PSC Architectural/Engineering 5/90 (Billing Rate) * 1445 // 636
Indefinite-Scope, Indefinite-Delivery Contract
R 3/31/08

STATE OF MICHIGAN

DEPARTMENT OF MANAGEMENT AND BUDGET

This contract authorizes the professional services contractor to provide professional services. (Authority: 1984 PA 431)

CONTRACT FOR PROFESSIONAL SERVICES

THIS CONTRACT, authorized this nineteenth day of September in the year two-thousand and eight (2008), by the Director, Department of Management and Budget, BETWEEN the STATE OF MICHIGAN acting through the FACILITIES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION of the DEPARTMENT OF MANAGEMENT AND BUDGET, First Floor, Stevens T. Mason State Office Building, Lansing, Michigan, hereinafter called the State,

and Dixon Engineering, Inc.
1104 Third Avenue
Lake Odessa, Michigan 48849

the Prime Professional Services Contractor, hereinafter called the Professional,

FOR THE FOLLOWING PROJECT:

Index No. (To Be Established) Contract Order No. Y (To Be Assigned)
File No. (To Be Assigned)
Indefinite-Scope, Indefinite-Delivery Contract No. 00205
Department of Management and Budget
Facilities Administration, Design and Construction Division
Professional Architectural and Engineering Indefinite-Scope, Indefinite Delivery Contract for Minor Projects
Inspection and Testing of Elevated Water Storage Tanks Engineering Study/Design and Construction Administration Services
Various State Departments and Facilities
Various Site Locations, Michigan

Provide professional inspection and testing of elevated water storage tanks engineering study/design services, technical staff, and support personnel for indefinite-scope, indefinite-delivery minor projects on an as-needed basis at various State/Client Agencies within the various site location areas as defined by the State of Michigan. These various assigned indefinite-scope, indefinite-delivery 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 indefinite-scope, indefinite-delivery minor 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 design firm. The professional inspection and testing of elevated water storage tanks engineering study/design services required for each of these assigned projects requested by the Department may include any or all of the Tasks included in the Phase 100 – Study through the Phase 700 – Construction text of the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Standard Professional Services Contract.

The Professional firm's inspection and testing of elevated water storage tanks engineering study/design services shall be performed in strict accordance with this Professional Services Contract and be in compliance with the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements.

The total compensation cost to be paid to the Professional design firm by the Department for all assigned indefinite-scope, indefinite-delivery minor Projects under this Contract will not exceed two-hundred and fifty-thousand dollars ($250,000) unless, otherwise approved in writing by the Department.

This Contract does not warrant or imply to the Professional design firm, entitlement to perform any specific percentage (%) amount of the required minor indefinite-scope, indefinite-delivery inspection and testing of elevated water storage tanks engineering study/design work outlined in the Department's approved and attached Appendix 1 – Project/Program Statement scope of work during the life of this three (3) year Contract.

This Contract will remain in effect for three (3) years from the date of this Contract award, but may be unilaterally terminated by the State of Michigan at any time therein, for cause or its convenience, by written notification of the State, to the Professional design firm. Furthermore, this Contract may be extended for one (1) additional year, at the sole option and discretion of the State upon the Department of Management and Budget, Facilities Administration, Design and Construction Division providing written notice to the Professional design firm prior to the expiration of the original three (3) year Contract time period. Any such time extension shall be subject to the terms and conditions of this Contract, including, but not limited to, the hourly billing payroll compensation rates included in this Contract for the Professional design firm, their Consultant and their employees or agents.

Please note that for this Professional Services Contract **your permanent assigned Indefinite-Scope, Indefinite-Delivery Contract No. is 00205** and it must be provided on all Project correspondence and documents. Also, you are not to provide any inspection and testing of elevated water storage tanks engineering study/design services or incur expenses until individual indefinite-scope, indefinite-delivery Projects are assigned to this Contract (see the Article 2 – Compensation and the Appendix 1 – Project/Program Statement text of this Contract.)

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

I. The Professional shall provide the professional inspection and testing of elevated water storage tanks engineering study/design services for the Project scope of work requirements in the study, design and construction administration Phase/Task sequence provided in this Professional Services Contract and to the extent authorized by the Department of Management and Budget, Facilities Administration, Design and Construction Division and be solely responsible for such professional services.

II. The State of Michigan shall compensate the Professional firm for providing their professional inspection and testing of elevated water storage tanks engineering study/design and construction administration services for the Project scope of work services in accordance with the conditions of this Professional Services Contract.

III. CENTURY DATE COMPLIANCE PROTECTION: All fixtures, equipment or operating systems which require firmware or software systems and that are provided with and/or incorporated into the work shall include, at no increase in Contract price or Contract time, design and performance such that they will not experience firmware or software abnormality and/or generate incorrect results or performance deficiencies due to date oriented processing.

If a Construction Contract is required for this Project, the Professional shall include the Century Date Compliance Protection language in the: (1) "Supplemental Conditions," of the Construction Contract of the Department of Management and Budget, Facilities Administration, Design and Construction Division, "MICHSPEC 2001 Edition of The Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)"; or the (2) Current Department of Management and Budget, Facilities Administration, Design and Construction Division," DMB Short Form 401 - Proposal and Contract/Front-End Package for Small Projects for Professional Services Contractors (PSC) with General Conditions for Construction and Instructions to Bidders" as adopted and modified by the State of Michigan and incorporated into the Construction Contract. The "Supplemental Conditions," Century Date Compliance Protection language will require the Professional to provide in the Construction Contract for this Project, the text provisions of the following paragraphs (A.) through (E.) below:

A. The firmware and software design to ensure century date compliance capability, shall include, but not be limited to date structures (databases, date files, etc.) that provide four (4) digit date century; stored data that contain date century recognition, including, but not limited to, data stored in databases and hardware device internal system date; calculations and program logic (e.g. sort algorithms, calendar generation, event recognition, and all processing actions that use or produce date values) that accommodates same century and multi-century formulas and date values; and user interfaces (i.e. screen reports, etc.) that accurately treats four (4) digit year 2000 as a leap year within all calculations and calendar logic.

B. When requested by the State of Michigan, the Construction Contractor shall promptly provide written assurances to the State from any manufacturer of any fixtures, equipment or operating systems provided with and/or incorporated into the work that its fixtures, equipment, or operating systems have been reasonably tested and will not experience any firmware or software abnormality and/or generate incorrect results or performance deficiencies due to date oriented processing. Whether the State chooses to request such assurances, and whether such assurances are provided, will not relieve the Construction Contractor from the Construction Contractor's obligation to provide fixtures, equipment and operating systems in accordance with the Professional firm's Phase 100 – Study, Final Report and final design Contract Documents/inspection and testing of elevated water storage tanks engineering study/design drawings and specifications requirements or will represent acceptance of defective work.

C. If the Construction Contractor knows or has reason to know of any incorrect results and/or performance deficiencies due to date oriented processing, the Construction Contractor shall promptly notify the Professional and the State in writing of any such defective work.

D. The Construction Contractor specifically warrants and represents that all fixtures, equipment or operating systems provided with and/or incorporated into the work will not experience firmware or software abnormality and/or generate incorrect results or performance deficiencies due to date oriented processing. This Construction Contractor warranty shall extend or until the applicable warranty otherwise covering the fixture, equipment or operating system at issue expires, whichever is later.

E. The Construction Contractor shall take prompt corrective action upon receiving any written notice of any defective work because any fixtures, equipment or operating systems experience firmware or software abnormality and/or generate incorrect results or performance deficiencies.

IV. 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 of Management and Budget, Facilities Administration, Design and Construction Division and/or the Professional firm prior to the execution of the Construction Contract which modifies or interprets the Project final design Contract Bidding Documents, including inspection and testing of elevated water storage tanks engineering study/design 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 Project Index No., Project File No., the Contract Order No. Y, and a description of the proposed Addenda scope of work; and (5) Specify the date of Addenda issuance. As such, the Addenda are intended to become part of the Project Contract Bidding Documents when the Construction Contract is executed by the Professional firm's recommended lowest responsive, responsible qualified Construction Contractor. An Addendum issued after the competitive construction Bid opening to those construction Bidders who actually submitted a Bid, for the purpose of rebidding the Project work without readvertising, is referred to as a post-Bid Addendum.

BID: A written offer by a competitive construction Bidder for the Department of Management and Budget, Facilities Administration, Design and Construction Division's Project construction work, as specified, which designates the competitive construction Bidder's base Bid and Bid price for all alternates.

BIDDER: The person acting directly, or through an authorized representative, who submits a competitive construction Bid directly to the Department of Management and Budget, Facilities Administration, Design and Construction Division.

BIDDING DOCUMENTS: The Professional firm's Project final design Contract Documents/inspection and testing of elevated water storage tanks engineering study/design drawings and specifications requirements as advertised, and all Addenda issued before the competitive construction Bid opening, and after the competitive construction Bid opening, if the Project construction work is rebid without readvertising. Bidding Documents shall consist of: the final design inspection and testing of elevated water storage tanks engineering study/design 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 construction 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 competitive construction 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 scope of work requirements for this Contract.

BULLETIN: A standard document form (DMB-485, Bulletin Authorization No. and the DMB-489, Instructions to Construction Contractors for Preparation of Bulletin Cost Quotations for Contract Change Orders) used by the Department of Management and Budget, Facilities Administration, Design and Construction Division to describe a sequence numbered change in the Project scope of work 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 "DMB-460, Project Procedures" documents package.

CAPITAL OUTLAY MANUAL: Provides a general background description of the State of Michigan's, Capital Outlay process for minor and major architectural and/or engineering Projects. Describes the Capital Outlay programming, planning and construction process. This manual contains the sequence of Project events from programming/planning a Project through construction. Contains the procedures and forms for the Capital Outlay Budget. Defines the meaning and content of the Project/Program Statement (required for planning Projects) and indicates suggested space standards.

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 firm's field Inspections of the Project scope of work during the construction Phase of this Contract which includes but is not limited to: (1) Document the quantity and quality of all Project construction work and verify 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 of Management and Budget, Facilities Administration, Design and Construction Division, "MICHSPEC 2001 Edition of The Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" or the current

Department of Management and Budget, Facilities Administration, Design and Construction Division," DMB Short Form 401 - Proposal and Contract/Front-End Package for Small Projects for Professional Services Contractors (PSC) with General Conditions for Construction and Instructions to Bidders" 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 of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director that the Project construction work is in compliance with the Professional firm's design intent and that the Project scope of work has been completed by the Construction Contractor in accordance with the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering study/design drawings and specifications requirements.

The Professional shall provide sufficient Inspections of the Project scope of work during the construction Phase 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 scope of work requirements, up to and including full-time field Inspections. The construction field Inspections shall occur as the construction field conditions and the Project scope of work requirements may require and during the regularly scheduled monthly progress and payment meetings. 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 scope of work. 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 Prime Professional firm's staff, but employed by the Prime 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 written order standard document form (DMB-403) issued and signed by the State of Michigan and signed by the Professional which amends the Contract Documents for changes in the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements or an adjustment in Contract price and/or Contract time, or both.

CONTRACT DOCUMENTS: The Professional firm's Phase 100 – Study, Final Report and final design inspection and testing of elevated water storage tanks 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, all Addendums, and attachments as may be necessary to comprise a Construction Contract for the Project scope of work requirements. Specifications for this Contract will be prepared for Division 00 through 49, in the 2004 MasterFormat Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the defined Project scope of work requirements (See Appendix 4).

CONTRACT MODIFICATION: A written amendment standard document form (DMB-410) to the Contract scope of work requirements signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements or previously unknown on-site field conditions as approved by the Department will be compensated to the Professional firm 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 firm for correcting, or for responding to claims or litigation for, the Professional firm's Phase 100 – Study, Final Report and final design Contract Documents/inspection and testing of elevated water storage tanks engineering study/design errors, omissions or neglect on the part of the Professional.

CONTRACT ORDER: A written order standard document form (DMB-402) issued and signed by the State of Michigan authorizing a professional firm to: (1) Begin to incur Project expenses and proceed with the Project scope of work on-site; and (2) Provide the professional services stipulated in the fully executed Contract scope of work requirements for the not-to-exceed dollar ($) fee amount designated in the Phases of the Contract Order. Issuance of this standard document form by the State of Michigan to the Professional firm certifies that: (1) The State will enter into a Professional Services Contract for the professional services described in the Phases of this Contract; and that (2) The proper three (3) sets of Original Certificate of Insurance documents have been received and accepted by the State along with the approval and signing of the Professional firm's Professional Services Contract by the Director of the Department of Management and Budget, Facilities Administration.

DEPARTMENT: The Department of Management and Budget. 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 of Management and Budget, Facilities Administration, Design and Construction Division on behalf of the Department.

DESIGN MANUAL: Provides the Professional with information regarding the Department of Management and Budget, Facilities Administration, Design and Construction Division's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" 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 Management and Budget or their authorized State of Michigan representative.

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

FIELD REPRESENTATIVE: An employee of the State under the direction of the Project Director who provides the Inspection of construction Projects for compliance with the design intent of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering study/design drawings and specification requirements and the building construction codes. The Field Representative is the liaison between the Construction Contractor, the Professional, and the Project Director. The Project Director, or their 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 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.

INSPECTION: The Professional and their Consultants 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 of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering study/design drawings and specifications requirements.

KEY PRINCIPAL PERSONNEL/EMPLOYEE: A Chief Executive Officer of a professional firm who is essential for the successful completion of the Project scope of work requirements.

NOTICE OF INTENT TO AWARD: A written notice to the Construction Contractor, by the Department of Management and Budget, Facilities Administration, Design and Construction Division accepting the Project Professional firm's written recommendation to award the construction Bid to the lowest responsive, responsible qualified 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 design Phase step necessary to produce the Project's scope of work requirements in the course of the Professional providing inspection and testing of elevated water storage tanks 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 firm 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 of Management and Budget, Facilities Administration, Design and Construction Division 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 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 scope of work requirements.

PROJECT DIRECTOR: The professional licensed State of Michigan employee of the Department of Management and Budget, Facilities Administration, Design and Construction Division, Architectural/Engineering discipline who is responsible for directing and supervising the Professional firm's inspection and testing of elevated water storage tanks engineering study/design services during the life of this Professional Services Contract (See attached Appendix 1 – Project/Program Statement scope of work requirements for this Project). The Project Director is responsible for monitoring and coordinating the performance of the construction Phase services and also responsible for the overall administration and Inspection of Capital Outlay and miscellaneous operating projects (MOP's) construction activities to ensure quality control, final design Contract Documents compliance and timely Project completion within the established Project construction Budget. The Project Director, or their 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. Unless delegated by specific written notice from the Department, the 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.

PROJECT/PROGRAM STATEMENT: The Department's approved and attached Appendix 1 - Project/Program Statement scope of work requirements prepared by the State/Client Agency that defines the scope of the problem and describes why this Project is desirable, and provides a preferred resolution of the problem. The Project/Program Statement also requires the Professional firm to provide a Project schedule identifying critical study/design milestone dates that shall be required and achieved by the Professional firm for the Project scope of work requirements as well as proposed construction milestone target dates anticipated for the Construction Contractor to achieve.

PROJECT TEAM: Consisting of the Professional, the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director, the 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 made a determination that the Project work, or a portion of the Project construction work inspected, in concert with the Professional, the Construction Contractor, the Department, Project Director, the Field Representative, the State/Client Agency and any construction manager, is substantially complete and shall be attached to the respective DMB-455, Certificate of Substantial Completion form. This standard document form is a part of the "DMB-460, 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 Management and Budget, 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 inspection and testing of elevated water storage tanks engineering study/design services. The term State/Client Agency does not include an institution of higher education or a community college.

SUBSTANTIAL COMPLETION: The standard document form (DMB-445) for the Project work, or a portion of the Project work designated in the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications as eligible for separate Substantial Completion, has been completed in accordance with the design intent of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications, to the extent that the Department of Management and Budget, Facilities Administration, Design and Construction Division 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. Prerequisites for Substantial Completion, over and above the extent of Project work completion required, shall include the following items; (a) Receipt by the Department of all required Contract operating and maintenance documentation; (b) All systems have been successfully tested and demonstrated by the Construction Contractor for their intended use; and (c) Receipt by the Department of Management and Budget, Facilities Administration, Design and

Construction Division of all required Contract certifications and/or occupancy approvals from the State of Michigan and those political subdivisions having jurisdiction over the Project work. Receipt of all required Contract certifications and/or occupancy approvals from those political subdivisions with jurisdiction in and of itself does not necessarily imply Substantial Completion.
SUSTAINABLE DESIGN: The Professional firm'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 firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements 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 scope of work requirements; (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 1 PROFESSIONAL SERVICES SCOPE OF WORK

The Professional shall provide all professional services, technical staff and support personnel necessary to achieve the Project scope of work requirements as described in the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements in the best interest of the State, and be within the Professional firm's not-to-exceed monetary compensation fee(s) herein authorized by the State. Project services shall comprise, without exception, every professional inspection and testing of elevated water storage tanks engineering study/design discipline and expertise necessary to meet all the requirements as described in the attached Appendix l - Project/Program Statement scope of work and be within the amount authorized by the State and be in accordance with the industries accepted standard requisites for professional inspection and testing of elevated water storage tanks engineering study/design practice and services. The Professional firm's services includes attendance at all Project related meetings and conferences in pursuance thereof. Professional services for this Project shall be provided in the Phase/Task sequence shown below and shall be rendered in accordance with the Professional firm's attached Appendix 3 – Project Study, Design and Proposed Construction Schedule duration. The Professional firm's study, design and proposed construction schedule shall be detailed, undated, and time sequence related for all Phase/Task services appropriate for the Project scope of work requirements. The Professional shall field-check, and verify the accuracy of all inspection and testing of elevated water storage tanks engineering study/design drawings 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 firm'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 firm's performance under this Contract.

The Professional acknowledges by signing this Professional Services Contract, having a clear understanding of the requested Project scope of work requirements and of the professional inspection and testing of elevated water storage tanks engineering 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 monetary compensation fee(s) for the Professional firm to provide the requested Project scope of work requirements. No increase in monetary compensation fee to the Professional firm will be allowed unless there is a material change made to the Project scope of work requirements as described in the Department's approved and attached Appendix 1 - Project/Program Statement scope of work requirements and the change in scope to the Project/Program Statement scope of work requirements is accepted and approved in writing, by the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director and the Professional. Professional services shall not be performed and no Project monetary expenses shall be incurred by the Professional firm prior to the issuance of a written and signed Professional Services Contract and a DMB Form 402 - Contract Order by the Department to the Professional, authorizing the Professional firm to start the Project work on-site. Compensation for Department directed changes to the Project or modifications to the Project scope of work requirements will be provided to the

Professional firm 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 firm, as approved by the Project Director, on an hourly billing rate basis in accordance with this article. This monetary compensation shall not exceed seven and one-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 firm and the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director.

The Professional shall immediately inform the Department whenever it is indicated that the Professional firm's authorized Project not-to-exceed Budget cost may be exceeded. The Professional shall make recommendations to the Department for revisions to the Project to bring the Project Cost back to the Professional firm's original authorized Budget amount. Any revision to the Project scope of work requirements must be accepted and approved by the Department in writing.

The professional services also include participation in legislative presentations as may be required by the State of Michigan's current Capital Outlay manual for "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" who is essential for the successful completion of the Project scope of work requirements and identified in the Professional firm's attached Appendix 2 – Project Organizational Chart will be allowed by the Professional firm for this Contract without the prior written consent from the Department of Management and Budget, Facilities Administration, Design and Construction Division's Project Director. Before any "Key Principal Personnel/Employee" substitution takes place, the Professional firm shall submit a written request to the Project Director for personnel substitution and this substitution request shall include the following information: (1) A request in writing for a No Cost Contract Modification for this "Key Principal Personnel/Employee" substitution; (2) Detailed written justification for this "Key Principal Personnel/Employee" substitution; (3) The Professional firm's qualifications of any proposed "Key Principal Personnel/Employee" replacement; and (4) A written statement from the Professional firm assuring the Department that the Project scope of work will not be adversely affected by this "Key Principal Personnel/Employee" substitution change. This request by the Professional firm to modify their Professional Services Contract must be accepted and approved in writing by the Project Director and the Director of the Department of Management and Budget, Facilities Administration, on the Department's, Professional Services Contract Modification form (DMB-410).

The Department of Management and Budget, Facilities Administration, Design and Construction Division will designate an individual to serve as the Project Director for the Project scope of work who shall be fully acquainted with the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements and have the authority to render Project decisions and furnish information promptly. Except, in connection with issues under the Article 12 - Contract Claims and Disputes text, the Project Director will exercise general management and administration for the Professional firm'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 study, design and construction Phase administration services of this Project, the Professional shall be required to obtain from the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director, the on-site Inspection record standard document form titled "DMB-452, The Professional firm's Inspection Record" for all on-site Inspection visits to the Project site. This standard document form is a part of the "DMB-460, Project Procedures" documents package. The Professional firm's Inspection Record standard document form shall be completed and signed by the Professional and compiled monthly with the original document sent to the Department of Management and Budget, Facilities Administration, Design and Construction Division'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 firm's monthly submitted payment request.

The "DMB-460, Project Procedures" documents package shall be used by the Professional in the administration of this Contract and contains the following Department of Management and Budget,

Facilities Administration standard document forms: (1) DMB-413, General Release – Visitors; (2) DMB-426, Builder's Risk Claim; (3) DMB-434, Certification of Off-Site Material Storage; (4) DMB-437, Guarantee and Indebtedness Statement; (5) DMB-440, Payment Request; (6) DMB-441, Meeting Attendance Record; (7) DMB-445, Certificate of Substantial Completion; (8) DMB-452, Professional firm's Inspection Record; (9) DMB-485, Bulletin Authorization No.; (10) Instructions for Schedule of Value; (11) DMB-487, Material Stored on Project/Job Site; and (12) DMB–489, Instructions to Construction Contractors for Preparation of Bulletin Cost Quotations for Contract Change Orders.

All Project inspection and testing of elevated water storage tanks engineering study/design services will be consistent with the Department of Management and Budget, Facilities Administration, Design and Construction Division's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" unless otherwise approved in writing by the Department.

The professional inspection and testing of elevated water storage tanks engineering study/design services required for each Phase of this Contract shall be performed by the Prime Professional firm and their Consultant firm's in accordance with Task service descriptions in this article. The following study/design Phase/Task service descriptions outlined in this Contract represents the Department of Management and Budget, Facilities Administration, Design and Construction Division's standard of care method for describing the Professional firm's responsibilities for providing the inspection and testing of elevated water storage tanks engineering study, design and construction administration 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 scope of work requirements and be in accordance with the approved Project Budget and the industries accepted requisites for professional inspection and testing of elevated water storage tanks engineering study/design practice and standards. However, all of the study/design Phase/Task service descriptions outlined in this Contract may or may not be applicable to the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements and will require the Professional to identify only the study/design Phase/Task services that are applicable for their Project scope of work. The Professional shall determine and coordinate the interface of the study/design Phase/Task services required for their Project scope of work and be responsible for identifying any additional Task services necessary to successfully complete their Project scope of work requirements.

PHASE 100 - STUDY PHASE

Provide a complete and comprehensive inspection and testing of elevated water storage tanks engineering study consistent with the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements with itemized construction cost estimates as defined by the State of Michigan's, Department of Management and Budget, Facilities Administration, Design and Construction Division.

Task 101 COORDINATION: Meet with the Project Team consisting of a representative of the Department, the State/Client Agency, and others as considered appropriate by the Department for the Project scope of work requirements. 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 scope of work 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. Prepare and distribute to the Project Team, copies of 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, distribute copies to the Department and participants within two (2) business days of the date of occurrence, otherwise meeting minutes shall be distributed within five (5) business days. Provide up to five (5) additional copies and distribute as the Department may direct.

Task 102 RESEARCH: Gather and/or develop all data to evaluate and clarify the Project scope of work requirements. Research existing data, analyze and refine the concepts of the Department's approved and attached Appendix 1 - Project/Program Statement scope of work. Through discussions with the Department and/or each State/Client Agency, and by interrogation and necessary counsel, establish, in requisite detail, the 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: Correlate, describe, and by appropriate Project scope of work tables, graphs, and inspection and testing of elevated water storage tanks engineering drawings (on 24-inch by 36-inch or 30-inch by 42-inch mylar sheets, or sheet size approved in writing by the Department). Transcribe and consolidate all existing data, studies and the research analysis of Task 102 into a comprehensive study report summarizing spaces, physical features, systems, functions, capacities, loads, relationships, and interactions to be achieved by the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements.

Task 110 STUDY REPORT: Upon completion of all on-site field investigation activities prepare a complete inspection and testing of elevated water storage tanks engineering report with itemized construction cost estimates in the following outline and in such detail as the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements may prescribe:

A. Problem
B. Conclusion
C. Recommendation
D. Discussion and details

Submit ten (10) copies of the draft study report to the Project Team at each required 50 percent and 90 percent completion review interval and incorporate the study review comments as directed by the Department into the final study report. Also, provide one (1) camera-ready original and an electronic copy suitable for legible reproduction. Provide presentations as indicated in the Project scope of work plan for Department acceptance and incorporate all requested study review comments required for Department written acceptance of the Project study report. Provide one (1) acceptable study report presentation to the Project Team 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 firm by the Department with a Contract Change Order.

PHASE 200 - PROGRAM ANALYSIS

Amplify the Department's approved and attached Appendix 1 - Project/Program Statement scope of work requirements and Phase 100 – Study, Final Report to embody the physical, functional, and programmatic relationships required to achieve the Project scope of work objectives. The proposed resultant program analysis, when accepted and approved by the Department, shall amend the Department's approved and attached Appendix 1 - Project/Program Statement to comprise the general scope of work requirements 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 inspection and testing of elevated water storage tanks engineering study/ design development evolution.

Task 201 COORDINATION: Meet, as required, with representatives of the Department and other State/Client Agencies who, along with the Professional, comprise the Project Team. Assist the Project Team to finalize the Department's approved and attached Appendix 1 - Project/Program Statement and Phase 100 – Study, Final Report to completely define the proposed Project scope of work, and to establish lines of communication, authority, and responsibility and to establish a method for the State/Client Agency's to formally sign-off on the respective data input, the program analysis thereof and appropriate elements of the

resultant design. Present proposed program analysis 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 scope of work requirements. Preside at all Project related meetings. Prepare and distribute to the Project Team, copies of 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, distribute copies to the Department and participants within two (2) business days of the date of occurrence, otherwise meeting minutes shall be distributed within five (5) business days. Provide up to five (5) additional copies and distribute as the Department may direct.

Task 202 PROGRAM ANALYSIS: Identify and develop data to evaluate and clarify the proposed Project scope of work requirements. Analyze the concepts of the Department's approved and attached Appendix 1 - Project/Program Statement scope of work requirements and Phase 100 – Study, Final Report through discussions with the Project Team and establish the functional objectives of the State/Client Agency's program and operational needs, as well as operational factors, maintenance and other support features. Provide all additional research, studies, and program analysis necessary to express such objectives and requirements in terms of a fully operable Project which will acceptably serve its intended use.

Task 203 DEVELOPMENT: Correlate, describe, and by appropriate Project scope of work tables, graphs, and inspection and testing of elevated water storage tanks engineering study drawings (on 24-inch by 36-inch or 30-inch by 42-inch mylar sheets, or sheet size approved in writing by the Department), transcribe and consolidate all existing data, studies and the analysis of Task 202 into a comprehensive program analysis report summarizing spaces, physical features, systems, functions, capacities, relationships, and interactions to be achieved by the proposed Project scope of work requirements. Allocation of spaces shall be in accordance with the State of Michigan's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" approved standards and be consistent with the Department's approved and attached Appendix 1 - Project/Program Statement, Phase 100 – Study, Final Report and Project Budget. Revise proposed program analysis development design as may be required to achieve the Project scope of work objectives and incorporate review comments by the Project Team.

Task 209 PROJECT COST ESTIMATE: Provide an itemized cost estimate of the proposed Project program analysis design based on the Department's approved and attached Appendix 1 - Project/Program Statement scope of work requirements, Phase 100 – Study, Final Report and the program analysis/physical, functional, and programmatic relationships review and development. Verify to the Department, in writing, that the Professional firm's review of the Department's approved and attached Appendix 1 - Project/Program Statement requirements, Phase 100 – Study, Final Report and the program analysis, the legislatively approved Budget for the Project is adequate to achieve the proposed Project program analysis design scope of work objectives. Revise the program analysis design documents as necessary to provide an acceptable program analysis design within the Department's authorized Project Budget.

Task 210 PROGRAM ANALYSIS REPORT: Submit ten (10) copies of the proposed draft program analysis report to the Project Team at each required 50 percent and 90 percent completion review interval and incorporate the design review comments as directed by the Department into the proposed final program analysis report. Also, provide one (1) camera-ready original and an electronic copy suitable for legible reproduction. Provide presentations as indicated in the Project scope of work plan for Department acceptance and incorporate all design review comments required for Department written acceptance of the proposed Project program analysis report. Provide one (1) acceptable program analysis presentation to the Project Team for this Task. Any additional program analysis presentations requested by the Department will be considered extra professional services

and the additional program analysis costs will be paid to the Professional firm by the Department with a Contract Change Order.

PHASE 300 - SCHEMATIC DESIGN

Prepare for review with the Project Team and revise as necessary for Department written acceptance, progressive schematic design architectural and/or engineering drawings consistent with the Project scope of work requirements, which diagrammatically depict the area(s) and relationship of the functions as described in the Department's approved and attached Appendix 1 - Project/Program Statement scope of work requirements. Establish the design basis for, and show principal elevated water storage tank 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 scope of work requirements. 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.

Task 301 COORDINATION: Meet with the Project Team to establish a physical size and arrangement of the Project scope of work requirements and its principal systems. This will include technical, human, and physical environment requirements consistent with the programmed use of each defined space or system as well as the functional interrelationships between spaces or systems. Determine any Project requirements as necessary to accommodate art work. Where the Project involves work in an existing utility system, identify and locate for the Department, in writing, and by scaled graphic diagram, any 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 for the Department, in writing, the impact of the proposed Project schematic design on the existing facility operations. Assist the Department in determining and resolving any Project requirements for maintaining the current operation of the existing 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 from the Project site for this Project, will be performed by the Department with other professional firms by separate Contract, who are licensed and insured to perform this service. See Task 512 Hazardous Materials, for text defining the Professional firm's Project scope of work 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 the providing of timely decisions. Present proposed schematic 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 scope of work requirements. Preside at all Project related meetings. Prepare and distribute to the Project Team, copies of 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, distribute copies to the Department and participants within two (2) business days of the date of occurrence, otherwise meeting minutes shall be distributed within five (5) business days. Provide up to five (5) additional copies and distribute as the Department may direct.

Task 302 CONSTRUCTION CODES 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 scope of work requirements. Review with the Project Team the principal impacts on Project planning and incorporate into the schematic design Phase report and the Project cost/proposed construction schedule of Task 309.

Task 303 SITE STAGING INVESTIGATION: The Professional shall coordinate their proposed inspection and testing of elevated water storage tanks 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 Department's approved and attached Appendix 1- Project/Program Statement scope of work requirements. Review conclusions and, upon request, explain their influence on the Project schematic design. Define the impact of the Project on adjacent buildings. The Professional will not be responsible for the testing and removal of hazardous materials from the Project site, see Task 512 Hazardous Materials, for text defining the Professional firm's Project scope of work responsibility for assisting the Department with these materials.

Task 304 STRUCTURAL: Field-check and verify the accuracy of all existing and proposed drawings. Research, survey, define, and render all existing structural systems appropriate to the proposed Project scope of work requirements. Show elevated water storage tank 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: Article Text Not Required For This Project Scope Of Work.

Task 306 ELECTRICAL: Article Text Not Required For This Project Scope Of Work.

Task 307 ENGINEERING: Field-check and verify the accuracy of all existing and proposed drawings. Research, survey, define, and render the existing and proposed schematic design inspection and testing of elevated water storage tanks engineering area layout appropriate to the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements. Show proposed applicable area space, finish treatment, uses, and interrelationships and principal elevated water storage tank sections, elevations, and dimensions. Show principal fire protection spaces and features.

Task 308 DRAFTING: Prepare and render proposed schematic design inspection and testing of elevated water storage tanks engineering documents appropriate to the Project scope of work requirements, on 24-inch by 36-inch or 30-inch by 42-inch mylar sheets, (or sheet size approved in writing by the Department), of all principal elevated water storage tank/site utility systems. Coordinate the Project schematic design with related engineering design disciplines for completeness, accuracy and consistency. The Professional shall field-check and verify the accuracy of all existing and proposed inspection and testing of elevated water storage tanks 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 estimated Project cost and design/construction schedule. Revise schematic design as required to produce a design within the Department of Management and Budget, Facilities Administration, Design and Construction Division's approved Budget. Prepare and submit a Project Budget based on the approved schematic design. Apply critical target dates to the Professional firm's attached Appendix 3 – 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 such presentations and revisions of the schematic design planning documents, as necessary, to achieve the Project scope of work requirements. Present proposed documents for the Project Team review at the 50 percent and 90 percent completion intervals. Present proposed documents to the Project Team for programmatic design conformance review and acceptance. Provide mylar inspection and testing of elevated water storage tanks engineering drawings suitable for legible reproduction and five (5) copies of the 100 percent completed proposed schematic design documents to the Department for their review. Revise proposed schematic design documents, as necessary, to incorporate all requested design review comments required for Department written acceptance of the

proposed Project schematic design scope of work. Where legislative review is required, provide an additional twelve (12) copies of the Department approved proposed schematic design Phase documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format presented in the current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies," as published by the Department of Management and Budget, Facilities Administration, Design and Construction Division. Provide one (1) acceptable 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 firm by the Department with a Contract Change Order.

PHASE 400 - PRELIMINARY DESIGN

Prepare progressive preliminary design inspection and testing of elevated water storage tanks engineering drawings to develop and portray the Project scope of work requirements based upon the Department of Management and Budget, Facilities Administration, Design and Construction Division's approved and attached Appendix 1 - Project/Program Statement scope of work requirements and the approved schematic design. Refine the proposed schematic design drawings as necessary to produce an acceptable preliminary design. The proposed preliminary design, together with an outline draft specification, shall be of such completeness and detail to establish and define the size, function, arrangements, spaces, location and operations or use of equipment and materials comprising the principal design details of structures and systems. The proposed preliminary design inspection and testing of elevated water storage tanks engineering drawings and outline draft specifications shall clearly depict the Professional firm's proposed design intent of the systems, materials, equipment, utilities, site improvements, and other elements of the Project scope of work requirements through single-line diagrams, system layout drawings and developed plans and design details. The level of preliminary design thus achieved must constitute the complete proposed preliminary design basis for detailing into final design drawings.

Prepare in bar chart format, the proposed Project construction schedule and an estimated statement of the proposed Project costs based upon factors prevailing or predictable for the proposed construction bidding period. Written acceptance thereof by the Department establishes 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 Department's approved and attached Appendix 1 - Project/Program Statement, approved schematic drawings, and to refine the Project scope of work requirements. Assist the Project Team to progressively review development of the proposed preliminary design and to develop input and timely decisions therefore. Where the Project involves work in an existing elevated water storage tank or site utility system, indicate for the Department, in writing, and by scaled graphic diagram, any elevated water storage tank 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 for the Department, the impact of the proposed Project preliminary design scope of work on the existing elevated water storage tank facility operations. Assist the Department in determining and resolving any Project scope of work requirements for maintaining the existing operation of the current elevated water storage tank 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 from the Project site for this Project, will be performed by the Department with other professional firms by separate Contract, who are licensed and insured to perform this service. See Task 512 Hazardous Materials, for text defining the Professional firm's Project scope of work responsibility for assisting the Department with these materials. 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 to the Project Team 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.

Prepare and distribute to the Project Team, copies of 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, distribute copies to the Department and participants within two (2) business days of the date of occurrence, otherwise meeting minutes shall be distributed within five (5) business days. Provide five (5) additional copies and distribute as the Department may direct.

Task 402 SPECIFICATIONS: Prepare proposed preliminary design outline draft specifications for Divisions 00 through 49, in the 2004 MasterFormat Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the defined Project scope of work requirements (See Appendix 4).

Task 403 SITE STAGING DESIGN/INVESTIGATION: The Professional shall coordinate their proposed inspection and testing of elevated water storage tanks engineering services to prepare and provide a preliminary site investigation and site staging design as directly related to the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements as approved from Task 303. Revise as required. The Professional will not be responsible for the testing and removal of hazardous materials from the Project site, see Task 512 Hazardous Materials text, for defining the Professional firm's scope of work responsibility for assisting the Department with these materials.

Task 404 STRUCTURAL: Field-check and verify the accuracy of all existing and proposed inspection and testing of elevated water storage tanks engineering drawings. Prepare structural calculations appropriate to the proposed Project scope of work requirements as approved from Task 304, and size major components. Prepare proposed preliminary design structural plans, sections, elevations, and details inspection and testing of elevated water storage tanks engineering drawings, as applicable for the defined scope of work. Determine and prepare a list of required preliminary design structural drawings as related to the proposed Project scope of work. Revise as required.

Task 405 MECHANICAL/HVAC/PLUMBING/UTILITIES: Article Text Not Required For This Project Scope Of Work.

Task 406 ELECTRICAL: Article Text Not Required For This Project Scope Of Work.

Task 407 ENGINEERING: Field-check and verify the accuracy of all existing and proposed drawings. Prepare preliminary design inspection and testing of elevated water storage tanks engineering drawings, appropriate to the proposed Project scope of work requirements as approved from Task 307, to detail and define the Project affected elevated water storage tank spaces. Determine and prepare a list of required preliminary design inspection and testing of elevated water storage tanks engineering drawings as directly related to the Department's approved and attached Appendix 1 – Project/Program Statement scope of work. Drawings will include plans, elevations, sections, and critical construction details in order that an accurate and detailed construction estimate can be made and provided. Depict energy efficient design features of the Project and provide summary calculations to demonstrate applicable compliance with the State of Michigan's current Energy Code requirements. Revise as required. Where the Project involves work in an existing elevated water storage tank and/or utility system, indicate for the Department, in writing, and by scaled graphic diagram, any elevated water storage tank and 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. Coordinate the necessary new work of the Project with any hazardous material removal required to implement the Project scope of work. Identify and define for the Department, the impact of the proposed Project design on the existing 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. This assistance may include as a minimum, hazardous waste removal, and demolition and construction.

Hazardous material testing and removal for this Project, will be performed by the Department with other professional firms who are licensed and insured to perform this service with these materials.

Task 408 DRAFTING: Prepare and render the proposed preliminary design inspection and testing of elevated water storage tanks engineering documents, appropriate to the Project scope of work requirements approved from Task 308, on 24-inch by 36-inch or 30-inch by 42-inch mylar sheets, (or sheet size approved in writing by the Department), of all principal elevated water storage tanks/site utility systems. Coordinate the proposed Project preliminary design with related engineering design disciplines for completeness, accuracy and consistency. Prepare drawings utilizing applicable State of Michigan standards as defined in the Department of Management and Budget, Facilities Administration, Design and Construction Division's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" for all Project related inspection and testing of elevated water storage tanks engineering 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 scope of work related source.

Task 409 BUDGET/CONSTRUCTION SCHEDULE: Prepare an itemized Project construction cost estimate statement based upon factors prevailing or reasonably predictable for the proposed bidding period. Evaluate and report the cost/benefits of multiprime construction. Recommend strategy method(s) and appropriate Phasing of construction, for any long-lead items and for purchase of any State of Michigan-furnished materials. This shall be consistent with any approved Project Phasing. Include any early-order/long-lead items and/or any State provided materials, equipment or furnishings. Provide, in a format acceptable to the Department, the estimated operating utility cost for the completed Project. Prepare in bar chart format a detailed schedule of the design and proposed bidding and construction schedule, based on the Professional firm's attached Appendix 3 – Project Study, Design and Proposed Construction Schedule as approved by Task 309.

Task 410 PRELIMINARY DESIGN REVIEW: Prepare, reproduce, submit, and make such preliminary design presentations, as necessary, to review the status of the design with the Project Team to achieve the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements. Present proposed preliminary design documents for the Project Team design review at the 50 percent and 90 percent completion intervals. 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. With the 50 percent review, provide design criteria/data calculations of principal inspection and testing of elevated water storage tanks engineering systems demonstrating basic compliance with the State of Michigan's current Code requirements. Provide a set of mylars suitable for legible reproduction and five (5) copies of completed preliminary documents to the Department for their review. Revise proposed preliminary design documents, as necessary, to incorporate all requested design review comments required for Department written acceptance of the proposed Project preliminary design scope of work. Where legislative review is required, provide an additional twelve (12) copies of the Department approved proposed preliminary design Phase documents to the Department of Management and Budget for distribution to the Joint Capital Outlay Subcommittee, in the format presented in the current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies," as published by the Department of Management and Budget, Facilities Administration, Design and Construction Division. Provide one (1) acceptable preliminary design presentation to the Project Team for this Task. Any additional preliminary design presentations requested by the Department will be considered extra professional services and the additional preliminary design costs will be paid to the Professional firm by the Department with a Contract Change Order.

PHASE 500 - FINAL DESIGN

Prepare for progressive, periodic review, final design Bidding Documents which shall revise, refine, amplify and depict, in detail, the Project as described and required by the Department's approved and attached Appendix 1 - Project/Program Statement scope of work requirements and any approved preliminary design. Bidding Documents shall be prepared in Phases/Bid packages appropriate to the final design Project scope of work requirements and funding.

The proposed final design Contract Bidding Documents shall depict and document a complete and constructible Project. These documents shall incorporate and comply with all current, applicable regulations, ordinances, construction codes and statutes, and must have prior reviews by appropriate federal, State or any local authorities having jurisdiction before presentation to the Department for acceptance. Where design approvals are required, the Professional shall acquire and provide them. The final design Contract Documents shall be without ambiguity and must be so complete that no significant design decision is left to the discretion of any qualified construction Bidder, manufacturer, or supplier. The final design Contract Bidding Documents will not define, quantify, or in any other way represent any work as being assignable to, or to be performed by, any Consultant.

Bidding Documents shall consist of, but are not limited to, the final design inspection and testing of elevated water storage tanks engineering drawings and specifications, special, general and supplemental conditions of the Construction Contract, and modifications, if any, to standard document forms provided by the Department. Such standard document forms may consist of, but are not limited to, the Project advertisement, the instructions to construction Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the standard document form of agreement between the Department and the Construction Contractor for the Project scope of work requirements.

In addition to the requirements herein, the professional services for this Project shall include, but are not limited to, those set forth in the Department of Management and Budget, Facilities Administration, Design and Construction Division, "MICHSPEC 2001 Edition of The Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" or the current Department of Management and Budget, Facilities Administration, Design and Construction Division," DMB Short Form 401 - Proposal and Contract/Front-End Package for Small Projects for Professional Services Contractors (PSC) with General Conditions for Construction and Instructions to Bidders" as adopted and modified by the State of Michigan and incorporated into the Construction Contract, plus such other Department standard document forms general conditions as may be part of the Construction Contract. If the Professional intends to use any additional general condition requirements for this Project other than the Department's they must be accepted and approved by the Department in writing.

Contract Documents shall consist of the final design inspection and testing of elevated water storage tanks engineering drawings and specifications Bidding Documents and all Addendums and attachments necessary to provide a complete Construction Contract for the Project scope of work requirements.

Task 501 COORDINATION: Review approved preliminary design drawings with the Project Team for revisions. Incorporate any design refinements within the Project scope of work requirements. 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. Prepare and distribute to the Project Team, copies of minutes of all meetings, reports of 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, distribute copies to the Department and participants within two (2) business days of the date of occurrence, otherwise meeting minutes shall be distributed within five (5) business days. Provide five (5) additional copies and distribute as the Department may direct.

Task 502 SPECIFICATIONS: Prepare proposed final design specifications in such format and approved Phasing as appropriate to the Project scope of work requirements as approved from Task 402. Include an index schedule of all required submittals, as well as all other schedules necessary to clearly and completely supplement the definition of the Project scope of work requirements provided by the specifications for Divisions 00 through 49. Specifications shall be coordinated with the final design inspection and testing of elevated water storage tanks engineering drawings and shall be prepared in the 2004 MasterFormat Outline by the Construction Specifications Institute (C.S.I.) (See Appendix 4). The proposed final design inspection and testing of elevated water storage tanks 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 and an itemized list shall be provided with the final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements that identifies the materials, finishes, processes and products. Sustainable Design is defined in this Contract as the Professional firm's use of Project design resources with no negative impact to the natural ecosystems and when possible, achieving a net enhancement of the Project scope of work requirements.

Performance specifications shall be used when feasible. If performance specifications are not feasible, 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 products produced in the State of Michigan 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 when requested by the Department, for purchasing or construction bidding items necessary to be prepurchased through existing State Contracts or direct Bid materials or equipment.

Task 503 SITE STAGING DESIGN: The Professional shall coordinate their proposed inspection and testing of elevated water storage tanks engineering design services to prepare and render complete final site staging design documents, as directly related to the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements implementing the information approved in Tasks 303 and 403. The Professional will not be responsible for the testing and removal of hazardous materials from the Project site, see Task 512 Hazardous Materials, for defining the Professional firm's Project scope of work responsibility for assisting the Department with these materials.

Task 504 STRUCTURAL: Prepare and render complete structural final design documents as approved from the Task 404 defined Project scope of work requirements.

Task 505 MECHANICAL/HVAC/PLUMBING/UTILITIES: Task Service Text Not Required For This Project Scope Of Work.

Task 506 ELECTRICAL: Task Service Text Not Required For This Project Scope Of Work.

Task 507 ENGINEERING: Prepare and render complete inspection and testing of elevated water storage tanks engineering final design documents as approved from the Task 407 defined Project scope of work requirements.

Task 508 DRAFTING: Prepare complete final design inspection and testing of elevated water storage tanks engineering drawings for Bidding Documents as directly related to the Project scope of work requirements approved from Task 408, on 24-inch by 36-inch or 30-inch by 42-inch mylar sheets, (or sheet size approved in writing by the Department) utilizing applicable State of Michigan standards as defined in the Department of Management and Budget, Facilities Administration, Design and Construction Division's current "Major Project Design Manual for Professional Services Contractors and

State/Client Agencies." 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. Where the Professional firm's computerized drafting system is used, and is compatible with the Department's Auto CAD computer drafting system, the Project Bidding Documents derived from the final design drawings and computer software system shall be made available and converted, when requested by the Department in writing, to the Department's Auto CAD computer drafting system. When requested by the Department in the scope of work for this Project, the Professional shall provide the computer/electronic data files for the final design Contract drawings of the Project for use by the Department. The software name and release number used to produce the final design Contract drawings will be clearly identified on the computer tape or computer compact disk (CD). The sealed hard copy of the mylar inspection and testing of elevated water storage tanks engineering final design Contract drawings furnished by the Professional will be the controlling Contract Documents for this Project.

Task 509 CHECKING CONTRACT DOCUMENTS: Check and coordinate all proposed final design Contract Documents for completeness and accuracy. Prepare final design Contract Documents that will protect the Department from unexpected cost increases after award of the Construction Contract to a qualified construction Bidder, Project delays or claim settlements for reason of defective rendering of the Professional firm's inspection and testing of elevated water storage tanks engineering drawings or specifications 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 inspection and testing of elevated water storage tanks engineering design disciplines for completeness, accuracy, and consistency. 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 firm's final design Contract Documents shall comply with the State of Michigan Construction Code, 1972 PA 230, as amended, 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. Except as otherwise provided for in this Contract, inspection and testing of elevated water storage tanks engineering design code compliance and plan review approval(s) shall be performed by the Department of State Police, Fire Marshal Division, and the Department of Labor and Economic Growth, Bureau of Construction Codes and Fire Safety and the design code compliance and plan review approval fees shall be paid by the Department and are not the responsibility of the Professional. Any Project design code compliance and plan review approval fees paid by the Professional firm on the behalf of the Department will be compensated by the Department to the Professional firm as an authorized reimbursable expense item (See Appendix 4) in this Contract. Present and submit all modeling, testing, design data, and appropriate inspection and testing of elevated water storage tanks engineering plans/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 (See attached Appendix 4, Authorized Reimbursable Tests and $ Expenses). Provide inspection and testing of elevated water storage tanks engineering design features and summary calculations to demonstrate applicable Project compliance with the State of Michigan Code 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 Contract 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

under this Task does not relieve the Professional from complying with the construction field Inspections review/enforcement requirements.

Task 511 CONSTRUCTION TESTING PROGRAM: Establish at the 50 percent completion interval the required construction Phase quality control and material 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 program Bidding Documents for the construction Phase quality control and material testing services. The Department will retain an independent professional quality control and material testing firm for the construction Phase testing at the 50 percent completion review of Task 515 (Construction Phase Testing services shall be estimated and identified as an authorized reimbursable expense item (See Appendix 4) 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 with other professional firms by separate Contract, who are licensed and insured to perform this service. Coordinate the professional design services of this Contract with any hazardous material removal services required to implement this Project scope of work. 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/Contract Bidding Documents drawings, specifications and schedule, if necessary, to reflect the impact of the hazardous material removal/abatement scope of work 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 Project construction costs with each final design review. Include all construction Bid packaging and Phasing. Confirm, in writing, the estimated operating utility cost of the Project. Determine the amount and adequacy of any construction contingency. Upon submittal of the 90 percent complete final design Bidding Documents, confirm, in writing to the Department, that in accordance with the Contract scope of work, an accurate itemized estimate of the construction cost is formulated and the total Project construction cost is predicted to be within the Project Budget.

Notify the Department, in writing, if it becomes evident, during the final design Phase schedule duration of this Project, that the Project cannot be constructed within the Professional firm’s estimated construction Budget. Unless the Department determines the problem to be outside the control or responsibility of the Professional, the Professional shall to the extent required to bring the actual Project construction Budget cost back to the Professional firm’s original estimated construction Budget cost, revise their final design drawings and specifications to produce a complete design for the Project, 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 Project proposed construction schedule period to be part of the Construction Contract. Give consideration to 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. Amplify the Professional firm’s attached Appendix 3 – Project Study, Design and Proposed Construction Schedule to consider construction bidding, Phasing, seasonal

influences and to account for any elements of construction having critical deliveries and/or construction times and of the Task 512 required Project scope of work.

Task 515 FINAL DESIGN BIDDING DOCUMENTS REVIEW: Provide complete final design Bidding 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 scope of work design criteria/data calculations for inspection and testing of elevated water storage tanks engineering systems and resubmit to the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director. Determine and confirm in writing, that the final design can be achieved within the Project Budget and that all requirements of Tasks 509 and 510 have been met. Submit 100 percent complete sets of final design Bidding Documents to the Project Team for their final review. Submit final design documents first to the State/Client Agency for their final design review of the Project programmatic design conformance adequacy. Submit final design Bidding Documents to the Department for their review and revise final design Bidding Documents, as necessary, to incorporate all requested final design review comments required for Department written acceptance of the final design Bidding Documents. Provide one (1) acceptable final design presentation to the Project Team for this Task. Any additional final design presentations requested by the Department will be considered extra professional services and the additional final design costs will be paid to the Professional firm by the Department with a Contract Change Order.

Task 516 CONSTRUCTION BIDDING AND CONTRACTING PROCEDURES: Assist the Department in the construction bidding and contracting process. Advertisement and award of this Construction Contract will be by the State of Michigan. Provide the Department with a list of recommended qualified construction Bidders' appropriate to the Project scope of work requirements. Recommend the appropriate construction bidding and/or contracting method to the Department. Prepare and distribute Bidding Documents and instructions as required to accommodate predetermined construction Bid packages and/or Phases. Maintain a qualified construction Bidders' list. Conduct prebid meetings. Issue a preconstruction Addenda to all qualified construction Bidders as required. Include in each Addendum complete specifications for the Project scope of work requirements, if such specifications are not part of the final design Bidding Documents. Exert every practical means to obtain several, qualified construction Bidders for every Construction Contract. The Professional firm 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 firm's construction bidding and contracting procedure services for Task 516 are not complete until: (1) The lowest responsive, responsible qualified construction Bidder's Bid has been selected and accepted by the Department; and (2) The lowest responsive, responsible qualified construction Bidder's Construction Contract has been executed.

Construction Bid Evaluation and Recommendation of Construction Contract Awards: Review and evaluate the Department's submitted competitive construction Bids for the Project. Based on the Professional firm's review of the competitive construction Bids and the qualified construction Bidders, provide the Department with a written recommendation for the apparent lowest responsive, responsible qualified 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 firm'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 final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications or for any estimating work related to the Project scope of work requirements. The Professional shall conduct precontract meetings with responsive, responsible qualified construction Bidder(s) to review the following items: (1) The design intent of the Professional firm's final design Contract Documents/inspection and

testing of elevated water storage tanks engineering drawings and specifications; and (2) To advise and assist the Construction Contractor(s) in understanding the requirements of the Department of Management and Budget, Facilities Administration, Design and Construction Division's standard form of Construction Contract Documents, Project scope of work, and its Construction Contract award procedures. (See attached Appendix 6, The Professional Firm's MICHSPEC (Long Form) Documents Assistance Procedures for the Construction Contractor During the Project Construction Bidding, Bid Evaluation, and Recommendation of the Construction Contract Award).

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 of Management and Budget, Facilities Administration, Design and Construction Division's, MICHSPEC 2001 Edition of the Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" standard form documents Section 00500, Contract Agreement and the Section 00800, Supplementary Conditions, in triplicate; (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 original Certificates of Insurance and any other legal documents required for submittal by the Department's, Notice of Intent to Award letter (See attached Appendix 6 text).

Task 517 FINAL DESIGN CORRECTION PROCEDURES: Correct at no additional cost to the Department any inspection and testing of elevated water storage tanks engineering final 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 firm's inspection and testing of elevated water storage tanks engineering final design errors or omissions and similar, or avoidable costs shall be accounted as part of the Professional firm'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 inspection and testing of elevated water storage tanks 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 respective 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 firm's original final design inspection and testing of elevated water storage tanks engineering drawings and specifications as appropriate to the Project scope of work requirements. Marking and initialing of drawings is not an acceptable form of written instruction.

Bulletin Authorization: Request authorization to issue each individual Bulletin. The Professional firm's Bulletin Authorization request will: (1) Identify the problem requiring the change; (2) Describe clearly if such problem arises from the inspection and testing of elevated water storage tanks 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 firm'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 scope of work requirements. Identify any anticipated Project design or construction schedule implications.

Bulletins: All reproduction costs for design interpretations and clarifications and Bulletins related to the Professional firm's inspection and testing of elevated water storage tanks engineering final design errors or omissions and similar, or avoidable costs shall be accounted as part of the Professional firm's calculated hourly billing rates. Describe, by Bulletin, design revisions necessary to correct the inspection and testing of elevated water storage tanks 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 in order 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. All Bulletin revisions shall be incorporated, by the Professional, into the appropriate originals of all applicable final design inspection and testing of elevated water storage tanks engineering drawings and specifications, if such specifications are not provided by the Professional firm's 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 up to five (5) copies of each Bulletin to the Department and distribute as the Department may direct. Provide the Construction Contractor with the following number of Bulletin copies: (1) For construction costs less than one (1) million dollars, provide two (2) copies; and (2) All others, provide five (5) copies.

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) scope of work requirements. 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

The Department will appoint a Project Director to monitor and coordinate the performance of construction Phase services. Except where the Contract is assigned, the Professional is responsible to the Project Director for the adequacy and timeliness of their services.

During the construction Phase of this Project, the "DMB-460, Project Procedures" documents package shall be used by the Professional in the administration of this Contract and contains the following Department of Management and Budget, Facilities Administration standard document forms: (1) DMB-413, General Release – Visitors; (2) DMB-426, Builder's Risk Claim; (3) DMB-434, Certification of Off-Site Material Storage; (4) DMB-437, Guarantee and Indebtedness Statement; (5) DMB-440, Payment Request; (6) DMB-441, Meeting Attendance Record; (7) DMB-445, Certificate of Substantial Completion; (8) DMB-452, Professional firm's Inspection Record; (9) DMB-485, Bulletin Authorization No.; (10) Instructions for Schedule of Value; (11) DMB-487, Material Stored on Project/Job Site; and (12) DMB–489, Instructions to Construction Contractors for Preparation of Bulletin Cost Quotations for Contract Change Orders.

The Professional shall be required to obtain from the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director, the on-site Inspection record standard form document titled "DMB-452, The Professional firm's Inspection Record" for all on-site Inspection visits to the Project site. This standard document form is a part of the "DMB-460, Project Procedures" documents package. The Professional firm's Inspection Record standard document form shall be completed and signed by the Professional and compiled monthly with the original form document sent to the Department of Management and Budget, Facilities Administration, Design and Construction Division'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 firm's monthly payment request.

The Professional shall provide all required construction Phase administration services and timely professional and administrative initiatives as the circumstances of the Project construction Phase scope of work may require in order to allow the design intent requirements of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications to be successfully implemented into a completed Project through the Construction Contractors completion of the Construction Contract work. In addition to the requirements herein, the professional services for this Project shall include, but are not limited to, those set forth in the Department of Management and Budget, Facilities Administration, Design and Construction Division, "MICHSPEC 2001 Edition of The Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" or the current Department of Management and Budget, Facilities Administration, Design and Construction Division," DMB Short Form 401 - Proposal and Contract/Front-End Package for Small Projects for Professional Services Contractors (PSC) with General Conditions for Construction and Instructions to Bidders" as adopted and modified by the State of Michigan and incorporated into the Construction Contract, plus such other Department standard document forms general conditions as may be part of the Construction Contract. If the Professional intends to use any additional general condition requirements for this Project other than the Department's they must be accepted and approved by the Department in writing.

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 have access to the Construction Contractor(s) work at all times.

Establish and maintain effective construction Phase administration office procedures, systems and records to progressively, and exclusively, manage and control the Professional firm'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 Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements.

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 firm's staff, Consultants, and all other Project related resources. Preside at all Project related construction meetings. Prepare and distribute copies of minutes of all meetings, copies of correspondence, memoranda, records of telephone or other conversations and communications, and reports of all on-site visitations. Where essential or significant information for Phases 600 and 700 – Construction Administration/Office and Field Inspection Services is established or evaluated, where critical problems are identified, and/or where critical decisions are made, distribute written copies to the Department and participants within two (2) business days following the date of occurrence, otherwise meeting minutes shall be distributed within five (5) business days. Provide five (5) additional copies and distribute as the Department may direct.

Task 602 SHOP DRAWINGS/SUBMITTALS/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 firm'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 firm's review and approval of shop drawings, or other submittals. In addition to all other functions, the Professional firm's approval of shop drawings shall verify the submittals furnished by the Construction Contractor(s) conforms to the design intent of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements. Provide written approval or rejection of shop drawings within ten (10) business days of receipt in the Professional firm's office. Provide and distribute up to five (5) copies 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. Payment of the construction Phase professional fee, by the State of Michigan to the Construction Contractor, will be based on the Construction Contractor's performance of authorized Contract professional service(s) expenses performed prior to the date of each monthly submitted payment request. Payment requests will be submitted monthly to the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director as the Project progresses on a Department payment request form (DMB-440). Payment to the Construction Contractor by the Department for each monthly submitted payment request invoice will 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 firm's office. The Professional will certify to the Department, in writing, the dollar ($) amount the Professional determines to be due to the Construction Contractor for their monthly 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. If a monthly payment request is returned to the Construction Contractor, the Construction Contractor shall make the necessary corrections and resubmit that payment request to the Professional.

Issue an appropriate certificate for payment only pursuant to a correctly prepared and accurate payment request and only for acceptable Project work. Payment certification will constitute a written representation by the Professional, to the Department, that based on their Phase 700 – 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 Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements 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 will 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 firm'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 Labor and Economic Growth, 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 Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director.

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 scope of work on time and on schedule. Notify the Department, in writing, within three (3) business days of the receipt of the Construction Contractor's proposed Project construction schedule, or amendments thereto, if in the Professional firm'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 firm'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 firm'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 firm'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 assessability 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, 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 firm'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 firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements and avoid delays to any element of work which may, in the Professional firm'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 Construction Contract, monitor and evaluate the Project Construction Contractor(s) performance and quality assurance labor 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 firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements.

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 requirements or which, in the Professional firm's opinion, is inconsistent with the design intent of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications. 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 firm's final design Contract Documents/inspection and testing of elevated water storage tanks 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 firm'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 firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements; 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, 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 final design Contract Bidding Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications that will allow the Department to rebid the remaining portion of work using the Professional firm's recommendations. The Professional firm 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, as required, Punch Lists for each Construction Contract. Prescribe a reasonable time schedule for completion of all construction Punch List items and identify an amount to be withheld from payment consisting of a minimum of two (2) times the estimated value of the unacceptable construction work plus an amount sufficient 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 firm'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 firm'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 firm'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: Incorporate and render the Construction Contractor's as-built inspection and testing of elevated water storage tanks engineering drawings within ninety (90) consecutive calendar days after receipt of the properly prepared and submitted Construction Contractor documents into the Professional firm's original final design inspection and testing of elevated water storage tanks engineering Contract Documents/drawings and specifications. The Professional shall provide the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director with the following two (2) types of Contract deliverable as-built original documents for Project close-out: (1) One (1) set of legible/reproducible mylars completely updated, as-built original tracings of the Contract Documents/inspection and testing of elevated water storage tanks engineering drawings; and (2) Two (2) sets of completely updated as-built, close-out documents of the Project Contract Documents/inspection and testing of elevated water storage tanks engineering drawings on computer compact disks (CD's) in an 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 firm's as-built inspection and testing of elevated water storage tanks 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 above referenced as-built documents shall be free of the Professional firm's original inspection and testing of elevated water storage tanks 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 firm's services for the Task 609, As-Built Documents are not complete until: (1) The as-built inspection and testing of elevated water storage tanks engineering drawings have been verified, in writing, by the Professional to the Project Director as being accurate and complete; and (2) The as-built inspection and testing of elevated water storage tanks engineering drawings have been turned over and accepted by the Department of Management and Budget, Facilities Administration, Design and Construction Division'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 ninety (90) 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 inspection and testing of elevated water storage tanks engineering drawings; (5.) Copies of "Operation and Maintenance Manuals" of the Project systems; and (6.) Equipment warranties and guarantees.

Provide to the Department's, Project Director, within ninety (90) 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 inspection and testing of elevated water storage tanks 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 firm'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 Field Representatives to monitor the coordination and progress of the scope of work 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. These Department Field Representatives will be under the direction of the Project Director. The Project Director, or their 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 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 scope of work 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 scope of work requirements, up to and including full-time field Inspections. The construction field Inspections shall occur as the construction on-site field conditions and the Project scope of work requirements may require and during the regularly scheduled monthly progress and payment meetings. 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 scope of work. 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 firm's final design Contract Documents/inspection and testing of elevated water storage tanks 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 firm'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.

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 scope of work requirements may require and during the regularly scheduled monthly 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 of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements.

Task 704 PROBLEM SOLVING MEETINGS: Conduct and record problem solving meetings between the Professional and the Professional firm's Consultants, the Construction Contractor(s), their subcontractors, the Department, Project Director, the 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 scope of work requirements may require, and/or shall be at such time as the Construction Contractor(s), the Professional, the Department, Project Director, 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 monthly scheduled Project construction progress meetings with the Department, Project Director, the 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 in compliance with the design intent of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements, 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 Department, Project Director, the 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 Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director, 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 firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications requirements and that all equipment and systems function without defects.

ARTICLE 2 COMPENSATION

In consideration of the performance of this Contract, the Department agrees to pay the Professional firm, as monetary compensation for the professional inspection and testing of elevated water storage tanks engineering services, an hourly billing rate for each employee providing a direct service to this Project, on an estimated cost not-to-exceed basis as specified herein, subject to subsequent modification mutually agreeable to the parties hereto: provided, however, that the Professional may not incur costs, or bill the Department, for professional inspection and testing of elevated water storage tanks engineering services in excess of the estimates established for this Project without the prior written agreement of the Department.

The hourly billing rates shall include all direct and indirect monetary costs associated with the employment of personnel, Contract computer services, equipment, home office, field office, related operating expenses, indirect labor, overhead, and profit. Sick leave, vacation, and holiday pay shall be included in the overhead costs and shall not be billable to the Project. Hourly billing rates for this Contract shall remain fixed for the duration of the Project Contract. In the event the Professional firm is required to provide the Department with future professional inspection and testing of elevated water storage tanks engineering services beyond the duration of this Contract, the hourly billing rates will be subject to negotiation.

Compensation fee to the Professional for their Project scope of work services shall be on an hourly billing rate basis for professional services rendered by salaried and non-salaried professional, technical and technical support employees, except for any authorized reimbursable expenses provided for in this Contract. Total compensation for any Phase shall not exceed the monetary compensation fee amount authorized for that Phase, unless so authorized in writing by the Department's approved Contract Change Order. Compensation for professional services and authorized reimbursables shall not exceed the monetary compensation fee amount authorized in the Phases of the Contract Order or the Contract Change Order signed and issued by the Department to the Professional. Professional services shall not be performed and no Project monetary expense shall be incurred by the Professional firm prior to the issuance of a written and signed Professional Services Contract and a DMB Form 402 - Contract Order by the Department to the Professional, authorizing the Professional firm to start the Project work on-site. The Professional acknowledges having a clear understanding of the Department's approved and attached Appendix 1 – Project/Program Statement scope of work requirements and of the professional inspection and testing of elevated water storage tanks engineering study, design and construction administration services required by the Department to provide it, and further agrees that the terms of this Contract provide adequate monetary professional compensation fee(s) to provide the requested Project scope of work requirements. No increase in monetary compensation fee to the Professional firm will be allowed unless there is a material change made to the Project scope of work requirements as described in the Department's approved and attached Appendix 1 - Project/Program Statement scope of work requirements and the change in scope to the Project/Program Statement scope of work requirements is accepted and approved in writing, by the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director and the Professional. Professional services shall not be performed and no Project monetary expenses shall be incurred by the Professional firm prior to the issuance of a written and signed Professional Services Contract and a DMB Form 402 - Contract Order by the Department to the Professional. Compensation for Department directed changes to

the Project or modifications to the Project scope of work requirements will be provided to the Professional firm 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 firm, as approved by the Project Director, on an hourly billing rate basis in accordance with this article. This monetary compensation shall not exceed seven and one-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 firm and the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director.

No substitution of any "Key Principal Personnel/Employee" who is essential for the successful completion of the Project scope of work requirements and identified in the Professional firm's attached Appendix 2 – Project Organizational Chart will be allowed by the Professional firm for this Contract without the prior written consent from the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director. Before any "Key Principal Personnel/Employee" substitution takes place, the Professional firm shall submit a written request to the Project Director for personnel substitution and this substitution request shall include the following information: (1) A request in writing for a No Cost Contract Modification for this "Key Principal Personnel/Employee" substitution; (2) Detailed written justification for this "Key Principal Personnel/Employee" substitution; (3) The Professional firm's qualifications of any proposed "Key Principal Personnel/Employee" replacement; and (4) A written statement from the Professional firm assuring the Department that the Project scope of work will not be adversely affected by this "Key Principal Personnel/Employee" substitution change. This request by the Professional firm to modify their Professional Services Contract must be accepted and approved in writing by the Project Director and the Director of the Department of Management and Budget, Facilities Administration, on the Department's, Professional Services Contract Modification form (DMB-410).

Compensation for the Professional firm to provide the professional inspection and testing of elevated water storage tanks engineering design services of this Contract shall be determined using the Professional firm's current hourly billing rate costs for the employees performing a direct service for the Project. Such hourly billing rate Project costs shall not change during the life of this Contract without written approval by the Department. The Professional shall provide, but no additional monetary compensation shall be allowed, for the professional services necessary to respond to and resolve all Construction Contractor design related claims arising wholly or in part from the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering design errors or omissions or other aspects of the Project's design or the Professional firm's performance which is inconsistent with the Professional or Construction 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.

2.2 EMPLOYEE HOURLY BILLING RATES: The salaried employees hourly billing payroll rate is determined by dividing the annual salary, exclusive of bonuses and profit sharing, by 2,080 and adjusting such rate to reflect the actual reduced per-hour cost if more than eight (8) hours per day or forty (40) hours per week are worked in any payroll period. Salaried employees shall be clearly identified. Hourly billing rates for non-salaried employees is the basic hourly wage rate received by an employee exclusive of fringe benefits, vacations, sick leave, other indirect costs and profit. 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 firm with a written and Department approved Contract Modification during the life of this Contract to account for normal personnel pay increases.

The Professional shall provide only one (1) "Key Principal Personnel/Employee" (Chief Executive Officer) from each design discipline to contribute direct services to this Project.

Hourly billing rates will include all direct and indirect monetary costs to the State for the Professional firm's services under this Contract other than the authorized and approved reimbursements (See Appendix 8). Hourly billing rates shall be based on the Professional firm'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 firm's use of providing different hourly billing rates for different Phases is not allowed.

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, and all Project related travel expenses for Projects **less than** one-hundred (100) miles in each direction from the Professional firm's Michigan office, computer costs/operating costs and time. The cost of all telephone-related services and all reproduction services (except final design Contract Bidding Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications) and where specifically authorized elsewhere in this Contract, the reproduction of final design Contract Documents for legislative presentation. The hourly billing rate also includes, all reproduction costs for design interpretations, design clarifications and Bulletins related to the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering final 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 firm's calculated hourly billing rate. All 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. All other direct or indirect monetary costs, including that of processing the costs of the Professional firm's Consultant's, and reimbursable expense items shall be included. The hourly billing rate also includes all profit without regard to its form or distribution. Project related travel for Projects **more than** one-hundred (100) miles in each direction from the Professional firm's Michigan office shall be treated as an authorized reimbursable expense at the State of Michigan's current travel rates (See Article 2.4 text of this Contract).

Items not allowable as part of the Professional firm'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 firm may not be applied to the work of the Professional firm's Consultant's. Each Consultant firm must submit a separate hourly billing rate with proper documentation for the Consultant services they will provide. The hourly billing rate of the respective Consultant firm shall be used for that Consultant firm's personnel only. No mark-up may be applied by the Professional firm to their Consultant firm's hourly billing rate(s) charges. The Consultant services of all the Professional firm's Consultants shall be billed as an authorized reimbursable expense item.

All Project reproduction costs for study/design clarifications and Bulletins dealing with the Professional firm's Contract Documents/inspection and testing of elevated water storage tanks engineering final design errors or omissions, construction code compliance (precipitating either from design code compliance and plan review, study/design interpretations, or construction on-site/field Inspections), or avoidable costs shall be accounted as part of the Professional firm's calculated hourly billing rates.

2.3 RANGE OF EMPLOYEE HOURLY BILLING RATES: The Professional shall identify the inspection and testing of elevated water storage tanks engineering discipline service being provided and include the Primary Professional firm's Consultant's technical employee(s) full

payroll signature names and position classifications for the Project and their current hourly billing rates at the beginning of the Project. Also, provide the technical employee(s) anticipated hourly billing rates at the end of the Project based on the Professional's estimated schedule duration. This range of current and anticipated hourly billing rates shall reflect the actual monetary costs currently being paid to all of the Primary Professional firm's Consultant's technical employees for the professional services within their specified position classification, and shall include any anticipated pay increases over the life of the Professional firm's Consultant's estimated Contract schedule. The range of hourly billing rates for any employee position or classification may not be changed without a Contract Modification approved by the Department in writing. No mark-up of the Professional firm's Consultant's hourly billing rates will be allowed.

2.4 DIRECT COST REIMBURSEMENT ITEMS: The professional services of all the Professional firm's Consultant's, shall be treated as reimbursable expenses at a direct cost times a 1.0 multiplier. Reimbursement of authorized expense items at direct cost times a 1.0 multiplier is intended only as a means to compensate the Professional for their direct costs. The Professional shall be responsible for: (1) The selection of the supplier of their professional services or materials; (2) The coordination, adequacy and application of their professional services, whether provided by the Professional firm's staff or provided by their Consultant; and (3) Any Project costs that exceed the Contract per Phase reimbursement Budget.

Reproduction costs for the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering design clarifications and Bulletins necessary to achieve the Contract scope of work requirements is not allowable for reimbursement and shall be accounted as part of the Professional firm's calculated hourly billing rate. Unless authorized elsewhere in this Contract, direct cost reimbursements times a 1.0 multiplier expense items shall be limited to: Printing and reproduction of the Phase 100 - Study Final Reports, the Phase 500 - Final Design Contract Bidding Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications and the United States (U.S.) Mail regular shipping postage and handling of final design Contract Bidding Documents, Design Code Compliance and Plan Review Approval Fees by the Department of State Police, Fire Marshal Division and the Department of Labor and Economic Growth, Bureau of Construction Codes and Fire Safety, 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. Where reproduction of final design Contract Bidding Documents is by the Professional, reimbursement expenses shall be limited to the cost of materials only. In addition, the authorized reimbursement includes the number of final design Contract Bidding Documents and Addendums that are required to supply all prospective qualified construction Bidders.

The hourly billing rate (See Appendix 8) does not include and the Department of Management and Budget, Facilities Administration, Design and Construction Division will pay the Professional firm for (under Appendix 4 – Reimbursable Tests and $ Expenses) travel mileage costs for State of Michigan Projects **more than** one-hundred (100) miles in each direction from the Professional firm's Michigan office if the Professional firm can demonstrate a cost savings to the State, if reimbursed for travel mileage in accordance with the current travel rates provided in the State of Michigan's, "Schedule of Travel and Meal Reimbursement Rates" versus an adjustment to the Professional firm's calculated hourly billing rate. Compensation to the Professional firm for Project related travel when authorized by the Department, will be in the attached Appendix 4 – Reimbursable Tests and $ Expenses text and will be limited and reimbursed by the Department in accordance with the current travel rates provided in the State of Michigan's "Schedule of Travel and Meal Reimbursement Rates."

Prime Professional Firm: Dixon Engineering, Inc.

Position/ Classification	Individual	Hourly $ Range Billing Rate From - To	Total Hours	Total $ Cost
			____	_____ $

(See Attached Appendix 5 – Project Hourly Billing Rate $ Compensation for the Actual Position/Classifications and the Anticipated Hourly Billing Rate $ Compensation Range for this Contract.)

*Key Principal Personnel/Employee

Consultant Firm: As Selected
City, State

Position/ Classification	Individual	Hourly $ Range Billing Rate From – To	Total Hours	Total $ Cost
			____	_____ $

(See Attached Appendix 5 – Project Hourly Billing Rate $ Compensation for the Actual Position/Classifications and the Anticipated Hourly Billing Rate $ Compensation Range for this Contract.)

*Key Principal Personnel/Employee

**See attached Appendix 8 guideline for computation instructions regarding the overhead items allowed by the Department for the Professional Services Contractor's hourly billing rate calculation.

Consultant Firm: As Selected ~ Printing and Reproduction of the Phase 100 - Study
City, State Final Reports and/or the Phase 500 - Final Design Contract
Bidding Documents, Drawings and Specifications**

Multiplier: 1.0

**Specifications will be prepared for Divisions 00 through 49, in the 2004 MasterFormat Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the defined Project scope of work requirements (See Appendix 4).

2.6 DIRECT COST/REIMBURSABLE CONSULTANT SERVICES: The professional services of all the Professional firm's Consultants shall be treated as an authorized reimbursable expense at a direct cost times a 1.0 multiplier.

2.7 DIRECT COST REIMBURSEMENT ITEMS: Reimbursement of authorized expense items at direct cost times a 1.0 multiplier is intended only as a means to compensate the Professional for their direct costs. The Professional shall be responsible for: (1) The selection of the supplier of their professional services or materials; (2) The coordination, adequacy and application of their professional services, whether provided by the Professional firm's staff or provided by their Consultant; and (3) Any Project costs that exceed the Contract per Phase reimbursement Budget.

Reproduction costs for the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering study/design interpretations, study/design clarifications and Bulletins necessary to achieve the Contract scope of work is not allowed for reimbursement and shall be accounted as part of the Professional firm's calculated hourly billing rate.

Compensation fee to the Professional firm for the individual Tasks described in Article 1 shall not exceed the following amounts per Project Phase unless authorized by a Department approved Contract Change Order signed by the Department and the Professional.

PROJECT PHASE	SUBTOTAL AMOUNTS	MULTIPLIER	COMPENSATION NOT TO EXCEED
100 Study			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
200 Program Analysis			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
300 Schematic Design			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
400 Preliminary Design			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
500 Final Design			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
600 Construction Adm.-Office Services			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
700 Construction Adm.-Field Services			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
TOTAL CONTRACT AMOUNT			$ 250,000.00 ____

*See attached Appendix 4 for an itemized list per Project Phase of authorized reimbursable tests and $ expenses.

**See attached Appendix 8 guideline form for computation instructions regarding the overhead items allowed by the Department for the Professional Services Contractor and their Consultant firm's hourly billing rate calculation.

ARTICLE 3 PAYMENTS

Payment of the professional services monetary compensation fee, by the State of Michigan to the Professional, shall be based on the Professional firm's performance of authorized Contract professional service(s) expenses performed prior to the date of each monthly submitted payment request. Payment requests shall be submitted monthly to the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director as the Project progresses on a Department payment request form (DMB-440). Payment to the Professional by the Department for each monthly submitted payment request invoice shall be made to the Professional within thirty (30) consecutive calendar days following the Department's receipt and approval of an approved payment request invoice from the Professional. Payment requests to the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director shall include signed certification by the Professional for the actual percentage of Project work completed as of the date of invoicing for each Phase/Task. The Professional firm's payment request applications shall summarize the amounts authorized, earned, previously paid and currently due for each Project Phase. Payment request applications to the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director shall be supported by itemized Project work records documentation for each assigned Project Phase in such form and detail as the Department may require. Each of the Professional firm's Consultant's submitted payment request applications shall include similar information. This includes, but is not limited to:

a) Phase/Task Numbers for the professional services provided for the Project scope of work.
b) Name of individual providing professional service and position/classification title as defined in the Article 2 - Compensation text.
c) Hours worked: Authorized reimbursable expense items provided.
d) Current hourly billing rate charges for each individual position/classification.
e) Copy of certified on-site visitation log or site visit report showing time on-site.
f) Receipts for authorized reimbursable expense items.
g) Itemized invoices from each of the Professional firm's Consultant's documenting that firm's professional services charge and the Project work related services provided.

ARTICLE 4 ACCOUNTING

Authorization for the Professional firm to begin to incur monetary compensation costs for the Project professional services shall be made by the Department with a Department signed Professional Services Contract and a Department approved and signed DMB Form 402 - Contract Order, authorizing the Professional firm to start the Project work on-site. This Contract Order may authorize funds for all professional service Project Phases or authorizations may be made for sequential Phases according to the Project needs. It shall be the Professional firm's responsibility to carefully monitor their Project monetary costs and their Consultant firm's professional service costs, activities, and progress and to give timely notification of any justifiable need to increase the authorized Project Budget funds. Increases or decreases to the authorized Project funds will be provided to the Professional by the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director by a revised and Department approved Contract Change Order signed by the Department and the Professional. No unauthorized Project work shall be performed by the Professional.

The Professional shall keep current and accurate records of Project monetary costs and expenses of hourly billing rates and authorized reimbursable expense items and all other Project related accounting document costs to support the Professional firm'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 5 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:

a) Workers' Compensation Insurance for claims under the Michigan's Workers' Compensation Act or other similar employee benefit act of any other state applicable to an employee.

   Employers' Liability Insurance, in conjunction with the Workers' Compensation Insurance, for claims for damages because of bodily injury, occupational sickness or disease or death of an employee when workers' compensation may not be an exclusive remedy, subject to a limit of liability of not less than $100,000 each accident.

b) Automobile Insurance required by law for claims arising from ownership, maintenance or use of a motor vehicle.

c) General Liability Insurance for claims for damages because of bodily injury or death of any person, other than the Professional firm's employees, or damage to tangible property of others, including loss of use resulting therefrom, to the extent that such kinds of liability are not insured by other specific liability insurance and are ordinarily insurable under general liability insurance, subject to bodily injury limits of not less than $100,000 each occurrence and $300,000 annual aggregate and property damage limits of not less than $100,000 each occurrence and $300,000 annual aggregate, or combined bodily injury/property damage single limit of not less than $300,000 each occurrence and $500,000 annual aggregate.

d) Professional Liability Insurance for claims for damages arising out of an error, omission or negligent act in the performance of professional services, subject to limits of liability of not less than $100,000 each claim and an annual policy period aggregate of not less than $100,000.

e) Contractual Liability Insurance for claims for damages that may arise from the Professional firm's assumption of liability on behalf of the State under Article 6 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.

Original signed Certificate of Insurance documents, acceptable to the State, shall be provided and filed with the State prior to commencement of the Professional firm's Project scope of work services unless otherwise approved, in writing, by the Department. Faxes or Portable Document Format (PDF) copies of the required original Certificate of Insurance documents will not be accepted, only the original documents are acceptable. Signatures on the original Certificate of Insurance documents must be blue pen and ink and cannot be laser facsimile. The insurance company shall attach evidence that it is authorized by the Department of Labor and Economic Growth, Office of Financial and Insurance Services to do business, as an insurer in the State of Michigan, and must have an insurance rating of "A-" or better, as listed by the A.M. Best Company unless, otherwise authorized in writing, by the State of Michigan. The original 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 Project Index No.; (2) The Project File No.; (3) The Project Title; (4) Description of the Project Scope of Work; and (5) The State of Michigan must be named as an "Additional Insured on the General Liability Insurance Policy." The original 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 to the State of Michigan, Department of Management and Budget, Facilities Administration, Design and Construction Division. 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.

The attached Appendix 9, Original 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 firm's comply with these insurance requirements.

Also, be advised that if a Construction Contract is required for this Project, the original surety bonds required for a Construction Contract will not be accepted by the State of Michigan unless, the surety bonding company is listed in the current United States Government, Department of Treasury's, Listing of Approved Sureties (bonding/insurance companies), Department Circular 570. This Circular 570 Listing is published annually every July 1, in the Federal Register solely for the information of providing a listing of companies holding certificates of authority as acceptable sureties on Federal bonds and as acceptable reinsuring companies required to provide surety bonds to the United States Government. Copies of the current Circular 570 Listing of approved surety bonding/insurance companies and interim changes may be obtained through the internet web site at http://www.fms.treas.gov/c570/c570.html.

ARTICLE 6 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 Subcontractors/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 Subcontractors/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 Subcontractors/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 Subcontractors/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 firm's opinion be likely to become the subject of a claim of infringement, the Professional shall at the Professional firm'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 firm'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 7 OWNERSHIP OF DOCUMENTS

All Contract Documents/inspection and testing of elevated water storage tanks engineering drawings, specifications and Project related documents prepared and furnished by the Professional shall become the property of the State upon their request, in writing, by the State or upon the prior termination of the Professional firm's services hereunder, and the Professional shall have no claim for further employment or additional compensation as a result of this action taken by the State to request full rights of ownership of these Contract Documents and materials. The Professional firm shall not use or copy the Contract Documents/inspection and testing of elevated water storage tanks engineering drawings, specifications, and any Project related documents for any purpose other than this Project. However, the Professional may retain a copy of all Project scope of work documents for their record keeping files.

ARTICLE 8 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 effected 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.

8.4 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 9 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 10 GOVERNING LAW

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

ARTICLE 11 NONDISCRIMINATION

In connection with the performance of the Project scope of work under this Contract and in accordance with the attached Appendix 7 – Certificate of Awardability, the Professional agrees as follows:

a) The Professional will not discriminate against any employee or applicant for employment because of 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 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 particular 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.

b) 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 particular job or position.

c) 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 firm’s nondiscrimination commitments under this article.

d) 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; 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.

e) 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 firm’s. 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.

f) 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 of 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.

g) 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.

h) 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 firm's Consultant's or seller.

ARTICLE 12 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 Management and Budget, Director of Facilities Administration within thirty (30) consecutive calendar days of the end of the disputed negotiations, and any decision of the Director of 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 Facilities Administration is a prerequisite to filing a suit in the Michigan Court of Claims.

ARTICLE 13 AS-BUILT DRAWINGS

Within ninety (90) consecutive calendar days after Substantial Completion of the Project, after building or Project occupancy, the Professional shall obtain, incorporate, and render the Construction Contractor's as-built marked-up inspection and testing of elevated water storage tanks engineering drawings and specifications from the Construction Contractor depicting all construction Contract Modifications, additions, and deletions in connection with the Project scope of work for this Contract. These marked-up inspection and testing of elevated water storage tanks engineering drawings shall be transformed by the Professional into the following two (2) types of Contract deliverable as-built documents for the Department: (1) one set of legible/reproducible mylars completely updated, as-built originals of the final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings; and (2) Two (2) sets of completely updated as-built, close-out documents of the Project final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings on computer compact disks (CD's) in an Auto CAD format that is "Auto CAD readable" and conforms to the American Institute of Architects (AIA) National CAD Standard format. The as-built and record inspection and testing of elevated water storage tanks engineering drawings shall be provided to the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Project Director as per the Article 2, Phase 600 – Construction Administration/Office Services, As-Built Documents, (Task 609) text.

The Professional shall provide the Department with the original final design Contract Documents/inspection and testing of elevated water storage tanks engineering as-built/mylar drawings, specifications, and computer/electronic data file record system disks depicting all construction modifications, additions and deletions in connection with the Project for final record at the completion of their contracted work. The original final design Contract Documents/inspection and testing of elevated water storage tanks engineering as-built drawings, specifications, computer/electronic data file record system disks developed by the Professional for the Project scope of work services will be returned to the Professional upon their written request.

ARTICLE 14 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 Department's approved and attached Appendix 1 – 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/inspection and testing of

elevated water storage tanks engineering study/design errors, omissions or neglect on the part of the Professional.

IN WITNESS, WHEREOF, each of the parties has caused this Professional Services **Contract to be executed in blue pen and ink** 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 receives a copy executed by the authorized State of Michigan representative(s) by regular, registered or certified mail or by delivery in person.

FOR THE PROFESSIONAL:

_____ _____
Signature Date

_____
Title

_____
Federal Identification (I.D.) No. or Social Security No.

FOR THE STATE OF MICHIGAN:

_____ _____
Director, Department of Management and Budget Date

APPENDIX 1

PROJECT/PROGRAM STATEMENT

PROJECT STATEMENT

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
Facilities Administration
First Floor, Stevens T. Mason Building
P.O. Box 30026
Lansing, Michigan 48909

INDEFINITE-SCOPE, INDEFINITE DELIVERY CONTRACT NO.	FILE NUMBER	INDEX NUMBER(S)	APPROVAL DATE
00205	To Be Assigned	To Be Established	

DEPARTMENT

Management and Budget, Facilities Administration

AGENCY

Facilities of Various State Departments

ADDRESS

Various Site Locations, Michigan

STATE CLIENTAGENCY CONTACT	TELEPHONE NUMBER
To Be Identified	

DEPARTMENT OF MANAGEMENT AND BUDGET, FACILITIES ADMINISTRATION, PROJECT DIRECTOR	TELEPHONE NUMBER
To Be Identified	

PROJECT DESCRIPTION

This Project intends to secure professional inspection and testing of elevated water storage tanks engineering services for the design and construction administration of various Projects, at various State/Client Agencies, within various site locations of the State. These various assigned indefinite-scope, indefinite-delivery architectural and engineering 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. These professional inspection and testing of elevated water storage tanks engineering services are to be rendered on an as-needed basis.

Projects may be assigned under this Contract, from time to time, to the extent that the State may determine that it is in its best interest to have specific work done by the Professional firm. Projects so assigned may not be limited in type or size. The professional inspection and testing of elevated water storage tanks engineering services required for each of these assigned Projects requested by the Department may include any or all of the Tasks included in the Phase 100 – Study through the Phase 700 – Construction text of the Department of Management and Budget's, Facilities Administration, Design and Construction Division's, Standard Professional Services Contract.

The State will initiate a new Project by notifying the Professional firm with a Notice of Intent To Award a Project. Such notification, and response thereto, may be by letter, fax, or verbal/phone, using such format and procedures as the State may prescribe. An individual Project/Program Statement outlining the Project scope of work will be provided for each new assigned Project. Each new assigned Project will have its individual Index No., File No., and Contract Order No. Y number. All professional design services and costs shall be accounted to this Contract Order No. Y number, and it must be on all Project correspondence and documents. **Also, include your permanent assigned Indefinite-Scope, Indefinite-Delivery Contract No. 00205 on all Project correspondence and documents.**

Except as may be otherwise provided for, within forty-eight (48) hours of such State notification, the Professional firm shall provide the Department with a Professional Services Contract Modification proposal form (DMB-410) containing information necessary for the State to modify the Professional firm's Contract to include that work. No overtime or premium time services are anticipated on any Project unless so stated in the Project/Program Statement.

The incorporation of a new Project into this Contract is effected by the State's execution of a Department signed Contract Order form (DMB-402) or a Contract Modification Order form (DMB-403). Except as may be otherwise provided for, receipt thereof serves as Notice To Proceed.

ADMINISTRATION/COORDINATION

The Department will assign a Project Director to oversee and coordinate the Professional firm's services for each assigned Project. But, every assigned Project may not have the same Project Director.

CONTRACT TERM

The term of this Contract will for three (3) years from the date of this Contract award for two-hundred and fifty-thousand dollars ($250,000.00). The terms of this Contract also includes a one (1) year extension option at the sole discretion of the Department of Management and Budget's, Facilities Administration, Design and Construction Division providing written notice to the Professional design firm to extend their Contract for one (1) additional year prior to the expiration date of the original three (3) year Contract time period.

Projects may be assigned under this Contract until the total of professional compensation costs, or the combination of professional and construction costs of all assigned Projects, reach the limits prescribed below (or fixed by any Contract Modification), or until the completion of the Project would exceed the Contract's two-hundred and fifty-thousand dollars ($250,000.00) limit. Projects will not normally be assigned whose duration would exceed the remaining Contract three (3) year time period. However, where the State determines extenuating circumstances apply, or where a party other than the Professional has delayed a completion, the Contract may be extended exclusively to allow the completion of a specific Project.

SPECIAL WORKING CONDITIONS*

Parts of this Contract work will be conducted at Various State Facilities, some of which may house prisoners or wards of the State. Differing procedures for gaining access, and for the conduct of work will be encountered. At all times, personnel rendering services under this Contract will comply with the work rules of the individual State facility and with the requirements and directions of the staff thereof.

*Note: See attached Department of Corrections, Request for L.E.I.N. Clearance form.

SCHEDULE OF WORK

The State's written notification of Intent to Assign a Project may, or may not fully define an expected Project Schedule.

Part of the Professional firm's required response to each such notification is submission of a proposed, undated Project Schedule, measured in standard units of days, weeks, or months, as appropriate. This schedule will be amplified and the dates of events entered, upon receipt of the Department's signed Contract Order, or Contract Change Order, incorporating the Project into the Contract.

Assigned work may carry any degree of priority and urgency. Consequently, some conflict with the schedules of previously assigned Projects may occur. These must be resolved as part of developing the schedule proposed for each new assignment, and such revised schedules must accompany that proposal.

Because priority and emergency assignments may be expected under this Contract, the Professional firm shall have, and as a condition of eligibility for the Contract shall maintain, the capability to respond to, and begin active and continuing work, on any assigned Project within twenty-four (24) hours of Notice To Proceed.

Adherence to the schedules of all assigned Projects is a requisite measure of satisfactory performance of the professional services of this Contract.

SPECIAL WORKING CONDITIONS

DESIRED SCHEDULE OF WORK

LOCATION OF WORK AREAS

The location of work areas associated with any individual Project will be specified in the Project/Program Statement for that work, and/or the Professional firm will be given instructions and opportunity to examine the Project specific site area circumstances as may be necessary.

The award and/or holding of this Contract does not guarantee, or vest the Professional firm with any entitlement to, any work within this site area location. The State reserves the right, and sole discretion, to have work within the site area location done by other Professional firm(s) where, in its opinion, it is in the best interest of the State to have such work done by that Professional firm.

TOTAL AUTHORIZED CONSTRUCTION COST

The professional services rendered under this Contract (and the State's obligation for the total compensation cost thereof) shall not exceed a cumulative total of $250,000.

The State's total cost for the professional services of any Phase of work under this Contract shall not exceed the respective total authorized in the Contract. And, the total cost for all professional design services shall not exceed the authorized total of all Phases therein.

The State's total cost for the professional services for any Project, shall not exceed the amount authorized by the Department's signed Contract Order, or Contract Change Order, assigning that Project.

The total cost for professional services for any Phase, of any Project, shall not exceed the respective amount authorized therefore by the signed Contract Order, or Contract Change Order, assigning the specific work. And, the costs of the hourly billing rate payroll wages and/or authorized reimbursables for any Phase, of any Project, shall not exceed the respective amounts so authorized.

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 (MIOSHA, DNR, and DPH), and any other local regulations and standards that may apply.

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

Attachment(s)

Sample Project Assignment Format

PROJECT PHASE	SUBTOTAL AMOUNTS	MULTIPLIER	COMPENSATION NOT TO EXCEED
100 Study			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
200 Program Analysis			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
300 Schematic Design			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
400 Preliminary Design			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
500 Final Design			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
600 Construction Adm.-Office Services			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
700 Construction Adm.-Field Services			
Hourly Billing Rate Payroll**	$	1.0	$
Authorized Reimbursables*		1.0	_____
TOTAL			$
TOTAL CONTRACT AMOUNT			$ _____

*See attached Appendix 4 for an itemized list per Project Phase of authorized reimbursable tests and $ expenses.

**See attached Appendix 8 guideline form for computation instructions regarding the overhead items allowed by the Department for the Professional Services Contractor and their Consultant firm's hourly billing rate calculation.

APPENDIX 2

PROJECT ORGANIZATIONAL CHART

APPENDIX 3

PROJECT STUDY, DESIGN AND PROPOSED CONSTRUCTION SCHEDULE

APPENDIX 4

AUTHORIZED REIMBURSABLE TESTS/$ EXPENSES

The professional services listed below are authorized by the Department of Management and Budget, Facilities Administration, Design and Construction Division for direct cost reimbursements times a 1.0 multiplier.

4.1 SUMMARY OF AUTHORIZED REIMBURSABLE EXPENSE ITEMS

(Complete for each firm)

Professional/Consultant Firm: Dixon Engineering, Inc.
Lake Odessa, Michigan

Multiplier: 1.0

Project Phase No.	Description of Professional Services Provided	Total $ Amount
100*	Printing and Reproduction of Study Phase, Final Report Documents, Drawings and Specifications**	$_____
200*	Printing and Reproduction of Program Analysis Phase, Final Report Documents, Drawings and Specifications**	$_____
300*	Printing and Reproduction of Schematic Design Phase, Final Report Documents, Drawings and Specifications**	$_____
400*	Printing and Reproduction of Preliminary Design Phase, Final Report Documents, Drawings and Specifications**	$_____
500*	Design Code Compliance and Plan Review Approval Fees by the Department of State Police, Fire Marshal Division and the Department of Labor and Economic Growth, Bureau of Construction Codes and Fire Safety	$_____
500*	Printing and Reproduction of Final Design Phase, Contract Bidding Documents, Drawings and Specifications**	$_____
600*	Printing and Reproduction of Construction Administration/ Office Services Phase, Final Report Documents	$_____
700*	Printing and Reproduction of Construction Administration/ Field Inspection Services Phase, Final Report Documents	$_____
	Total of Authorized Reimbursable Expense Items	$_____

*See the Article 2 – Compensation Format for the Authorized Reimbursable Expense Items of this Contract.

**Specifications will be prepared for Divisions 00 through 49, in the 2004 MasterFormat Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the defined Project scope of work requirements.

APPENDIX 5

PROJECT HOURLY BILLING RATE $ COMPENSATION

APPENDIX 6

THE PROFESSIONAL FIRM'S MICHSPEC (LONG FORM) DOCUMENTS ASSISTANCE PROCEDURES FOR THE CONSTRUCTION CONTRACTOR DURING THE PROJECT CONSTRUCTION BIDDING, BID EVALUATION, AND RECOMMENDATION OF THE CONSTRUCTION CONTRACT AWARD

THE PROFESSIONAL FIRM'S MICHSPEC (LONG FORM) DOCUMENTS ASSISTANCE PROCEDURES FOR THE CONSTRUCTION CONTRACTOR DURING THE PROJECT CONSTRUCTION BIDDING, BID EVALUATION, AND RECOMMENDATION OF THE CONSTRUCTION CONTRACT AWARD

A. Whenever the Professional firm is required to use the Department of Management and Budget, Facilities Administration, Design and Construction Division's, "MICHSPEC 2001 Edition of the Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" standard form documents as adopted and modified by the State of Michigan and incorporated into the Construction Contract, plus such other Department general conditions as may be part of the Construction Contract. The following assistance procedures shall be followed by the Professional firm during the Project construction bidding, Bid evaluation, and recommendation of the Construction Contract award:

If MICHSPEC (Long Form) Contract Documents are used for this Project, all applicable Section 00500, Contract Agreement and related attachment documents shall be filled-out in triplicate (date field left blank) and executed in blue pen and ink by the Professional firm's recommended Construction Contractor.

CONSTRUCTION BIDDING AND CONTRACTING PROCEDURES: Assist the Department in the construction bidding and contracting process. Advertisement and award of this Construction Contract will be by the State of Michigan. Provide the Department with a list of recommended qualified construction Bidders' appropriate to the Project scope of work requirements. Recommend the appropriate construction bidding and/or contracting method to the Department. Prepare and distribute Bidding Documents and instructions as required to accommodate predetermined construction Bid packages and/or Phases. Maintain a qualified construction Bidders' list. Conduct prebid meetings. Issue a preconstruction Addenda to all qualified construction Bidders as required. Include in each Addendum complete specifications for the Project scope of work requirements, if such specifications are not part of the final design Bidding Documents. Exert every practical means to obtain several, qualified construction Bidders for every Construction Contract. 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 firm's construction bidding and contracting procedure services for Task 516 are not complete until: (1) The lowest responsive, responsible qualified construction Bidder's Bid has been selected and accepted by the Department; and (2) The lowest responsive, responsible qualified construction Bidder's Construction Contract has been executed.

Construction Bid Evaluation and Recommendation of Construction Contract Awards: Review and evaluate the Department's submitted competitive construction Bids for the Project. Based on the Professional firm's review of the competitive construction Bids and the qualified construction Bidders, provide the Department with a written recommendation for the apparent lowest responsive, responsible qualified 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 firm'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 final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications or for any estimating work related to the Project scope of work requirements. The Professional shall conduct precontract meetings with responsive, responsible qualified construction Bidder(s) to review the following items: (1) The design intent of the Professional firm's final design Contract Documents/inspection and testing of elevated water storage tanks engineering drawings and specifications; and (2) To advise and assist the Construction Contractor(s) in understanding the requirements of the Department of Management and Budget, Facilities Administration, Design and Construction Division's standard form of Construction Contract Documents, Project scope of work, and its Construction Contract award procedures.

The Department will send the Notice of Intent to Award letter to the recommended Construction Contractor awarded the Construction Contract. The Notice of Intent to Award will designate the

Contract price and itemize the alternates that the Department, at its sole discretion has accepted. 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 in blue pen and ink, the Department of Management and Budget, Facilities Administration, Design and Construction Division's, MICHSPEC 2001 Edition of the Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" standard document forms Section 00500, Contract Agreement and the Section 00800, Supplementary Conditions, in triplicate; (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 original Certificate of Insurance and any other legal documents required for submittal by the Department's, Notice of Intent to Award letter.

Immediately upon the notice of intent of the Department of Management and Budget, Facilities Administration, Design and Construction Division's, Notice of Intent to Award letter to the Construction Contractor recommended in writing by the Professional firm to be the lowest responsive, responsible qualified Construction Contractor Bidder of the Construction Contract. The Professional firm shall fill-out where applicable for the Project scope of work and submit to the Professional firm's recommended apparent lowest responsive, responsible qualified Construction Contractor Bidder, three (3) sets of original, unsigned, MICHSPEC 2001 Edition, Section 00500, Contract Agreement (Long Form) documents for their review and signature in blue pen and ink for the Project Construction Contract.

The Professional firm's recommended apparent lowest responsive, responsible qualified Construction Contractor Contract Documents to be submitted for the Construction Phase scope of work of this Project shall contain the following Department of Management and Budget, Facilities Administration, Design and Construction Division's, MICHSPEC 2001 Edition, Construction Contract Agreement (Long Form) standard form documents and outline the Project scope of work procedures to be followed by the Professional firm's recommended Construction Contractor for their review and signature execution in blue pen and ink of the following Department of Management and Budget, Facilities Administration, Design and Construction Division's, MICHSPEC 2001 Edition, Section 00500, Contract Agreement documents:

1.) Section 00300, Bid Summary and Bid Form and Section 00310 and Section 00320, Bid Form Attachments;

2.) Section 00400, Qualified Submittals;

3.) Section 00500, Contract Agreement. (Note: The Professional shall fill-out the following Project scope of work articles of this MICHSPEC (Long Form) document and the Professional firm's recommended apparent lowest responsive, responsible qualified Construction Contractor Bidder shall fill-out and execute in blue pen and ink the remaining portions of this Contract Document:

    a. Preface to Article 1 text
    b. Article 1, The Contract; The Project; and The Work
    c. Article 2, Contract Documents
    d. Article 3, Contract Price
    e. Article 4, Contract Time; Liquidated Damages
    f. Article 6, The Professional Services Contractor

4.) Section 00520, Attachment "A" to Contract Agreement;

5.) Section 00610, Performance Bond;

6.) Section 00620, Payment Bond;

7.) Section 01301, Progress Schedule;

8.) Section 00800, Supplementary Conditions. (Note: The Professional firm shall fill-out this form where applicable for the Project scope of work);

9.) Original Certificates of Insurance;

10.) Certificate of Awardability, a legal form that is required for the Construction Contractor by the State of Michigan's, Department of Civil Rights for any Project Contract work that is valued at one-hundred thousand dollars ($100,000) or more.

Each Construction Contractor's total Base Bid that is valued at one-hundred thousand dollars ($100,000) or more shall enclose a copy of the Bidder's valid Certificate of Awardability issued by the State of Michigan's, Department of Civil Rights (concerning compliance with the State of Michigan's nondiscrimination requirements). FAILURE BY A CONSTRUCTION BIDDER TO ENCLOSE, WITH THE CONSTRUCTION BIDDER'S BASE BID, A COPY OF THE CONSTRUCTION BIDDER'S VALID CERTIFICATE OF AWARDABILITY SHALL JUSTIFY DISQUALIFICATION OF THAT CONSTRUCTION BIDDER, UNLESS A VALID CERTIFICATE OF AWARDABILITY EXISTED ON OR BEFORE THE CLOSING TIME FOR RECEIPT OF CONSTRUCTION BIDS, THE FAILURE TO ENCLOSE SUCH VALID CERTIFICATE OF AWARDABILITY WAS INADVERTENT AND THE CONSTRUCTION BIDDER SUBMITS A COPY OF ITS BIDDER'S CERTIFICATE OF AWARDABILITY WITHIN TWENTY-FOUR (24) HOURS AFTER NOTIFICATION BY THE DEPARTMENT THAT A COPY OF THE VALID CERTIFICATE OF AWARDABILITY WAS NOT SUBMITTED. The time required by the Department of Civil Rights to process Certificate of Awardability applications varies, with their workload, which changes from time to time. The construction Bidder is responsible for securing all pertinent information from the Department of Civil Rights prior to submitting their construction Bid and for keeping their Certificate of Awardability up-to-date. Firms <u>will not</u> be notified when their certificates are going to expire. All correspondence communications for the Certificate of Awardability shall be directed to:

State of Michigan
Department of Civil Rights
Contract Compliance Team
Cadillac Place State Office Building (former General Motors Building)
3054 West Grand Boulevard
Suite 3-600
Detroit, Michigan 48202
Telephone Number: (313) 456-3822 or 456-3823
Fax Number: (313) 456-3826

B. ALSO, BE ADVISED: Before the Department of Management and Budget, Facilities Administration, Design and Construction Division can formally execute the Construction Contractor's Contract, the Construction Contractor must also provide, within fifteen (15) calendar days from the date that the Department's, Notice of Intent to Award letter was mailed to the Construction Contractor for the subject Project work, the following Construction Contract Documents:

1.) A certified copy of a resolution of corporate authority adopted by the Construction Contractor's Board of Directors or a certified copy of the articles of the Construction Contractor's By-Laws authorizing signature authority of the Construction Contract on behalf of the corporation. If a partnership, it is necessary to submit a copy of the Power-of-Attorney which authorizes signature authority on behalf of the partnership. A Power-of-Attorney is not required if each of the partners sign the Construction Contract individually.

2.) Original Certificate of Insurance documents covering Public Liability, Property Damage, and Worker's Compensation. NOTE: ALL <u>ORIGINAL CERTIFICATE OF INSURANCE DOCUMENTS</u> MUST SPECIFY THE SUBJECT PROJECT IDENTIFICATION AND LIST THE STATE OF MICHIGAN AS AN ADDITIONAL INSURED. THE INSURANCE

COMPANY MUST HAVE AN INSURANCE RATING OF A- OR BETTER AS LISTED BY THE A.M. BEST COMPANY. To view the latest A.M. Best's Key Ratings Guide visit the A.M. Best Company internet web site at http://www.ambest.com.

3.) Original Performance, Labor, and Material Bonds must be made in favor of the State of Michigan and bear the Department's award date of the Construction Contract. NOTE: SURETY BONDS WILL NOT BE ACCEPTED BY THE STATE OF MICHIGAN UNLESS THE BONDING COMPANY IS LISTED IN THE CURRENT UNITED STATES GOVERNMENT, DEPARTMENT OF TREASURY'S, LIST OF APPROVED SURETIES (BONDING/INSURANCE COMPANIES), DEPARTMENT CIRCULAR NO. 570. Copies of the current Circular No. 570 Listing of approved surety bonding/insurance companies and interim changes may be obtained through the internet web site at http://www.fms.treas.gov/c570/c570.html.

FAXES OF THE REQUIRED CONSTRUCTION CONTRACT DOCUMENTS LISTED IN THE ABOVE SECTION (B) NO. 2 AND 3 WILL NOT BE ACCEPTED, ONLY THE ORIGINAL DOCUMENTS ARE ACCEPTABLE. IF YOU HAVE ANY QUESTIONS, PLEASE CALL MS. LINDA FELDPAUSCH AT THE DEPARTMENT OF MANAGEMENT AND BUDGET, FACILITIES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION AT (517) 241-0122 FOR ASSISTANCE.

NOTE, BE ADVISED: THAT THE CONSTRUCTION CONTRACTOR IS NOT TO PROCEED WITH ANY CONSTRUCTION WORK OR PERFORM ANY ON-SITE ACTIVITIES UNTIL THE PROJECT CONSTRUCTION CONTRACT HAS BEEN EXECUTED BY BOTH PARTIES. AT THAT TIME, A PRECONSTRUCTION MEETING WILL BE ARRANGED.

The Construction Contractor shall mail and/or return all of the above Construction Contract Documents for the Construction Contract to the following address:

MAILING ADDRESS	EXPRESS MAIL ADDRESS
Department of Management and Budget	Department of Management and Budget
Facilities Administration	Facilities Administration
Design and Construction Division	Design and Construction Division
P.O. Box 30026	First Floor, Stevens T. Mason State Office Building
Lansing, Michigan 48909	530 West Allegan Street
Attention: Ms. Linda Feldpausch	Lansing, Michigan 48933
Telephone No. (517) 241-0122	Attention: Ms. Linda Feldpausch
	Telephone No. (517) 241-0122

NOTE: NEW CONSTRUCTION PROJECT PARTIALLY CLOSES STREETS AND AFFECTS PARKING SPACES: Capitol Loop – Downtown Lansing. Due to the new construction work, parking is at a premium in the area of the Stevens T. Mason State Office Building. Also, security measures and the new construction work may affect the delivery time of mail and packages sent via United Parcel Service (UPS), Federal Express (Fed. Ex.), and Airborne Express. If hand-delivering your Construction Contract Documents, please allow ample time to locate parking and be prepared to sign-in and present requested pictured identification to the security officer on-duty in the lobby of the Stevens T. Mason State Office Building in order for your Construction Contract Documents to arrive at the Department of Management and Budget, Facilities Administration, Design and Construction Division. It remains the responsibility of the Construction Contractor firm to submit their Construction Contract Documents on time, as specified.

APPENDIX 7

CERTIFICATE OF AWARDABILITY

APPENDIX 8

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 Contractor firm's to determine the hourly billing rate to use on State of Michigan Projects.

All of the Professional firm's Consultants providing Project services must submit a separate hourly billing rate for the Consultant services they will provide. No mark-up of the Professional firm's Consultants hourly billing rates will be allowed.

The Department of Management and Budget, Facilities Administration, Design and Construction Division will reimburse the Professional firm for the actual cost of printing and reproduction of the final design Contract Bidding Documents, soil borings, surveys and any required laboratory testing services. No mark-up of these Project costs will be allowed.

2008 HOURLY BILLING RATE

Based on 2007 Expenses

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

SALARIES:
Principals (Not Project Related)
Clerical/Secretarial
Technical (Not Project Related)
Temporary Help
Technical Training
Recruiting Expenses

OFFICE FACILITIES:
Rents and Related Expenses
Utilities
Cleaning and Repair

SUPPLIES:
Postage
Drafting Room Supplies
General Office Supplies
Library
Maps and Charts
Magazine Subscriptions

SERVICES (PROFESSIONAL):
Accounting
Legal
Employment Fees
Computer Services
Research

FINANCIAL:
Depreciation

EQUIPMENT RENTALS:
Computers
Typewriter
Bookkeeping
Dictating
Printing
Furniture and Fixtures
Instruments

TRAVEL:
All Project-Related Travel*

MISCELLANEOUS:
Professional Organization Dues
for Principals and Employees
Licensing Fees

SERVICES (NONPROFESSIONAL):
Telephone and Telegram
Messenger Services

TAXES:
Franchise Taxes
Occupancy Tax
Unincorporated Business Tax
Property Tax
Single Business Tax
Income Tax

INSURANCE:
Professional Liability Insurance
Flight and Commercial Vehicle
Valuable Papers
Office Liability
Office Theft
Premises Insurance
Key-Personnel Insurance

EMPLOYEE BENEFITS:
Hospitalization
Employer's F.I.C.A. Tax
Unemployment Insurance
Federal Unemployment Tax
Disability
Worker's Compensation
Vacation
Holidays
Sick Pay
Medical Payments
Pension Funds
Insurance - Life
Retirement Plans

PRINTING AND DUPLICATION:
Specifications (other than Contract Bidding Documents)
Drawings (other than Contract Bidding Documents)
Xerox/Reproduction
Photographs

LOSSES:
Bad Debts (net)
Uncollectible Fee
Thefts (not covered by Project/Contract bond)
Forgeries (not covered by Project/Contract bond)

HOURLY BILLING RATE DOES NOT INCLUDE AND THE DEPARTMENT OF MANAGEMENT AND BUDGET, FACILITIES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION WILL PAY THE PROFESSIONAL FIRM FOR (UNDER REIMBURSABLE COSTS):

1. Printing and reproduction of Phase 100 Survey and/or Study Final Reports.
2. Printing and reproduction of Phase 500 Final Design Contract Bidding Documents/Drawings, and Specifications.
3. Design Code Compliance and Plan Review Approval Fees of the Phase 500 - Final Design Documents by the Department of State Police, Fire Marshal Division and the Department of Labor and Economic Growth, Bureau of Construction Codes and Fire Safety.

4.* Travel mileage costs for State of Michigan Projects **more than** one-hundred (100) miles in each direction from the Professional firm's Michigan office if the Professional firm can demonstrate a cost savings to the State, if reimbursed for travel mileage in accordance with the current travel rates provided in the State of Michigan's, "Schedule of Travel and Meal Reimbursement Rates" versus an adjustment to the Professional firm's hourly billing rates.

APPENDIX 9

ORIGINAL CERTIFICATES OF INSURANCE