
Expertise & Account Role	Jeff Huhta has extensive experience in designing and administering projects for: transportation, pathway improvement, specialized surveying, storm water management, wetland mitigation, and municipal improvement. He will serve as the project leader and main contact for this account. Specifically, Jeff will oversee and coordinate all project activities including, but not limited to: preliminary design, final design and construction administration services. Additionally, Jeff will serve as the lead project manager for NFE overseeing all project surveying, geotechnical investigations, water system designs, sanitary system designs, pavement designs, pathway designs and SESC design.
Team Member:	Steven Sutton, PE, LSIT (NFE)
Expertise & Account Role	Steve Sutton has significant experience in designing and administering projects for: transportation improvement, pathway improvement. storm water management, and municipal improvement. He will serve as the lead designer for this project. Specifically, Steve will assist in the preparation of preliminary design documents and specifications, final design and specifications, and project estimates. Steve will also coordinate activities associated with construction administration.
Team Member:	Jason Longhurst, PE (NFE)
Expertise & Account Role	Jason Longhurst has over 19 years of experience as a design engineer utilizing CAD. He is a leading expert in Civil 3D design and is adept at performing detailed design drawings utilizing 3D modeling techniques. Jason will serve as the lead design engineer.
Team Member:	Petr Kotrba, PE (NFE)
Expertise & Account Role	Petr Kotrba has over 20 years of experience as a design engineer utilizing CAD. He is a leading expert in Civil 3D design and is adept at performing detailed design drawings utilizing 3D modeling techniques. Petr will serve as design engineer.

Team Member:	Mark Wilson (NFE)
Expertise & Account Role	Mark Wilson has over 24 years of experience as a design engineer utilizing CAD. He has served as the lead design engineer and construction inspector for Wilderness State Park. He is a leading expert in Civil 3D design and is adept at performing detailed design drawings utilizing 3D modeling techniques. Mark will serve as a design engineer.
Team Member:	Tim Wood, EIT (NFE)
Expertise & Account Role	Tim has 8 years of experience as a design engineer utilizing CAD. He is a leading expert in Civil 3D design and is adept at performing detailed design drawings utilizing 3D modeling techniques. Tim will serve as the design engineer.
Team Member:	Mark Owens, PS (NFE)
Expertise & Account Role	Mark Owens has over 33 years of experience of land surveying experience with most of those years serving as a survey crew chief. He has completed hundreds of public improvement surveys, including many for park improvements.
Team Member:	George Ostrowski, LLA, LEED AP (NFE)
Expertise & Account Role	George has 28 years of experience in the areas of environmental design, permitting and landscape architecture. He will serve as landscape architect for all land planning and environmental related activities including: QA/QC reviews, project studies, and preliminary design and site inspections. Specifically, George will oversee and coordinate all designs involving bio-retention cells, ground water recharge initiatives, and overall landscape plans.
Team Member:	Tad Krear, RLA (LDS)
Expertise & Account Role	Tad Krear has over 34 years of experience in the areas of land planning and landscape architecture. Tad will serve as the project manager for all land planning related activities associated with this project, including: QA/QC reviews, preliminary and final design phases. He will coordinate all efforts with the project team.
Team Member:	Derek Slupka (DS Architects)
Expertise & Account Role	Derek Slupka has over 30 years of experience in architecture and architectural design. Derek will serve as the project manager/architect and main contact for small architectural projects, building evaluations and repairs, including QA/QC reviews, project studies, preliminary design, final design, and site inspections. Derek will coordinate all DS activities with the project team and perform the majority of the onsite building construction inspections.

Team Member:	Martin Ruiter, AIA, LEED AP (H&B)
Expertise & Account Role	Martin Ruiter has over 29 years of experience in architecture and architectural design. Marty will serve as the project manager/architect and main contact for the architectural/engineering portion of the work. He will also serve as the project manager for all architectural concerns associated with this account, including QA/QC reviews, project studies, preliminary design, final design, and site inspections. Marty will coordinate all H&B activities with the project team and perform the majority of the onsite building construction inspections.
Team Member:	Brian S. Gill, AIA (TDG)
Expertise & Account Role	Brian Gill has over 30 years of experience in architecture and architectural design. Brian will serve as the project manager/architect and main contact for the architectural/engineering for toilet shower buildings. He will also serve as the project manager for all architectural concerns associated with toilet shower building design and construction, including QA/QC reviews, project studies, preliminary design, final design, and site inspections. Brian will coordinate all TDG activities with the project team and perform the majority of the onsite building construction inspections.
Team Member:	Bradley J Butcher, AIA, NCARB (Sidock)
Expertise & Account Role	Bradley Butcher has over 37 years of experience in architecture and architectural design. Brad will serve as the project manager/architect and main contact for large architectural/engineering projects. He will also serve as the project manager for architectural concerns associated with this account, including QA/QC reviews, project studies, preliminary design, final design, and site inspections. Brad will coordinate all Sidock activities with the project team and perform the majority of the onsite building construction inspections.
Team Member:	Joseph Sovis, PE (Matrix)
Expertise & Account Role	Joseph Sovis has over 29 years of experience in the design of electrical distribution and lighting systems. He will be responsible for the electrical and lighting design, document production, specification writing and shop drawing review.
Team Member:	Craig Trierweiler, PE, LEED AP, CxA (Matrix)
Expertise & Account Role	Craig Trierweiler has over 24 years of experience in the design of HVAC systems. He will be responsible for the mechanical and plumbing design, document production, specification writing and shop drawing review.

Team Member:	Keith Ritsema, PE (JDH)
Expertise & Account Role	Keith Ritsema has over 24 years of experience in structural design of foundations, buildings and framing systems. He will be responsible for all aspects concerning the structural design, detailing, specification writing and shop drawing reviews for this account.
Team Member:	Carey Suhan, PE (TEC)
Expertise & Account Role	Carey Suhan has over 30 years of experience in the areas of geotechnical evaluation and reporting and critical foundation design as it relates to earthwork analysis and foundation construction. Carey will serve as the project manager for geotechnical concerns associated with this project including: QA/QC reviews, project studies, schematic design, preliminary design, final design, and site inspections. Carey will coordinate all TEC activities with the project team.
Team Member:	Diane Martin (ASIT)
Expertise & Account Role	Diane Martin has over 27 years of experience in environmental resource assessment and management. Diane will serve as the project manager overseeing wetland delineations, wetland mitigation design, tree surveys, threatened and endangered species assessments, aquatic and ecosystem evaluation, study and design, and environmental analysis. She will also perform QA/QC reviews, project studies, preliminary design, final design, and site inspections. Diane will coordinate all ASTI activities with the project team and perform the majority of the onsite building construction inspections.
Team Member:	David Hohmeyer, PE (SAS)
Expertise & Account Role	David Hohmeyer has over 30 years of experience in the areas of geotechnical evaluation and reporting and critical foundation design as it relates to earthwork analysis and foundation construction. David will serve as the project manager for geotechnical concerns associated with this project including: QA/QC reviews, project studies, schematic design, preliminary design, final design, and site inspections. David will coordinate all SAS activities with the project team.
Team Member:	Gary Siebein (Siebein)
Expertise & Account Role	Gary Siebein has over 30 years of experience in performing acoustical studies, noise studies and other related studies for the full development of shooting ranges across the country. Gary has worked hand in hand with MDNR and NFE on multiple shooting range projects in the State of Michigan. He will serve as acoustical project manager responsible for coordinating and managing all field and study activities, as well as data interpretation and engineering recommendations.

SAMPLE WORK PLAN *(Excerpt from Port Crescent State Park)*

If the Selection Committee and DTMB/DNR staff are so moved to retain the services of the NFE team, we will utilize the following work plan and referenced checklists in completing our assignments. The implementation of the work plan and checklists is consistent for all NFE team design projects and is a part of our QA/QC program.

PROPOSED WORK PLAN AND MILESTONE SCHEDULE FOR PROJECT IMPLIMENTATION AND DESIGN DEVELOPMENT

TASK	COMPLETION DATE
PRE-PROPOSAL PHASE	
❑ NFE team meets with the DTMB/DNR staff to review project requirements and address all questions prior to proposal submittal.	Already Complete
❑ NFE team reviews available project records including: • Existing site improvement drawings • Available aerial imagery and historical maps • Online mapping and informational sources • Prior work experience records within the project area	Already Complete
❑ NFE team assembles and prepares responsibility matrix and clearly defines scope of work, detailed work plan and project staffing.	Already Complete
❑ NFE team prepares and submits proposal for professional services to complete Phase 300 and 500 level design services and Phase 600 & 700 services for construction	Already Complete
PRE-AWARD PHASE	
❑ NFE team receives notice to proceed.	August 22,2022
SCHEMATIC DESIGN PHASE (PHASE 300)	
❑ NFE team meets with the DTMB Project Director and DTMB/DNR project staff for project debriefing, and to discuss the scope of the project, overall schedule, and specific needs/logistics. The detailed work plan and responsibility matrix are thoroughly reviewed at this meeting to assure that initial work items are compliant with DTMB/DNR requirements. Also, a framework for communication is established moving forward.	August 31, 2022

TASK	COMPLETION DATE
❑ NFE performs a detailed analysis and review of existing project records and related documentation including: • Hard copies of all reports and existing plans • Historical maps • Testing reports	September 12, 2022
❑ Prepare photo documentary of existing conditions with commentary of design concerns for use in design development and historical reference.	September 12, 2022
❑ Simultaneously with completing a photo documentary, perform the required field investigation, evaluation, and condition assessment.	September 12, 2022
❑ Mobilize field staff to obtain topographic survey information in those areas of the project requiring detailed topo.	September 26, 2022
❑ Based on all testimony and information gathered from above, prepare Schematic plans to effectively communicate how the design approach addresses specific project requirements. Plans to include research data of available technologies for pavement reconstruction and repair, clearly identify the problem, identify conclusions with respect to research findings, proposed recommendations for consideration, and conceptual details for design.	October 28, 2022
❑ NFE prepares pre-preliminary cost estimate utilizing detailed pay items and preliminary quantities to verify understanding of project costs and existing estimates. Note: This is the first step in preparing a detailed cost estimate for the project. As the reader continues through this work plan, they will note that this estimate will be updated and/or modified numerous times throughout the Schematic design development phase of the project. This first run at the estimate will be detailed, but Schematic in form, and will serve as the base for future estimating.	November 18, 2022
❑ SAS completes geotechnical review and report of findings.	November 18, 2022
❑ Based on geotechnical information obtained, and conceptual plans and estimate, hold a 50% design meeting with DTMB/DNR to review and obtain concurrence of project direction and Schematic design development drawings.	November 30, 2022

TASK	COMPLETION DATE
❑ Based on commentary from the 50% Schematic design documents, address all questions; perform additional calculations; and analysis, research and obtain additional testimony from stakeholders to develop the 90% complete Schematic design drawings.	December 28, 2022
❑ Present the 90% Schematic design drawings to the DTMB/DNR staff (remote meeting). Also, at this meeting, project permitting, and timelines will be discussed at length.	January 11, 2023
❑ Submit Schematic design drawings for review by various public agencies including, but not limited to: • DTMB SESC • EGLE NOC Permit • EGLE Campground Unit • EGLE Part 301/303 Permit (if required)	January 13, 2023
FINAL CONSTRUCTION PLAN DESIGN DEVELOPMENT (PHASE 500 SERVICES)	
❑ Utilizing data obtained from research, findings, and meetings to date, develop 50% complete final design drawings and project details including the following items of work: • Final existing condition plans • Final demolition plans • Final paving and grading plans • Final typical cross sections and preliminary details • Final phasing plans	February 10, 2023
❑ 50% final design review.	February 23, 2023
❑ Based on commentary from the 50% final design documents, address all questions; perform additional calculations; and analysis, research and obtain additional testimony from stakeholders to develop the 90% complete design drawings.	March 10, 2023
❑ 90% final design review.	March 23, 2023
❑ Based upon 90% review comments, complete the design documents and specifications for construction bidding, and perform all tasks required under this phase of work.	March 31, 2023
❑ Prepare projected construction schedule for incorporation into the bid documents.	March 31, 2023

TASK	COMPLETION DATE
❑ Assist DTMB with solicitation and bid process.	April 2023
❑ Complete bid process, issue Notice of Award.	May 2023
CONSTRUCTION ADMINISTRATION – OFFICE (PHASE 600 SERVICES)	
❑ Schedule, oversee and document the pre-construction meeting.	May 2023
❑ Monitor completed contractor progress, attend scheduled progress meetings, and authorize contractor's monthly pay estimates for DTMB processing.	May 2023 – November 2023
❑ Evaluate and respond to any/all contract claims; attend field meetings, as necessary, to resolve field items/concerns.	May 2023 – November 2023
❑ Prepare and oversee the completion of a project punch list.	November 2023
CONSTRUCTION ADMINISTRATION – FIELD (PHASE 700 SERVICES)	
❑ Perform periodic field inspections to oversee contract completion and verify quality control. Report findings to the DTMB/DNR staff.	May 2023 – November 2023
❑ Attend scheduled progress meetings during construction.	May 2023 – November 2023
❑ Complete project final inspection.	November 2023

The above schedule constitutes a general synopsis of our overall work plan and includes the initial phase of construction. It is assumed that all work would be completed under a campground/park shutdown for the 2023 construction season. The work plan that the NFE team implements for this project will be based on the overall project requirements as defined through the design development process.

Nowak & Fraus Engineers

QA/QC Program

FOR THE SURVEY, DESIGN AND ADMINISTRATION OF

MDOT AND MUNICIPAL PROJECTS

QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

GENERAL

Nowak & Fraus, PLLC has been providing consulting engineering services within the state of Michigan for over 43 years. Over this period of time, our quality assurance program has evolved into a program that has afforded us the opportunity to maintain a loyal client base who has come to expect a high level of service and who receives a high quality product. Nowak & Fraus defines quality control (QC), quality assurance (QA) and quality control plan (QCP) as follows:

Quality Control: Nowak & Fraus defines quality control as a system put into a place to maintain the standards desired first by ourselves, and secondly by our clients, in providing our work product and services. This is achieved by constant supervision of work in process and review for completeness and accuracy.

Quality Assurance: Nowak & Fraus defines quality assurance as the process of regularly reviewing quality control processes to assure that the products and services we provide, meet or exceed the clients' expectations while keeping our processes current to industry standards and governing laws. Reduction in errors and omissions are achieved by referring to a check list.

Quality Control Plan: Nowak & Fraus defines quality control plan as our comprehensive written procedures, activities and training required to assure that our project delivery system functions effectively. Our CAD Details and Standards developed by the company achieve the quality expectations expected by our customers.

MISSION STATEMENT OF CONSULTANTS' RESPONSIBILITIES

Nowak & Fraus' mission, relative to our consultant responsibilities, is to provide a cost effective, high level of service, while assuring project objectives and requirements are achieved so that we may be rewarded with repeat business from our growing base of clientele.

ORGANIZATIONAL CHART OF QA/QC MANAGERS

The strength of our QA/QC plan is based on our ability to implement and monitor the program. Nowak & Fraus has developed a team approach to solving problems, completing designs, and performing construction engineering services. Each team is lead by one of the corporate principals with a corporate associate assisting. An organizational chart, depicting this hierarchy, is attached.

Designs and construction engineering services are generally coordinated through these individuals and carried out by support staff. All QA/QC managers have a minimum of 10 years of practical MDOT project experience.

CHECKLISTS/SIGN OFF SHEETS

As a part of our QA/QC program, Nowak & Fraus has implemented a rigorous review and oversight program. Attached to this section is a copy of our surveying and design procedures, which are implemented by our staff on all MDOT projects undertaken by Nowak & Fraus. Furthermore, supervisors have MDOT standard plans and specifications at their disposal for reference, to ascertain that MDOT work is consistent with State standards/specifications. Additionally, we confirm regularly that MDOT policies and guidelines, as they are developed, are forwarded to the company for dissemination to our supervisors.

ERROR PREVENTION AND DETECTION PROCESS

As stated previously, Nowak & Fraus has developed a team approach to solving problems, completing designs and performing construction engineering services. Although constant supervision is provided during the design phase, team leaders conduct weekly production meetings where senior staff review the status of the project, and provide instructions to support staff to carry out additional design tasks. At the 70% complete design stage of the project, QA/QC managers perform a more intense review of plans and specifications to assure that design and project objectives are being satisfied. At the completion of the design phase, plans and specifications are thoroughly reviewed first by the project engineer and then by the corporate principal to assure the prepared documents meet the project objectives and MDOT design criteria. Through this process, there are many opportunities for the QA/QC managers to detect and prevent errors from occurring. This, coupled with the extensive experience of our QA/QC managers with MDOT standards and procedures, allows Nowak & Fraus to complete effective and accurate designs, while staying on task and budget.

As it relates to construction engineering services, Nowak & Fraus fosters the same team approach in implementing and monitoring its QA/QC program. The construction engineer holds daily briefing/debriefing meetings with field support personnel where QA/QC issues are discussed and implemented. Additionally, Nowak & Fraus requires that bi-weekly construction meetings be held on all governmental contracts with project contractors to review progress and quality control issues involving workmanship, materials, equipment and personnel. Changes in quality control procedures are discussed and, if appropriate, implemented. These issues are revisited in future meetings, or followed up on by Nowak & Fraus staff to assure corrective measures are successfully implemented.

Overall, Nowak & Fraus QA/QC managers are steadfast in their commitment to assuring the process and work product are of quality that meets or exceeds project requirements, but they are also flexible in dealing with contractor/owner issues.

PROCESS FOR CONTINUED DEVELOPMENT OF QA/QC PROGRAMS & PROCEDURES

As stated previously, Nowak & Fraus' QA/QC program has evolved over the 35 years of operation. Nowak & Fraus, will continue to monitor, and when required, modify this program to assure that our mission, with respect to our consultant responsibilities, remains on task and on target. As changes in government requirements are discovered, our QA/QC program will be reviewed and changed, if necessary. As advances in technology are implemented, our QA/QC program will be reviewed and, if necessary, changed. As changes in personnel or operation procedures occur, our QA/QC program will be reviewed and revised. Our CAD Details & Standards Manual will be updated regularly.

Nowak & Fraus is committed to quality control on behalf of our employees and our clients. We will continue to endeavor in monitoring and updating our quality control program to insure the long term success of the company and satisfaction of our customer.

JOB FILE PREPARATION CHECKLIST

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE JOB FILE FOR FIELD		
ITEM OF WORK	**COMPLETED BY:**	
Complete new job form	Yes____	No____
Complete scope of work form	Yes____	No____
Submit job form, scope form and proposal to administrative staff for job file preparation	Yes____	No____
Obtain MDOT requirements for project survey	Yes____	No____
Vertical control datum	Yes____	No____
Horizontal control datum	Yes____	No____
Survey checklists	Yes____	No____
Review new job file and scope of work form	Yes____	No____
Obtain aerial photo and identify project area	Yes____	No____
Obtain current benchmark elevation(s)	Yes____	No____
Obtain current quarter section/section map(s) - including section corners and monuments	Yes____	No____
Obtain current copy of plat(s) – project area and adjacent subdivision(s)	Yes____	No____
Obtain assessing department parcel description(s), including adjoiners	Yes____	No____
Obtain parcel Sidwell number(s)/parcel ID number(s), including adjoiners	Yes____	No____
Order private utility information - gas, electric, phone, cable, etc.	Yes____	No____
Obtain public utility information - storm, water, sanitary, combined, drain, etc.	Yes____	No____
Obtain reference project data	Yes____	No____
Obtain tree survey/woodland/wetland survey requirements	Yes____	No____
Obtain any old paving plans for the project area	Yes____	No____
Coordinate tree survey/wetland survey consultants/personnel	Yes____	No____
Obtain site floodplain information	Yes____	No____
Project manager to prepare written instruction for field work	Yes____	No____

I do hereby certify that I have reviewed the job file and the checklist as identified above and have found the job file to be in acceptable order and ready for field work:

Signed:_____
Project/Field Manager

SURVEY SPECIFIC
QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

GENERAL

Nowak & Fraus, PLLC has been providing consulting engineering services within the state of Michigan for over 35 years. Over this period of time, our quality assurance program has evolved into a program that has afforded us the opportunity to maintain a loyal client base who has come to expect a high level of service and who receives a high quality product. Nowak & Fraus defines quality control (QC), quality assurance (QA) and quality control plan (QCP) as follows:

Quality Control: Nowak & Fraus defines quality control as a system put into a place to maintain the standards desired first by ourselves, and secondly by our clients, in providing our work product and services. This is achieved by constant supervision of work in process and review for completeness and accuracy.

Quality Assurance: Nowak & Fraus defines quality assurance as the process of regularly reviewing quality control processes to assure that the products and services we provide, meet or exceed the clients' expectations while keeping our processes current to industry standards and governing laws. Reduction in errors and omissions are achieved by having our QA/QC Manager review all surveying related documents prior to delivery and completing a QA/QC certification checklist.

Quality Control Plan: Nowak & Fraus defines quality control plan as our comprehensive written procedures, activities and training required to assure that our project delivery system functions effectively. Our certification checklists and CAD Details and Standards developed by the company assist us in achieving the quality expectations expected by our customers.

MISSION STATEMENT OF CONSULTANTS' RESPONSIBILITIES

Nowak & Fraus' mission, relative to our consultant responsibilities, is to provide a cost effective, high level of service, while assuring project objectives and requirements are achieved so that we may be rewarded with repeat business.

ORGANIZATIONAL CHART OF QA/QC MANAGERS

The strength of our QA/QC plan is based on our ability to implement and monitor the program. Nowak & Fraus has developed a systematic approach to completing all surveying related assignments. Mr. Alex Nicolaescu, the surveyor in responsible charge for all MDOT related surveying initiatives, monitors our QA/QC program and is the final signing authority for our certification checklists. Assisting Mr. Nicolaescu in this process is a multitude of individuals with varying degrees of experience and expertise. An organizational chart, depicting this hierarchy, is attached.

CHECKLISTS/SIGN OFF SHEETS

As a part of our surveying QA/QC program, Nowak & Fraus has implemented a rigorous review and oversight program. Attached to this section is a copy of our surveying certification checklist, which is implemented by our staff on all MDOT projects undertaken by Nowak & Fraus. Additionally, we will confirm regularly that MDOT surveying policies and guidelines, as they are developed, are forwarded to the company for dissemination to our surveying managers.

ERROR PREVENTION AND DETECTION PROCESS

As stated previously, Nowak & Fraus has developed a systematic approach to solving problems and completing surveying services. Although constant supervision is provided during the project development, team leaders conduct weekly production meetings where senior staff and QA/QC manager review the status of the project, and provide instructions to support staff to carry out additional tasks.

In addition to the weekly production meetings, Nowak & Fraus has implemented the following procedures:

- Survey data gathered by crews is downloaded nightly and reviewed for accuracy by the survey crew party chief. All data is backed up nightly.
- Vertical and horizontal control networks are adjusted by least squares adjustment software prior to obtaining radial topography.
- Work schedule is monitored and adjusted as the work proceeds through completion.
- A preliminary survey is field checked by one of our surveying managers to assure compliance with program requirements.
- A comprehensive survey report is prepared at the conclusion of the project, as required by MDOT. Said report to include the following:
  - Control print listing
  - Alignment type and source of stationing
  - Alignment point listing
  - Government corner listings and ties to alignment
  - Individual utility reports
  - Drainage report
- A final project check and sign-off is conducted by the QA/QC manager.

Throughout the above identified process, surveying managers exercise their many opportunities to detect and prevent errors from occurring. This, coupled with the extensive experience of our QA/QC managers with MDOT standards and procedures, allows Nowak & Fraus to complete accurate surveys, while staying on task and budget.

Overall, Nowak & Fraus QA/QC managers are steadfast in their commitment to assuring the process and work product are of quality that meets or exceeds project requirements, but they are also flexible in dealing with contractor/owner issues.

PROCESS FOR CONTINUED DEVELOPMENT OF QA/QC PROGRAMS & PROCEDURES

As stated previously, Nowak & Fraus' QA/QC program has evolved over the 35 years of operation. Nowak & Fraus, will continue to monitor, and when required, modify this program to assure that our mission, with respect to our consultant responsibilities, remains on task and on target. As changes in government requirements are discovered, our QA/QC program will be reviewed and changed, if necessary. As advances in technology are implemented, our QA/QC program will be reviewed and, if necessary, changed. As changes in personnel or operation procedures occur, our QA/QC program will be reviewed and revised.

Nowak & Fraus is committed to quality control on behalf of our employees and our clients. We will continue to endeavor in monitoring and updating our quality control program to insure the long term success of the company and satisfaction of our customer.

PROJECT SURVEY CHECKLIST

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE JOB FILE FOR FIELD		
ITEM OF WORK	**COMPLETED BY:**	
Complete new job form	Yes____	No____
Complete scope of work form	Yes____	No____
Submit job form, scope form and proposal to administrative staff for job file preparation	Yes____	No____
Obtain MDOT requirements from MDOT survey contact	Yes____	No____
Obtain LCRC's for all government corners within the project limits	Yes____	No____
Obtain NGS or MDOT data sheets of existing control		
Obtain aerial photo and identify project area/limits	Yes____	No____
Obtain current vertical control locations and elevations	Yes____	No____
Obtain current section map(s)	Yes____	No____
Obtain current copy of plat(s) – project area and adjacent subdivision(s)	Yes____	No____
Obtain assessing department parcel description(s), including adjoiners	Yes____	No____
Obtain parcel Sidwell number(s)/parcel ID number(s), including adjoiners	Yes____	No____
Order private utility information - gas, electric, phone, cable, etc.	Yes____	No____
Obtain public utility information - storm, water, sanitary, combined, drain, etc.	Yes____	No____
Obtain reference project data	Yes____	No____
Obtain tree survey/woodland/wetland survey requirements	Yes____	No____
Obtain any old paving plans for the project area	Yes____	No____
Obtain site floodplain information	Yes____	No____
Field Coordinator / Survey manager to prepare written instruction for field work	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PERFORM REQUIRED LEVEL LOOP AND HORIZONTAL CONTROL		
ITEM OF WORK	**COMPLETED BY:**	
Professional surveyor to review job file, scope of work form, MDOT survey requirements and written instruction from survey manager / coordinator	Yes____	No____
Professional surveyor to meet with survey coordinator and party chief Review job file Review scope of work Review written instructions from project manager Review MDOT requirements (including standard checklist)	Yes____	No____
Establish horizontal site control Locate all property controlling irons Locate and witness all PLSS survey monuments within project limits Close any traverse conducted as a part of the survey Locate and witness existing construction centerline control points	Yes____	No____
Perform a least squares adjustment on horizontal control and establish new coordinate values for all ground control	Yes____	No____
Prepare least squares adjustment statistical report (ASCII) showing reference factors and weighting strategies	Yes____	No____
Control Point List in Microsoft Word and ASCII text formats with: Datum ___; Description __; Coordinates with Std. Err. __; Station-offsets __; Scale Factors __; Witnesses __; Geoid used __; Grid ___;or Ground ___;Plane.	Yes____	No____
Prepare statement with formula to convert from grid to ground on control point list	Yes____	No____
Prepare sketch or plot of network/traverse	Yes____	No____
Prepare G.P.S./traverse adjusted coordinates report with standard errors	Yes____	No____
Establish Vertical site control Verify existing benchmark system Conduct a bench loop and establish benchmarks along project route	Yes____	No____
Perform a least squares adjustment on vertical control	Yes____	No____
Prepare benchmark level loop least squares adjustment report in ASCII format	Yes____	No____
Bench Mark List in Microsoft Word and ASCII text formats with: Datum ___; Descriptions ___; Elevations ___; Station-offsets___.	Yes____	No____
Prepare a level adjustment report, showing to the hundredth of a foot, ___ 0.06ft error per /Mi ___ 0.04ft error per /Mi	Yes____	No____
DDPROC - .ha files printout, or copy of Mark Recovery Form submitted on the NGS website for stations recovered and used for Horizontal and / or Vertical Control	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PERFORM REMAINING FIELD WORK FOR SURVEY		
ITEM OF WORK	**COMPLETED BY:**	
Verify and utilize adjusted coordinate values for all control	Yes____	No____
Obtain all required topography Locate all structures within and adjacent to project limits Locate all underground utilities Tie in traffic signals and appurtanences Obtain sufficient topo adjacent to project limits Obtain cross sectional data of roadway at appropriate interval Tie in pavement markings and identify existing lane widths Note cross section of existing roadway and note in field book Identify all surface types Note pavement joints at all tie in locations Locate existing drainage facilities and note direction of flow	Yes____	No____
Reestablish horizontal alignment and stationing if feasible Tie in true pavement centerline Locate and tie in station markers if available	Yes____	No____
Obtain utility cuts on all structures including storm, sanitary, water valves, gas valves, etc.	Yes____	No____
Review survey instructions and make any final measurements	Yes____	No____
Fill out daily reports	Yes____	No____
Prepare any field sketches and notes identifying unusual concerns/constraints	Yes____	No____
Brief professional surveyor on a daily basis as project develops	Yes____	No____
Download data sets on a daily basis and check for Correct line work Obvious blunders	Yes____	No____
Enter job into job log Verify correct job number is being used Use job number plus new extension (-1, -2, -3) for each day of data	Yes____	No____
Process data file into drawing Check line work and compare to project notes and sketches Check zero layer for incorrect codes	Yes____	No____
If necessary, fix code descriptions and reprocess drawing	Yes____	No____
Fix line work and save job in field directory	Yes____	No____
Meet with professional surveyor, survey coordinator and survey manager and go over project	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE DRAFT SURVEY PACKAGE		
ITEM OF WORK	**COMPLETED BY:**	
CAiCE File requirements		
Project Name is MDOT Job Number (#####c)	Yes____	No____
CAiCE Project Description field is filled out	Yes____	No____
Correct Units (International Feet) selected in System Settings	Yes____	No____
Correct Datum Selected in System Settings	Yes____	No____
Z Coordinate value set to 4.2 in System Settings	Yes____	No____
Correct MDOT Feature Table Attached prior to Data importation	Yes____	No____
Correct MDOT Cell Library Attached prior to Data importation	Yes____	No____
Only MDOT Feature Codes Used	Yes____	No____
All points have appropriate Descriptions	Yes____	No____
Desired plot scale checked with designer	Yes____	No____
All survey chains edited and properly connected prior to DTM creation.	Yes____	No____
All survey chain crossings resolved	Yes____	No____
All survey chain curves checked for correctness and aesthetics.	Yes____	No____
No survey chain curves are shown as chords.	Yes____	No____
Survey chain Patterns checked for proper direction (guardrail, railroad, tree line, etc)	Yes____	No____
Hydro survey chains checked for correct left to right direction	Yes____	No____
Single DTM Surface is named EX (multiple surfaces = EX1, EX2, etc.)	Yes____	No____
DTM checked for invalid breaklines	Yes____	No____
DTM checked for invalid point data (spikes/holes)	Yes____	No____
DTM triangles checked for spikes and dips	Yes____	No____
Long or invalid triangles have been obscured from TIN	Yes____	No____
Bridge decks and data suspended above natural terrain/substructures have been removed from the terrain surface prior to triangulation	Yes____	No____
Terrain surface beneath bridge decks is included in DTM	Yes____	No____
Underwater areas have been removed from terrain surface prior to triangulation	Yes____	No____
Text size is dependent on the scale ___ 100 scale, text size = 9.0 ___ 50 scale, text size = 4.5 ___ 40 scale, text size = 3.6	Yes____	No____
Cell Scale set to: ___ 1.0 (1":100'); ___;0.5 (1": 50'); ___0.4 (1": 40')	Yes____	No____
Contour Interval set to 2 in DTM Settings	Yes____	No____
Max. Offset for contour smoothing set to 1 in DTM Settings	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE DRAFT SURVEY PACKAGE (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Contour object display setting requirements		
Contour interval set to 2 regular and 10 index	Yes____	No____
All contour colors set to 5, Index set to 2	Yes____	No____
Line weights set to 0 regular, 1 Index	Yes____	No____
All contour levels set to 20	Yes____	No____
Index Label spacing set to 60, color set to 5	Yes____	No____
Character height is dependent on the scale; _____ 100 scale, character height = 9.0 _____ 50 scale, character height = 4.5 _____ 40 scale, character height = 3.6	Yes____	No____
Label Depression Contours unchecked	Yes____	No____
Final contours computed after DTM edits and settings checked	Yes____	No____
Display		
Scale and text size checked prior to display	Yes____	No____
Survey Chains displayed as per Attachment >AA=	Yes____	No____
Survey Points displayed as per Attachment >AA=	Yes____	No____
Alignment geometry chain Feature Code is SCL	Yes____	No____
Alignment geometry chain is displayed	Yes____	No____
Contours are displayed	Yes____	No____
Point descriptions displayed as per Attachment >AA= and scope	Yes____	No____
All overlapping text has been clearly resolved (if requested in scope)	Yes____	No____
All subsurface drainage can be correlated with inventory sheets.	Yes____	No____
CAiCE drawing file created and named Job # +pl.cdg (#####cpl.cdg)	Yes____	No____
Correct seed file selected for MicroStation file conversion DATUM / SEED FILE ___ Assumed / ___ MiDOT2d.dgn ___ SPC83 South / ___ Seedfs.dgn ___ SPC83 Central / ___ Seedfc.dgn ___ SPC83 North / ___ Seedfn.dgn	Yes____	No____
Correct cell file selected for MicroStation file conversion (midote_02.cel)	Yes____	No____
MicroStation file of Bridge structures created with Contours (Plan of Site)	Yes____	No____
Geopak files generated from the MDOT Plans Production tugboat/macro. ____ 3d MicroStation DGN triangle file; ____Survey Chain TIN bdy ____ Job #.OBS and Job #.XYZ files (can only be generated from tugboat	Yes____	No____
CAiCE archive file named Job# (#####c.zip)	Yes____	No____
Project portfolio labeled and includes data as per scope.	Yes____	No____
Used MDOT's Plans Production tugboat/macro	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE DRAFT SURVEY PACKAGE (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Alignment		
Prepare a sketch or CADD drawing of the alignment with: stationing __, horizontal coordinates __, curve data __, alignment points found or set __, source of stationing __.	Yes____	No____
Prepare control sketch with control points, government corners and alignment plotted.	Yes____	No____
A report discussing in detail the type of alignment, source of the stationing and how it was determined	Yes____	No____
Prepare alignment point list in Microsoft Word and ASCII text formats with: Datum ___; Description ___; Station ___; Coords. with Scale Factors___; Witnesses ___.	Yes____	No____
Describe Alignment Chain(s) (ASCII) from CAiCE Coordinates__; Bearings__; Distances__; Curve data__; Stationing__	Yes____	No____
Property		
Assemble recorded copies of all LCRCs required for the project.	Yes____	No____
Prepare government corner list in Microsoft Word and ASCII text formats with: Datum __, Corner names__, Coordinates, Scale Factors, and 4 witnesses __, Indication of which corners are in danger of destruction __.	Yes____	No____
Establish section corner ties to the alignment with station, distance and bearing along the section line.	Yes____	No____
Prepare section map with bearings, distances between government corners.	Yes____	No____
Prepare LCRC forms recording pursuant to PA 74 (if required)	Yes____	No____
Assemble copies of all research documents, tax maps, tax descriptions, deeds, recorded plats, surveys, etc	Yes____	No____
Prepare a separate plot of alignment or tax map showing all property irons found, with point numbers	Yes____	No____
Prepare property Corner report (ASCII) with Coordinates with Scale Factors__, Station-offset__, Description__, Feature code__, Alignment name__.	Yes____	No____
Prepare a station-offset listing of property irons	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE DRAFT SURVEY PACKAGE (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Mapping		
Prepare a legible planimetric plot (2d Microstation Drawing) generated from the MDOT (CAiCE) Plans Production Tugboat, including: contours __, MDOT Cells symbology __, Centerline alignment shown __.	Yes____	No____
Prepare a second plot showing all surface materials, utility connectivity and other pertinent notes or comments.	Yes____	No____
Assemble all field survey notes obtained for this project.	Yes____	No____
Prepare a drainage structure inventory that is: correlated to the structures shown on the plot __, includes all pertinent data about the structures: Station and offset __, coordinates __, structure name __, rim elevations __, invert depths with corresponding computed invert elevation__, pipe sizes __, directions __, structure cover type __, culvert size, material, condition __, headwall or end section description __.	Yes____	No____
Prepare individual utility reports (ASCII) for each utility with: Designation__, Coordinates__, Elevation__, Description__, Feature Code __, Station-Offset__.	Yes____	No____
Prepare utility owner listing (ASCII) with: Name of Utility__, Address__, Phone number__, Contact Person__.	Yes____	No____
Prepare drainage structure report (ASCII or a spreadsheet compatible with MDOT software) of manholes and catch basins with: Designation__, Coordinates__, Elevation__, Description__, Feature Code__, Station- offset__, Invert and Pipe Dimension information__, Structure condition__.	Yes____	No____
Prepare a culvert structure report (spreadsheet compatible with MDOT software) with: Designation__, Coordinates__, Elevation__, Station-offset__, Size and Material__.	Yes____	No____
Prepare a drainage report (dissertation of conversations with local people and own visual inspection of the project area.	Yes____	No____
Prepare a list of all utilities noting utility name, address, phone number and contact person	Yes____	No____
Prepare a station offset report for each utility feature	Yes____	No____
Assemble as-built plans from each utility.	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

FIELD REVIEW DRAFT SURVEY		
ITEM OF WORK	**COMPLETED BY:**	
Survey QA/QC manager reviews all data and reports compiled as a part of the draft survey preparation incuding: Alignment drawings___; control sketch___; alignment report___; property corner report___; plot of alignment showing all property irons___; proposed LCRC documentation___; topo plot___; surface material plot___; field survey notes___; drainage structure report___; individual utility report and maps___; culvert structure report___.	Yes____	No____
Survey QA/QC manager develops instructions for and additional work required to finalize the survey package.	Yes____	No____
Survey QA/QC manager field confirms preliminary survey and associated data		
Walk entire project limits and note any discrepancies in topography	Yes____	No____
Check inverts on critical design elements (sanitary sewer/storm sewer)	Yes____	No____
Develop opinions relative to design constraints	Yes____	No____
Develop opinions relative to existing site drainage	Yes____	No____
Develop opinions relative to traffic issues/conflicts	Yes____	No____
Develop questions to be answered by City/Township/MDOT	Yes____	No____
Review adjoining properties for design elements Review existing drainage patterns Future utility extension requirements	Yes____	No____
Check project for site lines and site distances	Yes____	No____
Prepare surveyor's report concerning these conditions and place in file	Yes____	No____
Take photographs of site/constraints/unique topography/conditions	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE FINAL SURVEY PACKAGE		
ITEM OF WORK	**COMPLETED BY:**	
Finalize all survey drawings and reports incorporating all requirements from MDOT and survey field confirmation Review and complete MDOT standard checklist___; File LCRC Certificates___; Certify all plots as per scope___; Include miscellaneous information___; Digital or scanned photographs___.	Yes____	No____
Survey QA/QC manager reviews and assures that all MDOT requirements for CAiCE file preparation are strictly adhered to and completes associated MDOT Checklist	Yes____	No____
Survey QA/QC manager performs final review of project survey, assembles project portfolio and reviews and complete MDOT administrative checklist	Yes____	No____
Perform any final revisions as required by QA/QC manager	Yes____	No____
Survey QA/QC manager signs off on survey	Yes____	No____
All paper pages in the portfolio must be scanned into a PDF format file even if already existing in electronic form.	Yes____	No____
Create one .DGN file with the Control point list, Benchmark list, Alignment point list, and Government Corner list per Attachment ASC named the Job # (xxxxxxxWIT.DGN).	Yes____	No____
Scope has been reviewed to insure compliance	Yes____	No____

I do hereby certify that I have reviewed the project survey and the checklist as identified above and have found the project survey to be in substantial compliance with owner and project requirements:

Signed:_____
Professional Surveyor

PROJECT DESIGN CHECKLIST

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PRELIMINARY DESIGN		
ITEM OF WORK	**COMPLETED BY:**	
Project manager assigns project to project engineer		
Project engineer performs research and procures MDOT design data/requirements	Yes____	No____
Obtain requirements for right-of-way	Yes____	No____
Obtain requirements for right-of-way	Yes____	No____
Obtain and review road design standards	Yes____	No____
Obtain and review approval process requirements	Yes____	No____
Obtain grade inspection checklists	Yes____	No____
Obtain municipal design standards	Yes____	No____
Obtain storm water detention/management requirements from jurisdictional authority	Yes____	No____
Review preliminary design criteria considering the following preliminary Grade Inspection review requirements.		
Tentative typical cross sections	Yes____	No____
Pavement cores and soil borings (as specified in proposal)	Yes____	No____
Traffic data (as specified in proposal)	Yes____	No____
Maintaining traffic considerations	Yes____	No____
R.O.W. requirements	Yes____	No____
Environmental considerations	Yes____	No____
Utility relocation involvement (Hold preliminary utility meeting)	Yes____	No____
What pay items to be used	Yes____	No____
Outside agency involvement	Yes____	No____
Alignment (vertical and horizontal)	Yes____	No____
Any other special problems that are anticipated	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PRELIMINARY DESIGN (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Project engineer develops layout in CAD		
Review horizontal layout and compare to project topography	Yes____	No____
Note any potential conflicts with existing topography Conflicts with utility poles Conflicts with existing infrastructure Coordinate with utilities concerning conflicts	Yes____	No____
Develop layout with proper dimensioning per AASHTO standards Lane widths are properly dimensioned per project requirements Adequate accessibility per ADA Turning radii are acceptable Adequate stacking and proper vehicular circulation	Yes____	No____
Review layout for pedestrian circulation per AASHTO standards Adequate ramp/sidewalk facilities Determine conflicts with existing systems Review/determine bike path requirements	Yes____	No____
Review layout for proposed utilities Efficient sanitary layout Efficient water main layout Compare with municipal standards Adequate hydrant coverage Sufficient area for storm management facilities Efficient storm sewer layout	Yes____	No____
Prepare preliminary utility layout in CAD	Yes____	No____
Prepare preliminary vertical alignment	Yes____	No____
Determine preliminary cover requirements on sanitary and storm sewer systems	Yes____	No____
Review preliminary plans with project manager and identify any concerns Identify grading issues Identify conflicts with existing utilities Identify conflicts with proposed utilities Identify design constraints	Yes____	No____
Submit preliminary drawings for agency review including: MDOT County Road Commission County Drain Commission Public Utilities (DTE, SBC Ameritech, Consumers, Comcast, etc.) Municipality	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PRELIMINARY DESIGN (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Project engineer/manager meet with MDOT/local agency (pre grade inspection review) to discuss general design of project	Yes____	No____
Discuss potential conflicts with proposed plan paying particular attention to existing lighting and traffic signal systems		
Discuss items requiring MDOT/local agency input	Yes____	No____
Detail unusual cost items Storm water treatment structures Pump stations Significant grading improvements	Yes____	No____
Review alignment and utility layout	Yes____	No____
Ask engineer specific questions Are there any additional improvements required for the project Are there any noticeable concerns with the proposed alignment	Yes____	No____
Verify programming requirements are still valid	Yes____	No____
Identify any long range permitting issues such as wetland permits, endangered species permits, floodplain permits, etc.	Yes____	No____
Recommend permits be prepared early in process to meet time schedules	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE GRADE INSPECTION CONSTRUCTION DRAWINGS		
ITEM OF WORK	**COMPLETED BY:**	
Project manager assigns project to project engineer and CAD technician for completion of preliminary design		
Revise layout to incorporate comments from MDOT and Local Agency from preliminary Grade Inspection meeting	Yes____	No____
Review MDOT procedure for final plan development	Yes____	No____
Review municipality requirements and standards for utilities, etc.	Yes____	No____
Prepare title sheet indicating the following: Location Map Project numbers Design speed Traffic counts, % of commercial List of standard plans Sheet index	Yes____	No____
Prepare typical cross sections	Yes____	No____
Show proposed typicals for all various sections of project, approach roads, and temporary roads. Also show existing typical sections	Yes____	No____
Show proposed pavement and lane widths, shoulder widths, slopes, crown, plan grade, construction centerline type of curb and gutter, guard rail, etc	Yes____	No____
Show thickness and type of materials for sub-base, aggregate base, Bituminous, concrete pavement, etc.	Yes____	No____
Show slope restoration including areas of seed, fertilizer, mulch, topsoil surface, sodding, and mulch blankets, etc.	Yes____	No____
Show ditch section and fill section, width of ditch, front and back slopes, etc.	Yes____	No____
Show width of Right-of-Way on typical	Yes____	No____
Identify Bituminous application chart indicating type of material, thickness, Lbs/Syd, and asphalt penetration.	Yes____	No____
Show sub-grade or sub-base underdrain if applicable	Yes____	No____
Show limits of topsoil stripping	Yes____	No____
Identify pavement joint legend for concrete pavement indicating types of transverse and longitudinal joints to be used on the project.	Yes____	No____
Identify and show pavement design	Yes____	No____
Identify and show driveway grades	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE GRADE INSPECTION CONSTRUCTION DRAWINGS (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Prepare horizontal alignment drawings		
Identify construction centerline with stationing, bearing and distance and horizontal curve data	Yes____	No____
Show and identify right-of-way limits	Yes____	No____
Show and identify government corners along with witness information	Yes____	No____
Show and identify horizontal control information including witness marks for all PI's, PC's, PT's, etc	Yes____	No____
Prepare and show legal description for right-of-way dedication (if applicable)	Yes____	No____
Show crossroad approach widths and radii, curve data and super elevation data	Yes____	No____
Finalize vertical alignment and project grading		
Show existing road and ground profiles	Yes____	No____
Show proposed pavement grade lines with % of grade along with vertical curve information	Yes____	No____
If curb and gutter, show top of curb grade lines	Yes____	No____
Show existing and proposed drainage structures and sewers on profile.	Yes____	No____
Design any required grade separation elements/retaining walls in accordance with BOCA requirements. Design hand rails/fencing as necessary	Yes____	No____
Identify slope stake limits	Yes____	No____
Review driveway grades (hold 5% max if possible)	Yes____	No____
Finalize detention volume calculations and design		
Calculate weighted runoff coefficient	Yes____	No____
Verify required storm design event from City standards	Yes____	No____
Calculate detention required	Yes____	No____
Calculate storm elevation	Yes____	No____
Verify proper amount of free board obtained	Yes____	No____
Set primary and secondary overflow elevations	Yes____	No____
Determine orifice outlet method and sizing	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE GRADE INSPECTION CONSTRUCTION DRAWINGS (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Design storm sewer system and prepare drainage area break-up sheet and storm sewer calculations		
Determine drainage area contributing to each structure/inlet	Yes____	No____
Prepare storm sewer calculations for piping system Verify initial time of concentration Verify minimum pipe size and velocity requirements Verify where to begin hydraulic grade line	Yes____	No____
Verify HGL does not exceed requirements	Yes____	No____
Verify validity of calculations	Yes____	No____
Review junction points to assure all contributing flows are included	Yes____	No____
Verify sum total of contributing areas equals project area	Yes____	No____
Spot check to verify inverts are calculated properly	Yes____	No____
Check cover requirements	Yes____	No____
Design/prepare drainage structure schedule		
Include all proposed and existing inverts	Yes____	No____
Specify rim elevation	Yes____	No____
Select and specify casting type	Yes____	No____
Verify structure sizes with proposed pipe sizes and angle of entry	Yes____	No____
Specify structure type and sump requirements	Yes____	No____
Complete storm design in plan and profile view		
Show and call our proposed drainage system	Yes____	No____
Show and identify culverts, catch basins, manholes (including structure numbers)	Yes____	No____
Show and identify pipe sizes, types of pipe, Class of pipe, length of pipe	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE GRADE INSPECTION CONSTRUCTION DRAWINGS (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Design sanitary sewer system		
Verify pipe slopes and velocity meet minimum requirements	Yes____	No____
Include sump and temporary bulkhead with 1" pipe	Yes____	No____
Verify service lead size and location	Yes____	No____
Verify with municipality and specify appropriate materials	Yes____	No____
Prepare sanitary structure schedule Include all proposed and existing inverts Specify rim elevations Select and specify casting type Specify structure type and sump requirements Verify structure sizes with pipe sizes and angles of entry	Yes____	No____
Design water main system		
Verify method of construction (cut in tee, tapping sleeve, etc)	Yes____	No____
Ascertain that there is sufficient sectional valves	Yes____	No____
Review requirements with municipal Fire Marshall Hydrant spacing and location Will hydrant flow testing be required? Will water main network analysis be required?	Yes____	No____
Verify service lead size and location	Yes____	No____
Keep number of bends to a minimum	Yes____	No____
Properly locate water shut-off and provide finish grade	Yes____	No____
Prepare all proposed rim elevations for gate valves Include all proposed rim elevations for gate valves Specify structure sizes, as required in standard details Specify structure type (D-box or gate well) Include finish grade elevation for hydrants	Yes____	No____
Design remaining roadway improvements		
Show all topo, existing ROW, utilities, benchmarks, etc.	Yes____	No____
Indicate and label all items to be removed (make a legend in necessary) Pay items to match MDOT standard specifications.	Yes____	No____
Label all gas, electrical, and other utility lines as "Hazardous", as required by MDOT	Yes____	No____
Label existing drainage structures to be adjusted, reconstructed, or removed	Yes____	No____
Incorporate any new comments from review agencies	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE GRADE INSPECTION CONSTRUCTION DRAWINGS (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Field review preliminary design elements for conflicts (walk the project)		
Can utility connections be constructed considering existing right-of-way occupation? Can utility cuts be accomplished safely? Where will bore pits be constructed? Is there enough room to construct structures?	Yes____	No____
How is existing drainage accounted for? Review existing drainage patterns? How will ditch side slopes be modified? How will driveways/lane widening impact existing drainage facilities?	Yes____	No____
Review location of existing utility poles, signs, etc. for potential conflicts and resolve on your design	Yes____	No____
Review grade drive approaches to assure a smooth transition from existing pavement to proposed pavement Grade on approach should not exceed 5% Identify the type of vehicles entering properties Investigate introducing vertical curves to eliminate abrupt grade changes.	Yes____	No____
Drainage facilities Make sure driveway culverts are an appropriate length Enclose ditch where side slopes are excessive	Yes____	No____
Sidewalks/pathways Look and plan for future extensions and grade appropriately. Investigate grading standards with governmental jurisdiction. Do not dead end sidewalks and bike paths where future conflicts are obvious.	Yes____	No____
Finalize preliminary roadway and utility design		
Add appropriate callouts for pay items consistent with standard MDOT pay items	Yes____	No____
Add and modify notes Coordination clauses MDOT/municipal requirements Salvaging of any materials	Yes____	No____
Add appropriate standard plan details	Yes____	No____
Determine sheet specific quantities	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE GRADE INSPECTION CONSTRUCTION DRAWINGS (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Prepare stage construction and construction signing plans		
For resurfacing projects, generally a flagging operation will be adequate, place appropriate MDOT sketches within proposal	Yes____	No____
Widening or reconstruction projects that require stage construction, lane closures, and the shifting of traffic will need staging and construction signing plans. Make sure low side of road with functioning drainage is first stage to be constructed	Yes____	No____
Show the various stages with the work to be done in each stage along with the required signing and barricading	Yes____	No____
Show detour route, if required, along with type and location of signs	Yes____	No____
Review stage construction plans with selected contractor and verify municipality is satisfied with stage construction plans and durations of impact.	Yes____	No____
Design of traffic signals, lighting, signing and pavement marking		
Show signal layout and location, conduit and cable runs, controller, and required detail sheets	Yes____	No____
Show light pole locations, cable runs and feeds, wiring diagrams and required detail sheets	Yes____	No____
Design and/or account for temporary lighting measures in the construction drawings	Yes____	No____
Show type of sign and its location. Call for sign by its name and symbol. Provide signing detail sheets.	Yes____	No____
Show pavement marking layout giving length of skip lines and dashes. Indicate lane widths. Show crosswalks, right turn, left turn only, school marking, railroad crossings, etc.	Yes____	No____
Prepare signal staging plans consistent with traffic maintenance plans.	Yes____	No____
Prepare quantity sheets		
List and indicate all pay items to be used	Yes____	No____
Have 90 % complete final quantities	Yes____	No____
Split quantities by project number, job number, and non-federal	Yes____	No____
Special details		
Review drawings and intent of design to determine if elements of the design will require special details	Yes____	No____
Review local agency requirements to determine if special details will be required	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE GRADE INSPECTION CONSTRUCTIN DRAWINGS (CONTINUED)		
ITEM OF WORK	**COMPLETED BY:**	
Project engineer/manager develops preliminary contract documents for bidding purposes	Yes____	No____
Verify all pay items identified in the plans are included in the proposal with the proper quantities		
Verify all non-standard MDOT pay items have special provisions identifying what is included in that pay item	Yes____	No____
Verify all notices to bidders, supplemental specifications are included in the contract Utility coordination clause Coordination clause Mail delivery Trash pickup Commercial bus routes School bus routes	Yes____	No____
Prepare advertisement with general description of the project and its requirements.	Yes____	No____
Prepare engineer's estimate of probable cost	Yes____	No____

QA/QC MANAGER REVIEWS GRADE INSPECTION DRAWINGS		
ITEM OF WORK	**COMPLETED BY:**	
Project engineer meets with QA/QC manager and presents the preliminary drawings		
Review MDOT construction plan development requirements	Yes____	No____
Identify any potential conflicts	Yes____	No____
Thoroughly review design in comparison to checklist and other requirements	Yes____	No____
Review drawings for presentation	Yes____	No____
Review accessible route and grading for sidewalk ramps Access route slope not greater than 1:20 Curb ramp slopes not greater then 1:12	Yes____	No____
Add note to the plan identifying that construction engineer responsible for determining removal limits and setting grade for sidewalk ramps. Assure adequate quantities for sidewalk removal Verify removal limits for sidewalk ramp construction are adequate	Yes____	No____
Review plans for adequate accessible route to all public facilities	Yes____	No____
Review plans for design exceptions and report to MDOT/City	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PREPARE FINAL GI PACKAGE		
ITEM OF WORK	**COMPLETED BY:**	
Revise drawings per QA/QC manager comments	Yes____	No____
Prepare engineer's estimate for construction		
Need separate estimate for each project, job number and non-federal pay items		
List pay items in order of code item numbers	Yes____	No____
Assign special numbers to any non-standard pay items (see pay item code book for instructions)	Yes____	No____
Include miscellaneous pay items for project contingency (ie. detail 7 joints, detail 8 joints, subgrade undercutting, structure reconstructs, drainage structure cover, handpatching, etc.)	Yes____	No____
Prepare special provisions for construction per MDOT requirements		
Have special provisions written in proper form for any special items not covered by MDOT standard specifications for construction	Yes____	No____
Write the provision so that it refers back to an article in MDOT standard specifications for construction	Yes____	No____
Don't write provision just to say it's done according to MDOT spec	Yes____	No____
Maintaining traffic provisions Indicate how traffic is to be maintained Indicate lane closures with duration and timing Indicate detouring Identify any special requirements Identify pay items that cover maintaining traffic Identify construction influence area limits	Yes____	No____
Progress schedule Identify completion date or work days Identify any intermittent completion dates, open to traffic dates Identify separate completion dates for landscaping Review multiple location projects to avoid project delays in completion of entire project Identify other projects in area which may impact work under this contract	Yes____	No____
Coordination clause Notify contractor of any other work being done in the area that could effect his work	Yes____	No____
Utility coordination		
Have utility relocations and adjustments coordinated with utility companies	Yes____	No____
All utility relocations must be completed prior to advertising project or a commitment date from utility company provided in proposal	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

SUBMIT DRAWINGS FOR GRADE INSPECTION		
ITEM OF WORK	**COMPLETED BY:**	
Send to MDOT	Yes____	No____
Send to utility companies for final coordination	Yes____	No____
Send to Local Agency for final coordination	Yes____	No____
Project engineer/manager to attend grade inspection	Yes____	No____

REVISE DRAWINGS PER DRADE INSPECTION		
ITEM OF WORK	**COMPLETED BY:**	
Review and understand review comments	Yes____	No____
Be thorough in resolving comments	Yes____	No____

SUBMIT FINAL DESIGN DRAWINGS AND SPECIFICATIONS TO MDOT		
ITEM OF WORK	**COMPLETED BY:**	
Include final cost estimate with appropriate pay item descriptions in required format	Yes____	No____
Coordinate with, as required, to prepare bidding documents and to answer any specific questions	Yes____	No____
Coordinate with municipality to assure all appropriate/required paperwork is completed for bid letting and project award.	Yes____	No____
Submit final package ten weeks prior to letting date	Yes____	No____

I do hereby certify that I have reviewed the project design and the checklist as identified above and have found the project design to be in substantial compliance with owner and project requirements:

Signed:_____
Project Manager

PROJECT INSPECTION CHECKLIST

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PRECONSTRUCTION REQUIREMENTS		
ITEM OF WORK	**COMPLETED BY:**	
Project engineer/inspection coordinator assigns project to inspection/testing personnel		
Review construction plans, MDOT specifications, MDOT standard plans, and special provisions for construction. Also, perform site visit / site walk (complete pre-construction video, if required)	Yes____	No____
Design engineer and designated construction engineer shall attend preconstruction meeting and/or review preconstruction meeting minutes	Yes____	No____
Review contractor's progress schedule to determine if order of work is consistent with contract documents and minimizes impact to residents and motoring public	Yes____	No____
Review appropriate categories of MDOT's Construction Manual for the required elements of work and become familiar with requirements and procedures	Yes____	No____
Layout advance warning signs / detour signage and SESC measures (as necessary)	Yes____	No____
Distribute City approved / prepared pre-construction notifications to the following: a. Neighborhood residents b. Neighborhood businesses c. Public safety offices (police, fire, etc.) d. City staff/ City Hall/ Council Representative (via group email prepared specific to the project)	Yes____	No____
Verify advance warning sign placement	Yes____	No____
Notify appropriate agencies of and proposed road closures noting start and duration Engineering Division (City website) Police Department Fire Department School District Newspaper/Media (as appropriate) Sanitation/trash collection USPS	Yes____	No____
Delineate / measure removals and verify initial project staking / obtain cut sheets	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

COMMENCEMENT OF CONSTRUCTION		
ITEM OF WORK	**COMPLETED BY:**	
Throughout construction, the following tasks must be completed by the inspection technician and/or the inspection department manager		
Review resident access / thru-traffic routes per the phasing construction plans and specifications	Yes____	No____
Review / measure progress, note activities and document pay items on inspection reports	Yes____	No____
Review soil erosion measures (inlet filters, silt fence, etc.) after significant rain events or as needed (weekly minimum)	Yes____	No____
Resolve contractor questions and resident questions / concerns, and alert Project Engineer as needed (daily update required)	Yes____	No____
Distribute additional progress notifications as required (see above list)	Yes____	No____
Attend bi-weekly progress meetings / review bi-weekly progress meeting minutes	Yes____	No____
Obtain wage rate interviews (as required)	Yes____	No____
Confirm on-going conformance with plans / specifications	Yes____	No____

EARTHWORK / ROADWAY ESTABLISHMENT		
ITEM OF WORK	**COMPLETED BY:**	
The following items shall be considered throughout earthwork operations and roadway construction. The following tasks must be completed by the inspection technician and/or the inspection department manager		
Verify project staking	Yes____	No____
Verify organic material removal and proper embankment placement (material testing as needed, per City / MDOT frequencies).	Yes____	No____
Determine and witness undercut excavations and fills.	Yes____	No____
Provide / oversee density testing on embankment placements and subgrade.	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

SANITARY SEWER / STORM DRAIN INSTALLATIONS		
ITEM OF WORK	**COMPLETED BY:**	
The following items shall be considered throughout sanitary sewer and storm drain installations. The following tasks must be completed by the inspection technician and/or the inspection department manager		
Coordinate all sanitary and storm sewer installations with appropriate Local Agency department	Yes____	No____
Verify project staking	Yes____	No____
Distribute public / resident notifications	Yes____	No____
Verify existing outlet elevation with the contractor and report any deviation from the plans with the Project Engineer	Yes____	No____
Verify on-site materials (pipe, structures, gaskets, etc.) with plans and specifications	Yes____	No____
Witness initial manhole installation or core operation (to existing structure)	Yes____	No____
Oversee pipe undercuts, bedding materials, trench widths backfill and installations per the plans. Review any witnessed safety observations with the Contractor and note within the reports	Yes____	No____
As-built all wye / lead installations or verify / record all lead reconnections (sanitary only).	Yes____	No____
Perform / oversee density testing on approved backfill material per City / MDOT frequencies. Collect material delivery tickets or collect samples for testing	Yes____	No____
Verify final rim elevations / placements	Yes____	No____
Observe pressure tests and review the completed post-construction video to determine any areas requiring repair / replacement	Yes____	No____
Create a punch list for underground utilities and oversee acceptable completion	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

WATER MAIN INSTALLATIONS		
ITEM OF WORK	**COMPLETED BY:**	
The following items shall be considered throughout water main installations. The following tasks must be completed by the inspection technician and/or the inspection department manager		
Coordinate all sanitary and storm sewer installations with appropriate Local Agency department	Yes____	No____
Verify project staking	Yes____	No____
Distribute shut-down notifications prior to proposed water main shutdown / removals	Yes____	No____
Verify on-site materials (pipe, structures, gaskets, etc.) with plans and specifications	Yes____	No____
Oversee pipe undercuts, bedding materials, trench widths backfill and installations per the plans. Review any witnessed safety observations with the Contractor and note within the reports	Yes____	No____
Distribute emergency water shut-down notifications if required (main breaks, unforeseen events, etc.) Make sure City is fully informed.	Yes____	No____
Resolve field conflicts, as encountered, with contractor and Project Engineer	Yes____	No____
Upon written receipt of approved main testing (pressure and bacteriological), coordinate connection schedule with the Contractor	Yes____	No____
Distribute shut-down notifications for new main connection (unless utilizing a live tap)	Yes____	No____
Oversee lead installations / re-connections and distribute temporary shut-down notices as necessary	Yes____	No____
Create a punch list for and oversee acceptable completion	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

HMA PAVING		
ITEM OF WORK	**COMPLETED BY:**	
The following items shall be considered throughout HMA paving. The following tasks must be completed by the inspection technician and/or the inspection department manager		
Review plans and proposed cross sections / mix types	Yes____	No____
Approve subgrade / existing surface (milling operation) a. Proofroll subgrade as needed b. Inspect existing base course and repair as needed	Yes____	No____
Oversee aggregate base installations / collect tickets / perform material testing and oversee / perform density testing	Yes____	No____
Verify HMA mixes, bond coat installation and mix temperatures	Yes____	No____
Verify HMA yields intermittently throughout paving operations to minimize potential overrun of materials	Yes____	No____
Inspect / oversee HMA mat installation (density, roller technique and installed depth)	Yes____	No____
Verify structure adjustments prior to final applied HMA course	Yes____	No____
Verify temporary / permanent pavement marking installations prior to opening to traffic	Yes____	No____

CONCRETE PAVEMENT – ROADWAY SLAB		
ITEM OF WORK	**COMPLETED BY:**	
The following items shall be considered throughout concrete paving of roadway slabs. The following tasks must be completed by the inspection technician and/or the inspection department manager		
Review plans and proposed cross sections / mix types	Yes____	No____
Approve subgrade (proofroll subgrade as needed)	Yes____	No____
Oversee subbase / aggregate base installations / collect tickets / perform material testing and oversee / perform density testing	Yes____	No____
Inspect joint layout, installation and reinforcement installation (as required)	Yes____	No____
Oversee installation and perform / oversee testing (air, temperature, slump and prepare / test cylinders)	Yes____	No____
Verify surface texturing (tined, burlap finish, etc.)	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

CONCRETE PAVEMENT – CURB & GUTTER		
ITEM OF WORK	**COMPLETED BY:**	
The following items shall be considered throughout installation of concrete curb and gutter. The following tasks must be completed by the inspection technician and/or the inspection department manager		
Review standard details / mix types	Yes____	No____
Approve subgrade	Yes____	No____
Verify curb drop locations for approaches and ramps	Yes____	No____
Inspect joint layout, installation and reinforcement installation (as required)	Yes____	No____
Oversee installation and perform / oversee testing (air, temperature, slump and prepare / test cylinders)	Yes____	No____
Verify surface texturing	Yes____	No____

CONCRETE PAVEMENT – SIDEWALK / SIDEWALK RAMPS		
ITEM OF WORK	**COMPLETED BY:**	
The following items shall be considered throughout installation of concrete sidewalk and sidewalk ramps. The following tasks must be completed by the inspection technician and/or the inspection department manager		
Review standard details / mix types	Yes____	No____
Verify subgrade / base establishment (no organics)	Yes____	No____
Verify / establish sidewalk and ramp elevations per current MDOT / ADA requirements	Yes____	No____
Inspect joint layout installation (as required)	Yes____	No____
Oversee installation and perform / oversee testing (air, temperature, slump and prepare / test cylinders)	Yes____	No____
Verify surface texturing (dimpled ramps)	Yes____	No____

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

RESTORATION		
ITEM OF WORK	**COMPLETED BY:**	
The following items shall be considered through the completion of restoration. The following tasks must be completed by the inspection technician and/or the inspection department manager		
Review plans and specifications	Yes____	No____
Verify restoration area prior to topsoil placement; verify acceptability of topsoil material (on-site screened or imported) and record depths of installed material	Yes____	No____
Oversee installation of seed / mulch or sod and obtain certifications	Yes____	No____
Record installed area measurements	Yes____	No____

I do hereby certify that I have reviewed the checklist as identified above and have followed the methods and procedures as required:

Signed:_____
Project Inspector

SECTION 4 - QUESTIONNAIRE

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: Nowak & Fraus Engineers
   Address: 46777 Woodward Ave., Pontiac, MI 48342-5032
   Telephone and Fax: (248) 332-7931 and (248) 332-8247
   Website: www.nfe-engr.com E-Mail: jhuhta@nfe-engr.com
   SIGMA Vendor ID: CV0038506

   If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work: NFE references our organizationl chart for a more thorough presentation of NFE teaming partners. NFE works collaberatively with multiple organizations to ensure our client's project needs are addressed. We regularly partner with Testing Engineers & Consultants and Soils and Structures for geotechnical work, Land Design Studio for land planning, and Hobbs + Black Architects, DS Architects, TDG Architects and Sidock Group for architectural services, Siebien for acoustical and noise studies, Matrix Consulting Engineers for MEP design, and Applied Science and Technology, Inc. for Environmental Consulting.

   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)? 46777 Woodward Ave., Pontiac, MI 48342-5032

   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. Jeffrey J Huhta, Managing Partner, 46777 Woodward Avenue, Pontiac, MI 48348; jhuhta@nfe-engr.com; 248-635-6473 or Steven Sutton, Principal, 46777 Woodward Avenue, Pontiac, MI 48348; SWSutton@nfe-engr.com; 248-332-7931

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: Nowak & Fraus Engineers (NFE) was founded as an engineering and surveying firm in 1969 by Harold Nowak and Jim Fraus. NFE has built a reputation of being one of the premier Civil Engineering firms in Michigan. Our team of professionals aim to provide the highest quality Civil Engineering and Land Surveying services. NFE has forged many important relationships throughout Michigan and is a well repected firm.

3. Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions. See "Personnel" section of the proposal.

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. There have been no recent changes to the organizational structure of NFE.

5. Provide a four year rate schedule per position. See Section 5 Cost Information.

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: NFE regularly prepares contract specifications, assists with project bidding and performs construction administration services utilizing MICHSpec and DCSpec. This is more clearly represented within Section 1 of our submittal where our project experience is highlighted. Also, we would encourage the reviewer to look at our project director scores on our project evaluations as other evidence.

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

Yes ☒ No ☐

If yes, explain:

If approved, this will be NFE's third consecutive ISID contract. Over the past 10 years, NFE has completed over 100 projects as a direct Prime Consultant and we have served as a vendor on numerous other projects with our teaming partners as a Prime Consultant. The combination of this work is both through ISID assignment and work that has been secured as a part of a competitive bid process. We believe NFE has a very good reputation amongst the DTMB Directors, MDOC Staff, MDNR Staff and MDVA Staff.

ARTICLE 5: CAPACITY AND QUALITY

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

NFE has adopted an extensive QA/QC program for completing projects on behalf of our municipal and private clients. Our QA/QC program includes extensive checklist and sign-off documents from job file preparation through project completion. Please see Section 3 of the proposal for our QA/QC policies and procedures.

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.

Each DTMB project will be assigned a Project Director that is responsible for overseeing the entire project from initiation through completion. The Project Director is responsible for the following: project budget, DTMB staff, professional service procurment, consultant oversight, processing consultant/contractor payments, administering project meetngs and addressing project closeout procedures. The DTMB Project Director serves as liaison between the State Agency procuring the project and the firms responsible for performing the work. The State Agency serves as the client/owner for whom the project is being performed. Typically, the state agency will assign a project representative that will coordinate project requirements with the DTMB Project Director. NFE will be responsible for carrying out the professional services on the project (Phase 100 through Phase 700 services). We report directly to the DTMB Project Director, and all communication with the State Agency is carried out through the DTMB Project Director. The DTMB and our firm work together to assist the client in achieving their goals and objectives.

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

NFE believes the integrity of the bidding process must be maintained at all times. If there is adequate time to thoroughly review a proposed substitution, NFE will carefully examine its viability compared to prepared plans and specifications. For a bidder to initiate the substitution of a specified material, the bidder must ask NFE the question, in writing, and supply descriptions and details of the material as it relates to the proposal. If NFE determines the substitution to be acceptable, an addendum is issued to all bidders advising of the allowable substitution, along with appropriate revised specifications. If the substitution is determined to be non-conforming to plans and specifications, the question and corresponding response are documented in the addendum. If there is not enough time to review the viability of the proposed substitution, NFE answers the bidder to explain there is insufficient time to review the matter and they must bid the project as designed. If the proposed substitution comes after the allowable questioning period, NFE answers the bidder to explain the question time has lapsed and, although no further questions are permitted, they can proceed bidding the project as designed. The DTMB Project Director and Client Agency are always consulted regarding changes.

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

NFE recognizes that substitutions are typically made to reduce cost for the contractor or because a particular specified material is not available. Saving money on a project is something that should be encouraged where possible. If a contractor proposes a substitution, NFE will perform due diligence to examine the viability of the substitution against the prepared plans and specifications. If the contractor does not provide it, NFE will ask for the benefits and cost savings associated with the proposed substitution. If the substitution is determined to be in conformance with plans and specifications, NFE will review the matter with the DTMB Project Director and staff. The Client Agency is consulted as necessary regarding the proposed recommended change. If all parties are in agreement that the substitution is acceptable, a change order is formally processed, and

revised plans and specifications are provided to the contractor and DTMB inspection staff for implementation.

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?

NFE makes technology a top priority and implements the latest options for communicating. Our Project Managers are available to the DTMB Project Director and Client Agency 24/7 using the following: phone (mobile phone, landline), texting, Facetime, Google Duo, email, "Constant Contact" email notification system, video conference (Microsoft Teams), project meetings, progress reports, inspection daily record reports, and in person site inspections. The above-mentioned communications systems are utilized for assuring effective and continuous communication is utilized throughout the project, and for completing projects. Specifically, NFE will continuously communicate with the DTMB project staff and Client Agency staff throughout the project development process to assure all parties are informed of the work progression and impending changes to schedule or activities.

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.

NFE has been providing professional Civil Engineering services for 50 years. In that time, we have developed a keen understanding of project estimating. Unit price spreadsheets, prior experience, public data bases, engineering judgement and reliance upon trusted advisors, suppliers and contractors within the industry are all utilized on an as needed basis in our cost estimating processes and procedures. As part of our QA/QC process, all cost estimates are reviewed by senior leadership to ensure accuracy. Our project experience demonstrates our defined process works effectively as we have good success in estimating costs accurately.

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

NFE's approach to minimizing construction cost over-runs is sound constructible designs, effective communication and good relationships with all parties involved in the construction process. NFE promotes a program of strict adherence to our QA/QC policies and procedures, which we believe results in clear, effective, and constructible design. NFE trains personnel to implement effective communication and partnering strategies that result in developing and maintaining an excellent work relationship with the project team. NFE recognizes that most errors are a result of poor communication and it is our goal to eliminate this as a source of problems on a project.

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

6-10% of construction cost depending on the size and complexity of the project.

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

Typically 80% of the project is performed by NFE directly, with the remaining 20% being performed by sub-consultants.

5.13 On a typical project, what would be your response time, from the time receiving 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.)

NFE will prepare project quotes within 5 days of assignment to quote, and will begin work within one week of authorization to start.

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

NFE will request all required documentation from the read low bidders as required within the contract documents. This includes a list of references (per contract form); list of similar projects completed within the past 5 years (three are required); resume of project superintendent; and as necessary, the schedule of values. NFE will contact submitted references and to inquire as to the suitability of retaining the contractor for the proposed work based on prior experiences. Additionally, NFE will perform a phone interview with the contractor (or face to face as may be necessary). Lastly, NFE will work with the contractor to complete the DTMB form for Best Value Construction Bidder Evaluation. All of the data above will be summarized in a recommendation letter from NFE to the Project Director. Typical turn around for a bidder evaluation is approximately 5 business days.

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

LEED is an organized and regimented process by which developments can become certified as "environmentally friendly" by implementing sustainable designs and best management practices.

5.16 Describe your experience with similar open-ended contracts.

NFE has successfully completed ISID contracts and projects with the DTMB for the past 10 years. We reference our project experience as proof of our success to participate in an ISID arrangement. Additionally, NFE performs as-needed services to many of our municipal and other government agency clients. NFE represents 12 different municipal agencies as a consulting engineer and we have a nationwide contract with Amtrack to perform as needed services across the United States.

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

NFE has completed numerous facility assessments as a part of Phase 100 services for the DTMB. Our services include the detailed infrastructure evaluations and reporting where required to study electrical, mechanical or plumbing systems. Additionally, NFE will work with preferred vendors to assure a detailed and thorough investigation of all related systems that require evaluation including MEP system, structural systems or architectural systems. The NFE team will review each system component being considered and an assessment report will be prepared to address all evaluation criteria.

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.

Projects within these categories are regulated by the Michigan Department of Environment, Greate Lake and Energy, and all project permitting requirements are administered though their department. Critical dune and coastal zone management require submittal of a EGLE/USACE joint permit application. Applications, together with the appropriate fee, are mailed to the PCU in Lansing for review to verify completeness prior to assignment. The file is then assigned to a permit specialist for application processing. Campground permits are obtained from the EGLE by submitting an Application for Campground Construction Permit and is administered under Michigan's Public Health Code, 1978 PA 368. In most cases, it is highly recommended that a pre-submittal meeting (pre-application) be arranged with the EGLE to ensure concerns and objectives are discussed in advance of the permit submittal.Projects in, or adjacent to, lakes or rivers require submittal of a EGLE/USACE joint permit application. Applications, together with the appropriate fee, are mailed to the PCU in Lansing for review to verify completeness prior to assignment to the local field office. The local field office reviews the application, performs a site investigation and works with the applicant to answer questions, administer a public hearing (if required) and otherwise process the application. In most cases, it is highly recommended that a pre-submittal (pre-application) meeting be arranged with the EGLE to assure that concerns and objectives are discussed in advance of the permit submittal.

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

Any request for additional compensation shall be submitted to DTMB and the Client Agency in the form of a Bulletin Request completed by NFE. The Bulletin Request will contain a description of the nature of the changes, an estimate of construction cost and an estimate of professional fees associated with the change. The Bulletin Request is reviewed by the DTMB and Client Agency and if agreeable, signed. Then, NFE will request a quote from the contractor for the proposed work. The Contractor’s quote will be compared to the Bulletin Request to determine if costs are consistent. The Contractor’s quote, if found acceptable, will be approved and a Change Order will be written to the Contractor by the Project Director. If the Contractor’s quote is not acceptable, NFE will assist the DTMB and Client Agency in negotiating an acceptable quote.

PART II - COST

SECTION 5 - COST INFORMATION

COST INFORMATION

Attached to this section is NFE's standard fee schedule for compensation. Additionally, NFE has provided billable rate information for our partnering firms. In general, NFE's markup of all sub consulted services is 5%.

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	Nowak & Fraus Engineers
Yearly Hourly Billing Rate Increase	4%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Jeffrey Huhta**	Project Manager	168.00	174.00	182.00	188.00
Steve Sutton**	Project Manager	168.00	174.00	182.00	188.00
Karl Ruiter**	Project Engineer	156.00	162.00	168.00	174.00
Jason Longhurst**	Project Engineer	156.00	162.00	168.00	174.00
Petr Kotrba**	Engineer III	98.00	102.00	106.00	110.00
Tim Wood**	Engineer III	98.00	102.00	106.00	110.00
Mark Wilson**	Engineer III	98.00	102.00	103.00	110.00
Ellen Marani	Engineer II	92.00	96.00	100.00	104.00
Dave Auricchio**	Engineer II	92.00	96.00	100.00	104.00
George Ostrowski**	Landscape Architect	116.00	120.00	124.00	128.00
Steve Evans	Survey Manager	116.00	120.00	124.00	128.00
TBD	2 Person Survey Crew	168.00	174.00	182.00	188.00
Jim Jenna**	Sr. Testing/Inspector	82.00	86.00	90.00	94.00
Andrew Kulpanowski	Sr. Testing/Inspector	82.00	86.00	90.00	94.00
Mike Rogers**	Sr. Testing/Inspector	82.00	86.00	90.00	94.00
Robert Helberg**	Sr. Testing/Inspector	82.00	86.00	90.00	94.00
Dave McConkey	CAD Technician	82.00	86.00	90.00	94.00
James Nelson	CAD Technician	82.00	86.00	90.00	94.00
Cornelia Carter	Clerical	60.00	62.00	64.00	68.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

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	Hobbs + Black Architects
Yearly Hourly Billing Rate Increase	4%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Position/Classification	Rate Ranges			
	Year 1	Year 2	Year 3	Year 4
Project Principal	195.00	201.00	207.00	213.00
Project Manager/Arch.	175.00	180.00	185.00	190.00
Project Architect	125.00	129.00	133.00	137.00
Project Assistant	80.00	52.00	84.00	87.00
Senior Designer	140.00	144.00	147.00	151.00
Designer	80.00	82.00	84.00	87.00
Estimator	160.00	165.00	170.00	175.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

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	DS Architects, Inc.
Yearly Hourly Billing Rate Increase	As shown below
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Derek Slupka	Principal / Architect	$140.00	$140.00	$145.00	$145.00
Brian O'Neill	CAD Technician III	$80.00	$80.00	$85.00	$85.00
Kyle Morang	CAD Technician II	$70.00	$70.00	$75.00	$75.00
Allison Miller	CAD Technician I	$60.00	$60.00	$65.00	$65.00
Kari Charboneau	Architectural support	$50.00	$50.00	$55.00	$55.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

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	Sidock Group, , Inc.
Yearly Hourly Billing Rate Increase	3%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Steve DeHorn, PE	Principal	208.00	214.00	220.00	227.00
Bradley J Butcher, AIA	Senior PM, Primary	178.00	183.00	188.00	194.00
Robert M. Roth, Jr, PE	Senior PM Structural	178.00	183.00	188.00	194.00
Dwayne Walker, PE	Senior PM Mechanical	178.00	183.00	188.00	194.00
Michael Lott, PE	Sr. Proj Const. Electrical	178.00	183.00	188.00	194.00
Stacy Peterson, RA	Sr. Proj Const. Arch.	174.00	179.00	184.00	190.00
Daniel E. Heise, PE	Sr. Proj Const. Electrical	174.00	179.00	184.00	190.00
Cyril Miranda, PE	Sr. Proj Const. Mech.	174.00	179.00	184.00	190.00
Timothy J Miller, AIA	PM Architecture	174.00	179.00	184.00	190.00
Gint Gaska, AIA	PM Architecture	169.00	174.00	179.00	184.00
Jim Thorton	PM Architecture	169.00	174.00	179.00	184.00
Willaim Frazier	PM Structural	169.00	174.00	179.00	184.00
Wayne Dutton	Project Lead – Arch.	157.00	162.00	167.00	172.00
Phil Keranen, PE	Project Lead - Electrical	157.00	162.00	167.00	172.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

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	TDG Architects
Yearly Hourly Billing Rate Increase	4%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Brian Gill	Principal in Charge	$140	$145	$150	$161
Matt Hoener	Project Manager	$110	$114	$118	$122
Ron Clisby	Designer	$100	$104	$108	$112
Mike Terenzi	CAD Draftsman I	$90	$93	$96	$99
Chris Westerlund	CAD Draftsman II	$80	$83	$86	$89

*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

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	Matrix Consulting Engineers, Inc.
Yearly Hourly Billing Rate Increase	3%
Mark-up for Sub-Consultants (not to exceed 5%)	0%
Mark-up for Reimbursables (not to exceed 5%)	0%

Position/Classification	Rate Ranges			
	Year 1	Year 2	Year 3	Year 4
Principal/Senior Engineer	174.00	180.00	186.00	192.00
Engineering Project Manager	148.00	153.00	158.00	163.00
Lead Project Engineer	132.00	136.00	140.00	144.00
Project Engineer	121.00	125.00	129.00	133.00
Design Engineer II	110.00	114.00	118.00	122.00
Design Engineer I	97.00	100.00	103.00	106.00
Project Manager	142.00	146.00	150.00	155.00
Designer IV	122.00	126.00	130.00	134.00
Designer III	103.00	107.00	110.00	113.00
Designer II	93.00	96.00	99.00	102.00
Designer I	78.00	81.00	84.00	87.00
Cad Operator II	67.00	69.00	71.00	73.00
Cad Operator	56.00	58.00	60.00	62.00
Clerical	54.00	56.00	58.00	60.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

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	Land Design Studio
Yearly Hourly Billing Rate Increase	4%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Tad Krear**	Project Manager	140.00	146.00	152.00	158.00
Charles Elias	Sr. Landscape Architect	120.00	124.00	130.00	136.00
Eric James**	Associate Landscape Architect	110.00	114.00	118.00	122.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

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	Testing Engineers & Consultants
Yearly Hourly Billing Rate Increase	3%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Carey Suhan PE**	Principal	170.00	176.00	181.00	186.00
David Bergman PE	Sr. Structural Engineer	150.00	155.00	160.00	165.00
Don Kaylor, GPG, EP	Sr. Geologist/Proj. Mgr.	120.00	124.00	128.00	132.00
Gary Putt, PE	Sr. Project Engineer	130.00	134.00	138.00	142.00
Ian Mickle	Sr. Driller	85.00	88.00	91.00	94.00
T.B.D.	Clerical	50.00	52.00	54.00	55.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

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	JDH Engineering, Inc.
Yearly Hourly Billing Rate Increase	4%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Keith Ritsema	Principal & Senior PM	180.00	187.00	195.00	202.00
David Bendert	Senior Engineer	145.00	150.00	157.00	163.00
Jonathan Vergunst	Project Engineer	125.00	130.00	135.00	140.00
Matt Candela	Designer / EIT	110.00	115.00	119.00	124.00

*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 attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

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	Soils & Structures, Inc.
Yearly Hourly Billing Rate Increase	2%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Dave Hohmeyer PE	Principal Geotech Eng.	198.00	202.00	206.00	210.00
Michael Partenio PE	Sr. Geotech Eng.	160.00	163.20	166.45	169.75
Malcom Thompson PE	Geotech Eng.	140.00	142.80	145.65	148.55
Kris Twining PE	Sr. Structural Engineer	160.00	163.20	166.45	169.75
Chris Gates PE	Structural Engineer	140.00	142.80	145.65	148.55
Nate Sturtevant EIT	Structural Engineer	125.00	127.50	130.05	132.65

*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

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	ASTI Environmental
Yearly Hourly Billing Rate Increase	3%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Employee Name	Position/Classification	Rate Ranges			
		Year 1	Year 2	Year 3	Year 4
Dianne Martin	Principal-in-Charge	$180	$185.40	$190.96	$196.69
Dana Knox	Wetland Scientist/III	$140	$144.20	$148.53	$152.98
Kyle Hottinger	Wetland Scientist/III	$140	$144.20	$148.53	$152.98
Jeremiah Roth	Wetland Scientist/II	$99	$101.97	$105.03	$108.18
Shane Jennings	Arborist/II	$99	$101.97	$105.03	$108.18
Emmett Smrcka	Ecologist/I	$86	$88.58	$91.24	$93.97
Rita Hodges	GIS Technician	$83	$85.49	$88.05	$90.70
Joe Nix	CAD Technician	$83	$85.49	$88.05	$90.70
Brad Kassuba	Wetland Scientist/III	$140	$144.20	$148.53	$152.98
Renee Mulcrone	Aquatic Scientist/III	$140	$144.20	$148.53	$152.98

*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

APPENDIX
SECTION 6 - ADDITIONAL INFORMATION

4. ADDITIONAL INFORMATION

- Insurance Form
- MDOT Prequalifications
- Certificate of Awardability

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 06/27/2022

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 have ADDITIONAL INSURED provisions or 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	CONTACT NAME: Cyndi Armstrong	
Moore Insurance Services, Inc. 67 N. Howell P.O. Box 207 Hillsdale MI 49242	PHONE (A/C, No, Ext): (517) 439-9345	FAX (A/C, No): (517) 439-5536
	E-MAIL ADDRESS: info@mooreinsuranceservices.com	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : RLI Insurance Company	13056
INSURER B : Accident Fund National Insurance Company	12305
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Nowak & Fraus, PLLC
46777 Woodward Avenue
Pontiac MI 48342

COVERAGES **CERTIFICATE NUMBER:** CL2262703743 **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 [X] XCU not Excluded [X] Railroad Contractual GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [X] OTHER: Unmanned Aircraft Liability			PSB0001130	06/30/2022	06/30/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Each Occurence/Agg	$ 2,000,000 $ 1,000,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY			PSA0001122	06/30/2022	06/30/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ $ $ $
A	[ ] UMBRELLA LIAB [X] OCCUR [X] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $			PSE0001047	06/30/2022	06/30/2023	EACH OCCURRENCE AGGREGATE 	$ 5,000,000 $ 5,000,000 $
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WCV6092232	06/30/2022	06/30/2023	[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
A	Professional Liability w/ Pollution Incident			RDP0047556	06/30/2022	06/30/2023	Per Claim Aggregate	$2,000,000 $4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

FOR INFORMATIONAL PURPOSES ONLY

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

Eric A Moore

NF ENGINEERS

STATUS OF MDOT PREQUALIFICATIONS
As of JANUARY, 2023

PREQUALIFICATION CATEGORY	STATUS
Construction Engineering: Assistance	**APPROVED**
Construction Engineering: Roadway	**APPROVED**
Construction Engineering: Roadway – Local Agency	**APPROVED**
Construction Services: Office Technician	**APPROVED**
Construction Inspection: Roadway	**APPROVED**
Construction Inspection: HMA Pavement	**APPROVED**
Construction Inspection: Traffic and Safety	**APPROVED**
Construction Testing: Aggregates	**APPROVED**
Construction Testing: Concrete	**APPROVED**
Design – Roadway	**APPROVED**
Design – Roadway: Intermediate	**APPROVED**
Design – Traffic: Pavement Markings	**APPROVED**
Design – Traffic: Work Zone Maintenance of Traffic	**APPROVED**
Design – Utilities: Municipal	**APPROVED**
Design: Landscape Architecture	**APPROVED**
Surveying: Construction Staking	**APPROVED**
Surveying: Right of Way	**APPROVED**
Surveying: Road Design	**APPROVED**

R 12/16/13

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Facilities and Business Services 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 of 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: 48342)

☐ 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: _____)

Bidder: Nowak & Fraus Engineers

Jeffrey J. Huhta, PE, PS
Authorized Agent Name (print or type)

1-19-2023
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 12/16/13

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Facilities and Business Services 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.
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 time 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: Nowak & Fraus Engineers

Jeffrey J. Huhta, PE, PS
Authorized Agent Name (print or type)

1-19-2023
Authorized Agent Signature & Date

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

Oakland County
46777 Woodward Avenue
Pontiac, MI 48342

Wayne County
28 W. Adams, Suite 210
Detroit, MI 48226

Macomb County
48680 Van Dyke, Suite 200
Shelby Township, MI 48317

www.NFE-ENGR.com

APPENDIX 3

PROFESSIONAL CERTIFICATION FORMS
(Please see pages 273 - 274)

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): 03/23/2023

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 have ADDITIONAL INSURED provisions or 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	CONTACT NAME: Cyndi Armstrong	
Moore Insurance Services, Inc. 67 N. Howell P.O. Box 207 Hillsdale MI 49242	PHONE (A/C, No, Ext): (517) 439-9345	FAX (A/C, No): (517) 439-5536
	E-MAIL ADDRESS: info@mooreinsuranceservices.com	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : RLI Insurance Company	13056
INSURER B : Accident Fund National Insurance Company	12305
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Nowak & Fraus, PLLC
46777 Woodward Avenue
Pontiac MI 48342

COVERAGES **CERTIFICATE NUMBER:** CL2262703743 **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	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ XCU not Excluded ☒ Railroad Contractual GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PRO-JECT ☐ LOC ☒ OTHER: Unmanned Aircraft Liability	Y	Y	PSB0001130	06/30/2022	06/30/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Each Occurence/Agg	$ 2,000,000 $ 1,000,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ HIRED AUTOS ONLY ☒ NON-OWNED AUTOS ONLY	Y	Y	PSA0001122	06/30/2022	06/30/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	☐ UMBRELLA LIAB ☒ OCCUR ☒ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $	Y	Y	PSE0001047	06/30/2022	06/30/2023	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	Y	100040616	06/30/2022	06/30/2023	☒ 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
A	Professional Liability w/ Pollution Incident			RDP0047556	06/30/2022	06/30/2023	Per Claim Aggregate	$2,000,000 $4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Indefinite-Scope, Indefinite-Delivery Contract No. 00981-Department of Technology, Management and Budget State Facilities Administration, Design and Construction Division, Professional Architectural and Engineering Indefinite-Scope, Indefinite Delivery Contract for Minor Projects-Various State Department and Facilities, Various Site Locations, Michigan. State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents are listed as additional insureds with respect to general, auto, and excess liabilities only on a primary and non-contributory basis.

CERTIFICATE HOLDER

State of Michigan Department of Technology,
Management & Budget
3111 W. St. Joseph Street
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

Eric A Moore

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

_____