



MINOR CONSTRUCTION PROJECT BID PACKAGE

Issued by Authority of The Michigan Department of Natural Resources

This is an invitation for a sealed bid for furnishing labor, material, supplies and equipment to complete the project detailed on the Proposal and Contract Form and in the attached specifications. Bid security performance bond and labor and material bond **are not** required for this project.

The State reserves the right to award to that responsive and responsible bidder offering the best value to the State for the quality of the service to be supplied, conformity with specifications and suitability to the requirements of the State, or to reject any and all bids in whole or in part if the best interest of the State will be served.

It is the vendor's responsibility to read, understand and follow the Instructions To Bidders, General Conditions and General Requirements attached to this packet.

Questions regarding these terms should be directed to:		Questions regarding the project should be directed to:	
The Issuing Officer: PATRICK AVENDT	Telephone No.: (517) 373-9902	Project Manager's Name: MR. TROY RIFE	Telephone Number: (231) 775-9727, Ext. 6012
Address: OFFICE OF LAND AND FACILITIES MICHIGAN DEPARTMENT OF NATURAL RESOURCES STEVENS T. MASON BUILDING – 8TH FLOOR 530 WEST ALLEGAN STREET P.O. BOX 30033 LANSING, MICHIGAN 48909 (This Zip Code for P.O. Box only.) (Street Address Zip Code is 48933.)		Division/Office Name: DNR PARKS AND RECREATION DIVISION	
		Field Unit Name: TIPPY DAM RECREATION OFFICE	
		Street Address of Park Headquarters: 1500 DILLINGS ROAD	
		City: BRETHREN	State: ZIP: MI 49619

- This Bid Package contains:
- A. This instructional cover sheet
 - B. Three copies of the "Proposal and Contract for DNR" (Form PR-1625).
 - C. Instructions to Bidders, General Conditions, General Requirements
 - D. Technical specification and other attachments, if any required.
 - E. "Sealed Bid" Envelope (Addressed to the MICHIGAN DEPARTMENT OF NATURAL RESOURCES)

THE ATTACHED CONTRACT DOCUMENTS ARE FOR:		Bid Number: 24-3156
PROJECT LOCATION (location where the work is being done) TIPPY DAM RECREATION OFFICE		COUNTY: MANISTEE
NAME OF CONSTRUCTION PROJECT: INSTALL HEATING AND TEMPORARY UTILITIES		
MANDATORY PRE-BID OPEN HOUSE: Tuesday, May 19, 2009 at 10:00 a.m. on site: Tippy Dam Recreation Office, telephone: (231) 848-4880 1500 Dillings Road Brethren, Michigan 49619		
BID OPENING:	DATE: FRIDAY, MAY 29, 2009	TIME (local time): 2:00 P.M. in Lansing

TO BID FOR THIS WORK, SUBMIT A PROPOSAL FOLLOWING THE INSTRUCTIONS BELOW.

- 1) Complete the "bidder's" portion on the "Proposal and Contract for DNR" (Form PR-1625).
 - **DO NOT** change the bid form or qualify the bid. Only bid on the contract as written. If the bidder wishes to alter the bid price, it may be done by sending in the amount of change (addition or reduction) to the original bid by the bid opening time. The original bid sum must not be revealed. Bid prices must be good for sixty days.
- 2) If an Addendum was issued, confirm receipt by returning two signed copies.
- 3) Seal two completed copies of the "Proposal and Contract for DNR" (Form PR-1625) in an envelope.
- 4) On the "Sealed Bid" Envelope provided, ensure that the following information is completed on the label:
 - a) Bid number
 - b) Bid opening date and time
 - c) That the actual bid is enclosed
- It is the responsibility of the bidder to ensure that correctly identified bids are delivered on time. The Michigan DNR can not be responsible for mail delivery services.
- On or before the due date and time specified on the "Proposal and Contract for DNR" (Form PR-1625), sealed bids must be received and time stamped at 530 WEST ALLEGAN STREET-8th FLOOR, LANSING MI 48933, to be considered as on time.
- The bids will be publicly opened and read aloud. Bid results will be available to the public after the opening.



PROPOSAL AND CONTRACT for DNR

Submittal of this information constitutes a valid proposal as required by Authority of Act 431, PA 1984, to provide the services as specified.

BID OPENING DATE and TIME: FRIDAY, MAY 29, 2009 5:00 p.m. Local Time	CONTACT INFORMATION FOR EXAMINATION OF PREMISES: Site Contact/Project Manager's Name: MR. TROY RIFE Telephone Number: (231) 775-9727, Ext. 6012		For DNR Issuing Officer CONTRACT NO. COMMODITY CODE:
	PROJECT NUMBER: 24-3156		
DEPARTMENT (751): DNR - DIVISION /OFFICE NAME: PARKS AND RECREATION DIVISION	FIELD UNIT NAME: TIPPY DAM RECREATION OFFICE		
PROJECT LOCATION (WORK SITE): 1500 DILLINGS RD., BRETHERN, MICHIGAN 49619	PROJECT NAME: INSTALL HEATING AND TEMPORARY UTILITIES		

SCOPE OF WORK: The Work to be completed under this contract includes: Providing all labor, materials, and equipment to install the in-floor hydronic heating system, install temporary utilities, and related items as shown on the drawings and specified herein, at the DNR Tippy Dam Recreation Office, Brethren, Manistee County, Michigan. Contractor is responsible for all necessary permits. Mandatory pre-bid meeting: Tuesday, May 19, 2009 at 10:00 a.m., on site. Site Contact: Keith Lounsbury, at (231) 848-4880

Time of Completion: Upon acceptance of the Proposal and Contract by the State, the Contractor agrees to complete all work **within forty-five (45) days after award of contract.**

BIDDER'S Section: (See attached Instructions To Bidders, General Conditions And General Requirements.)	
<ul style="list-style-type: none"> Do Not Alter or Qualify This Proposal and Contract. This Proposal May Be Rejected If This Form Is Altered or Qualified. 	
BIDDER'S NAME AND COMPLETE ADDRESS	TELEPHONE NUMBER
STREET ADDRESS	FEDERAL I.D. NUMBER (if none, SOCIAL SECURITY NUMBER) (Protected information required for processing payments)
CITY STATE ZIP CODE	

Base Proposal Sum: \$ _____ (This figure shall be valid for a period of sixty (60) days from the Bid Opening Date.)

NOTE: BID GUARANTEE & BONDS ARE NOT REQUIRED ON THIS PROJECT.

Bidder Acknowledges receipt of the following addenda: _____ Dated: _____

We propose to furnish all labor, materials, equipment, tools, and services required to complete the work in accordance with the specifications and conditions contained herein in consideration of the sum(s) stated above and agree that this document and attached General Terms and Requirements will constitute the contract if accepted by the State.

Signatures and Authorizations: Bids may be rejected as being incomplete without this authorization

- Corporations** shall include with the bid, a copy of the resolution giving the person signing the bid, power to bind the company in a legal contract.
- Partnerships** may have all partners sign this "Proposal and Contract for DNR" (Form PR-1625) or may submit a Power of Attorney.
- Sole proprietorships** need only to have their signatures witnessed.

BIDDER'S SIGNATURE (s)	DATE
WITNESS' SIGNATURE	DATE

Submit 2 copies of this Proposal To:

OFFICE OF LAND AND FACILITIES
 MICHIGAN DEPARTMENT OF NATURAL RESOURCES
 STEVENS T. MASON BUILDING – 8TH FLOOR
 530 WEST ALLEGAN STREET
 P.O. BOX 30033
 LANSING, MICHIGAN 48909 (This Zip Code for P.O. Box only.)

ACCEPTANCE: THIS PROPOSAL IS ACCEPTED BY THE STATE OF MICHIGAN	
DNR ISSUING OFFICER'S SIGNATURE	DATE
WITNESS' SIGNATURE	DATE

INSTRUCTIONS TO BIDDERS

1. **Preparation of Bid:** Execute bid fully and properly. Submit in duplicate on this form in a sealed envelope to this office.
2. **Signatures:** All bids, notifications, claims, and statements must be signed as follows:
 - a. Corporations: Signature of official shall be accompanied by a certified copy of the resolution of the Board of Directors authorizing the individual signing to bind the corporation.
 - b. Partnerships: Signature of one partner shall be accompanied by a **certified** copy of the power of attorney authorizing the individual signing to bind all partners. If bid is signed by **all** partners, no authorization is required.
 - c. Individual: No authorization is needed. Each signature must be witnessed.
3. The bidder acknowledges the right of the owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the bidder recognizes the right of the owner to reject a bid:
 - a. if the bid is in any way incomplete or irregular;
 - b. if the bidder's performance as a contractor was unsatisfactory under a prior contract for the construction, repair, modification or demolition of a facility with the owner, or a contractor in privity of contract with the owner, which was funded, directly or indirectly, by the owner;
4. It is the intent of the owner to award a contract to the lowest responsible bidder, provided the bid has been submitted in accordance with the requirements of the bidding documents, and does not exceed the funds available.
5. Individuals needing special services to fully participate in the bidding process due to a physical challenge may contact the building superintendent or the facility manager.
6. **Electronic Funds Transfer Payment** Public Act 533 of 2004 requires all vendors doing business with the State of Michigan to receive payment by electronic funds transfer (EFT) for services and goods provided to the State. Please log on to the contractor and payment website at www.michigan.gov/cpexpress to register your company or you may contact the C&P Express Help Desk toll-free at 888-734-9749
7. **Interpretation of Contract Documents:** If any person contemplating submitting a bid for this project is in doubt as to the true meaning of any part of the drawings, specifications or other contract documents, he/she may submit a written request to the director for an interpretation not later than nine days prior to due date of bids. The person submitting the request will be responsible for its prompt delivery. An interpretation of the documents will be made by the requesting office and an addendum issued and mailed or delivered to each person who has received a set of drawings and specifications. All addenda issued shall be made a part of the contract requirements. The state will not be responsible for any other explanation or interpretation of the contract documents.

8. **Substitution of Materials:** Any bidder wishing to use manufacturers or materials other than those specified shall submit a written request to the director not later than nine days prior to due date for bids. Request shall be accompanied by product data to permit evaluation and comparison with specified products or materials. The person submitting the request will be responsible for its prompt delivery. An examination and evaluation of product data will be made by the state unit and, if found acceptable, an addendum will be issued and mailed or delivered to each person who has received a set of drawings and specifications. All addenda issued shall be made a part of the contract requirements.
9. **Time of Completion:** Upon acceptance by the state of the Proposal and Contract, the contractor agrees to complete all work required in the time frame required on the Proposal and Contract.
10. **Michigan Products and Recycled Products:** All contractors and suppliers are encouraged to provide Michigan-made products and/or recycled products whenever possible where price, quality, and performance are equal to, or superior to, non-Michigan products and the requirements of the contract documents.
11. **Rejection:** The state reserves the right to reject any bids and to waive any defects in bids.
12. **Contract:** Upon acceptance by the state, this document will constitute the contract and the executed duplicate will be returned to the contractor. The contract shall not be in force until the contractor has complied with all of the requirements of insurance.

GENERAL CONDITIONS

1. **Definitions:** "**State**", the State of Michigan; "**Director**", the director of the State Unit or his/her authorized representative; "**State Unit**", any state department, board, commission or institution; "**Contractor**", the bidder whose proposal is accepted by the state; "**Notification**", written notice delivered in person or by mail; "**Contract Documents**", this document and supplemental specifications and drawings.
2. **Unfair Labor Practice:** Public Act No. 278 of 1980 prohibits the state from awarding a contract or subcontract to an employer who has been found in contempt of court by a Federal Court of Appeals, on not less than three occasions involving different violations during the preceding seven years, for failure to correct an unfair labor practice as prohibited by Section 8 of Chapter 372 of the National Labor Relations Act, 29 U.S.C. 158. A contractor for the state may not, in relation to that contract subcontract with such an employer.
3. **Safety Regulations:** The contractor shall conform to the "General Safety Rules and Regulations" for the construction industry, as prescribed by the Construction Safety Commission, Department of Labor and Economic Growth, Bureau of Safety and Regulations, Lansing, Michigan, and the Occupational Safety and Health Standards of the United States Department of Labor. This shall be made a

condition of each subcontract entered into pursuant to the contract.

4. **Taxes:** The contractor shall include and be deemed to have included in the bid and contract price all Michigan sales and use taxes currently imposed by legislative enactment and as administered by the Michigan Department of Treasury's Revenue Division on the bid date.
5. **Nondiscrimination:** For all state contracts for goods or services in amount of \$5,000 or more, or for contracts entered into with parties employing three or more employees; in connection with the performance of work under this contract, the contractor shall comply with all published rules, regulations, directives, and orders of the Michigan Civil Rights Commission relevant to Section 6, 1976 PA 453 as amended, which may be in effect at the time of bidding for any individual State project.
6. **Conflicts and Omissions:** The intent of the contract documents is to provide everything necessary for the proper execution of the work. In case of conflict, the work shall not proceed until a decision has been agreed upon by all parties concerned.
7. **Royalties, Patents, Notices, and Fees:** Contractor shall give all notices and pay all royalties, building permits, and fees. He/she shall defend all suits or claims for infringement of any patent rights and shall save the state harmless from loss on account thereof. He/she shall comply with all laws, ordinances, and codes applicable to any portion of the work.
8. **Examination of Premises:** Bidder shall familiarize himself/herself with local conditions affecting the job. He/she shall take his/her own measurements and be responsible for the correctness of same. Bidder shall be held to have made such examinations and no allowances will be made in his/her behalf by reason of error or omission on his/her part. If any part of the contractor's work depends for proper results upon existing work or the work of another contractor, the contractor shall notify the director before commencing work of any defects that will affect the results. Failure to so notify the director will constitute his/her acceptance of the conditions.
9. **Working Conditions:** All work shall be done in accordance with all regulations governing the state unit wherein the work is to be performed and with minimum possible interference with the proper functioning of the activities of that state unit. Materials, tools, equipment, etc., shall be confined so as not to unduly encumber the premises. Each bidder shall be held to have visited the site and checked with the authorities the working conditions and the methods of carrying out the work and to have included in his/her proposal all costs for meeting such working conditions.
10. **Materials:** Unless otherwise specified, all materials shall be new and of the best grade of the representative kinds for the purpose.
 - a. Whenever material, an item of equipment, or a system is described by a performance specification, written as a proprietary product, or uses the name of a manufacturer or vendor, the term "or equal" if not inserted, shall be implied.

11. **Permits:** The Owner has acquired the necessary permit for this project.

All work shall be executed in accordance with the State of Michigan's Construction Codes, except where work is specified or shown to be above such standard. The work shall be executed in conformity with the drawings and these specifications.

If the contractor performs any work knowing it to be contrary to the State of Michigan's Construction Codes, the contractor shall assume full responsibility and shall bear all attributable costs.

12. **Employees and Superintendence:** Contractor shall enforce good order among his/her employees and shall not employ on the work any disorderly, intemperate, or unfit person or anyone not skilled in the work assigned to him/her. Contractor or a competent person having authority to act for him/her shall be at the work at all times. He/She shall have the plans and specifications available on the site at all times.

- a. Michigan Residency: Pursuant to 1988 PA 504, 50 percent of the persons working on this project and employed by the prime contractor or subcontractors shall have been residents of the State of Michigan for not less than one year before beginning work.

13. **Other Contracts:** The state may let other contracts in connection with the work and the contractor shall properly connect and coordinate his/her work with the work of such other contractors. The state shall not be liable for any damages or increased costs occasioned by the failure of other contractors to execute their work as may be anticipated by these documents.

14. **Protection:** The contractor shall be responsible for the protection of state property during the period of construction and shall exercise care to prevent damage to structures, utility services, storm and sanitary drainage systems, lawns, trees, plant material, fences, walks, drives, roadways, and other improvements in and adjacent to the area of work under the contract.

15. **Insurance:** No work connected with this contract shall be started until the contractor has submitted original signed certificates of insurance covering general liability and workers' compensation indicating (a) all workers are insured to protect him/her from claims for damages for personal injury or death which may arise from operations under this contract as required by Michigan statute and that (b) he/she has the following liability insurance coverage: Commercial General Liability limits shall be \$2,000,000.00 each occurrence, \$2,000,000.00 general aggregate, \$2,000,000.00 products and completed operations aggregate, \$1,000,000.00 personal and advertising injury. Commercial Automobile Liability limits shall be \$2,000,000.00 combined single limit, \$1,000,000 Each Occurrence Limit, \$500,000 Fire Damage Limit (any one fire). All of the above insurance shall be maintained during the life of this contract. Partial payments shall not relieve the contractor from full responsibility for any damage which may result from any cause including fire or other casualty until completion of the contract and final payment. Any

casualties shall not relieve the contractor from performing the contract.

Insurance Companies must have a rating of "A—" or better as listed by A.M. Best Company. The State of Michigan must be named as an additional insured.

16. Michigan Right-to-Know Law: All contractors must conform to the provisions of the Michigan Right-to-Know Law, 1986 PA 80 which requires employers to:

- a. develop a communication program designed to safeguard the handling of hazardous chemicals through labeling of chemical containers and development and availability of Material Safety Data Sheets;
- b. provide training for employees who work with these chemicals.
- c. develop a written hazard communications program.

17. Changes: Contractor shall make changes in the contracted work only as ordered in writing by the director.

18. Inspection: Contractor shall at all times permit and facilitate inspection of the work by the director. The state unit will designate an inspector for this contract. It will be the responsibility of this contractor to notify the inspector of the date operations are to start and to contact the inspector periodically during the course of the work to insure that work is being performed in accordance with the conditions of this contract.

19. Termination for Breach: The state may terminate this contract when violations are not stopped immediately and corrected within a reasonable length of time after notification by the director or when the approved progress schedule is not met because of failure of the contractor to prosecute the work. In the event of such termination, the state may complete the contracted work and the contractor will be liable for any excess cost occasioned the state thereby and in such case the state may take possession of and utilize in completing the work such materials and equipment as may be on the site and necessary.

20. Clean Up: Contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by his/her employees or work and at the completion of the work. he/she shall remove all his/her waste, tools, equipment, staging and surplus materials from the structure and grounds and leave his/her work clean and ready for use.

21. Guarantee: Contractor shall furnish the state with a written guarantee to remedy any defects due to faulty materials or labor which appear in the work within one year from the date of final acceptance by the state.

22. Payment: Payment for the work will be made in one sum at the completion of the contract except that a single progress payment may be made at any time during the construction period for the value of the work completed, except in no case shall the amount of the payment exceed 50 percent of the value of the contract. If contractor expects to request partial payment, he/she shall submit a schedule of costs and quantities of the various parts of the work aggregating the total contract sum, such as the director may request. When requested, the contractor

shall submit a statement based upon this schedule, itemized and supported as the director may require. Contract will not be considered complete until the work has been accepted as final by the state unit and the director and the attached "Guarantee and Statement" (DMB-437) has been completed and signed by the contractor. Payments will be made within 30 days after the Director has certified to the Owner that work is in place in the portion of the facility covered by the applicable request for payment in accordance with the Contract documents. Process of progress payments by the Owner may be deferred by the Owner until Work having a prior sequence, as provided in the Contract documents, is in place and is approved. Each Application of Payment shall certify that all monies owed by the Contractor to Subcontractors and Suppliers for which payment previously has been sought have been paid from the payments received.

23. Prevailing Wage Rates: The Prevailing Wage Law, Act 166 of the Public Acts of 1965 is applicable to this Contract. By law, prevailing wage rates are the rates contained in collectively bargained agreements covering the location of the state project. The purpose of establishing prevailing wage rates is to provide rates of pay for workers on construction projects for which the state or a school district is the contracting agent and which is financed or supported by the state. The Prevailing Wage Law requires that every contractor and subcontractor shall post a copy of all prevailing wage and fringe benefit rates prescribed in the contract at the construction site. An accurate record showing the name and occupation of and the wages and benefits paid to each construction mechanic must be kept by the employer and available for inspection by the department. Please pay special attention to the overtime requirements. A worker who believes he or she has not been paid the prevailing wage rate on a state project may file a complaint with the Wage Hour Administration, Bureau of Safety and Regulation, Department of Labor and Economic Development, 7150 Harris Drive, P.O. Box 30476, Lansing, Michigan 48909-7976, Phone: (517) 322-1825.

24. Protection of Utility Services: It is a requirement of this Contract, in accordance with Public Act 53 of 1974, as amended, that the Contractor give notice of construction intent to public utilities. "Miss Dig" (telephone number 1-800-482-7171, toll free) shall be notified a minimum of 72 hours (three working days) prior to construction activities. The Contractor shall provide for the protection of all public utility underground and above ground facilities that are to remain. Damage to any such utility services resulting from the Contractor's operations shall be repaired or replaced by the Contractor without additional cost to the State.

GENERAL REQUIREMENTS

1. The state unit will provide the following work:
 - a. **State Salvage:** The state reserves the right to salvage certain items and equipment. Such items will be identified to the bidder at the time of his/her inspection of the proposed work. Salvaged items will be removed by state prior to commencement of work under the contract.

b. **Moving Furnishings and Equipment:** The contractor shall give timely notice to state unit of all furnishings, window covering and movable equipment that will interfere with his/her work or which the contractor cannot protect with coverings of paper, plastic, drop cloths or clean tarpaulin. The contractor shall furnish, install, maintain and remove all coverings used to protect furnishings, window coverings and movable equipment.

2. **Project Coordination:**

a. Prior to beginning work the contractor shall **meet** with the state unit and arrange the schedule for the project. Once the project is started, it shall be carried to completion without delay.

b. Any building utility service interruptions or outages required by the contractor in performing the work shall be prearranged with the staff of the state unit and shall occur only during those scheduled times.

3. **Cutting and Patching:**

a. The contractor shall do all cutting, fitting or patching of the work that may be required to make its several parts fit together properly or make new work join with the existing structure. The contractor shall take proper precautions so as not to endanger any existing work. The contractor shall not cut or alter existing structural members or foundations.

b. Holes or openings cut in exterior walls and roofs for installation of materials or equipment shall be waterproofed by appropriate, approved materials and methods.

c. All adjacent finished surfaces that are damaged by the new work shall be patched with materials matching existing surfaces. Joints between patched and existing material shall be straight smooth and flush. All patching material shall be applied by workers skilled in its installation.

4. **Mechanical Alteration Procedures:**

a. All work which will necessitate shutting down of existing mechanical equipment or systems shall be made at such time as will not interfere with the normal use of the existing building.

b. Any cutting of floors, walls, roofs or ceilings required to run new work or remove old shall be performed by the contractor requiring same and all patching on his/her work shall be done by the contractor to full satisfaction of the state unit.

c. All piping in existing building shall be run concealed as far as practical in pipe spaces, ceiling spaces, tunnels, crawl spaces or similar areas, except as approved or directed by the state unit.

5. **Project Meetings:**

a. **Preconstruction Conferences:** The state unit may schedule a preconstruction conference to be attended by the, state unit staff, and the contractors. Once the project has been started, the contractor shall carry it to completion without delay.

b. **Meetings:** The state unit may schedule meetings to be held on the job site whenever needed to supply information necessary to prevent job interruptions, to observe the work or to inspect completed work. The contractor shall be represented at each meeting by persons with full authority to act for the contractor in regard to all portions of the work.

6. **Shop Drawings and Project Data:**

a. Before the delivery of any material or equipment to the job site, the contractor shall submit to the state unit a complete list of material suppliers, subcontractors, and brand names of all materials proposed to be used in the project.

b. The contractor shall check and verify all field measurements and shall submit to the state unit a minimum of five copies of shop drawings, product data catalogs, material schedules, safety data sheets, etc. Following examination by the state unit, three copies will be retained for the state's use and the remaining copies will be returned to the contractor with indication of approval or with notations for correction.

7. **Temporary Utilities:**

a. The contractor shall furnish and install all temporary facilities and controls required by the work, shall remove them from state property upon completion of the work, and the grounds and existing facilities shall be restored to their original condition.

b. Water and electricity will be available in the area where work will be performed. The contractor will not be charged for reasonable use of these services for construction operation. The contractor shall pay costs for installation and removal of any temporary connections including necessary safety devices and controls. Use of services shall not disrupt or interfere with operations of the state unit.

c. **Temporary Sanitary Facilities:** The state unit will designate a permanent toilet facility on the premises for use by a personnel employed in the work. The contractor shall repair any damage to the toilet facility caused by his/her employees.

d. Heating units if required shall be of type approved by the state unit. Equipment and surroundings shall be kept clean and in safe condition All direct fired space heaters, if used, shall be vented directly to the outside. The contractor shall pay for all fuel and/or electricity used for temporary heat.

8. **Construction Aids:**

a. The contractor shall furnish, install, and maintain as long as necessary and remove when no longer required, safe and adequate scaffolding, ladders, staging, platforms, chutes, railings, hoisting equipment, etc., as required for proper execution of the work. All construction aids shall conform to federal, state, and local codes or laws for protection of workers and the public.

b. **Debris Chute:** The contractor shall use a chute to lower debris resulting from his/her work. The chute shall be the enclosed type with its discharge directly into the truck.

9. **Barriers and Enclosures:** The contractor shall furnish, install and maintain as long as necessary and remove when

no longer required adequate barriers, warning signs or lights at all dangerous points throughout the work for protection of property, workers and the public. The contractor shall hold the State of Michigan harmless from damage or claims arising out of any injury or damage that may be sustained by any person or persons as a result of the work under the contract.

10. **Contract Close Out:**

a. **Substantial Completion:** The contractor shall notify the state unit when the work will be substantially complete and ready for inspection and preparation of a list of minor replacement, correction and adjustment items. The contractor shall be represented on the job site at the time this inspection is made and thereafter shall complete all work by the date set for final acceptance by the owner.

b. **Cleaning:**

(1) **Regular Cleaning:** All scrap or removed material, debris or rubbish shall be regularly removed from the project at the end of each working day. No discarded material shall

be deposited on the grounds of the state unit without the express permission of the physical plant engineer or administrative officer. No salvage or surplus material may be sold on the premises of the state unit.

(2) **Final Cleaning:** Just prior to final acceptance by the state unit, the contractor shall clean all of the work and existing surfaces, building elements and contents that were soiled by his/her operations and make repairs for any damage or blemish that was caused by the work.

11. **Project Record Documents:** The contractor shall furnish to state unit with the request for final payment reproducible drawings or plans, and any sections or details necessary, clearly showing the actual path and location of material and equipment installed in this project.

12. **Warranties:** The contractor shall forward to the state unit Form PR-1628E covering statements concerning guarantee and indebtedness, and any other special warranties or requirements of the contract documents.

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

SECTION 03300

CAST-IN-PLACE CONCRETE

PART ONE - GENERAL

1.01 DESCRIPTION

- A. Work included: The work under this Section consists of, but is not necessarily limited to, furnishing and placing concrete as shown on the drawings. Also included are required forms, reinforcing, finishing and curing as specified herein.

1.02 QUALITY ASSURANCE

A. Qualifications of workers and materials:

1. Provide at least one person, who shall be present at all times, during execution of this portion of the work. They shall be thoroughly familiar with the type of materials being installed, the reference standards, and the requirements of this work, and shall direct all work performed under this Section.
2. The concrete batch plant facilities must be certified and meet the requirements of the National Ready Mixed Concrete Association.

B. Testing and Inspection Services:

1. The Contractor will engage a testing and inspection service to evaluate concrete delivered to and placed at the site. Perform materials evaluation and test concrete mixes in accordance with requirements of ACI 301.
2. Perform sampling and testing during concrete placement, in accordance with the following ASTM specifications:
 - a. C-172 - Method of Sampling Fresh Concrete.
 - b. C-143 - Standard Method of Test for Slump of Portland Cement Concrete.
 - c. C-173 - Air content, as determined by the Volumetric Method.
 - d. C-39 - Method of Test for Compressive Strength of Molded Concrete Cylinders. Note: for each class of concrete, provide one set for each 50 cu. yds. or fraction thereof. Set shall include:
 - 1) one specimen tested at 7 days
 - 2) two specimens tested at 28 days
 - 3) one retained for later testing if required
 - 4) Test results will be reported in writing to the Architect/ Engineer, Contractor, and concrete producer, on the same day, tests are made.

C. Mix Proportion and Design:

1. Prepare design mixes for each type and strength by either laboratory trial mix or field test data bases as follows:
 - A. Proportion normal-weight concrete according to ACI 221.1 and ACI 301.
2. Submit a written report to the Architect/Engineer for each proposed concrete mix at least 15 days prior to start of work. Do not begin concrete production until mixes have been reviewed and are acceptable to the Architect/Engineer.
3. Mix designs may be adjusted when material characteristics, job conditions, weather, test results or other circumstances warrant. Do not use revised concrete mixes until submitted to and accepted by the Architect/Engineer.
4. Use air-entraining admixture in all concrete exposed to freezing and thawing. Air-entrainment shall conform to MDOT (2003 Ed.) Standard Specifications, Section 903.03, and shall be measured at 4-6% by volume.

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

5. Minimum concrete compressive strength at 28 days shall meet the following schedule:
 - a. Footings, piers, columns, structural slabs: 3,000 psi.
 - b. Slabs on grade: 4,000 psi.
 - c. Exterior walks, curbs, retaining walls: 3,500 psi.

PART TWO - PRODUCTS

2.01 MATERIAL

- A. Formwork:
 1. General:
 - a. Forms shall be of sound and tight materials.
 - b. Forms for all exposed parts of concrete shall be made of plywood or metal, or of structural backing with plywood or metal liners to produce a smooth surface on the concrete.
 - c. Forms for unexposed parts may be of sound wood boarding, salvaged plywood, or of other approved material herein specified.
 2. Sealers:
 - a. All form sealers shall be first quality of their respective kinds and subject to the approval of the Architect/Engineer.
- B. Concrete Reinforcement:
 1. All concrete reinforcement materials shall be new, free from rust, and comply with the following reference standards:
 - a. Where steel bars are shown, they shall comply with specifications for "Deformed and Plain Billet-Steel Bars for Concrete Reinforcement", ASTM A 615, A 616, or A 617, Grade 60.
 - b. Where welded wire fabric (W.W.F.) is shown or referred to, it shall comply with ASTM A 185.
- C. Cement:
 1. Cement shall be Portland cement, type 1A, conforming to ASTM C-150.
- D. Aggregate:
 1. General:
 - a. All aggregate shall meet the requirements of ASTM C-33 and MDOT (1990 Ed.) Standard Specifications, Section 8.02.
 2. Coarse Aggregate:
 - a. Coarse aggregate shall meet MDOT specifications for Class 6A or 6AA, and be composed of stone or crushed rock of hard durable pieces, well graded, and free from clay or organic substance. Maximum size not to exceed one-fifth of the minimum dimension of the concrete member in which placed and not to exceed three-fourths of clear spacing between reinforcing steel. Maximum size aggregate for floor slabs and sidewalks shall be 3/4 inch.
 3. Fine Aggregate:
 - a. Fine aggregate shall meet MDOT specifications for Class 2NS, and be composed of hard natural sand, free of clay or other material, which will have a deleterious effect on the finished product.
- E. Water:
 1. Water shall be clean and free from injurious amounts of foreign matter.

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

- F. Miscellaneous Concrete Accessories:
1. Expansion Joint Material:
 - a. Fiber-type Federal Specification No. HHF-341F, Type III.
 - b. Vinylex, zip-strip by Form Tech Concrete Forms, Inc. Ph. 248-344-8260.
 2. Joint Sealer:
 - a. Federal Specification SS-S200D, placed above expansion and control joint.
 3. Under Slab Moisture Barrier:
 - a. Acceptable Manufacturers:
 - 1) "Zero Perm" - Alumiseal Corp., Stamford, CT
 - 2) "Moistop" - Fortifiber Corp., Howard City, MI
 - 3) "T-65" - Griffolyn, Reef Industries, Inc., Houston, TX
 4. Concrete curing compound/sealer/hardener:
 - a. Acceptable manufacturers:
 - 1) "Super-Trete 110-VOC" – Cresset Chemical Co., Weston, OH
 - 2) "VOCOMP-25" – W.R. Meadows, Inc., Hampshire, IL
 - 3) "Cure-R" – L&M Construction Chemicals, Inc., Omaha, NE
- G. Anchor Bolts:
1. Steel anchor bolts shall comply with ASTM A307, with heavy hexagonal nuts. See drawings for sizes and locations.

PART THREE - EXECUTION

3.01 INSTALLATION

- A. Formwork:
1. General:
 - a. Construct all required forms to be substantial, sufficiently tight to prevent leakage of mortar, and able to withstand excessive deflection when filled with wet concrete.
 - b. Layout:
 - 1) Form all required cast-in-place concrete to the shapes, sizes, lines, and dimensions indicated on the drawings.
 - 2) Make proper provisions for all openings, offsets, recesses, anchorage, blocking, and other features of the work as indicated on the drawings or required by the various sections of these Specifications.
- B. Embedded Items:
1. Set all required steel frames, angles, grilles, bolts, inserts, and other such items required to be anchored in the concrete before the concrete is placed.
- C. Bracing:
1. Properly brace and tie the forms together so as to maintain position and shape.
- D. Steel Reinforcement:
1. Position, support and secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, and hangers, as required. Where splices are required, lap bars a minimum of 18".

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

E. Placing Concrete:

1. General:

- a. Place concrete in compliance with practices and recommendations of the American Concrete Institute (ACI) and as herein specified.

2. Method:

- a. Convey concrete from mixer to place of final deposit by methods that will prevent separation and loss of materials.
- b. For chuting, pumping, and pneumatically conveying concrete, use only equipment of such size and design as to ensure a practically continuous flow of concrete at the delivery end without loss or separation of materials.
- c. Deposit concrete as nearly as possible in its final position to avoid segregation due to rehandling and flowing.
- d. Place concrete as dry as possible consistent with good workmanship, never exceeding the maximum recommended slump.
- e. Never place concrete in water or allow water to come in contact with concrete until it has hardened sufficiently to not be damaged.

3. Rate of Placement:

- a. Place concrete at such a rate that concrete is at all times plastic and flows readily between bare bars.

4. Compaction:

- a. Thoroughly consolidate all concrete by suitable means during placement, working it around all embedded fixtures and into corners of forms.
- b. During placement, thoroughly compact the concrete by hand tamping and by mechanical vibration.
- c. Vibrating of forms will not be allowed.

F. Joints:

1. Construction Joints:

- a. Construction joints in concrete shall be keyed together and the design reinforcement shall be properly extended through the joints.

2. Movement (Control) Joints:

- a. Movement (control) joints shall be at least 1/4 the depth of the slab (1/5 the depth of the slab in passageway and mechanical room – to avoid in-floor heat tubing). See plans for locations.
- b. Where control joints are called for, they shall be sawn the morning after the concrete has been placed.

G. Adjoining Concrete and Bituminous Surfaces:

1. Where new concrete flatwork adjoins an existing bituminous surface, the Contractor shall make a neat vertical saw cut along the full length of the bituminous material. The saw cut must be made to the full depth of the material.
2. The concrete flatwork shall then be finished so that it is dead flush with the existing bituminous surface.
3. It shall be the responsibility of the Contractor to dispose of the waste material in a manner acceptable to the Architect/Engineer.

H. Leveling and Finishing:

1. General:

- a. Concrete slabs shall be brought to proper lines of level and pitch by screeding and floating in order to remove all humps and hollows to produce true even surfaces.

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

- b. Tamp slabs with suitable equipment to depress large aggregate and then push float as necessary.
 - c. Slabs where concrete finish is exposed shall have a steel trowel finish. Interior or exterior surfaces that permit standing water will not be permitted.
 - d. All exterior concrete flatwork shall be steel troweled and finished with a fine hair broom.
 - e. Handicap ramp shall be finished with a coarse-hair broom or a corrugated bull float.
2. Exterior Finishes:
- a. Surfaces Below Grade: Surfaces below grade or not exposed shall have rough form finish. After forms and ties are removed, tie holes and defects shall be patched, fins exceeding 1/4" in height shall be chipped off or rubbed off. The remainder of wall surface may be left with the texture imparted by the forms.
3. Curing and protecting:
- a. Unless otherwise approved, cure concrete by keeping all exposed surfaces wet for a minimum of three days. Concrete shall be kept from freezing at all times.
 - b. Unless equipment is utilized to protect concrete from freezing, no concrete shall be placed unless the temperature is above 40°F and rising.
 - c. Enclosures and heating equipment to be used for protection of concrete construction during freezing weather shall be erected, tested and approved by the Architect/Engineer before proceeding with construction. Equipment and enclosures shall maintain a temperature of at least 50°F for a period of five days after concrete is placed.
 - d. Calcium chloride used as an accelerator during cold weather shall not exceed 2% by weight.

END OF SECTION

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

PLUMBING

SECTION 15400

PART ONE - GENERAL

1.01 DESCRIPTION

- A. Work included: Provide Rough in waste plumbing where shown on the Drawings, as specified herein, and as needed for a complete and proper installation including, and not necessarily limited to:
 - 1. Drain, waste rough in plumbing with a slope of 1/8-inch per foot.

1.02 QUALITY ASSURANCE

- A. Codes and Regulations:
 - 1. In addition to complying with the specified requirements, comply with pertinent regulations of governmental agencies having jurisdiction.
- B. In the event of conflict between or among specified requirements and pertinent regulations, the more stringent requirement will govern when so directed by the Architect/Engineer.

PART TWO - PRODUCTS

2.01 PIPE SCHEDULE

- A. Drain, waste, and vent system:
 - 1. Below slab or underground:
 - a. Service weight Cast Iron Hub-and-Spigot Soil pipe and fittings.
 - b. Service weight Cast Iron Hubless soil pipe and fittings.
 - c. PVC-DWV, Schedule 40, pipe and fittings.
- B. Building Water System (domestic piping):
 - 1. Below ground (1-inch and smaller),: Polyethylene (PE) water plastic tubing, iron pipe size.

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

- C. Gas Piping:
 - 1. Above Ground: Schedule 40 seamless black steel pipe except provide galvanized where pipe or fittings are exposed to the weather.
 - 2. Gas Service Piping: Gas Utility Company Standard Materials.
- D. PVC-DWV:
 - 1. Schedule 40, pipe and fittings complying with ASTM D-2665 and ASTM D-2729.
 - 2. Solvent cement joints complying with ASTM D-2564.
- E. Polyethylene Underground Water Service Plastic Tubing:
 - 1. Polyethylene (PE) water service plastic pipe, iron pipe size, bearing the NSF seal of approval. Working pressure of 160 psi at 73.4 degrees F. Pipe shall meet ASTM D2239, PE 3408, and SDR 7.
- F. Gas piping:
 - 1. Provide Fee and Mason #212 split ring hangers with supporting rods.
- G. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect/Engineer.

PART THREE - EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 PLUMBING SYSTEM LAYOUT

- A. Lay out the plumbing system in careful coordination with the Drawings, determining proper elevations for all components of this system and using only the minimum number of bends to produce a satisfactorily functioning system.
- B. Follow the general layout shown on the Drawings in all cases except where other work may interfere.

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

3.03 TRENCHING AND BACKFILLING

- A. Perform trenching and backfilling associated with the work of this Section in strict accordance with the provisions of Division Two, Site Work Section of these Specifications.
- B. Cut bottom of Trenches to grade excavated to a depth 4-inches deeper than the final grade line of the pipe. Make trenches 12-inches wider than the greatest dimension of the pipe.
- C. Before laying pipe, prepare bottom of trench to secure grade.
- D. Shoring, when necessary, shall be placed and properly braced by the Contractor. The Contractor shall be responsible for damage resulting from inadequate or omitted shoring. The Contractor shall repair all damage and remove all earth resulting from cave-ins or washings.
- E. Bedding and backfilling:
 - 1. Install pipes on a 4-inch bed of approved tamped bank run sand.
 - 2. Backfill trenches only after pipe lines have been tested, inspected and approved. Remove all trash or foreign materials before backfilling. Backfill with materials approved by the Architect/Engineer. Fill trenches to finished grade and maintain at grade. Materials shall not include frozen or large clods of earth, large stones, or broken concrete.
 - 3. Cover all types of pipe with one-foot of approved sand and gravel or bank-run gravel, deposited in 6-inch layers and carefully tamped or puddled.
 - 4. From one-foot above piping to finished grade, approved excavated materials may be used for backfilling, puddled when necessary and thoroughly compacted in an approved manner.
 - 5. Where piping is under floor slab, walks or other similar surfaces, the backfill material shall be approved sand and gravel or bank run gravel for the full depth of the excavation, compacted in 6-inch layers to a specified AASHTO T-99 density of 90 percent.
- F. Soil and Waste Piping
 - 1. Grade Horizontal Waste Lines at 1/8-inch per foot--Connections between mains and laterals shall be made with wyes and 1/8 bends. Make changes in direction with long radius ells except in stacks where sanitary tees may be used and short radius 1/4 bends may be used in changes from horizontal to vertical.

**TIPPY DAM FIELD OFFICE
NEW OFFICE AND COLD STORAGE BUILDING**

3.04 SLEEVE SEALS

- A. General: Provide sleeve seals for sleeves located in foundation walls below grade, in slab floors on grade of one of the following:
1. Lead and Oakum: Caulk between sleeve and pipe.
 2. Mechanical Sleeve Seals: Modular mechanical type, consisting of interlocking synthetic rubber links shaped to continuously fill annular space between pipe and sleeve, connected with bolts and pressure plates which cause rubber sealing elements to expand when tightened, providing watertight seal and electrical insulation. Subject to compliance with requirements, provide mechanical sleeve seals of the following or equal: Thunderline Corp.

CLEANOUTS

- B. Cleanouts shall be installed where required by code, shown on the plans, and specified here in. They shall be accessibly located and set flush with the finish surface.

END OF SECTION

**TIPPY DAM FIELD OFFICE
NEW STORAGE BUILDING**

- D. Operations and Maintenance Manual:
1. Upon completion of the work of this Section, the contractor shall deliver to the Engineer two copies of an Operation and Maintenance Manual complete with equipment descriptions, operating instructions, repair parts list, and control and wiring diagrams for the Radiant In-Floor Heating System.
 2. Provide a written description detailing the operation of the Radiant In-Floor Heating System, including settings and operation of controls and maintenance requirements for system components.

PART TWO - PRODUCTS

2.01 BOILER PIPING SCHEDULE

- A. Pipe
1. Schedule 40 seamless black steel, conforming to ASTM A53.
 2. Type L, hard copper conforming to ASTM B58.
- B. Joints
1. Screwed or Sweat Joints conforming to ASA B16.3 or ASTM B32.
- C. Fittings
1. 150 pound malleable iron, screwed, ASA B16.3 or wrought copper sweat fittings.

2.02 VALVES

- A. Balance Valve – Bell and Gossett :
- B. Reduced Pressure Zone Backflow Preventer (RPZ) – Watts, Series 009QTS, conforming to ASSE Standard 1013.
- C. Temperature Pressure Relief Valve – ASME relief valve provided as part of Boiler package.
- D. Ball Valve:
1. Class 125 WOG, bronze 2 piece body, bronze ball, bronze stem, with soldered ends.
 2. Class 125 WOG, bronze 2 piece body, bronze ball, bronze stem, with threaded ends.
- E. Drain Valve:
1. Class 125 WOG, bronze body, screwed bonnet, rising stem, composition disc, 3/4" hose outlet connection with vacuum breaker and soldered ends.
 2. Class 125 WOG, bronze body, screwed bonnet, rising stem, composition disc, 3/4" hose outlet connection with vacuum breaker and threaded ends.

**TIPPY DAM FIELD OFFICE
NEW STORAGE BUILDING**

- F. Check Valve:
1. Class 125 WOG, 150 psi, bronze body screwed cap, horizontal swing, bronze disc, UL listed, with soldered ends.
 2. Class 125 WOG, 150 psi, bronze body screwed cap, horizontal swing, bronze disc, UL listed, with threaded ends.

2.03 RADIANT IN-FLOOR TUBING

- A. Tubing shall be cross-linked polyethylene, 5/8-inch inside diameter, rated at 180 degrees Fahrenheit maximum working temperature and 100 psi working pressure in accordance with ASTM standard F876 and F877. The manufacturers name, temperature and pressure ratings, and ASTM and DIN compliance numbers must appear on the tubing.
- B. Tubing shall be cross-linked polyethylene manufactured by the "Engel Method". The tubing shall have a integral barrier to limit the oxygen diffusion (DIN 4726) through the tube to be no greater than .009 g/m³/day at 104 degrees Fahrenheit water temperature. Independent lab test results must be available at the request of owner or owners representative.
- C. The minimum bend radius for cold bending of the tubing shall not be less than eight times the outside diameter. Bends with a radius less than stated shall require the use of a bend support device.
- D. Manifolds shall be cast bronze construction, manufactured of alloys to prevent dezincification. Manifolds shall have integral circuit balancing valves and individual circuit control valves (on/off). Manifolds shall be able to vent air from the system. Manifolds shall be provided with support brackets and tube bend supports. Manifolds shall be isolated from supply and return tubing with valves that are suitable for isolation and balancing.
- E. Tube fittings shall be manufactured of dezincification resistant brass. These fittings must be supplied by the tube manufacturer. The tube fittings shall consist of a barbed insert, a suitable compression ring, and a compression nut.
- F. Tube fittings shall be compatible to the tubing material used. Fittings used with the cross linked polyethylene tube shall not permit excessive oxygen permeation.
- G. Supply and return piping to manifolds shall be Type "L" hard copper.
- H. All floor heating equipment shall be installed per manufacturers instructions and in accordance with all warranty requirements.

2.04 BOILER

- A. Boiler shall be: Triangle Tube Model Prestige 110 Unit shall be a 96% efficiency LP gas fired, fully modulating boiler. Input Modulation MBH rating shall be 30 to 110. The unit shall have the following standard features: stainless steel heat exchanger, stainless steel burner, outdoor temperature sensor, negative pressure gas valve, 30 psi relief valve, Flanged Grundfos 3-speed UPS26-99FC system circulator, Drain valve, pressure gauge, condensate drain assembly, 24 volt terminal strip and NTC temperature sensors.
- B. Provide optional concentric PVC Vent Kit

**TIPPY DAM FIELD OFFICE
NEW STORAGE BUILDING**

2.05 BOILER TRIM AND SPECIALITIES

- A. Air Separator: Sparco Powervent PV125.
- B. Backflow / PRV combination valve: Honeywell FM911.
- C. Extrol Tank: Sparco Model Number TK300-30. Tank shall be a butyl diaphragm-type, pre charged to 12 psi, with a maximum working pressure of 100 psi and a maximum operating temperature of 240 degrees Fahrenheit.
- D. Circulating Pump: Grundfos Model #UPS15-58FC in-line pump, as indicated on the Boiler Piping Detail on Sheet M-1.
- E. Zone Pump: Grundfos Model #UPS15-58FC in-line pump, as indicated on the Boiler Piping Detail on Sheet M-2.

2.06 CONTROLS

- A. High Limit Aqua Stat: Honeywell auto reset / high limit #L4006.
- B. Low Water Cut Off: McDonnell Miller 901.

2.07 BOILER WATER TREATMENT

- A. Boiler water treatment shall be 40 percent Glycol / Water.

2.08 OTHER MATERIALS

- A. The Radiant In-Floor Heating System shall include, but not limited to, all necessary plumbing, valves, specialties and controls required for the operation of the boiler and the heating system. Some of these items not specifically specified include pipe, hangers, fill line, elbows, tees, temperature gauges, thermometers and any necessary items required for a complete satisfactory operating system. Items not specifically specified shall be selected by the contractor and approved by the Field Engineer prior to installation.

PART THREE - EXECUTION

3.01 RADIANT IN FLOOR TUBING

- A. All piping stored on site during construction shall be maintained in a clean condition with open pipe ends protected with plugs or caps.
- B. The tubing shall be installed 12-inches on center unless otherwise indicated on the plans.
- C. Install all tubing in a continuous uncut length with no splices.
- D. Concrete flooring shall not be poured until the manufacturers representative and the project engineer have inspected the work and given approval of the system.
- E. Coordinate the tubing layout and installation with the floor mounted hardware, mechanical equipment, and sanitary waste and vent piping system.
- F. The tubing shall be installed in accordance with the manufacturers recommendations and details and as specified herein.

**TIPPY DAM FIELD OFFICE
NEW STORAGE BUILDING**

- G. The tubing system shall be charged with propylene Glycol or air to a pressure of 60 psig for a period of 24 hours prior to encasement in the concrete. Any loss in pressure shall be corrected or replaced and re-tested.
- H. Temperature control wiring shall be in conduit.
- I. System controls and installation shall be as per manufacturer's recommendations.
- J. At the start up of the system, the contractor shall follow the manufacturer's recommendations for system propylene glycol and temperature balancing and shall deliver to the owner three (3) sets of complete records of these settings.

3.02 BOILER WATER TREATMENT

- A. Install feeder as per manufacturers recommendations.
- B. Provide chemical quantities as recommended by chemical supplier, based on water condition.
- C. Instruct Facility Manager or his representative on the operation and maintenance of the Boiler Water Treatment system.

3.03 TESTING, ADJUSTMENTS AND BALANCING

- A. All tests required under Michigan State Codes shall be accomplished by this contractor.
- B. All parts of each system and associate equipment shall be tested and adjusted to work properly and be left in good operating condition.
- C. All defects disclosed in the work by test or otherwise shall be corrected without additional cost to the Owner.
- D. Tests shall be repeated after corrections have been made until satisfactory results are achieved.
- E. All repairs to piping systems shall be made with new materials. Where it becomes necessary to replace pieces of pipe, such replacements shall be the same length as the defective pieces.
- F. After the testing has been completed and the installation declared satisfactory, provide proper adjustments to leave system in an acceptable good operating condition.

3.04 OPERATING INSTRUCTIONS

- A. The Contractor shall provide two copies of operating instructions, as part of an Operations and Maintenance Manual, described in Part 1.03.C, of this Section.
- B. The Contractor shall provide the Facility Manager or his Representative, with an on site instruction walk thru, for the operation and maintenance of the system and equipment listed in this Section.
- C. As part of the Instructions, the Contractor shall incorporate the identification system with the Instruction and Control Diagrams described heretofore .

END OF SECTION

**TIPPY DAM FIELD OFFICE
NEW STORAGE BUILDING**

SECTION 16050

ELECTRICAL BASIC MATERIAL AND METHODS

PART ONE - GENERAL

1.01 DESCRIPTION

- A. Work included: Provide a complete electrical service where shown on the drawings, as specified herein, and as needed for a complete and proper installation including, but not necessarily limited to:
 - 1. Installation of a 120/240-volt, single phase, service as indicated on the plans and specified herein.
 - 2. Installing branch circuit wiring as indicated on the plans and specified herein.
 - 3. Installation of electrical equipment indicated on the plans and specified herein and in sections specifying related work.
 - 4. Electrical equipment and system testing, adjustments, marking, tagging, cleaning, painting, etc.

- B. Related Work Elsewhere
 - 1. Section 15600 Heating System.

1.02 QUALITY ASSURANCE

- A. Codes, Standards and Regulations:
 - 1. Provide electrical equipment and wiring devices which have been UL listed and labeled
 - 2. Comply with NEMA standards for general and specific purpose electrical equipment .

1.03 SUBMITTALS

- A. Comply with pertinent provisions of Division One.

- B. Shop Drawings
 - 1. Submit shop drawings for approval before purchase on all items listed under the following sections in Part Two - Products:
 - a. 2.04 Wiring Devices
 - b. 2.06 Panelboards

 - 2. If the Contractor provides equipment other than that upon which the design is based, it shall be his responsibility to coordinate its installation with the space available. He also shall pay for any changes caused as a result of this substitution.

**TIPPY DAM FIELD OFFICE
NEW STORAGE BUILDING**

PART TWO - PRODUCTS

2.01 RACEWAYS

A. General:

1. All interior conduit shall be rigid metal conduit, intermediate metal conduit or electric metallic tubing.
- 2.
3. All exterior conduit shall be schedule 40 PVC.

2.02 BOXES

- A. Device Boxes - Galvanized stamped steel with conduit knockouts. Where surface mounted devices are shown, cast metal boxes with a corrosion resistant finish shall be used. Do not use stamped steel boxes for these applications. Where more than one device is shown at a location, single piece multigang boxes shall be used.
- B. Junction and Pull Boxes (Building) - Galvanized steel units with screwed-on covers, sized and located as per current State of Michigan Electrical Code.

2.03 WIRING DEVICES

- A. Shop Area: Ground Fault Receptacles - Hubbell industrial heavy duty specification grade GFCI Receptacle #GF5362, rated 20 amps (NEMA 5-20R), 120 Volts, with built-in Class A, Group 1, ground fault protection. **The receptacles shall be wired for end-of-line type configuration.** Built-in test and reset buttons shall be provided with visible ground trip indication. **Receptacle shall include an all glass circuit board, and solid silver cadmium oxide control contacts with overlap design power contacts.** The receptacles shall be UL listed per UL Standard 498 and 943.
- B. Cover Plates:
1. Wall plates shall be Type A1S1 302 stainless steel.

2.04 WIRE AND CABLE

- A. Provide factory-fabricated wire of sizes, ratings, materials and types indicated here in and on the drawings. All conductors shall be insulated for min. 75 degrees C. Rated for minimum of 600 volts. Wire and copper conductors of the following types are as follows:
1. General Building Interior: Type THHN or THWN, suitable for operations of 600 volts as specified in the National Electric Code, at conductor temperatures not to exceed 90-degrees C. in dry locations. Conductors shall be annealed copper, insulated with high-heat and moisture resistant PVC, jacketed with abrasion, moisture, gasoline and oil resistant nylon.
 2. Service Entrance: Type USE, suitable for operations at 600 volts or less in wet or dry locations. Conductors shall be annealed copper, insulated with high-heat and moisture resistant PVC, jacketed with abrasion, moisture, gasoline and oil resistant nylon.
 3. Grounding Conductors
 - a. In metallic conduit: Insulated green copper conductors (green in color for sizes 12 and 10 and approved green markings for larger sizes).

**TIPPY DAM FIELD OFFICE
NEW STORAGE BUILDING**

- b. Isolated ground: Insulated green copper conductors only.
- B. Wire Connectors: "Sta Kon" as manufactured by Thomas and Betts, or approved equal.

2.05 PANELBOARDS

- A. Panelboards - Square D, Type QO load center with bus bar internal connections. Door, trim, and cabinet shall be galvanized steel with a grey baked enamel finish. Door shall include a cylinder tumbler-type lock. Unit shall be UL rated for service entrance.
 - 1. Breakers - Square D type QO thermal magnetic, molded case circuit breakers, plug on or bolt on as applicable. Breakers shall be 1, 2 or 3-pole as indicated on the plans with an integral crossbar to assure simultaneous opening of all poles in multipole circuit breakers. Breakers shall have a overcenter, trip-free, toggle-type operating mechanism with quick-make, quick-break action and positive handle indication. Handles shall have "ON", "OFF" and "TRIPPED" positions. In addition, Trip indication shall include a visible trip indicator in the window of the breaker case.

2.06 GROUNDING MATERIALS

- A. Ground Rods - 3/4 inch x 10 foot copper-clad steel, UL listed, manufactured by Copperweld, Weaver, or approved equal.
- B. Rod Clamps - J. A. Weaver, U-Bolt clamp, Type UG, Square D, Type GC 110/111, or approved equal.
- C. Water Pipe Clamps - J. A. Weaver, Type J or approved equal.
- D. Reinforcing Bar Connection - Cadweld exothermic grounding connection Type RJ or approved equal.
- E. Ground Cables (Not Grounding Conductors) - Shall be bare, stranded copper of 98 percent conductivity. Grounding electrode conductor shall be Number 6 AWG minimum and Bonding connections No. 6 AWG minimum or sized per current State of Michigan Electrical Code.

PART THREE - EXECUTION

3.01 RACEWAYS AND FITTINGS

- A. Exposed conduit shall be installed in neat symmetrical lines parallel with the center lines of the structure, walls, etc. Provide locknuts and insulated throat bushings at enclosures
- B. Rigid galvanized steel or intermediate metal conduit shall be used in all applications where installed embedded in concrete or masonry construction, exposed in areas of building subject to abuse, and all exterior applications.
- C. Electric metallic tubing shall be used concealed above ceilings or in stud walls, exposed in areas where not subject to physical damage, and in compliance with NEC limitations.
- D. Flexible liquid tight conduit or flexible steel conduit shall be used for final connections to motors and other vibrating equipment or other applications requiring flexibility and as shown on the plans.

**TIPPY DAM FIELD OFFICE
NEW STORAGE BUILDING**

3.02 PULL BOXES

- A. Install where necessary to terminate, tap off, or redirect multiple conduit runs. Locate so that covers are accessible after completion of construction. Support pull boxes independently of conduits entering them.

3.03 WIRE CONNECTORS AND TERMINATING DEVICES

- A. Joints will be permitted only in junction and outlet boxes. All joints shall be firmly bonded together and taped or shall be made with mechanical connectors..

3.04 GROUNDING AND BONDING

- A. Service Grounding - The service neutral conductor shall be grounded by establishing a grounding electrode system as required by current State of Michigan Electrical Code. The grounding electrode connection to the reinforcing bar at the bottom of the building footing shall be made with a "Cadwell" Type RJ thermal fusion connector. Additionally, a 3/4-inch x 10-foot copper-clad ground rod shall be driven and bonded to the grounding electrode conductor. In no case shall an underground metallic cold water piping system serve as the sole service grounding means. Measured resistance of the grounding electrode system to absolute earth shall not exceed 5 ohms. If necessary, additional ground rods shall be driven at 10-foot spacing to obtain a ground resistance of less than 5 ohms.
- B. Equipment Grounding - Motors, receptacles, lighting fixtures, etc. shall be grounded by means of a separate green insulated equipment grounding conductor run in the conduit with the phase conductors. The panelboard shall be provided with a grounding bus for connection of equipment grounding conductors.

3.05 TESTING

- A. All wiring shall be proof-tested for shorts, opens, and ground as a completed system.

END OF SECTION



STATE OF MICHIGAN

JENNIFER M. GRANHOLM
GOVERNOR

DEPARTMENT OF ENERGY, LABOR & ECONOMIC GROWTH
LANSING

STANLEY "SKIP" PRUSS
DIRECTOR

REQUIREMENTS OF THE PREVAILING WAGES ON STATE PROJECTS ACT, PUBLIC ACT 166 OF 1965

The Michigan Department of Labor & Economic Growth determines prevailing rates pursuant to the Prevailing Wages on State Projects Act, Public Act 166 of 1965, as amended. The purpose of establishing prevailing rates is to provide minimum rates of pay that must be paid to workers on construction projects for which the state or a school district is the contracting agent and which is financed or financially supported by the state. By law, prevailing rates are compiled from the rates contained in collectively bargained agreements which cover the locations of the state projects. The official prevailing rates provide an hourly rate which includes wage and fringe benefit totals for designated construction mechanic classifications. The overtime rates also include wage and fringe benefit totals. Please pay special attention to the overtime and premium pay requirements. Prevailing wage is satisfied when wages plus fringe benefits paid to a worker are equal to or greater than the required rate.

State of Michigan responsibilities under the law:

- The department establishes the prevailing rate for each classification of construction mechanic **requested by a contracting agent** prior to contracts being let out for bid on a state project.

Contracting agent responsibilities under the law:

- If a contract is not awarded or construction does not start within 90 days of the date of the issuance of rates, a re-determination of rates must be requested by the contracting agent.
- Rates for classifications needed but not provided on the Prevailing Rate Schedule, **must** be obtained **prior** to contracts being let out for bid on a state project.
- The contracting agent, by written notice to the contractor and the sureties of the contractor known to the contracting agent, may terminate the contractor's right to proceed with that part of the contract, for which less than the prevailing rates have been or will be paid, and may proceed to complete the contract by separate agreement with another contractor or otherwise, and the original contractor and his sureties shall be liable to the contracting agent for any excess costs occasioned thereby.

Contractor responsibilities under the law:

- Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing rates prescribed in a contract.
- Every contractor and subcontractor shall keep certified payrolls, as used in the industry, of each and every construction mechanic, and verification of such certified payroll in writing by either a representative or auditor/certified accountant at the end of such a certified payroll. These records should include the occupation and indicate the hours worked on each project for each classification and the actual wages and benefits paid. This record shall be available for reasonable inspection by the contracting agent or the department.
- Each contractor or subcontractor is separately liable for the payment of the prevailing rate to its employees.
- The prime contractor is responsible for advising all subcontractors of the requirement to pay the prevailing rate prior to commencement of work.
- The prime contractor is secondarily liable for payment of prevailing rates that are not paid by a subcontractor.
- A construction mechanic shall only be paid the apprentice rate if registered with the United States Department of Labor, Bureau of Apprenticeship and Training and the rate is included in the contract.

Enforcement:

A person who has information of an alleged prevailing wage violation on a state project may file a complaint with the Wage & Hour Division. The department will investigate and attempt to resolve the complaint informally. During the course of an investigation, if the requested records and posting certification are not made available in compliance with Section 5 of Act 166, the investigation will be concluded and a referral to the Office of Attorney General for civil action will be made. The Office of Attorney General will pursue costs and fees associated with a lawsuit if filing is necessary to obtain records.

A violation of Act 166 may result in the contractor's name being added to the Prevailing Wage Act Violators List published on the division's website, updated monthly. This list includes the names and addresses of contractors and subcontractors the division has found in violation of Act 166 based on complaints from individuals and third parties. The Prevailing Wage Act Violators List is intended to inform contracting agents of contractors that have violated Act 166 for use in determining who should receive state-funded projects.

DELEG is an equal opportunity employer/program.

Auxiliary aids, services and other reasonable accommodations are available upon request to individuals with disabilities.

WAGE & HOUR DIVISION
P.O. BOX 30476 • LANSING, MICHIGAN 48909-7976
www.michigan.gov/wagehour • (517) 335-0400 • FAX (517) 335-0077



STATE OF MICHIGAN

JENNIFER M. GRANHOLM
GOVERNOR

DEPARTMENT OF LABOR & ECONOMIC GROWTH
LANSING

KEITH W. COOLEY
DIRECTOR

Michigan Department of Energy, Labor & Economic Growth *Wage & Hour Division*
OVERTIME PROVISIONS for MICHIGAN PREVAILING WAGE RATE SCHEDULE

1. Overtime is represented as a nine character code. Each character represents a certain period of time after the first 8 hours Monday thru Friday.

	Monday thru Friday	Saturday	Sunday & Holidays
First 8 Hours		4	8
9th Hour	1	5	
10th Hour	2	6	
Over 10 hours	3	7	

Overtime for Monday thru Friday after 8 hours:

the 1st character is for time worked in the 9th hour (8.1 - 9 hours)

the 2nd character is for time worked in the 10th hour (9.1 - 10 hours)

the 3rd character is for time worked beyond the 10th hour (10.1 and beyond)

Overtime on Saturday:

the 4th character is for time worked in the first 8 hours on Saturday (0 - 8 hours)

the 5th character is for time worked in the 9th hour on Saturday (8.1 - 9 hours)

the 6th character is for time worked in the 10th hour (9.1 - 10 hours)

the 7th character is for time worked beyond the 10th hour (10.01 and beyond)

Overtime on Sundays & Holidays

The 8th character is for time worked on Sunday or on a holiday

Four Ten Hour Days

The last character indicates if an optional 4-day 10-hour per day workweek can be worked without paying overtime after 8 hours worked.

2. Overtime Indicators Used in the Overtime Provision:

H - means TIME AND ONE-HALF due

X - means TIME AND ONE-HALF due after 40 HOURS worked

D - means DOUBLE PAY due

Y - means YES an optional 4-day 10-hour per day workweek can be worked without paying overtime after 8 hours worked

N - means NO an optional 4-day 10-hour per day workweek *can not* be worked without paying overtime after 8 hours worked

3. EXAMPLES:

HHHHHHHDN - This example shows that the 1½ rate must be used for time worked after 8 hours Monday thru Friday (*characters 1 - 3*); for all hours worked on Saturday, 1½ rate is due (*characters 4 - 7*). Work done on Sundays or holidays must be paid double time (*character 8*). The N (*character 9*) indicates that 4 ten-hour days is not an acceptable workweek at regular pay.

XXXHHHHDY - This example shows that the 1½ rate must be used for time worked after 40 hours are worked Monday thru Friday (*characters 1-3*); for hours worked on Saturday, 1½ rate is due (*characters 4 - 7*). Work done on Sundays or holidays must be paid double time (*character 8*). The Y (*character 9*) indicates that 4 ten-hour days is an acceptable alternative workweek.

(REV 01/14/09)

WAGE & HOUR DIVISION

P.O. BOX 30476 • LANSING, MICHIGAN 48909-7976

www.michigan.gov/wagehour • (517) 335-0400 • FAX (517) 335-0077

ENGINEERS - CLASSES OF EQUIPMENT LIST

UNDERGROUND ENGINEERS

CLASS I

Backfiller Tamper, Backhoe, Batch Plant Operator, Clam-Shell, Concrete Paver (2 drums or larger), Conveyor Loader (Euclid type), Crane (crawler, truck type or pile driving), Dozer, Dragline, Elevating Grader, End Loader, Gradall (and similar type machine), Grader, Power Shovel, Roller (asphalt), Scraper (self propelled or tractor drawn), Side Broom Tractor (type D-4 or larger), Slope Paver, Trencher (over 8' digging capacity), Well Drilling Rig, Mechanic, Slip Form Paver, Hydro Excavator.

CLASS II

Boom Truck (power swing type boom), Crusher, Hoist, Pump (1 or more 6" discharge or larger gas or diesel powered by generator of 300 amps or more, inclusive of generator), Side Boom Tractor (smaller than type D-4 or equivalent), Tractor (pneu-tired, other than backhoe or front end loader), Trencher (8' digging capacity and smaller), Vac Truck.

CLASS III

Air Compressors (600 cfm or larger), Air Compressors (2 or more less than 600 cfm), Boom Truck (non-swinging, non-powered type boom), Concrete Breaker (self-propelled or truck mounted, includes compressor), Concrete Paver (1 drum, ½ yard or larger), Elevator (other than passenger), Maintenance Man, Mechanic Helper, Pump (2 or more 4" up to 6" discharge, gas or diesel powered, excluding submersible pump), Pumpcrete Machine (and similar equipment), Wagon Drill Machine, Welding Machine or Generator (2 or more 300 amp or larger, gas or diesel powered).

CLASS IV

Boiler, Concrete Saw (40HP or over), Curing Machine (self-propelled), Farm Tractor (w/attachment), Finishing Machine (concrete), Firemen, Hydraulic Pipe Pushing Machine, Mulching Equipment, Oiler (2 or more up to 4", exclude submersible), Pumps (2 or more up to 4" discharge if used 3 hrs or more a day-gas or diesel powered, excluding submersible pumps), Roller (other than asphalt), Stump Remover, Vibrating Compaction Equipment (6' wide or over), Trencher (service) Sweeper (Wayne type and similar equipment), Water Wagon, Extend-a-Boom Forklift.

HAZARDOUS WASTE ABATEMENT ENGINEERS

CLASS I

Backhoe, Batch Plant Operator, Clamshell, Concrete Breaker when attached to hoe, Concrete Cleaning Decontamination Machine Operator, Concrete Pump, Concrete Paver, Crusher, Dozer, Elevating Grader, Endloader, Farm Tractor (90 h.p. and higher), Gradall, Grader, Heavy Equipment Robotics Operator, Hydro Excavator, Loader, Pug Mill, Pumpcrete Machines, Pump Trucks, Roller, Scraper (self-propelled or tractor drawn), Side Boom Tractor, Slip Form Paver, Slope Paver, Trencher, Ultra High Pressure Waterjet Cutting Tool System Operator, Vactors, Vacuum Blasting Machine Operator, Vertical Lifting Hoist, Vibrating Compaction Equipment (self-propelled), and Well Drilling Rig.

CLASS II

Air Compressor, Concrete Breaker when not attached to hoe, Elevator, End Dumps, Equipment Decontamination Operator, Farm Tractor (less than 90 h.p.), Forklift, Generator, Heater, Mulcher, Pigs (Portable Reagent Storage Tanks), Power Screens, Pumps (water), Stationary Compressed Air Plant, Sweeper, Water Wagon and Welding Machine.

Revised: 05/23/08



Michigan Department of Energy, Labor & Economic Growth

Wage & Hour Division

PO Box 30476

Lansing , MI 48909-7976

517.335.0400

www.michigan.gov/wagehour



STANLEY "SKIP" PRUSS
DIRECTOR

JENNIFER M.
GRANHOLM
GOVERNOR

Informational Sheet: Prevailing Wages on State Projects General Information Regarding Fringe Benefits

Certain fringe benefits **may** be credited toward the payment of the Prevailing Wage Rate:

- If a fringe benefit is paid directly to a construction mechanic
- If a fringe benefit contribution or payment is made on behalf of a construction mechanic
- If a fringe benefit, which may be provided to a construction mechanic, is pursuant to a written contract or policy
- If a fringe benefit is paid into a fund, for a construction mechanic

When a fringe benefit is not paid by an hourly rate, the hourly credit will be calculated based on the annual value of the fringe benefit divided by 2080 hours per year (52 weeks @ 40 hours per week).

The following is an example of the types of fringe benefits allowed and how an hourly credit is calculated:

Vacation	40 hours X \$14.00 per hour = \$560/2080 =	\$.27
Dental insurance	\$31.07 monthly premium X 12 mos. = \$372.84 /2080 =	\$.18
Vision insurance	\$5.38 monthly premium X 12 mos. = \$64.56/2080 =	\$.03
Health insurance	\$230.00 monthly premium X 12 mos. = \$2,760.00/2080 =	\$1.33
Life insurance	\$27.04 monthly premium X 12 mos. = \$324.48/2080 =	\$.16
Tuition	\$500.00 annual cost/2080 =	\$.24
Bonus	4 quarterly bonus/year x \$250 = \$1000.00/2080 =	\$.48
401k Employer Contribution	\$2000.00 total annual contribution/2080 =	\$.96
Total Hourly Credit		\$3.65

Other examples of the types of fringe benefits allowed:

- Sick pay
- Holiday pay
- Accidental Death & Dismemberment insurance premiums

The following are examples of items that **will not** be credited toward the payment of the Prevailing Wage Rate

- Legally required payments, such as:
 - Unemployment Insurance payments
 - Workers' Compensation Insurance payments
 - FICA (Social Security contributions, Medicare contributions)
- Reimbursable expenses, such as:
 - Clothing allowance or reimbursement
 - Uniform allowance or reimbursement
 - Gas allowance or reimbursement
 - Travel time or payment
 - Meals or lodging allowance or reimbursement
 - Per diem allowance or payment
- Other payments to or on behalf of a construction mechanic that are not wages or fringe benefits, such as:
 - Industry advancement funds
 - Financial or material loans

Official Request #: 467
Requestor: DEPT. OF NATURAL RESOURCES
Project Description: INSTALL UTILITIES, PHASE I
Project Number: TIPPY DAM RECREATION OFFICE

Manistee County
Official 2009 Prevailing Wage Rates for State Funded Projects

Issue Date: 3/27/2009
Contract must be awarded by: 6/25/2009

<u>Classification</u>		Last Updated	Straight Hourly	Time and a Half	Double Time	Overtime Provision
Name	Description					
Bricklayer						
Bricklayer	BR9-40	3/6/2009	\$37.43	\$49.89	\$62.35	H H H X X X X D Y
Apprentice Rates:						
	0-749 hours		\$27.46	\$34.93	\$42.41	
	750-1499 hours		\$28.71	\$36.81	\$44.91	
	1500-2249 hours		\$29.95	\$38.67	\$47.39	
	2250-2,999 hours		\$31.20	\$40.55	\$49.89	
	3000-3749 hours		\$32.45	\$42.42	\$52.39	
	3750-4499 hours		\$33.69	\$44.28	\$54.87	
	4500-5249 hours		\$34.94	\$46.15	\$57.37	
	5250-6000 hours		\$36.18	\$48.01	\$59.85	
Caulker, Pointer, Cleaner, Plasterer, Tile Setter						
	BR9-40-BL	9/17/2008	\$37.43	\$49.89	\$62.35	H H H X X X X D Y
Apprentice Rates:						
	0-749 hours		\$28.71	\$36.81	\$44.91	
	750-1499 hours		\$29.95	\$38.67	\$47.39	
	1500-2249 hours		\$31.20	\$40.55	\$49.89	
	2250-2999 hours		\$32.45	\$42.42	\$52.39	
	3000-3749 hours		\$33.69	\$44.28	\$54.87	
	3750-4499 hours		\$34.94	\$46.15	\$57.37	
Carpenter						
Carpenter and Floor Layer	CA202	1/28/2009	\$32.17	\$42.86	\$53.54	H H H H H H D Y
Apprentice Rates:						
	1st year		\$21.42	\$26.76	\$32.10	
	2nd year		\$23.56	\$29.97	\$36.38	
	3rd year		\$26.77	\$34.78	\$42.80	
	4th year		\$28.90	\$37.98	\$47.06	
Cement Finisher						
Cement Finisher	BR9-40-CF	9/17/2008	\$33.69	\$44.52	\$55.34	H H D X X X D D Y
Apprentice Rates:						
	0-749 hours		\$26.11	\$33.14	\$40.18	
	750-1499 hours		\$27.19	\$34.76	\$42.34	
	1500-2249 hours		\$28.28	\$36.40	\$44.52	
	2250-2999 hours		\$29.36	\$38.02	\$46.68	
	3000-3749 hours		\$30.44	\$39.64	\$48.84	
	3750-4499 hours		\$31.52	\$41.26	\$51.00	

Official Request #467
 Requestor: DEPT. OF NATURAL RESOURCES
 Project Description: INSTALL UTILITIES, PHASE I
 Project Number: TIPPY DAM RECREATION OFFICE
 County: Manistee

Official Rate Schedule
Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Cement Mason													
Cement Mason	PL16-13	5/30/2008	\$33.42	\$45.18	\$56.94	H	H	H	H	H	H	D	Y
	Apprentice Rates:												
	1st year		\$25.19	\$32.84	\$40.48								
	2nd year		\$27.54	\$36.36	\$45.18								
	3rd year		\$29.89	\$39.88	\$49.88								
Drywall													
Drywall Finisher	PT-1803-DF	7/5/2007	\$33.45	\$44.58	\$55.70	H	H	H	H	H	H	D	Y
	Apprentice Rates:												
	0 - 900 hours		\$22.32	\$27.88	\$33.44								
	901- 1800 hours		\$25.66	\$32.89	\$40.12								
	1801 - 2700 hours		\$29.00	\$37.90	\$46.80								
	2701 - 3600 hours		\$31.23	\$41.24	\$51.26								
Electrician													
Inside Wireman	EC-498-IW	3/28/2008	\$38.74	\$55.07	\$71.40	H	H	H	H	H	H	D	Y
Double time pay required after 12 hours worked Monday - Friday													
	Apprentice Rates:												
	Period 1		\$16.41	\$22.02	\$27.63								
	Period 2		\$17.79	\$24.10	\$30.39								
	Period 3		\$20.71	\$28.48	\$36.23								
	Period 4		\$22.13	\$30.60	\$39.07								
	Period 5		\$25.31	\$35.37	\$45.43								
	Period 6		\$28.20	\$39.71	\$51.21								
Glazier													
Glazier	GL-826	7/3/2007	\$38.17	\$51.56	\$64.95	H	H	H	H	D	D	D	Y
	Apprentice Rates:												
	1st 6 months		\$27.46	\$35.49	\$43.53								
	2nd 6 months		\$28.80	\$37.51	\$46.21								
	3rd 6 months		\$30.14	\$39.51	\$48.89								
	4th 6 months		\$31.47	\$41.51	\$51.55								
	5th 6 months		\$32.81	\$43.52	\$54.23								
	6th 6 months		\$34.15	\$45.53	\$56.91								
	7th 6 months		\$35.49	\$47.54	\$59.59								
	8th 6 months		\$36.83	\$49.55	\$62.27								
Heat and Frost Insulator													
Spray Insulation	AS25S	3/5/2007	\$20.14	\$29.14		H	H	H	H	H	H	H	N
Heat and Frost Insulator and Asbestos Worker													
Heat and Frost Insulator and Asbestos Worker	AS47	7/2/2008	\$42.75	\$56.74	\$70.72	H	H	H	H	H	H	D	Y
	Apprentice Rates:												
	1st year		\$24.90	\$31.89	\$38.88								
	2nd year		\$28.47	\$36.86	\$45.25								
	3rd year		\$32.04	\$41.83	\$51.62								
	4th year		\$35.61	\$46.80	\$57.99								
	5th year		\$39.18	\$51.77	\$64.35								
Ironworker													
Pre-engineered Metal Work	IR-25-PE-Z3	5/8/2008	\$39.47	\$49.54	\$59.60	X	X	H	X	X	X	D	Y
	Apprentice Rates:												
	1st Level		\$23.47	\$28.51	\$33.55								
	2nd Level		\$25.12	\$30.85	\$36.58								
	3rd Level		\$26.78	\$33.19	\$39.61								
	4th Level		\$28.44	\$35.55	\$42.66								
	5th Level		\$30.10	\$37.90	\$45.70								
	6th Level		\$31.36	\$39.65	\$47.93								
Rigger / Machinery mover	IR-340-RIG	9/29/2008	\$34.33	\$45.46	\$56.58	X	X	X	X	X	X	D	Y

Official Request #467
Requestor: DEPT. OF NATURAL RESOURCES
Project Description: INSTALL UTILITIES, PHASE I

Project Number: TIPPY DAM RECREATION OFFICE
County: Manistee

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Structural, Reinforcing, and Finish work.	IR-340-STR	9/26/2008	\$38.70	\$50.70	\$62.70	X	X	X	X	X	X	X	X	D	Y
Apprentice Rates:															
2nd Year			\$23.25	\$30.45	\$37.65										
3rd Year			\$25.65	\$34.05	\$42.45										
4th Year			\$29.85	\$39.45	\$49.05										
5th Year			\$32.25	\$43.05	\$53.85										
1st Year			\$20.85	\$26.85	\$32.85										
Laborer															
Class A Laborer - all construction on buildings, pumps, well wheels, air, electric or gasoline tools, motor driven buggies, fire watch duty, working on swing scaffolds, heavy construction work, carpenter tender, cement finisher tender, heater tender & flagperson.	L355-2-A	6/4/2008	\$27.48	\$36.49	\$45.49	H	H	H	H	H	H	H	H	D	Y
Apprentice Rates:															
0 - 1,000 work hours			\$22.98	\$29.73	\$36.49										
1,001 - 2,000 work hours			\$23.88	\$31.09	\$38.29										
2,001 - 3,000 work hours			\$24.78	\$32.43	\$40.09										
3,001 - 4,000 work hours			\$26.58	\$35.13	\$43.69										
Class B Laborer - jackhammer operators, crocklayers and caisson worker in buildings.	L355-2-B	6/4/2008	\$27.73	\$36.86	\$45.99	H	H	H	H	H	H	H	H	D	Y
Apprentice Rates:															
0-1,000 work hours			\$23.17	\$30.02	\$36.87										
1,001-2,000 work hours			\$24.08	\$31.39	\$38.69										
2,001-3,000 work hours			\$24.99	\$32.75	\$40.51										
3,001-4,000 work hours			\$26.82	\$35.49	\$44.17										
Class C Laborer - top men on chimneys or towers over thirty feet in height, material mixers, portable mixer operator, plasterer tender, mason tender, and demolition	L355-2-C	6/4/2008	\$28.23	\$37.61	\$46.99	H	H	H	H	H	H	H	H	D	Y
Apprentice Rates:															
0-1,000 work hours			\$23.54	\$30.57	\$37.61										
1,001-2,000 work hours			\$24.48	\$31.99	\$39.49										
2,001-3,000 work hours			\$25.42	\$33.39	\$41.37										
3,001-4,000 work hours			\$27.29	\$36.20	\$45.11										
Class D Laborer - concrete specialist when no cement finishers are available; troweling, finishing, screeding, patching, cutting, curing of cast in place or precast concrete by any and all methods.	L355-2-D	6/4/2008	\$32.04	\$42.40	\$52.75	H	H	H	H	H	H	H	H	D	Y
Apprentice Rates:															
0-1,000 work hours			\$26.86	\$34.63	\$42.39										
1,001-2,000 work hours			\$27.90	\$36.19	\$44.47										
2,001-3,000 work hours			\$28.93	\$37.73	\$46.53										
3,001-4,000 work hours			\$31.00	\$40.83	\$50.67										
Landscape Laborer															
Landscape Specialist includes air, gas, and diesel equipment operator, lawn sprinkler installer on landscaping work where seeding, sodding, planting, cutting, trimming, backfilling, rough grading or maintenance of landscape	LLAN-Z2-A	7/1/2008	\$24.65	\$33.97	\$43.28	X	X	H	X	X	X	X	H	D	Y
Operating Engineer															
Class C- Regular equipment operator, crane, stiff leg derrick, scraper dozer, grader, front end loader, hoist, job mechanic, head grease man, concrete pump truck & hydro	EN-324-BH1C	5/20/2008	\$44.45	\$58.27	\$72.09	H	H	H	H	H	H	H	H	D	Y
Apprentice Rates:															
0 - 999 hours			\$35.81	\$45.48	\$55.16										
1,000 - 1,999 hours			\$37.19	\$47.56	\$57.92										
2,000 - 2,999 hours			\$38.57	\$49.62	\$60.68										
3,000 - 3,999 hours			\$39.95	\$51.70	\$63.44										
4,000 - 4,999 hours			\$41.34	\$53.78	\$66.22										
5,000 - 5,999 hours			\$42.72	\$55.85	\$68.98										

Official Request #467
Requestor: DEPT. OF NATURAL RESOURCES
Project Description: INSTALL UTILITIES, PHASE I
Project Number: TIPPY DAM RECREATION OFFICE
County: Manistee

Official Rate Schedule
Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Class D- Air tugger (single drum), material hoist, boiler operator, sweeping machine, winch truck, Bob Cat & similar equipment, elevators (when operated by an operating engineer), and fork truck over 20' lift.	EN-324-BH1D 5/20/2008	\$39.35	\$50.62	\$61.89	H H H H H H H D Y
Class E- Pump 6" or over, well points, freeze systems, boom truck (non-swinging), end dumps and laser/power screed, concrete wire saw 20 h.p. and over, & brokk concrete breaker.	EN-324-BH1E 5/20/2008	\$38.75	\$49.72	\$60.69	H H H H H H H D Y
Class F- Air compressor, welder, generators, conveyors, pumps under 6", Grease man, and fork truck 20' or less lift.	EN-324-BH1F 5/20/2008	\$36.30	\$46.05	\$55.79	H H H H H H H D Y
Class G- Oiler, fireman and heater operator.	EN-324-BH1G 5/20/2008	\$34.65	\$43.57	\$52.49	H H H H H H H D Y
Class A- Crane w/ main Boom & Jib 220' or longer	EN-OSA 5/20/2008	\$45.20	\$59.40	\$73.59	H H H H H H H D Y
Class A- Crane w/ main Boom & Jib 300' or longer	EN-OSA3 5/20/2008	\$46.70	\$61.65	\$76.59	H H H H H H H D Y
Class A- Crane w/ main Boom & Jib 400' or longer	EN-OSA4 5/20/2008	\$48.20	\$63.90	\$79.59	H H H H H H H D Y
Class B- Crane Operator with main boom and jib 140' or longer, tower cranes, gantry crane, whirley derrick.	EN-OSB 5/20/2008	\$44.95	\$59.02	\$73.09	H H H H H H H D Y
Operating Engineer Steel Work					
Class A- Crane w/ main Boom & Jib 220' or longer	EN-324-SWW1220 5/20/2008	\$45.55	\$59.92	\$74.29	H H H H H H H D Y
Class A- Crane w/ main Boom & Jib 300' or longer	EN-324-SWW1300 5/20/2008	\$47.05	\$62.17	\$77.29	H H H H H H H D Y
Class A- Crane w/ main Boom & Jib 400' or longer	EN-324-SWW1400 5/20/2008	\$48.55	\$64.42	\$80.29	H H H H H H H D Y
Class B- Crane Operator with main boom and jib 140' or longer, tower cranes, gantry crane, whirley derrick.	EN-324-SWW1B 5/20/2008	\$45.30	\$59.55	\$73.79	H H H H H H H D Y
Class C- Regular equipment operator, crane, dozer, grader, loader, hoist, straddle wagon, job mechanic & hydro excavator	EN-324-SWW1C 5/20/2008	\$44.80	\$58.80	\$72.79	H H H H H H H D Y

Apprentice Rates:

1st 6 months	\$36.05	\$45.84	\$55.64
2nd 6 months	\$37.45	\$47.94	\$58.44
3rd 6 months	\$38.85	\$50.04	\$61.24
4th 6 months	\$40.25	\$52.14	\$64.04
5th 6 months	\$41.65	\$54.24	\$66.84
final 6 months	\$43.05	\$56.34	\$69.64

Class D- Air tugger (single drum), material hoist, pump 6" or over, elevators (when operated by an operating engineer) and brokk concrete breaker	EN-324-SWW1D 5/20/2008	\$39.70	\$51.15	\$62.59	H H H H H H H D Y
Class E- Air compressor, welder, generators and	EN-324-SWW1E 5/20/2008	\$38.05	\$48.67	\$59.29	H H H H H H H D Y
Class F- Oiler and Fireman.	EN-324-SWW1F 5/20/2008	\$35.45	\$44.77	\$54.09	H H H H H H H D Y

Official Request #467
Requestor: DEPT. OF NATURAL RESOURCES
Project Description: INSTALL UTILITIES, PHASE I
Project Number: TIPPY DAM RECREATION OFFICE
County: Manistee

Official Rate Schedule
Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Operating Engineer Underground

Class I Equipment EN-324A2-UC1 9/26/2008 \$44.33 \$58.07 \$71.80 H H H H H H H D Y

Apprentice Rates:

0-999 hours \$35.74 \$45.36 \$54.97
 1,000-1,999 hours \$37.12 \$47.43 \$57.73
 2,000-2,999 hours \$38.49 \$49.48 \$60.47
 3,000-3,999 hours \$39.87 \$51.55 \$63.23
 4,000-4,999 hours \$41.23 \$53.59 \$65.95
 5,000-5,999 hours \$42.61 \$55.66 \$68.71

Class II Equipment EN-324A2-UC2 9/26/2008 \$39.44 \$50.73 \$62.02 H H H H H H H D Y

Class III Equipment EN-324A2-UC3 9/26/2008 \$38.94 \$49.98 \$61.02 H H H H H H H D Y

Class IV Equipment EN-324A2-UC4 9/26/2008 \$38.66 \$49.56 \$60.46 H H H H H H H D Y

Painter

Painter PT-1803-P 7/5/2007 \$31.88 \$42.42 \$52.96 H H H H H H H D Y

Apprentice Rates:

1st year \$20.29 \$25.04 \$29.78
 2nd year \$24.50 \$31.35 \$38.20
 3rd year \$27.66 \$36.09 \$44.52

Plumber, Pipefitter, Welder, HVAC & Refrigeration

Plumber, Pipefitter, Welder, HVAC & Refrigeration PL-174-PP 10/8/2007 \$43.83 \$62.33 \$80.82 H H D H H H D D Y

Apprentice Rates:

1st year \$21.17 \$28.34 \$35.50
 2nd year \$26.22 \$35.91 \$45.60
 3rd year \$27.99 \$38.57 \$49.14
 4th year \$31.51 \$43.85 \$56.18
 5th year \$35.04 \$49.15 \$63.24

Roofer

Commercial Roofer RO-149-NL 8/18/2008 \$29.18 \$38.00 \$46.81 X X X X X X X D Y

Straight time is not to exceed ten (10) hours per day or forty (40) hours per week.

Apprentice Rates:

Apprentice 1 \$18.02 \$23.08 \$28.14
 Apprentice 2 \$21.34 \$26.68 \$32.02
 Apprentice 3 \$22.55 \$28.45 \$34.35
 Apprentice 4 \$23.76 \$30.23 \$36.69
 Apprentice 5 \$24.97 \$32.00 \$39.02
 Apprentice 6 \$26.20 \$33.79 \$41.39

Sheet Metal Worker

Sheet Metal Worker SHM-7-3 11/26/2008 \$42.63 \$55.14 \$67.65 H H D H H H D D Y

Apprentice Rates:

1st 6 months \$14.34 \$19.35 \$24.35
 2nd 6 months \$16.66 \$22.29 \$27.92
 3rd 6 months \$18.37 \$24.62 \$30.88
 4th 6 months \$20.68 \$27.56 \$34.44
 5th 6 months \$22.39 \$29.90 \$37.40
 6th 6 months \$24.71 \$32.84 \$40.97
 7th 6 months \$26.41 \$35.16 \$43.92
 8th 6 months \$28.73 \$38.11 \$47.49

Official Request #467
 Requestor: DEPT. OF NATURAL RESOURCES
 Project Description: INSTALL UTILITIES, PHASE I

Project Number: TIPPY DAM RECREATION OFFICE
 County: Manistee

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Truck Driver						
of all trucks of 8 cubic yd capacity or over	TM-RB2	9/17/2008	\$35.84	\$36.44		H H H H H H H H Y
of all trucks of 8 cubic yard capacity or less	TM-RB2A	9/17/2008	\$35.74	\$36.29		H H H H H H H H Y
on euclid type equipment	TM-RB2B	9/17/2008	\$35.99	\$36.66		H H H H H H H H Y

Underground Laborer Open Cut, Class I						
Construction Laborer	LAUC-Z4-1	9/18/2008	\$29.19	\$38.78	\$48.36	H H H H H H H D Y

Apprentice Rates:

0-1,000 work hours	\$24.93	\$32.39	\$39.84
1,001-2,000 work hours	\$25.79	\$33.68	\$41.56
2,001-3,000 work hours	\$26.64	\$34.95	\$43.26
3,001-4,000 work hours	\$28.34	\$37.51	\$46.66

Underground Laborer Open Cut, Class II						
Mortar and material mixer, concrete form man, signal man, well point man, manhole, headwall and catch basin builder, guard rail builders, headwall, seawall, breakwall, dock builder and fence erector.	LAUC-Z4-2	9/18/2008	\$29.32	\$38.97	\$48.62	H H H H H H H D Y

Apprentice Rates:

0-1,000 work hours	\$25.03	\$32.54	\$40.04
1,001-2,000 work hours	\$25.89	\$33.83	\$41.76
2,001-3,000 work hours	\$26.75	\$35.12	\$43.48
3,001-4,000 work hours	\$28.46	\$37.69	\$46.90

Underground Laborer Open Cut, Class III						
Air, gasoline and electric tool operator, vibrator operator, drillers, pump man, tar kettle operator, bracers, rodger, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars, etc.), cement finisher, welder, pipe jacking and boring man, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man.	LAUC-Z4-3	9/18/2008	\$29.43	\$39.14	\$48.84	H H H H H H H D Y

Apprentice Rates:

0-1,000 work hours	\$25.11	\$32.66	\$40.20
1,001-2,000 work hours	\$25.98	\$33.97	\$41.94
2,001-3,000 work hours	\$26.84	\$35.25	\$43.66
3,001-4,000 work hours	\$28.57	\$37.85	\$47.12

Underground Laborer Open Cut, Class IV						
Trench or excavating grade man.	LAUC-Z4-4	9/18/2008	\$29.50	\$39.24	\$48.98	H H H H H H H D Y

Apprentice Rates:

0-1,000 work hours	\$25.17	\$32.75	\$40.32
1,001-2,000 work hours	\$26.03	\$34.04	\$42.04
2,001-3,000 work hours	\$26.90	\$35.35	\$43.78
3,001-4,000 work hours	\$28.63	\$37.94	\$47.24

Underground Laborer Open Cut, Class V						
Pipe Layer	LAUC-Z4-5	9/18/2008	\$29.62	\$39.42	\$49.22	H H H H H H H D Y

Apprentice Rates:

0-1,000 work hours	\$25.26	\$32.89	\$40.50
1,001-2,000 work hours	\$26.13	\$34.19	\$42.24
2,001-3,000 work hours	\$27.00	\$35.49	\$43.98
3,001-4,000 work hours	\$28.75	\$38.12	\$47.48

Official Request #467
 Requestor: DEPT. OF NATURAL RESOURCES
 Project Description: INSTALL UTILITIES, PHASE I

Project Number: TIPPY DAM RECREATION OFFICE
 County: Manistee

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Underground Laborer Open Cut, Class VI

Grouting man, top man assistant, audio visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work & the installation and repair of water service pipe and appurtenances. LAUC-Z4-6 9/18/2008 \$26.84 \$35.25 \$43.66 H H H H H H H D Y

Apprentice Rates:

0-1,000 work hours	\$23.17	\$29.75	\$36.32
1,001-2,000 work hours	\$23.91	\$30.86	\$37.80
2,001-3,000 work hours	\$24.64	\$31.95	\$39.26
3,001-4,000 work hours	\$26.11	\$34.16	\$42.20

Underground Laborer Open Cut, Class VII

Restoration laborer, seeding, sodding, planting, cutting, mulching and topsoil grading and the restoration of property such as replacing mail boxes, wood chips, planter boxes, flagstones etc. LAUC-Z4-7 9/18/2008 \$25.18 \$32.76 \$40.34 H H H H H H H D Y

Apprentice Rates:

0-1,000 work hours	\$21.93	\$27.89	\$33.84
1,001-2,000 work hours	\$22.58	\$28.87	\$35.14
2,001-3,000 work hours	\$23.23	\$29.84	\$36.44
3,001-4,000 work hours	\$24.53	\$31.79	\$39.04



Department of Management and Budget
Office of Facilities

PROFESSIONAL/CONTRACTOR DEMOGRAPHICS,
STATISTICS AND CERTIFICATION

1. Company Name: _____
2. Company Address: _____

3. Principle Place of Business (zip code): _____
4. Organization Type
 Limited Liability Company
 Limited Liability partnership
 Corporation
 Partnership
 Sole Proprietorship
 Other: _____
5. Year of Establishment _____

Woman, Minority, or Veteran Owned Small

**Business Representation
(For Statistical Use Only)**

DEFINITIONS:

'Woman-owned business', means a small business that is at least 51% owned by a woman or women who are US citizens and who control and operate the business

The vendor represents that it IS _____, IS NOT _____ a women-owned small business.

'Minority-owned business', means a small business that is at least 51% owned by a minority or minorities who are US citizens and who control and operate the business

The vendor represents that it IS _____, IS NOT _____ a minority owned small business

'Veteran-owned business', means a small business that is at least 51% owned by a veteran or veterans who are U.S. citizens and who control and operate the business

The vendor represents that it IS _____, IS NOT _____ a veteran owned small business

The contractor represents and warrants that the company meets the above (when checked) and can provide supportive documentation upon request

Certification of a Michigan Based Business

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

DEFINITION: To qualify as a Michigan business, vendor must have during the 12 months immediately preceding this bid deadline, or if the business is newly established, for the period the business has been in existence, it has (check all that apply):

Bidder shall also indicate one of the following:

Bidder qualifies as a Michigan business (provide zip code: _____)

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

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

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

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

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

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

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

Authorized Agent Name (print or type)

Authorized Agent Signature

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



Department of Management and Budget Office of Facilities

Certification Regarding Debarment, Suspension, and Other Responsibility Matters

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

- (a) Has not been convicted of a criminal offense incident to the application for or performance of a contract or subcontract with the State of Michigan or any of its agencies, authorities, boards, commissions, or departments.
- (b) Has not been convicted of a criminal offense which negatively reflects on the vendor's business integrity, including but not limited to, embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, negligent misrepresentation, price-fixing, bid-rigging, or a violation of state or federal anti-trust statutes.
- (c) Has not had a loss or suspension of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.
- (d) Has not been convicted of a criminal offense or other violation of other state or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of DMB indicates that the vendor is unable to perform responsibly or which reflects a lack of integrity that could negatively impact or reflect upon the State of Michigan, including but not limited to, any of the following offenses under or violations of:
 - i. The Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
 - ii. A persistent and knowing violation of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.
 - iii. 1965 PA 166, MCL 408.551 to 408.558 (law relating to prevailing wages on state projects) and a finding that the vendor failed to pay the wages and/or fringe benefits due within the time period required.
 - iv. Repeated or flagrant violations of 1978 PA 390 MCL 408.471 to 408.490 (law relating to payment of wages and fringe benefits).
 - v. A willful or persistent violation of the Michigan Occupational Health and Safety Act, 1974, PA 154, MCL 408.10001 to 408.1094, including: a criminal conviction, repeated willful violations that are final orders, repeated violations that are final orders, and failure to abate notices that are final orders.
 - vi. A violation of federal or state civil rights, equal rights, or non-discrimination laws, rules, or regulations.

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

Typed Name & Title of Authorized Representative

Signature of Authorized Representative

Date

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