MichiganTech

ADVANCED POWER SYSTEMS RESEARCH CENTER (APSRC)

CONSTRUCT DYNO CELLS 3 AND 4

102-15-01

NOVEMBER 13, 2015
# TABLE OF CONTENTS

**Division 0 - Procurement**
- 000101 Cover Page
- 000111 Table of Contents
- 001113 Invitation to Bid
- 004200 Bid Proposal Form
- 005200 Draft Contract

**Division 1 – General Requirements**
- 010000 General Conditions
- 010001 Supplementary General Conditions
- 010002 Payment Procedures
- 010003 AIA Document G702 Sample
- 010004 AIA Document G703 Sample
- 010008 Certificate of Substantial Completion
- 010010 Final Completion Checklist
- 010012 Guaranty
- 010014 Consent of Surety to Final Payment
- 010016 Sworn Statement
- 010018 Full Unconditional Waiver
- 010020 Certificate of Final Completion
- 010022 Change Order
- 011000 Summary of Work
- 013300 Submittals

**Division 3 – 8 General Construction**
- 033000 Cast-in-place Concrete
- 034113 Precast Concrete Hollow Core Planks
- 042000 Unit Masonry
- 081113 Hollow Metal Doors and Frames
- 087100 Door Hardware

**Attachment 1: Prevailing Wages for this Project.**

**Drawings:** Separate Document
INVITATION TO BID

PROJECT: APSRC - Construct Dyno Cells 3 & 4

DUE DATE: Until 2:00 P.M. local time on December 2nd, 2015, the Owner will receive sealed proposals for the work as herein set forth at the offices of:

Attn. Penny Foetisch Facilities Management
100 Facilities Building - Waterfront
1400 Townsend Drive
Michigan Technological University
Houghton, MI 49931

at which time and place all proposals will be publicly opened and read aloud.

DOCUMENTS: Bidding documents consisting of proposal forms, plans, specifications, and other pertinent data can be viewed and downloaded from the Facilities Management web site at the following address: http://www.mtu.edu/facilities/planning/bids/

Please call Project Engineer at 906-487-2305, Jim Rathbun if you have technical questions.

WALK THROUGH: Bidders are invited to a mandatory Pre-Bid Walk-through 2 PM November 19th 2015 in lobby of the APSRC located ½ mile from the Houghton County Airport (CMX) at 23199 Airpark Blvd, Calumet, MI 49913.

PROPOSAL GUARANTEE: All bidders submitting bids in excess of $50,000 must provide a certified check or bank draft payable to Michigan Technological University, or a satisfactory Bid Bond executed by the Bidder and surety company, in an amount equal to but not less than five percent (5%) of the maximum proposal amount.

CONTRACT SECURITY: The successful bidders will be required to furnish a satisfactory performance bond and labor and material payment bond in amounts each of one-hundred percent (100%) of the accepted bid.

EQUAL EMPLOYMENT OPPORTUNITY: All bidders submitting bids in excess of $50,000.00 must be certified by the Department of Civil Rights for compliance with the State of Michigan Equal Employment Opportunity requirements prior to submission of bids. A copy of the bidder's valid certificate of compliance or award ability shall be submitted with the proposal. Failure to enclose the certificate with the proposal will not disqualify the bidder providing a valid certificate is submitted within a time acceptable to the owner.

Michigan Technological University reserves the right to reject any or all bids and to waive any informality or irregularity in any bid received.

Michigan Technological University is an equal opportunity educational institution/equal opportunity employer, which includes providing equal opportunity for protected veterans and individuals with disabilities.
Attn: Penny Foetisch
Facilities Management
Michigan Technological University
1400 Townsend Drive
Houghton, MI  49931-1295

Having carefully read the specifications and drawings dated NOVEMBER 13, 2015 for the APSRC – Construct Dyno Cells 3 and 4, the undersigned agrees to perform the work in accordance with Invitation to Bid No. 102-15-01

The undersigned also agrees to complete all work for this project by February 12, 2016 or sooner

Our bid to furnish and install all materials complete is:

$ ________________________________  (Bid price in numbers and words)

Bidder acknowledges receipt of the following addenda:

Addendum No. __________  Dated: __________
Addendum No. __________  Dated: __________
Addendum No. __________  Dated: __________

Name: ___________________________   Date: _________
(Signature)

Name: ___________________________
(Print)

Title: ___________________________

Firm: ___________________________

Sealed proposals will be received at Facilities Management, Bldg. 44, on the waterfront of Michigan Technological University, Houghton, Michigan until 2:00 P.M. on December 2, 2015.

(Return one copy to Facilities Management. Retain one copy for your files.)
005200 Agreement between Contractor and Owner for Construction (DRAFT)

Owner: Michigan Tech University, 1400 Townsend Dr., Houghton, MI

Project: Construct Dyno Cells 3 & 4 – APSRC
Project #: Owner: 105-15-01
Contract for: Construct Dyno Cells 3 & 4 including all saw cuts, pit foundations, Bond beam foundation, Masonry wall, precast planks, doors and frames

Contractor: TBD
Contract Start Date: TBD
Contract Completion Date: February 12, 2016 or Date of Final Payment

This Agreement, is authorized and made to be effective as of this day of __________ between Michigan Technological University, a Michigan constitutional corporation located in Houghton, Michigan, (the “University”) and ________________, (the “Contractor”), a corporation located at ________________, for contract services to be provided by the Contractor, to the University for, and in connection with, the following described project located at the University’s campus in Houghton, Michigan. The Contractor and the Owner, agree as follows:

ARTICLE 1 - THE CONTRACT DOCUMENTS:

The Contract Documents consists of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Specifications, Construction Plans/Drawings, etc. as listed in this Agreement and Modifications issued after execution of this Agreement; these form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents other than Modifications, appears in Article 6.

ARTICLE 2 - SCOPE OF THE WORK:

The Contractor shall furnish all of the materials and perform all of the Work shown on Drawings A101 and described in the Specifications for APSRC new Dyno Cells 3 & 4 Project 102-15-01, prepared by Michigan Tech Facilities Management, 1400 Townsend Dr., Houghton, MI, 49931.
ARTICLE 3 - TIME OF COMPLETION:

The Work to be performed under this Contract shall begin_________ or Date of Notice to Proceed, and shall be substantially completed on or before the Completion Date, February 12, 2016 or Date of Final Payment.

ARTICLE 4 - PROGRESS PAYMENTS:

Michigan Tech shall make payments as provided in Articles 1.2.14 of the General Requirements and 012900 Payment Procedures and conditions set forth and agreed upon herein:

Based upon Applications for Payment submitted to Michigan Tech by the Contractor and Certificates for Payment issued by Michigan Tech, Michigan Tech shall make payments on the Total Contract Amount to the Contractor as provided below and elsewhere in the Contract Documents.

The period covered by each Application for Payment shall be one month ending on the 14th of each month.

Each Application for Payment and Conditional Waiver and Release on Progress Payment shall be based upon schedule of values consistent with format of AIA Documents G702, G703. The schedule of values (G703) shall allocate the entire Total Contract Amount among the various portions of the Work and supported by such data to substantiate its accuracy as Michigan Tech may require. This schedule of values, unless objected to by Michigan Tech, shall be used as a basis for reviewing the Contractor's Application for Payment.

Applications for Payment shall indicate the percentage of completion of each portion of Work as of the end of the period covered by the Application for Payment. The amount of each Application for Payment (progress payment) shall be computed by:

1) Multiply the percentage complete of each portion of the work by the share of the Total Contract Amount allocated to that portion of the Work in the schedule of values, less retainage of ten (10%). Pending final determination of cost to Michigan Tech of changes in the Work, changes for amounts not in the dispute may be included per Section 1.2.8 of the General Requirements. The Total Contract Amount must be adjusted to reflect the changes in the Work by Change Order, then payment shall be allocated as to the completed portion of the Work in the adjusted schedule of values, less retainage of ten (10%).

2) The portion of the Total Contract Amount that is materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance
by Michigan Tech, suitably stored off the site at a location agreed upon in writing), may be included in the Application for Payment less retainage ten (10%).

3) The amount of the Application for Payment requested shall not include any previous payments made by Michigan Tech.

4) The amount of the Application for Payment requested shall not include any previous amounts that Michigan Tech has withheld or a nullified Application for Payment.

5) Michigan Tech shall review the Application for Payment and sign it certifying it, thus it will become a Certificate of Payment.

6) Provided an Application for Payment and Conditional Waiver and Release on Progress Payment are received and approved by Michigan Tech, Michigan Tech shall make payment to the Contractor not later than thirty (30) days after receipt of the Application for Payment.

ARTICLE 5 - ACCEPTANCE AND FINAL PAYMENTS:

Final Payment, constituting the entire unpaid balance of the Total Contract Amount, shall be made by Michigan Tech to the Contractor when (1) the Contract has been fully performed by the Contractor except for the Contractor's responsibility to correct nonconforming Work as provided in Subparagraph 1.2.12. of the General Conditions and to satisfy other requirements, if any, which necessarily survive final payment; and (2) a Final Certificate for Payment has been issued by Michigan Tech.

1) The Contractor may request in writing that Michigan Tech issue Substantial Completion. Upon receipt of written notice that the Work is ready for inspection and acceptance, Michigan Tech shall promptly inspect the Work.

2) When the Work has been Substantially Completed and accepted, Michigan Tech shall issue upon request by the contractor, Substantial Completion and a Final Completion Checklist as necessary. Upon completion of the Final Completion Checklist and upon request by the Contractor, Michigan Tech shall complete a Certificate of Completion. Michigan Tech shall make payments up to ninety five percent (95%); less such amounts as determined by Michigan Tech for incomplete Work, unsettled claims, and any Work that is materially delayed through no fault of the Contractor; of the Total Contract Amount of the balance due for that portion of the Work Substantially Completed and accepted.

3) The Contractor may request in writing that Michigan Tech issue a Certificate of Final Completion and Final Payment upon completion of the Final Completion Checklist. Upon receipt of written notice that the Work is ready for final inspection and acceptance, Michigan Tech shall promptly inspect the Work.
4) When Michigan Tech finds the work is sufficiently complete per the Final Completion Checklist and Contract Documents in their entirety, Michigan Tech shall promptly issue the Certificate of Final Completion that states that the Work provided in this Contract is complete, and that the Final Payment is due the Contractor, as noted in the Certificate of Substantial Completion. Final payment shall be due thirty (30) days after the Contract is fully performed.

ARTICLE 6 - THE CONTRACT DOCUMENTS:

The Contract Documents, together with this Agreement, form the Contract, and they are as fully a part of the Contract as attached:

- Specifications for this project dated 11/13/2015 as listed in the Table of Contents
- Drawings for this project dated 11/13/2015 as listed on the Cover Sheet
- Any Addendum issued prior to the bid date.

The Contractor’s signature on this Agreement indicates that the Contractor has read and will comply with each of these documents.
ARTICLE 7 - THE CONTRACT AMOUNT:

The Contract Lump Sum is as noted below.

The amount shown below shall be both in words and in figures. In case of discrepancy, the amount shown in words shall govern.

| Base Bid Lump Sum | $ ______________ |

IN WITNESS, WHEROF, each of the parties has caused this Contract to be executed by its duly authorized representatives on the date first mentioned above.

FOR THE CONTRACTOR

________________________________________ / __________________________
Signature Date

Title

FOR MICHIGAN TECHNOLOGICAL UNIVERSITY

________________________________________ Date
Ellen S. Horsch
Vice President for Administration
010000 - GENERAL REQUIREMENTS

1.1. INSTRUCTION TO BIDDERS

1.1.1. PREPARATION OF PROPOSALS: All proposals shall include supplying all materials, equipment, and labor, and shall be submitted on the attached proposal form. The forms are to be filled out in ink or typewritten, with the bidder's own letterhead and agent's signature in longhand. Each proposal shall be delivered in an opaque sealed envelope marked with the project name, Bid No., and bidders name.

1.1.2. BID FORM: No telephonic, telegraphic or digital facsimile (FAX) bid or telephonic, telegraphic or digital facsimile (FAX) modification of a bid will be considered. No bids received after the time fixed for receiving them will be considered. Late bids will be opened and considered.

1.1.3. BID GUARANTEE: Each proposal for which the base bid exceeds $50,000.00 shall be accompanied by either a certified or cashier's check on an open, solvent bank or a bid bond with an authorized surety company in the amount of 5% of the base bid, payable to Michigan Technological University, as a guarantee of good faith. If the successful bidder fails to furnish satisfactory bonds and insurance as required by the General Conditions within 7 days after notice of award, such guarantee shall be forfeited to the Owner as liquidated damages and the Owner shall be entitled at its sole option to immediately cancel, revoke, withdraw, or rescind its award. The guarantees of the three lowest bidders will be retained until the bond and insurance of the Contractor have been approved by the University. The guarantees of all other bidders will be returned within 10 days after the bid opening.

1.1.4. REJECTION OR WITHDRAWAL: The Owner reserves the right to accept or reject any or all proposals, in whole or in part, and also herein reserves the right to waive any informalities or irregularities in any or all proposals and to make such award as it deems, in its sole discretion, to be in the best interest of the Owner. No bid may be withdrawn within 60 days after opening date without forfeiting bid security.

1.1.5. CONTRACT: Upon acceptance of any proposal by the Owner, a purchase order will be issued incorporating the accepted proposal and upon the Contractor furnishing satisfactory proof of compliance with all bond and insurance requirements will constitute the Contract. The Contract shall not be binding upon the Owner until the Contractor has furnished the Owner's Facilities Management Department satisfactory certification of compliance with the insurance and bond requirements under General Conditions and the Owner may withdraw or cancel its purchase order at any time prior to receipt of all such certifications.

1.1.6. TAXES: The Contractor shall include all applicable Michigan sales and use taxes currently imposed by Legislative enactment and as administered by the Michigan Department of Treasury, all applicable local or state permit, license or inspection fees, and all Federal taxes or fees applicable, and no additional payment over and above the bid amount shall be allowed for the same.

1.2. GENERAL CONDITIONS

1.2.1. DEFINITIONS

1.2.2. CONFLICT AND OMISSIONS: The intent of the Contract Documents is to provide everything necessary for the proper execution of the work. In case of conflict among or ambiguity in the Contract Documents the Contractor shall immediately notify the Director of Engineering Services and the work shall not proceed until a decision has been agreed upon by all parties concerned. Any adjustment or interpretation by the Contractor without such agreement shall be at his own risk and expense. No work stoppage by the Contractor will extend the time for completion.

1.2.3. ROYALTIES, PATENTS, NOTICES, AND FEES: The Contractor shall give all notices and pay all royalties and fees, shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, and shall comply with all laws, ordinances, and codes applicable to any portion of the work.

1.2.4. EXAMINATION OF PREMISES: The Contractor shall become familiar with local and on-site conditions affecting the job and the cost thereof, shall take independent measurements and make an examination and determination of all physical conditions affecting the work, and be responsible for the correctness of same even if they differ from those anticipated or indicated in the Contract. The Contractor shall be held to have made such examinations prior to bid submission and no allowances will be made in his behalf nor will any additional expenses be recoverable by reason of any error, omission, or misunderstanding on the part of the Contractor even if such actual conditions differ from those anticipated or indicated in the Contract. If any part of the Contractor's work depends for proper results upon existing work or the work of another contractor the Contractor shall examine such work and notify the Director of Engineering Services of all defects or conditions that will affect the results. Failure to so notify will constitute acceptance of the conditions and render the Contractor responsible and liable for the results of any such defects or conditions which would have been revealed by complete examination and testing.

1.2.5. MOVING MATERIALS: If at any time it becomes necessary for the operation of the University to move materials temporarily located which are to enter into the final construction the Contractor furnishing the material shall, when so directed and without expense to the Owner, move them to another location.

1.2.6. MATERIALS AND WORKMANSHIP: All materials and workmanship shall be first-class in every respect and, unless otherwise specified, all materials and equipment shall be new and of the latest design. Should any disputes arise as to the quality and fitness of workmanship, equipment, materials or items, the decisions shall rest strictly with the University, and shall be based upon the requirements of the Contract Documents. The Contractor shall, if requested by the University, furnish evidence as to kind and quality of materials, at no additional cost to the University.

1.2.7. EMPLOYEES AND SUPERINTENDENCE: The Contractor shall enforce good order among his employees and
shall not employ on the work any negligent, disorderly, interperate or unfit person, or anyone not skilled in the work assigned. All work shall be performed in a skillful and workmanlike manner. The Contractor, or an authorized representative, shall be at the site at all times, and shall have the plans and specifications available.

1.2.8. EXTRA WORK AND CHANGES IN WORK: The Owner, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work, the Contract sum being adjusted accordingly. All such work shall be executed under the conditions of the original contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change.

In giving instructions, the Owner shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from the Owner and no claim for an addition to the Contract sum shall be valid unless as ordered.

When so directed, the Contractor shall promptly submit his itemized estimate and proposal for such extra work or changes, as well as separate unit prices on work for both additions to and deductions from the Contract.

Adjustments in the Contract sum for any such extra work or change shall be determined by one or more of the following methods:

Method Number 1: By an acceptable estimate and lump sum proposal from the Contractor.

Method Number 2: By unit prices stated in the Contract or subsequently agreed upon.

Method Number 3: By actual cost of all labor and materials and a percentage or fixed fee for all other charges, such as overhead, profit, insurance, taxes and bonds. On any change which involves a net credit to the Owner, no allowance for overhead and profit shall be figured.

If none of the foregoing methods is agreed upon, the Contractor, upon receipt of an order as hereinbefore stated, shall proceed with the work. In such case and also under Method Number 3, the Contractor shall keep and present in such form as the Owner may direct, a correct account of the cost, together with vouchers. In any case, the Owner shall certify to the amount including the specified allowance for overhead and profit, due the Contractor.

The allowable fee for added work by Contractor's own forces shall not exceed 15% of additional cost and his fee on work performed by Subcontractors shall not exceed 7 1/2% of additional cost. Quotations by Subcontractors at all times shall be subject to these same limitations.

1.2.9. OTHER CONTRACTS: The Owner may let other contracts in connection with the work and the Contractor shall properly connect and coordinate all work with the work of such other contractors. The Owner shall not be liable for any damages or increased cost occasioned by the failure of other contractors to execute their work as may be anticipated by these

Contract Documents. No contractor shall commit any act which will interfere with the performance of the work by any other contractor.

1.2.10. INSURANCE: No work connected with this Contract shall be started until the Contractor has submitted evidence, satisfactory to the Owner, depicting insurance coverage in accordance with the following:

1. Worker's Disability Insurance

The Contractor shall procure and shall maintain, during the life of this contract, Worker's Disability Insurance in work on the project under this Contract. In case any such work is sublet, the Contractor shall require the Subcontractor similarly to provide Worker's Disability Insurance for all of the latter's employees engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Disability Insurance. In case any class of employees engaged in hazardous work on the project under this Contract is not protected under the Worker's Disability Statute, the Contractor shall provide and shall cause each Subcontractor to provide Employer's General Liability Insurance for the protection of all such employees not otherwise protected.

2. General Liability Insurance

The Contractor shall carry, from the beginning of this Contract until completion of the same, general liability in the amount of $1,000,000 for each occurrence and $2,000,000 aggregate.

3. Property Insurance

The Contractor shall carry, from the beginning of this Contract until completion of the same, $100,000 for each property accident other than the property covered by this Contract.

4. Builders' Risk Insurance

The Contractor will assume all risk of loss for the first $100,000 on any single occurrence of damage to property of Owner or any third party, including the subject of this contract. This may be effected by purchase of insurance or by self-insurance, and must be primary and non-contributory. The Owner will assume all risk of loss for property damage in excess of $100,000 for any single occurrence.

5. Worker's Compensation/Employer's Liability

The Contractor shall carry, from the beginning of this Contract until completion of the same, Worker's Compensation Employer’s Liability in accordance with Statutory required by the State and $500,000 per accident.

6. Automobile Liability

The Contractor shall carry, from the beginning of this Contract until the completion of the same, $1,000,000 Required Personal Injury Protection benefits.

GENERAL CONDITIONS
010000 - 2
11/13/2015
Partial payments shall not relieve the Contractor from full responsibility for any claim which may result from any cause, including fire or any other casualty, until completion of the Contract and final payment. Any casualties shall not relieve the Contractor from performing the Contract.

Contractor will indemnify and hold harmless the University from and against all claims, judgements, liability and expense of any nature due to bodily injury, personal injury or damage to property arising out of, on account of or in connection with contractors (or any employee, subcontractor or agent of contractor) performance of the work or activity pursuant to the contract.

1.2.11. BONDS: The successful Contractor of a project for which the base bid exceeds $50,000.00 shall furnish in form and with sureties acceptable to the Owner, a performance bond and a labor and material bond, each in the amount of 100% of the Contract sum, as security for the faithful performance of all Work under the Contract and for the timely payment of labor and materials therefor. The cost of the aforesaid bonds shall be paid by the Contractor and included in the Contract Sum. No work connected with the Project shall be started until the Contractor has placed bonds, in proper form, on file with the University.

1.2.12. NONCOMPLIANCE WITH CONTRACT-TERMINATION: The Owner, at its option, may order suspension of the Work in whole or in part for such time as it deems necessary because of the failure of the Contractor to comply with the contractual requirements. The contract completion date shall not be extended on account of any such suspension order by the Owner. In the event the Owner orders an suspension of the work, the Contractor shall not be entitled to any costs or damages resulting from such suspension; the Owner shall not in any manner be liable or responsible for such costs or damages. The rights of the Owner provided in this clause are in addition to any other rights or remedies provided under this Contract or by law.

In addition to all other rights and remedies contained herein, or at law or equity, the Owner may terminate this Contract when any default is not stopped and remedied within a reasonable length of time after notification by the Owner. In the event of such termination the Owner may complete the contracted work and the Contractor and his surety will be liable for any excess cost occasioned by the Owner. In such case the Owner may take possession of and utilize in completing the work such necessary materials and equipment as may be on the Site.

1.2.13. GUARANTEE: The Contractor shall provide a written guarantee warranting all work under this Contract against faulty workmanship and defective materials, and to make good, at his own expense and promptly upon request by the Owner, all defective work and all damage to other work caused by such defective work, for 1 year from the date of signing of the Owner's Certificate of Substantial Completion form. The provisions of this express warranty shall not affect or impair any of the Owner's rights under any other applicable, implied, or expressed warranties.

1.2.14. PAYMENT: Payment for the work will be made in one sum at the completion of the contract except that partial payments aggregating 90% of the value of the completed work may be made at monthly intervals. If the contractor expects to request partial payments he shall submit a schedule of costs and quantities of the various parts of the work aggregating the total contract sum. When applying for partial or full payments, the Contractor shall submit a statement based upon this schedule, itemized and supported as the Director of Facilities Management may require and a Sworn Statement and Conditional Waiver and Release on Progress Payment setting forth the amounts due each subcontractor, supplier, and laborer.

The Contract will not be considered complete until the work has been finally accepted by the Director of Facilities Management and the following have been furnished: (1) the required guarantee, and (2) a sworn statement that all payrolls, material bills, and other indebtedness connected with the work have been paid, including such lien waivers as the M may request.

No presence, inspection, supervision, testing, or monitoring by the Owner or by any agent or representative thereof shall relieve the Contractor of responsibility for compliance with the terms of and performance pursuant to this Contract and the Contract Documents; nor shall any such conduct of the Owner or its agents or representatives constitute or be interpreted as constituting a waiver of any rights whatsoever or serve to stop them from requiring full performance by the Contractor.

1.2.15. NON-DISCRIMINATION CLAUSE: In connection with the performance of work under this Contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, national origin, age, sex, height, weight, or marital status. The Contractor will take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, national origin, age, sex, height, weight, or marital status. Such action shall include, but not be limited to, the following: employment upgrading; demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, age, sex, height, weight, or marital status.

3. The Contractor or his collective bargaining representative will send, to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or worker's representative of the Contractor's commitments under this section.

4. The Contractor will comply with all published rules, regulations, directives, and orders of the Michigan Civil Rights Commission relevant to Article 6, 1976 PA 453, as amended, which may be in effect prior to the taking of bids for any individual State project, also elicit information as to the practices, policies, program, and employment statistics of each Subcontractor as the Contractor himself, and said Contractor will permit access to his books, records, and

GENERAL CONDITIONS

010000 - 3
11/13/2015
6. In the event that the Civil Rights Commission finds, after a hearing held pursuant to its rules, that a contractor has not complied with the contractual obligations under this agreement, the Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which the Board may order the cancellation of the Contract found to have been violated, and/or declare the contractor ineligible for future contracts with the State and its political and civil subdivisions, departments, officers, and including the governing boards of institutions of higher education, until the contractor complies with said order of the Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the contractor is declared ineligible to contract as a contracting party in future contracts. In any case before the Civil Rights Commission in which cancellation of an existing contract is a possibility, the contracting agency shall be notified of such possible remedy and shall be given the option by the Civil Rights Commission to participate in such proceedings.

7. The Contractor will include, or incorporate by reference, the provisions of the foregoing paragraphs "1" thru "6" in every subcontract or purchase order unless exempted by the rules, regulations, and orders of the Michigan Civil Rights Commission and will provide in every subcontract or purchase order that said provisions will be binding upon each subcontractor or seller.

1.2.16 PERMITS, FEES AND NOTICES: The Contractor shall secure and pay for all permits, fees, and licenses required by State or Local governments necessary for the proper execution and completion of the work. The Contractor shall specifically secure Houghton County permits for Electrical, Mechanical and Plumbing work and schedule work inspections as required for approval. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the performance of the work. The University retains full jurisdiction of construction on campus and will make final determination of all variances.

1.2.17 USE OF SERVICES: The Contractor may use the Owner's water and power by contacting Michigan Tech Facilities Management for arrangements.

1.2.18 SCHEDULING: The Contractor shall meet with the Director of Engineering Services as follows: (1) prior to the start of work; (2) to schedule any interruption of University services; and (3) monthly, or as directed, to review the progress of work.

At the time work is commenced on the project, the Contractor verification that all debris removed has been disposed of in a licensed landfill. Any cost incurred by the Owner as a result of the failure of the Contractor to comply with this paragraph will be

shall prepare a progress schedule showing the dates for the commencement and completion of the various stages of construction. This schedule shall be coordinated with the Owner's required use of the facilities and other contractors' construction schedules, and shall be arrived at in consultation with the Director of Engineering Services and approved by all affected parties.

The Contractor shall furnish sufficient forces and construction plant and equipment to insure protection and progress of the work in accordance with the schedule.

Any changes in the work schedule are to be approved in advance by the Director of Engineering Services.

1.2.19 TEMPORARY CONSTRUCTION FACILITIES: All temporary construction facilities shall be neatly constructed and arranged on the Site in an orderly manner.

Suitable weather tight storage sheds, with raised floors, of capacity required to contain all materials which might be damaged by storage in the open shall be provided.

Construction equipment and other facilities such as ladders, ramps, etc., shall be strong, substantial, safe, and suitable for the purpose intended and shall comply with all University, Federal, State, and local requirements so as to maintain adequate and safe temporary access to all existing facilities. Temporary walkways, bridges, etc., shall be built with proper handrails, curbs, etc.

The Contractor will assume all risk of loss for any damage or destruction to the Contractor’s temporary office, equipment, shanties, protective fence, scaffolding, staging, and all other miscellaneous materials and items owned or rented by the Contractor or any subcontractor used in the performance of this contract.

A temporary dust-proof enclosure of the work area, including existing machines and equipment, must be erected and maintained throughout the length of the project where required in the various Divisions herein.

1.2.20 CLEANLINESS OF THE WORK: The work and any public or private property occupied by the Contractor shall be kept in a neat and orderly condition at all times. Waste materials, rubbish, and debris shall be removed daily.

At the completion of the work all the Contractor’s temporary buildings, equipment, tools, surplus or waste materials, and rubbish of every nature shall be removed from all occupied public and private premises and such premises shall be restored, as nearly as practicable, to the original condition. Such restoration shall be subject to the approval of the Director of Engineering Services.

Debris removed from the site must be disposed of in a licensed landfill as required by the Solid Waste Management Act, 1978 PA 614, as amended, being MCLA 299.402; MSA 13.29(1) and the administrative rules applying to the Act contained in the Michigan Administrative Code R 299.4101. The Contractor shall provide the Director of Engineering Services with written, dated a charge against the Contractor.

All exposed surfaces of the work shall be left clean and free from all mud, grease, stains, or other extraneous materials.

GENERAL CONDITIONS

010000 - 4

11/13/2015
The streets and service roads occupied or used by the Contractor shall be continuously kept clean of waste materials and refuse resulting from the work operations. Should the Contractor be negligent in the duties of maintaining proper cleanliness, the Owner will take steps to cause the required cleaning to be done and will deduct the cost thereof from any monies due the Contractor.

The elevators, if used, shall not be overloaded and suitable protection for the walls, floor, and ceiling shall be provided during use. Any damage to the elevators must be repaired to the Facilities Management Manager of Planning, Engineering, and Construction satisfaction.

1.2.21. FIRE PROTECTION DURING CONSTRUCTION: The Contractor shall have on the Site at all times fire protection equipment as required by applicable codes and ordinances and requirements of the Owner's insurance carriers. Prior to start of work, the Contractor shall be knowledgeable and proficient in Fire Safety and in the Owner's Hot Work policies, procedures and requirements. The Contractor shall faithfully follow the Owner's Hot Work Policy, which regulates any temporary operation involving open flames or producing heat and/or sparks. The Contractor shall designate a Fire Safety Supervisor and Fire Watch for each Hot Work operation. The Fire Safety Supervisor shall not permit a hot work operation to proceed unless and until the provisions and required precautions checklist of the Owner's Hot Work permit are adequately addressed. The Fire Watch shall monitor the Hot Work area during and after the hot work operation to take measures to prevent fires and to respond to fires if they start.

During all construction operations in occupied building space, the Contractor shall construct and maintain a one-hour fire resistance separation between the part of the building under construction and the occupied part of the building, per the Life Safety Code NFPA 101, Section 1-3.11, 1997 Edition.

1.2.22. PARKING AND USE OF ROADS: Immediately after the award of the Contract, the Contractor shall consult with the Director of Engineering Services to determine authorized parking and access to the Site, routing of all construction vehicles, and re-routing of other traffic during construction, and shall organize the work in relation thereto.

At the beginning of the field work, the Contractor shall post signs limiting construction parking, if available, to the construction area. Parking for worker's cars is not guaranteed and is the Contractor's responsibility.

During construction, when use of roads or sidewalks is restricted by construction work, the Contractor shall erect temporary barricades, post notices and warning lights, and when required during working hours, direct traffic to prevent congestion. The Contractor shall maintain such as long as temporary work requires and then remove from the public areas.

1.2.23. SAFETY PRECAUTIONS: During the progress of the work, the Contractor shall maintain adequate facilities for the protection and safety of all persons and property. All local, state, and federal laws, ordinances, rules, and regulations pertaining to the kind, use, and loading of all apparatus and equipment shall be complied with. Work shall be done to conformance with "General Safety Rules and Regulations for the Construction Industry" published by the Department of Labor, Construction and Industry Standards Commission, Lansing, Michigan 48926.

The contractor will immediately report all accidents involving persons and property to the University Public Safety Dept. A copy of the accident report must be filed with the Public Safety Dept.

The contractor shall conduct safety meetings during the progress of work. A copy of the minutes of these meetings must be submitted to the University. Contractor shall acknowledge Owner's Safety Requirements.

1.2.24. SUBSTITUTIONS:

1. The materials, products, and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution.

2. No substitution directly related to an "or equal" clause or similar language in the contract documents will be considered unless written request for approval has been submitted by the Bidder and has been received by the University at least ten days prior to the date for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance, and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment, or work that incorporation of the substitute would require shall be included. A burden of proof of the merit of the proposed substitute is upon the proposer. The University's decision of approval or disapproval of a proposed substitution shall be final.

3. If the University approves any proposed substitution, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

After receipt of bids, the University will consider a request for substitution only for the following reasons:

1. Products listed are no longer available.

2. Where the specified product or method cannot be provided within the Contract Time. However, the request will not be considered if the product or method cannot be provided as a result of the Contractor's failure to pursue the work promptly or to coordinate the various activities properly.

3. Where the specified product or method cannot receive necessary approval by a governing authority and the requested substitution can be approved.

4. Where a substantial advantage is offered to the University, in terms of cost, time, energy conservation, or other consideration of merit, after deducting offsetting responsibilities the University may be required to bear. These additional responsibilities may include such considerations as additional compensation to the Architect for redesign and evaluation services, the increased cost of other work by the University or separate contractors, and a manner which is compatible with other materials of the work, and where the contractor certifies that the substitution will overcome the incompatibility.

5. When the specified product or method cannot be provided in similar considerations.

6. When the specified product or method cannot be properly
coordinated with other materials in the work, and where the Contractor certifies that the proposed substitution can be properly coordinated.

7. When the specified product or method cannot receive a warranty as required by the Contract Documents and where the Contractor certifies that the proposed substitution receive the required warranty.

1.2.25. SUBCONTRACTS: The Contractor shall, as soon as practicable after the execution of the contract, notify the Owner in writing of the names of proposed subcontractors for the work. If the Contractor submits a list of proposed subcontractors prior to the execution of the contract, the Owner must be notified in writing of any change of subcontractor after the contract is executed. The Contractor will not employ any subcontractor that the Owner may, within a reasonable time, object to as incompetent or unfit.

The Contractor agrees to be fully responsible to the Owner for the acts and omissions of his subcontractors and of persons either directly or indirectly employed by them, as he is for persons directly employed by him.

Nothing contained in the contract documents shall create any contractual relationship between any subcontractor and the Owner.

Should material or workmanship, or parties furnishing same prove objectionable under the provisions of the contract, or should violations of the contract exist at the building or elsewhere, and continue after the contractor has received from the Owner a reasonable warning, then, upon request of the Owner, such objectionable parties shall be dismissed, removed, and excluded from the building or work. Such work shall be remedied and continued by others satisfactory to the Owner.

1.2.26. RELATIONS OF CONTRACTOR AND SUBCONTRACTOR: The Contractor agrees to bind every subcontractor and every subcontractor agrees to be bound by the terms of the Contract Documents as applicable to his work, unless specifically noted to the contrary in a subcontract approved by the Owner.

1.2.27. UNIVERSITY RULES AND REGULATIONS: The Contractor shall comply with all laws, ordinances, rules, regulations, and orders of the Owner, and be responsible for and shall direct his employees to conduct themselves so as not to interfere with or disrupt the University educational activities.

The Contractor, Subcontractors, and their employees and suppliers shall not use or interfere with the Owner’s existing accesses, drives, walks, and roads except as specifically indicated or by prior arrangement with the Owner.

The Contractor shall confine his activities, equipment, and personnel to the area within the construction limits, except for minor operations as noted and by prior arrangement with the permission of the Owner. Existing areas disturbed outside the scope of the work shall be restored to their original state.

1.2.28. PREVAILING WAGE: Rates of wages and fringe benefits to be paid to each class of mechanics employed by the contractor and all subcontractors, shall be not less than the wage and fringe benefit rates prevailing in the locality in which the work is to be performed. Every Contractor and Subcontractor shall keep an accurate record showing the name and occupation of, and the actual wages and benefits paid to each construction mechanic employed by him in connection with said contract. This record shall be available for reasonable inspection by the Michigan Department of Labor and the University. 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 wage and fringe benefit rates prescribed in a contract. Every contractor and subcontractor shall keep an accurate certified payroll record showing the name and occupation of and the actual wages and benefits paid to each construction mechanic employed by him in connection with said contract. 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 and Hour Division. The department will investigate and attempt to resolve the complaint informally. Executive Order Number 2003-001 requires that contractors doing business with the State of Michigan be in compliance with state and federal law. A violation of Act 166 of 1965, as amended, the Prevailing Wages on State Projects act or Act 390 of 1978, as amended, the Payment of Wages and Fringe Benefits Act, may result in the debarment of a contractor from being awarded a contract for the provision of goods and services to the State of Michigan for a period of up to eight (8) years.

1.2.29. COMPLIANCE WITH ALL APPLICABLE LAWS, RULES AND REGULATIONS: Notwithstanding any other specific provision herein, contractor (and any subcontractor) shall, at its sole expense, comply with all applicable federal, state, local and other laws, ordinances, rules and regulations in any manner applicable to the performance of the work or contractors’ activities in furtherance of or in connection with the work. Contractor will indemnify and hold harmless the University from and against any and all costs, claims, expenses or orders (including any penalties or fines assessed to University) incurred as a result of contractor’s failure to comply or contractor’s failure to perform any obligation imposed by the contract documents.
SECTION 010001

SUPPLEMENTARY GENERAL CONDITIONS

PART 1  PROTECTION - Contractor shall properly protect all new and existing work from damage. Proper safety provisions shall be made at all times for the protection of all persons and property. Contractor shall contact "Miss Dig" for all underground construction work as required by Michigan Public Act No. 53, 1974 and amended by P.A. 204, 1975.

PART 2  SHOP DRAWINGS

2.01 The Contractor shall submit for approval a complete set of shop drawings for all Windows, door frames, miscellaneous metals and precast panels required for the completion of this project.

2.02 The Contractor shall check and verify all field measurements and submit; with such promptness as to cause no delay in the Contractor's or any other contractor's work; electronic versions, checked and approved, of all shop or setting drawings and schedules where such submissions are stipulated in the various Divisions herein.

2.03 The University will check, with reasonable promptness, such drawings and schedules only for conformance with design concept and compliance with information given in the Contract Documents. The drawings will be stamped by the University as follows:

A. "RETURNED - NOT RELEASED" Transparencies thus marked indicate the drawings do not meet the requirements of the Contract Documents and shall be redrawn or resubmitted.

B. "REVIEWED AS NOTED" Transparencies thus marked are subject to corrections to meet the requirements of the Contract Documents and are released for shop drawing work only. Drawings are released for shop work only, but are to be corrected and resubmitted for final approval. The tracings of these drawings shall be revised and transparencies for same resubmitted.

C. "REVIEWED AND RELEASED" Transparencies thus marked indicate final action by the University and are released subject to meeting the requirements of the Contract Documents.

2.04 The University's approval of such drawings shall not relieve the Contractor from the responsibility for deviations from drawings and specifications unless he has, in accompanying letter, called the University's attention to such deviation at the time of submission and secured written approval. University's approval shall not relieve the Contractor from responsibility for errors in shop drawings and schedules. Contractor is responsible to provide all equipment required for a complete and operational system.

PART 3  DEFINITIONS

A. Furnish: This term means procurement or fabrication of materials, equipment or components; or the performance of services to the extent indicated. Where used with respect to materials, equipment, or components, the term shall include delivery to and
unloading at the Project site but is not intended to include the installation of the item, either temporary or final.

B. Install: This term means the placement of materials, equipment, or components including the receiving, unloading, transporting, storage, and installing; and the performance of such testing and finish work as is compatible with the degree of installation specified.

C. Provide: This term means to Furnish and Install, complete and in place, including all accessories, finishes, tests, and services as required to render the item so specified completely ready for use.

PART 4 AS-BUILT DRAWINGS - Each contractor shall record, legibly and to scale, all field change and deviations from the contract drawings as they occur. This record shall be kept on a set of contract drawings. This set of drawings shall be turned over to the University prior to final payment.

PART 5 OPERATION AND MAINTENANCE MANUALS: Submit available manuals.

PART 6 SCHEDULE OF VALUES: Not required.

PART 7 DOCUMENT CLARIFICATION - All inquiries regarding project specifications and drawings shall be made to Jim Rathbun, the University’s engineer for the project, at 906-487-2305.

PART 8 CONTRACT COMPLETION - Completion of the Contract shall be on or before February 12, 2015.

PART 9 EQUAL EMPLOYMENT OPPORTUNITY – In order to qualify for award, bidders submitting bids in excess of $50,000.00 must be certified by the Department of Civil Rights for compliance with State of Michigan Equal Employment Opportunity requirements. (Contract Compliance Team may be contacted at MDCR-CCT@michigan.gov or by phone at (313)456-3823. A copy of the bidder’s valid certificate of compliance or award ability shall be submitted by the successful bidder prior to award of contract.

PART 10 ASBESTOS - This is not an asbestos abatement project The Contractor shall not start any work in any area that has not been inspected for asbestos by the Owner’s Occupational Safety and Health Services, or a qualified representative of the Owner, and found to be safe. If asbestos is found, safety measures as recommended by the Owner’s Occupational Safety and Health Services, or a qualified representative of the Owner, shall be implemented by the Owner before work is started. The Contractor is prohibited from using or supplying any asbestos containing materials for this project.

PART 11 SUMMARY OF WORK

10.01 Perform all work indicated in the following drawing:

Drawing A101 – Dyno Cells – Dyno Cells Plan
Construct two new dyno cells to the north of the existing cells in Michigan Technological University’s Advanced Power Systems Research Center (APSRC) Building. The work includes, but is not limited to following items:

A. Saw cut and remove concrete floor as required to install new underground drains and sumps and test cell bed plate foundation (bed plate by others). Repair all concrete to match existing.

B. Remove existing electrical platform

C. Install dowels, bond beam footing, Masonry wall, and bond beam top course as shown on A101

D. Provide all lentels, door frames and doors (install with masonry wall) and hardware

E. Set precast plank as shown. Provide openings as required

F. Remove existing north side wooden guard rail, and complete new guard rail and kick plate over Cells 1 to 4. reuse existing 2 x 4 as practical)
PART 1 – GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.

1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
   a. Application for Payment forms with continuation sheets.
   b. Submittal schedule.
   c. Items required to be indicated as separate activities in Contractor's construction schedule.

2. Submit the schedule of values to Michigan Tech at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.

B. Format and Content: Use Project Specifications table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:
   a. Project name and location.
   b. Michigan Tech.
   c. Michigan Tech’s project number.
   d. Contractor's name and address.
   e. Date of submittal.

2. Arrange schedule of values consistent with format of AIA Documents G702, G703.

3. Provide a breakdown of the Total Contract Amount in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Specifications table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Total Contract Amount.

   a. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Total Contract Amount and subcontract amount.

4. Round amounts to nearest whole dollar; total shall equal the Total Contract Amount.

   a. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.

   b. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.

5. Schedule Updating: Update and resubmit the schedule of values before the next
Applications for Payment when Change Orders result in a change in the Total Contract Amount.

1.3 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by Michigan Tech and paid for by Owner.

1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Michigan Tech and the Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.

C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.

D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Michigan Tech will return incomplete applications without action.

1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
2. Include amounts of Change Orders issued before last day of construction period covered by application.

E. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Michigan Tech by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

F. Waivers of Lien: With each Application for Payment, submit waivers of lien as indicated in the Agreement.

G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of values.
3. Contractor's construction schedule (preliminary if not final).
4. Schedule of unit prices.
5. Submittal schedule (preliminary if not final).
6. List of Contractor's staff assignments.
7. List of Contractor's principal consultants.
10. Initial progress report.
12. Certificates of insurance and insurance policies.

H. Application for Payment at Substantial Completion: After Michigan Tech issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Total Contract Amount.

I. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited to, the following:

1. Evidence of completion of Project closeout requirements.
2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Total Contract Amount.
4. Completion of the Final Completion Checklist.
5. Evidence that claims have been settled.
6. Final liquidated damages settlement statement.

END OF SECTION 010002
APPLICATION AND CERTIFICATION FOR PAYMENT

TO OWNER: PROJECT: APPLICATION NO: Distribution to:

FROM CONTRACTOR: VIA ARCHITECT:

PERIOD TO: CONTRACTOR:

PROJECT NOS:

CONTRACT FOR:

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

1. ORIGINAL CONTRACT SUM $ 0.00
2. Net change by Change Orders $ 0.00
3. CONTRACT SUM TO DATE (Line 1 ± 2) $ 0.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) $ 0.00
5. RETAINAGE:
   a. 10% of Completed Work (Column D + E on G703) $ 0.00
   b. % of Stored Material (Column F on G703) $ 0.00
   Total Retainage (Lines 5a + 5b or Column I of G703) $ 0.00
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total) $ 0.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate) $ 0.00
8. CURRENT PAYMENT DUE $ 0.00
9. BALANCE TO finish, including RETAINAGE (Line 3 less 6) $ 0.00

CHANGE ORDER SUMMARY

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<th>ADJUSTMENTS</th>
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By: Date: 

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED . . . . . . . . . $ (Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT: By: Date: 

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

Users may obtain validation of this document by requesting a completed AIA Document D401 - Certification of Document's Authenticity from the Licensee.
AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for line items may apply.

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<th>ITEM NO.</th>
<th>DESCRIPTION OF WORK</th>
<th>SCHEDULED VALUE</th>
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<th>MATERIALS PRESENTLY STORED (NOT IN D OR E)</th>
<th>TOTAL COMPLETED AND STORED TO DATE (D+E+F)</th>
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Users may obtain validation of this document by requesting of the license a completed AIA Document D401 - Certification of Document's Authenticity.
010008 Certificate of Substantial Completion

Project: APSRC Construct Dyno Cells 3 & 4 system  
Owner: Michigan Technological University

Project Number: 102-15-01  
Contract for: Installation of APSRC Construct Dyno Cells 3 & 4 system

Contract Date:  
Substantial Completion Date and Final Completion Checklist:
The Work performed under this Contract as reviewed by the Contractor is substantially complete by the Contractor’s knowledge, information, and belief; the condition of the work is sufficiently complete per Contract Documents and the Owner can occupy for intended use.

The Contractor hereby requests that Michigan Tech issue Substantial Completion notification for the project noted above.

If necessary, any Remaining Items to be completed and/or corrected are included on the 010010 Final Completion Checklist. The list does not alter the responsibility of the Contractor to complete Work per Contract Documents.

By signing below, the Contractor acknowledges that they will complete and/or correct the Remaining Items as documented on the Final Completion Checklist by the date listed as Completion Date on the Agreement, or as modified by subsequent Change Orders.

Contractor Signature ____________________________________________ By ______________________________ Date ______________________________

Owner’s Issuance of agreement for Substantial Agreement:
Michigan Technological University’s representative hereby agrees that the project is substantially completed, and that this date shall be the Date of Commencement of Warranties for all items as established by the Contract Documents, including any listed in the Final Completion Checklist.

Owners Signature ____________________________________________ By ______________________________ Date ______________________________
010010 Final Completion Checklist

Project: APSRC Construct Dyno Cells 3 & 4 System
Owner: Michigan Technological University

Project Number: 102-15-01
Contract for: Construction: Installation of APSRC Construct Dyno Cells 3 & 4 System
Contract Date:

General Items:

1. Provide specific product warranties as follows:
   a. 
2. Provide extra material as follows:
   a. 
3. Provided Guaranty (attached).
4. Provide Consent of Surety for final payment (attached).
5. Provide Sworn Statement (attached).
6. Provide Full Unconditional Waiver of Lien from Contractor and major suppliers (attached).

List of Remaining Items to be completed and/or corrected:

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010012 GUARANTY

The CONTRACTOR, as a condition precedent to final payment, shall execute this Guaranty to the OWNER, guaranteeing for one (1) year from the date of final payment, to keep in good order and repair any defect in all the work completed under the Agreement. This includes work which may develop during said period due to improper materials, defective equipment, improper materials workmanship, or arrangements and in any work which may be affected in correcting any repairs or defects. This Guaranty will be binding upon the CONTRACTOR, his subcontractors and/or material suppliers and will be without any expense to the OWNER.

OWNER: ___________________________ CONTRACTOR: ___________________________

Print ___________________________ Print ___________________________

Signature ___________________________ Signature ___________________________

Date ___________________________ Date ___________________________

MICHIGAN TECHNOLOGICAL UNIVERSITY
APSR C- CONSTRUCT D YNO CELLS 3 AND 4
102-15-01

GUARANTY
010012 -1
11/13/2015
TO OWNER:  
(Name and address)  

ARCHITECT'S PROJECT NO.:  

PROJECT:  
(Name and address)  

CONTRACT FOR:  

CONTRACT DATED:  

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the Surety, on bond of (insert name and address of Contractor) hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety of any of its obligations to (insert name and address of Owner) as set forth in said Surety's bond.

IN WITNESS WHEREOF, the Surety has hereunto set its hand on this date:  
(Insert in writing the day/month/year)  

(Surety)  

Attest:  
(Seal):  

OWNERC ARCHITECT D CONTRACTOR D SURETY D OTHER D
INSTRUCTION SHEET
FOR AIA DOCUMENT G707, CONSENT OF SURETY TO FINAL PAYMENT

A. GENERAL INFORMATION

1. Purpose

This document is intended for use as a companion to AIA Document G706, Contractor's Affidavit of Payment of Debts and Claims, on construction project; whereby the Contractor is required to furnish a bond. By obtaining the Surety's approval of final payment to the Contractor and its agreement that final payment will not relieve the Surety of any of its obligations, the Owner may preserve its rights under the bond.

2. Related Documents

This document may be used with most of the AIA's Owner-Contractor agreements and general conditions, such as A201 and its related family of documents. As mentioned above, this is a companion document to AIA Document G70G.

3. Use of Current Documents

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B. CHANGES FROM THE PREVIOUS EDITION

Changes in the location of various items of information were made, without revising in to the: suhsance of each document.

C. COMPLETING THE G707 FORM

GENERAL: The bond form is the usual source of required information and the names and addresses of the Surety, Owner, Conractor and Project.

ARCHITECT'S PROJECT NO.: This information is typically supplied by the Architect and entered on the form by the Contractor.

CONTRACT FOR: This refers to the scope of the contract, such as "General Construction" or "Mechanical Work".

D. EXECUTION OF THE DOCUMENT

The G707 form requires both the Surety's seal and the signature of the Surety's authorized representative.
STATE OF MICHIGAN

County of ____________________________, being duly sworn, deposes and says:
That ____________________________ is the (contractor) (subcontractor) for an improvement to the following described real property situated in County, Michigan, described as follows: ____________________________

____________________________________
____________________________________

(Insert legal description of property)

That the following is a statement of each subcontractor and supplier and laborer with whom the (contractor) (subcontractor) has (contracted) (subcontracted) for performance under the contract with the owner or lessee thereof, and that the amounts due to the persons as of the date hereof are correctly and fully set forth opposite their names, as follows:

<table>
<thead>
<tr>
<th>Name of subcontractor, supplier, or laborer</th>
<th>Type of improvement furnished</th>
<th>Total contract price</th>
<th>Amount already paid</th>
<th>Amount currently owing</th>
<th>Accrued fringe benefits contributions (if applicable)</th>
<th>Balance to complete</th>
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That the contractor has not procured material from, or subcontracted with, any person other than those set forth on the reverse side and owes no money for the improvement other than the sums set forth on the reverse side.

Deponent further says that he or she makes the foregoing statement as the (contractor) (subcontractor) or as __________________________ of the (contractor) (subcontractor) for the purpose of representing to the owner or lessee of the premises described on the reverse side and his or her agents that the property described on the reverse side is free from claims of construction liens, or the possibility of construction liens, except as specifically set forth on the reverse side.

WARNING: AN OWNER OR LESSEE OF THE PROPERTY DESCRIBED ON THE REVERSE SIDE MAY NOT RELY ON THIS SWORN STATEMENT TO AVOID THE CLAIM OF A SUBCONTRACTOR, SUPPLIER, OR LABORER WHO HAS PROVIDED A NOTICE OF FURNISHING TO THE DESIGNEE OR TO THE OWNER OR LESSEE IF THE DESIGNEE IS NOT NAMED OR HAS DIED.

__________________________________________
Deponent

Subscribed and sworn to before me this_________day of______________________________, 20____

______________________________
Notary Public

______________________________ County, Michigan

My Commission Expires: _________________
010018 FULL UNCONDITIONAL WAIVER

My/our contract with ___________________________ to provide
(other contracting party)
__________________________________________________________ for the improvement of the property described as

APSRC Fire Alarm Replacement #APSRC FIRE AND MASS NOTIFICATION SYSTEM-01 having been fully paid and satisfied, with respect to our rights under the Payment / Lien Bond covering said Project and all of our rights to pursue payment under the Payment/Lien Bond No. issued by <<<<name of prime contractor>>> as principal and <<<<name of payment bond surety>>> as surety, together with any rights, demands, or causes of action we may have against <<<<name of prime contractor>>> or <<<<name of payment bond surety>>, by signing this waiver, all my/our construction lien rights against such property are hereby waived and released.

____________________________________________
(Printed Name of Lien Claimant)

____________________________________________
(Signature of lien claimant)

Signed on: ___________________________ Address: ___________________________

____________________________________________

Telephone: ___________________________

DO NOT SIGN BLANK OR INCOMPLETE FORMS. RETAIN A COPY.

END OF SECTION 010018
**MICHIGAN TECHNOLOGICAL UNIVERSITY**  
**APSRC- CONSTRUCT DYNO CELLS 3 AND 4**  
**102-15-01**

### 010020 Certificate of Final Completion

<table>
<thead>
<tr>
<th>Project:</th>
<th>Owner:</th>
</tr>
</thead>
<tbody>
<tr>
<td>APSRC Construct Dyno Cells 3 &amp; 4 System</td>
<td>Michigan Technological University</td>
</tr>
<tr>
<td></td>
<td>1400 Townsend Drive</td>
</tr>
<tr>
<td></td>
<td>Houghton, MI 49931</td>
</tr>
</tbody>
</table>

| Project Number | 102-15-01 |

| Contract for: Construction | Contractor: |
| Contract Date: | TBD or Date of Notice to Proceed |

<table>
<thead>
<tr>
<th>Substantial Completion Date</th>
<th>Final Completion Checklist Date</th>
</tr>
</thead>
</table>

The Contractor certifies that the Work and all other requirements have been completed in accordance with the Contract for Construction, including, but not limited to:

1. submission and approval of all remaining change order proposals, claims, and Applications for Payment
2. submission of “as-built” plans and specifications, shop drawings, and other record documents
3. completion of all discrepancies: List of Remaining Items noted on the Final Completion Checklist at the time of Substantial Completion:
   - submission of all final closeout deliverables/document
   - submission of Guaranty
   - submission of Consent of Surety for Final Payment
   - submission of Sworn Statement
   - submission of Full Unconditional Waiver of Lien

The Contractor further certifies that:

4. no liens have been attached against the Project
5. no suits are pending by reason of Work on the Contract
6. all Workers' compensation claims are covered by Workers’ Compensation Insurance as required by law
7. all insurance required of the Contractor beyond final payment, if any, is in effect and will not be cancelled or allowed to be expired without notice to the Owner

all public liability claims are adequately covered by insurance and that the Contractor shall save, protect, defend, indemnify, and hold the Owner harmless from and against any and all claims which arise as a direct or indirect result of any transaction, event occurrence, or
omission related to performance of the Work contemplated under said Contract

Upon execution below, this project will be considered complete. This consideration does not relieve the Contractor from its post-construction responsibilities, including correction of discrepancies noted during the first year after Substantial Completion, warranty issues, latent defects, and other requirements of the Contract or State law.

Name of Contractor: Notary Public:

________________________________________________________

Personally appeared before me this day of known (or made known) to me to be

the_____________________________ (title)

of_____________________________ (firm),

who, being by me duly sworn, subscribed to the forgoing affidavit in my presence.

By: ____________________________

Authorized Representative

My Commission Expires:

________________________________________________________

Owner Owner Signature Final Completion Date

End of Section 010020
## 010022 CONTRACT CHANGE ORDER

<table>
<thead>
<tr>
<th>CONTRACTOR:</th>
<th>CHANGE ORDER No.</th>
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<tbody>
<tr>
<td></td>
<td>PROJECT: APSRC Construct Dyno Cells 3 &amp; 4 System</td>
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<tr>
<td></td>
<td>PROJECT No.: 102:15-01</td>
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</table>

<table>
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<tr>
<th>OWNER: Michigan Technological University</th>
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<tr>
<td>1400 Townsend Dr., Houghton, MI, 49931</td>
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<th>DATE OF ISSUE:</th>
<th>EFFECTIVE DATE:</th>
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The Contractor is hereby directed to make the following changes in the Contract Documents.

**Description:**

**Reason for Change Order:**

**Attachments:** *(List documents supporting change and justifying cost and time)*

### CHANGE IN CONTRACT PRICE:

<table>
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<tr>
<th>Original Contract Price: $</th>
<th>Net changes from previous C. O.’s No. to ________</th>
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<th>Contract Price Prior to this Change Order:</th>
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<tr>
<th>Net Increase (decrease) of this Change Order:</th>
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<th>Contract Price with all Approved Change Orders:</th>
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### CHANGE IN CONTRACT TIMES:

<table>
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<tr>
<th>Original Contract Times: <em>(calendar days or dates)</em></th>
<th>Net changes from previous C. O.’s No. to ________ (calendar days)</th>
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<th>Contract Times prior to this Change Order:</th>
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<td><em>(calendar days)</em></td>
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<th>Contract Times with all Approved Change Orders:</th>
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<tr>
<td><em>(calendar days)</em></td>
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**RECOMMENDED:** *(Owner’s Representative)*

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<th>Date:</th>
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**APPROVED:** *(Owner): Michigan Tech University*

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<th>By:</th>
<th>Date:</th>
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**ACCEPTED:** *(Contractor)*

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<th>By:</th>
<th>Date:</th>
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**REVIEWED:** *(Funding Agency)*

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<th>By:</th>
<th>Date:</th>
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CHANGE ORDER

010022 - 1

11/13/2015
PART 1 GENERAL

1.1 PROJECT SUMMARY OF WORK
   A. Project Name: APSRC - Construct Dyno Cells 3 & 4
   B. Owner's Name: Michigan Technological University.

2 The Project consists of constructing Dyno Cells 3 & 4 at Michigan Tech Advanced Power Systems Research Center

2.1 CONTRACT DESCRIPTION
   A. A single prime contract based on a Stipulated Price.

2.2 DESCRIPTION OF WORK
   A. Construct two new dyno cells to the north of the existing cells in Michigan Technological University’s Advanced Power Systems Research Center (APSRC) Building. The work includes, but is not limited to following items:

   B. Saw cut and remove concrete floor as required to install new underground drains and sumps and test cell bed plate foundation (bed plate by others). Repair all concrete to match existing.

   C. Remove existing electrical platform

   D. Install dowels, bond beam footing, Masonry wall, and bond beam top course as shown on A101

   E. Provide all lentels, door frames and doors (install with masonry wall) and hardware

   F. Set precast plank as shown. Provide openings as required

   G. Remove existing north side wooden guard rail, and complete new guard rail and kick plate over Cells 1 to 4. reuse existing 2 x 4 as practical)

1.5 ITEMS TO BE SALVAGED BY CONTRACTOR - None

1.4 WORK BY OWNER
   A. Michigan Tech will install Data cabling with its in-house crew. This work will be coordinated with the contractor.

1.5 OWNER OCCUPANCY
   A. Michigan Tech will occupy the adjacent areas during the entire construction period.
   B. Cooperate with Michigan Tech to minimize conflict and to facilitate Michigan Tech’s operations.
1.6 CONTRACTOR USE OF SITE AND PREMISES

A. Construction Operations: Limited to actual construction area. Work in adjacent areas will be only as necessary for the project, and must be coordinate with Michigan Tech’s project manager.

B. Arrange use of site and premises to:
   1. Limit use of the Corridor outside the work area.
   2. Limit use of the freight elevator on the west side of the building. Consolidate usage to extent possible.
   3. Keep all areas outside of the construction area clean and protect existing finishes in the corridor and elevator. Contractor will be responsible for damages to these areas caused by construction activities.
   4. Parking is limited, and parking permits will be required at the site (there will not be a charge for the permits). Limit the amount of vehicles and trailers to the extent possible, and coordinate with the Michigan Tech Project Manager.

C. Provide access to and from site as required by law and by Michigan Tech:
   1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
   2. Do not obstruct roadways, sidewalks, or other public ways without permit.

D. Tobacco Free site: Smoking, E-cigarettes and chewing tobacco are prohibited. The entire site is tobacco free. See the Michigan Tech website for specific details.

E. Utility Outages and Shutdown:
   1. Limit disruption of utility services to hours the building is unoccupied.
   2. Prevent accidental disruption of utility services to other facilities.

1.7 WORK SEQUENCE

A. Coordinate system tie-ins, service interruptions, communication system tests and signal tests with Michigan Tech Public Safety and Police Services

END OF SECTION 011000
013300 SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY
A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.2 DEFINITIONS
A. Action Submittals: Written and graphic information and physical samples that require Michigan Tech's responsive action.

B. Informational Submittals: Written and graphic information and physical samples that do not require Michigan Tech’s responsive action. Submittals may be rejected for not complying with requirements.

1.3 ACTIONSUBMITTALS
A. Prior to ordering materials and construction, provide an Action Submittal for items specified throughout the contract documents that include the phrase 'as approved by Michigan Tech,' if the exact item as specified cannot be obtained and a similar item must be provided. This is not intended to be a substitution procedure, substitutions must follow requirements of section 012500.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS
A. Electronic copies of digital data files of the specified items can be provided by Michigan Tech for Contractor's use in preparing submittals.

B. Processing Time: Provide submittals within one week after award of contract to insure sufficient lead time for materials in time to meet the construction schedule. Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Michigan Tech's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 7 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Michigan Tech will advise Contractor when a submittal being processed must be delayed for coordination.

2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.

3. Resubmittal Review: Allow 7 days for review of each resubmittal.

C. Electronic Submittals (preferred method of transmittal): Identify and incorporate information in each electronic submittal file as follows:

1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.

2. Name file with submittal number or other unique identifier, including revision identifier.
   a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).

3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Michigan Tech.
containing the following information:

a. Project name.
b. Date.
c. Name of General Contractor.
d. Name of firm or entity that prepared submittal.
e. Names of subcontractor, manufacturer, and supplier.
f. Category and type of submittal.
g. Submittal purpose and description.
h. Specification Section number and title.

1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
i. Specification paragraph number or drawing designation and generic name for each of multiple items.

j. Drawing number and detail references, as appropriate.
k. Location(s) where product is to be installed, as appropriate.
l. Related physical samples submitted directly.
m. Indication of full or partial submittal.
n. Transmittal number, numbered consecutively.
o. Submittal and transmittal distribution record.
p. Other necessary identification.
q. Remarks.
r. Signature of transmitter

D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Michigan Tech.
3. Include the following information for processing and recording action taken:
   a. Project name.
   b. Date.
   c. Name of General Contractor.
   d. Name of firm or entity that prepared submittal.
   e. Names of subcontractor, manufacturer, and supplier.
   f. Category and type of submittal.
   g. Submittal purpose and description.
   h. Specification Section number and title.

   1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
   i. Specification paragraph number or drawing designation and generic name for each of multiple items.
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   n. Transmittal number, numbered consecutively.
   o. Submittal and transmittal distribution record.
   p. Other necessary identification.
   q. Remarks.
   r. Signature of transmitter
4. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Michigan Tech observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

E. Options: Identify options requiring selection by Michigan Tech.

F. Deviations: Identify deviations from the Contract Documents on submittals.

G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
   1. Note date and content of previous submittal.
   2. Note date and content of revision in label or title block and clearly indicate extent of revision.
   3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.

H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Michigan Tech's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements:
   1. Submit electronic submittals via email as PDF electronic files.

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
   1. Mark each copy of each submittal to show which products and options are applicable.
   2. Include the following information, as applicable:
      a. Manufacturer's catalog cuts.
      b. Manufacturer's product specifications.
      c. Standard color charts.
      d. Statement of compliance with specified referenced standards.
      e. Testing by recognized testing agency.
      f. Application of testing agency labels and seals.
      g. Notation of coordination requirements.
      h. Availability and delivery time information.
   3. Submit Product Data before or concurrent with Samples.
   4. Submit Product Data in the following format:
      a. PDF electronic file.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base
Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on Architect's digital data drawing files is otherwise permitted.

1. Preparation: Fully illustrate requirements in the Contract Documents.
2. Include the following information, as applicable:
   a. Identification of products.
   b. Schedules.
   c. Compliance with specified standards.
   d. Notation of coordination requirements.
   e. Notation of dimensions established by field measurement.
   f. Relationship and attachment to adjoining construction clearly indicated.
   g. Seal and signature of professional engineer if specified.

3. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches, but no larger than 30 by 42 inches.
4. Submit Shop Drawings in the following format:
   a. PDF electronic file.
   b. Four opaque (bond) copies of each submittal. Michigan Tech will return two copy(ies).

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
2. Identification: Attach label on unexposed side of Samples that includes the following:
   a. Generic description of Sample.
   b. Product name and name of manufacturer.
   c. Sample source.
   d. Number and title of applicable Specification Section.

3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
   a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
   b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
   a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Michigan Tech will return submittal with options selected.
6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.

a. Number of Samples: Submit one sets of Samples. Michigan Tech will retain.
   1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.

E. Application for Payment and Schedule of Values: Comply with requirements specified in Section 010001 Payment Procedures.

F. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 017000 Closeout Procedures.

G. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

H. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

I. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

J. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

2.2 DELEGATED-DESIGN SERVICES

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

   1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Michigan Tech.

B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file and three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

   1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.
PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Michigan Technological University.

B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017000 Closeout Procedures.

3.2 Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.3 MICHIGAN TECH'S ACTION

A. General: Michigan Tech will not review submittals that do not bear Contractor's approval stamp and will return them without action.

B. Action Submittals: Michigan Tech will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

C. Informational Submittals: Michigan Tech will review each submittal and will not return it, or will return it if it does not comply with requirements. Michigan Tech will forward each submittal to appropriate party.

D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.

E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Concrete formwork.
   B. Concrete for composite floor construction.
   C. Joint devices associated with concrete work.
   D. Concrete curing.

1.02 QUALITY ASSURANCE
   A. Perform work of this section in accordance with ACI 301 and ACI 318.
   B. Follow recommendations of ACI 305R when concreting during hot weather.

PART 2 PRODUCTS

2.01 FORMWORK
   A. Form Materials: Contractor’s choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
      1. Form Facing for Exposed Finish Concrete: Contractor’s choice of materials that will provide smooth, stain-free final appearance.
      2. Form Coating: Release agent that will not adversely affect concrete or interfere with application of coatings.
      3. Form Ties: Cone snap type that will leave no metal within 1-1/2 inches of concrete surface.

2.02 CONCRETE MATERIALS
   A. Cement: ASTM C 150, Type I - Normal Portland type.
      1. Acquire all cement for entire project from same source.
      1. Acquire all aggregates for entire project from same source.
   D. Fly Ash: ASTM C 618, Class C or F.
   E. Water: Clean and not detrimental to concrete.

2.03 CHEMICAL ADMIXTURES
   A. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.

2.04 BONDING AND JOINTING PRODUCTS
   A. Latex Bonding Agent: Non-dispersible acrylic latex, complying with ASTM C 1059 Type II.

2.05 CONCRETE MIX DESIGN
   A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.
B. Proportioning Structural Lightweight Concrete: Comply with ACI 211.2 recommendations.

C. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI 301.
   1. For trial mixtures method, employ independent testing agency acceptable to MTU Facilities Management for preparing and reporting proposed mix designs.

D. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended by manufacturer.

E. Structural Lightweight Concrete:
   1. Compressive Strength, when tested in accordance with ASTM C 39/C 39M at 28 days: 3,000 psi.
   2. Water-Cement Ratio: Maximum 40 percent by weight.
   3. Total Air Content: 3 percent, determined in accordance with ASTM C 173/C 173M.

2.06 MIXING

A. Transit Mixers: Comply with ASTM C 94/C 94M.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION

A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.

B. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.
   1. Use latex bonding agent only for non-load-bearing applications.

3.03 PLACING CONCRETE

A. Place concrete in accordance with ACI 304R.

B. Notify MTU Facilities Management not less than 24 hours prior to commencement of placement operations.

C. Install joint devices in accordance with manufacturer's instructions.

3.04 SEPARATE FLOOR TOPPINGS

A. Place required dividers, edge strips, reinforcing, and other items to be cast in.

B. Apply bonding agent to substrate in accordance with manufacturer's instructions.

C. Screed toppings level, maintaining surface flatness of maximum 1:1000.

3.05 CONCRETE FINISHING

A. Repair surface defects, including tie holes, immediately after removing formwork.

B. Exposed Form Finish: Rub down or chip off and smooth fins or other raised areas 1/4 inch or more in height. Provide finish as follows:

C. Concrete Slabs: Finish to requirements of ACI 302.1R, and as follows:
   1. Other Surfaces to Be Left Exposed: "Steel trowel" as described in ACI 302.1R, minimizing burnish marks and other appearance defects.
3.06 CURING AND PROTECTION

A. Comply with requirements of ACI 308R. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.

B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

C. Surfaces Not in Contact with Forms:
   1. Initial Curing: Start as soon as free water has disappeared and before surface is dry. Keep continuously moist for not less than three days by water ponding, water-saturated sand, water-fog spray or saturated burlap.
   2. Final Curing: Begin after initial curing but before surface is dry.

3.07 FIELD QUALITY CONTROL

A. Provide free access to concrete operations at project site and cooperate with appointed firm.

3.08 DEFECTIVE CONCRETE

A. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of MTU Facilities Management for each individual area.

END OF SECTION
SECTION 03 41 13

PRECAST CONCRETE HOLLOW CORE PLANKS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Precast floor and roof planks.
B. Connection plates with brackets and hangers.
C. Grouting plank joint keys.

1.02 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
B. Shop Drawings: Indicate plank locations, unit identification marks, connection details, edge conditions, bearing requirements, support conditions, dimensions, openings, openings intended to be field cut, and relationship to adjacent materials.

1.03 QUALITY ASSURANCE

A. Designer Qualifications: Under direct supervision of a Professional Engineer experienced in design of this Work and licensed in Michigan.
B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.
C. Erector Qualifications: Company specializing in performing the type of work specified in this section, with minimum three years of documented experience.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Lifting or Handling Devices: Capable of supporting member in positions anticipated during manufacture, storage, transportation, and erection.

PART 2 PRODUCTS

2.01 PRECAST UNITS

A. Precast Hollow Core Planks: Comply with PCI MNL-120, PCI MNL 126, PCI MNL-124, ACI 318, and ACI 301.
   1. Design components to withstand dead loads and design loads in the configuration indicated on the drawings and as follows:
      a. Floor Assembly: 100 lb/sq ft live load.
      b. Maximum Allowable Deflection of Floor Planks: 1/240 of span, cambered to achieve flat surface under dead load.
   2. Design connections in accordance with PCI MNL-123.
   3. Design components to accommodate construction tolerances, deflection of other building structural members and clearances of intended openings.

2.02 MATERIALS

A. Concrete Materials: ACI 301.
B. Tensioning Steel Tendons: ASTM A 416/A 416M, Grade 250 (1725); seven-wire stranded steel cable; low-relaxation type; full length without splices; uncoated.
C. Reinforcing Steel: ASTM A 615/A 615M Grade 40 (280) deformed steel bars.
D. Non-Shrink Grout: Non-metallic, minimum compressive strength of 10,000 psi at 28 days.

E. Cement Grout: Minimum compressive strength of 3,000 psi at 28 days.

2.03 ACCESSORIES
A. Connecting and Supporting Devices: Plates, angles, items cast into concrete, items connected to steel framing members, and inserts: ASTM A 36/A 36M carbon steel; prime painted.

B. Bearing Pads: High density plastic, 1/8 inch thick, smooth on one side. Vulcanized elastomeric compound molded to size.

C. Sill Seal: Compressible glass fiber strips.

2.04 FABRICATION
A. Weld reinforcing in accordance with AWS D1.4.

B. Embed anchors, inserts, plates, angles, and other items at locations indicated.

C. Provide openings required by other sections, at locations indicated.

2.05 FABRICATION TOLERANCES
A. Conform to PCI MNL-116 and PCI MNL-135, except as specifically amended below.
1. Maximum Variation From Nominal Dimensions:
   a. Width: Plus or minus 1/4 in.
   b. Length: Plus or minus 1/2 in.
   c. Depth: Plus or minus 1/4 in.

2. Maximum Variation From Intended Camber: Plus or minus 1/4 inch in 10 feet.
3. Maximum Variation from Plan End Squareness: Plus or minus 1/4 in.
4. Maximum Sweep: Plus or minus 1/4 in.
5. Maximum Misalignment of Anchors, Inserts, Openings: Plus or minus 1/8 inch.

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify that site conditions are ready to receive work and field measurements are as indicated on shop drawings.

3.02 PREPARATION
A. Prepare support devices for the erection procedure and temporary bracing.

3.03 ERECTION
A. Erect members without damage to structural capacity, shape, or finish. Replace or repair damaged members.

B. Install bearing pads and sill seal at bearing ends of planks as indicated.

C. Align and maintain uniform horizontal and end joints, as erection progresses.

D. Maintain temporary bracing in place until final connection is made. Protect members from staining.

E. Adjust differential camber between precast members to tolerance before final attachment and grouting.

F. Grout longitudinal keys as indicated.
3.04 TOLERANCES
   A. Erect members level and plumb within allowable tolerances. Conform to PCI MNL-135, except as specifically amended below.

3.05 PROTECTION
   A. Protect members from damage caused by field welding or erection operations.
   B. Provide non-combustible shields during welding operations.

3.06 CLEANING
   A. Clean weld marks, dirt, and blemishes from surface of exposed members.

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Concrete Block.
   B. Mortar and Grout.
   C. Reinforcement and Anchorage.
   D. Accessories.

1.02 DELIVERY, STORAGE, AND HANDLING
   A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.

PART 2 PRODUCTS

2.01 CONCRETE MASONRY UNITS
   A. Concrete Block: Comply with referenced standards and as follows:
      1. Size: Standard units with nominal face dimensions of 16 x 8 inches and nominal depth of 12 inches.
      2. Load-Bearing Units: ASTM C 90, normal weight.
         a. Hollow block, as indicated.
         b. Exposed faces: Manufacturer's standard color and texture where indicated.

2.02 MORTAR AND GROUT MATERIALS
   A. Masonry Cement: ASTM C 91, Type N.
   B. Portland Cement: ASTM C 150, Type I; color as required to produce approved color sample.
   C. Hydrated Lime: ASTM C 207, Type S.
   D. Mortar Aggregate: ASTM C 144.
   E. Grout Aggregate: ASTM C 404.
   F. Water: Clean and potable.
   G. Accelerating Admixture: Nonchloride type for use in cold weather.

2.03 REINFORCEMENT AND ANCHORAGE
   A. Reinforcing Steel: Type specified in Section 03 20 00; size as indicated on drawings; uncoated finish.
   B. Single Wythe Joint Reinforcement: Truss type; ASTM A 82/A 82M steel wire, mill galvanized to ASTM A 641/A 641M, Class 3; 0.1483 inch side rods with 0.1483 inch cross rods; width as required to provide not more than 1 inch and not less than 1/2 inch of mortar coverage on each exposure.

2.04 ACCESSORIES
   A. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

2.05 MORTAR AND GROUT MIXES
A. Mortar for Unit Masonry: ASTM C 270, using the Proportion Specification.
   1. Interior, loadbearing masonry: Type N.

B. Grout: ASTM C 476. Consistency required to fill completely volumes indicated for grouting; fine grout for spaces with smallest horizontal dimension of 2 inches or less; coarse grout for spaces with smallest horizontal dimension greater than 2 inches.

C. Mixing: Use mechanical batch mixer and comply with referenced standards.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive masonry.
B. Verify that related items provided under other sections are properly sized and located.
C. Verify that built-in items are in proper location, and ready for roughing into masonry work.

3.02 PREPARATION

A. Direct and coordinate placement of metal anchors supplied for installation under other sections.
B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.03 COURSING

A. Establish lines, levels, and coursing indicated. Protect from displacement.
B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
C. Concrete Masonry Units:
   1. Bond: Running.
   2. Coursing: One unit and one mortar joint to equal 8 inches.

3.04 PLACING AND BONDING

A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.
B. Lay hollow masonry units with face shell bedding on head and bed joints.
C. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.
D. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.
E. Isolate top joint of masonry partitions from horizontal structural framing members and slabs or decks with compressible joint filler.

3.05 REINFORCEMENT AND ANCHORAGE - GENERAL

A. Unless otherwise indicated on drawings or specified under specific wall type, install horizontal joint reinforcement 16 inches on center.
B. Place continuous joint reinforcement in first and second joint below top of walls.
C. Lap joint reinforcement ends minimum 6 inches.
3.06 LINTELS

A. Install reinforced unit masonry lintels over openings where steel or precast concrete lintels are not scheduled.
   1. Openings from 42 inches to 78 inches: Place two, No. 5 reinforcing bars 1 inch from bottom web.
   2. Do not splice reinforcing bars.
   3. Allow masonry lintels to attain specified strength before removing temporary supports.

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES

A. Sound-rated steel doors and frames.

1.02 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
B. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and identifying location of different finishes, if any.

1.03 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
B. Maintain at the project site a copy of all reference standards dealing with installation.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Store in accordance with NAAMM HMMA 840.
B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Steel Doors and Frames:
   4. Or approved equal.

2.02 DOORS AND FRAMES

A. Requirements for All Doors and Frames:
   1. Door Edge Profile: Beveled on both edges.
   2. Door Texture: Smooth faces.
   3. Hardware Preparation: In accordance with BHMA A156.115, with reinforcement welded in place, in addition to other requirements specified in door grade standard.
   4. Finish: Factory primed, for field finishing.
B. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with all the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

2.03 STEEL DOORS

A. Interior Doors, Sound-Rated:
   1. Grade: ANSI A250.8 Level 2, physical performance Level B, Model 2, seamless.
   2. STC Rating of Assembled Door, Frame, and Seals: 35, calculated in accordance with ASTM E 413, tested in accordance with ASTM E 90 or ASTM E 1408.
   3. Sound Seals: Integral, concealed in door or frame.
2.04 STEEL FRAMES
   A. General:
      1. Comply with the requirements of grade specified for corresponding door.
      2. Finish: Same as for door.
   B. Sound-Rated Door Frames: Fully welded type.

PART 3 EXECUTION

3.01 EXAMINATION
   A. Verify existing conditions before starting work.
   B. Verify that opening sizes and tolerances are acceptable.

3.02 INSTALLATION
   A. Install in accordance with the requirements of the specified door grade standard and NAAMM HMMA 840.
   B. Coordinate frame anchor placement with wall construction.
   C. Coordinate installation of hardware.

3.03 ADJUSTING
   A. Adjust for smooth and balanced door movement.
   B. Adjust sound control doors so that seals are fully engaged when door is closed.

END OF SECTION
SECTION 08 71 00

DOOR HARDWARE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Hardware for hollow steel doors.
B. Hardware for fire-rated doors.
C. Thresholds.
D. Weatherstripping, seals and door gaskets.

1.02 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the manufacture, fabrication, and installation of products onto which door hardware will be installed.
B. Convey Michigan Tech University's keying requirements to manufacturers.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project.
C. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.
D. Keys: Deliver with identifying tags to Michigan Tech University by security shipment direct from hardware supplier.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

PART 2 PRODUCTS

2.01 DOOR HARDWARE - GENERAL

A. Provide all hardware specified or required to make doors fully functional, compliant with applicable codes, and secure to the extent indicated.
B. Provide all items of a single type of the same model by the same manufacturer.
C. Provide products that comply with the following:
   3. All Hardware on Fire-Rated Doors: Listed and classified by UL as suitable for the purpose specified and indicated.
   4. Hardware for Smoke and Draft Control Doors (Indicated as "S" on Drawings): Provide hardware that enables door assembly to comply with air leakage requirements of the applicable code.

2.02 HINGES

A. Hinges: Provide hinges on every swinging door.
   1. Provide five-knuckle full mortise butt hinges unless otherwise indicated.
2. Provide ball-bearing hinges at all doors having closers.
3. Provide hinges in the quantities indicated.
4. Provide non-removable pins on exterior out-swinging doors.
5. Where electrified hardware is mounted in door leaf, provide power transfer hinges.

2.03 LOCKS AND LATCHES
A. Locks: Provide a lock for every door, unless specifically indicated as not requiring locking.
   1. Hardware Sets indicate locking functions required for each door.
   2. If no hardware set is indicated for a swinging door provide an office lockset.
   3. Trim: Provide lever handle or pull trim on outside of all locks unless specifically stated to have no outside trim.
   4. Lock Cylinders: Provide key access on outside of all locks unless specifically stated to have no locking or no outside trim.
B. Lock Cylinders: Manufacturer's standard tumbler type, seven-pin interchangeable core.
   1. Provide cams and/or tailpieces as required for locking devices required.
C. Keying: Keyed in like-groups.
D. Latches: Provide a latch for every door that is not required to lock, unless specifically indicated "push/pull" or "not required to latch".

2.04 MORTISE LOCKSETS
A. Locking Functions: As defined in BHMA A156.13, and as follows:
   1. Classroom: F05, key required to lock.
B. Manufacturers - Mortise Locksets:

PART 3 EXECUTION
3.01 EXAMINATION
A. Verify that doors and frames are ready to receive work; labeled, fire-rated doors and frames are present and properly installed, and dimensions are as indicated on shop drawings.

3.02 INSTALLATION
A. Install hardware in accordance with manufacturer's instructions and applicable codes.
B. Use templates provided by hardware item manufacturer.
C. Install hardware on fire-rated doors and frames in accordance with code and NFPA 80.
D. Mounting heights for hardware from finished floor to center line of hardware item: As listed in Schedule, unless otherwise noted:

3.03 ADJUSTING
A. Adjust hardware for smooth operation.

3.04 CLEANING
A. Clean adjacent surfaces soiled by hardware installation. Clean finished hardware per manufacturer's instructions after final adjustments has been made. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

3.05 PROTECTION
A. Protect finished Work under provisions of Section 01 70 00.
B. Do not permit adjacent work to damage hardware or finish.

END OF SECTION
STATE OF MICHIGAN
Prevailing Wages
PO Box 30476
Lansing, MI 48909
517-284-7800

Informational Sheet: Prevailing Wages on State Projects

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

The State of Michigan 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 rate schedule provides 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 an accurate record showing the name and occupation of and the actual wages and benefits paid to each construction mechanic employed by him in connection including certified payroll, as used in the industry, with said contract. 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 State of Michigan. 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.
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:

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Calculation</th>
<th>Hourly Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacation</td>
<td>40 hours X $14.00 per hour = $560/2080 =</td>
<td>$0.27</td>
</tr>
<tr>
<td>Dental insurance</td>
<td>$31.07 monthly premium X 12 mos. = $372.84 /2080 =</td>
<td>$0.18</td>
</tr>
<tr>
<td>Vision insurance</td>
<td>$5.38 monthly premium X 12 mos. = $64.56/2080 =</td>
<td>$0.03</td>
</tr>
<tr>
<td>Health insurance</td>
<td>$230.00 monthly premium X 12 mos. = $2,760.00/2080 =</td>
<td>$1.33</td>
</tr>
<tr>
<td>Life insurance</td>
<td>$27.04 monthly premium X 12 mos. = $324.48/2080 =</td>
<td>$0.16</td>
</tr>
<tr>
<td>Tuition</td>
<td>$500.00 annual cost/2080 =</td>
<td>$0.24</td>
</tr>
<tr>
<td>Bonus</td>
<td>4 quarterly bonus/year x $250 = $1000.00/2080 =</td>
<td>$0.48</td>
</tr>
<tr>
<td>401k Employer Contribution</td>
<td>$2000.00 total annual contribution/2080 =</td>
<td>$0.96</td>
</tr>
</tbody>
</table>

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
OVERTIME PROVISIONS for MICHIGAN PREVAILING WAGE RATE COMMERCIAL 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.

<table>
<thead>
<tr>
<th></th>
<th>Monday thru Friday</th>
<th>Saturday</th>
<th>Sunday &amp; Holidays</th>
<th>Four 10s</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 8 Hours</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th Hour</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10th Hour</td>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 10 hours</td>
<td>3</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 9th character indicates if an optional 4-day 10-hour per day workweek can be worked between Monday and Friday without paying overtime after 8 hours worked, unless otherwise noted in the rate schedule. To utilize a 4 ten workweek, notice is required from the employer to employee prior to the start of work on the project.

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.

XXXHHHHHDY - 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.

LARA is an equal opportunity employer.
Auxiliary aids, services and other reasonable accommodations are available, upon request, to individuals with disabilities.
Wage and Hour Program
530 W. Allegan • P.O. BOX 30476 • LANSING, MICHIGAN 48909
www.michigan.gov/wagehour • Phone : (517) 284-7800
### 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), Scaper (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-swinger, 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, Scaper (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.
REQUIREMENTS OF
THE PREVAILING WAGES ON STATE PROJECTS ACT, PUBLIC ACT 166 OF 1965

The State of Michigan 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 rate schedule provides 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 an accurate record showing the name and occupation of and the actual wages and benefits paid to each construction mechanic employed by him in connection including certified payroll, as used in the industry, with said contract. 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 State of Michigan. 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.
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:

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

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
## OPERATING ENGINEERS CLASSIFICATION DESCRIPTIONS

### Class I
- Asphalt Paver (self-propelled)
- Asphalt Planer (self-propelled)
- Asphalt Plant Operator
- Auto-Grader
- Blade Grader Operator
- Batch Plant (concrete-central mix)
- Backhoe (with over 3/8 yard bucket)
- Bulldozer Operator
- Concrete Pump 3” and over
- Conveyor Loader Operator (euclid type)
- Crane Operator
- Dragline Operator
- Elevating Grader Operator
- End-loader Operator (1 yard capacity or over)
- Slip Form Paver
- Finishing Machine Operator (asphalt)
- Gradall Operator (and similar type machines)
- Hoisting Engineer
- Hydro demolisher (water blaster)
- Locomotive Operator
- Mechanic
- Paver Operator (5 bags or more)
- Pump Operator (6” discharge or over, gas, diesel powered, or generator of 300 amp or larger)
- Pile Driving Operator
- Roto Mill
- Roller Operator (Asphalt)
- Side Boom Tractor (type D-4, equivalent or larger)
- Self-Propelled or Tractor Drawn Scraper
- Slurry Machine (asphalt)
- Shouldering or Gravel Distributing Machine Operator (self-propelled)
- Shovel Operator
- Side Boom Tractor (type D-4 or equivalent or larger)
- Tractor Operator
- Trenching Machine Operator Tube
- Finisher (slip form paving) Farm
- type tractor with attached pan
- Backhoe (with 3/8 yard bucket or less)
- Side Boom Tractor (smaller than D-4 type or equivalent)
- Batch Plant (concrete-dry mix)

### Class II
- Sweeper (wayne type & similar equipment)
- Screening Plant Operator
- Washing Plant Operator
- Crusher Operator
- Vacuum Truck Operator
- Grease Truck

### Class III
- Air Compressor Operator (600 cfm or more)
- Air Compressor (2 or more, less than 600 cfm)
- Concrete Breaker
- Tractor Operator (farm type with attachments)
- Wagon Drill Operator

### Class IV
- Boiler Fireman
- Oilier
- End-loader Operator (under 1 yard capacity)
- Roller Operator (other than asphalt)
- Curing Equipment Operator (self-propelled)
- Concrete Saw Operator (Over 40 HP)
- Power Bin Operator
- Plant Drier Operator (asphalt)
- Vibratory Compaction Equipment (6’ wide or over)
- Guard Post Driver Operator
- All Mulching Equipment
- Boom or Winch Hoist Truck Operator
- End Dumps
- Stump Remover
- Skid Steer
- Fireman
- Mechanic’s Helper
- Trencher (service)
- Flexplane Operator
- Cleftplane Operator
- Grader Operator Self-propelled Fine-
- Grade or Form (concrete) Finishing
- Machine Operator (concrete) Concrete
- Pump (under 3”)
- Farm Type Tractor Operator
- Mesh Installer (self-propelled)
LABORERS CLASSIFICATION DESCRIPTIONS

Class 1  Asphalt Shoveler or Loader, Asphalt Raker Tender, Asphalt Plant Misc., Railroad Track and Trestle Laborer, Burlap Man, Carpenter's Tender, Top Man, Yard Man, Guard Rail Builder's Tender, Earth Retention Barrier and Wall and Mechanically Stabilized Earthen Wall Installers Tender, Highway and Median Barrier Installer's Tender (including Sound, Retaining and Crash Barrier), Fence Erector's Tender, Dumper (wagon, truck, etc.) Joint Filling Labor, Misc., Unskilled Labor, Sprinkler Labor, Form Setting Labor, Form Stripper, Pavement Reinforcing, Handling and Placing (e.g. wire mesh, steel mats, dowel bars, etc.) Mason's or Bricklayer's Tender on Manholes, Manhole Builder, Headwalls, etc., Waterproofing (other than buildings), Seal Coating and Slurry Mix, Shoring, Underpinning, Bridge Painting, etc. (spray, roller and brush) Sandblasting, Pressure Grouting, and Bridge Pin and Hanger Removal, Material Recycling Laborer, Horizontal Paver (brick, concrete, clay, stone and asphalt) Ground Stabilization and Modification Laborer, Grouting, Waterblasting, Sign Installer and remote control operated equipment.

Class 2  Mix Operator (less than 5 sacks), Air or Electric Tool Operator (jack hammer, etc.), Spreader, Boxman (asphalt, stone, gravel, etc.), Concrete Paddler, Power Chain Saw Operator, Paving Batch Truck Dumper, Tunnel Mucker (highway work only), Concrete Saw Operator (under 40 H.P.), Dry Pack Machine and Roto-Mill Grounds Person.

Class 3  Tunnel Miner (highway work only), Finishers Tender, Guard Rail Builder, Highway and Median Barrier Installer, Fence Erector, Bottom Man, Powder Man, Wagon Drill and Air Track Operators, Curb and Side Rail Setters' Tender, Diamond & Core Drills, Earth Retention Barriers, Walls and Mechanically Stabilized Earthen Wall Installer (including sound, retaining and crash barrier), grade checker and certified welder.

Class 4  Asphalt Raker

Class 5  Pipe Layers, Oxy-gun

Class 6  Line-Form Setter for Curb or Pavement and asphalt screed checker/screw man on asphalt paving machines.

Class 7  Concrete Specialist, finishing and troweling, of cast in place or precast concrete by any and all methods.
STATE OF MICHIGAN
2015 MICHIGAN PREVAILING WAGE RATE SCHEDULE
For Parking Lot, Road, Highway, Bridge & Airport Construction

OVERTIME PROVISIONS FOR Road Builder 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.

<table>
<thead>
<tr>
<th></th>
<th>Monday thru Friday</th>
<th>Saturday</th>
<th>Sunday &amp; Holidays</th>
<th>Four 10s</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 8 Hours</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th Hour</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th Hour</td>
<td>2</td>
<td></td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Over 10 hours</td>
<td>3</td>
<td></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

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 Sunday & Holidays
the 8th character is for time worked on Sunday or on a holiday

4 Ten hour days @ Straight Time
The 9th character indicates if an optional 4-day 10-hour per day workweek can be worked between Monday and Friday without paying overtime after 8 hours worked. To utilize a 4 ten workweek, notice is required from the employer to employee prior to the start of work on the project.

2. Overtime Indicators Used in the Overtime Provision:
H - means TIME AND ONE-HALF due
D - means DOUBLE PAY due
X - means TIME AND ONE HALF due after 40 hours worked
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 optional 4-day 10-hour per day workweek can be worked without paying overtime after 8 hours worked

3. EXAMPLES:
HHHHHHHDDY - This example shows that the 1½ rate must be used for time worked after 8 hours Monday thru Friday (characters 1 - 3)and for all hours worked on Saturday, (characters 4 - 6), except hours worked after 10 hours on Saturday (7th character). Work done after 10 hours must be paid at the double time rate. Work done on Sunday or holidays must be paid double time (character 8). The Y (character 9) indicates that 4 ten-hour days is an acceptable alternative workweek at regular pay.

HHHHHHHHY means that the 1½ rate must be used for time worked after 8 hours worked Monday thru Friday (characters 1 -3); and for any hours worked on Saturdays, Sundays or holidays (characters 4-8). The Y (character 9) indicates that 4 ten-hour days is an acceptable alternative workweek at regular pay.

XXHXXXHDY this example allows 4 ten hour days Monday thru Saturday to be worked. Hours worked beyond ten Monday thru Saturday OR hours worked after 40 hours in one week must be paid at time and one half. Sunday or holiday hours must be paid at double.
State of Michigan
WHPWRequest@michigan.gov

Official Request: 330
Requestor: Michigan Technological University
Project: Build new masonry and concrete rooms and construct foundations for two new Dynomometer Test Cells
Project Number: 102-15-01 Advance Power Systems Research Center

Official 2015 Prevailing Wage Rate Schedule
for Parking Lot, Road, Highway, Bridge and Airport Construction

Issue Date: 11/13/2015
Contract must be awarded by: 2/11/2016

Page 1 of 23

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARPENTERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARPENTERS ZONE 1</td>
<td>RBCZ1</td>
<td>WAGE $29.00 $43.50</td>
<td>X X H X X H H Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9/4/2015</td>
<td>FRINGE $26.30 $35.35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Apprentice Rates:

| 1ST 6 MONTHS | WAGE $12.76 $19.14 |
|             | FRINGE $16.17 $20.15 |
| 2ND 6 MONTHS | WAGE $15.95 $23.92 |
|             | FRINGE $18.16 $23.14 |
| YEAR 2      | WAGE $18.85 $28.28 |
|             | FRINGE $19.97 $25.85 |
| YEAR 3      | WAGE $21.75 $32.62 |
|             | FRINGE $21.78 $28.57 |
| YEAR 4      | WAGE $24.65 $36.98 |
|             | FRINGE $23.58 $31.27 |

CARPENTERS ZONE 1
Wayne, Oakland, Macomb, Sanilac, St. Clair, Monroe and the following townships of Livingston County:
Brighton, Deerfield, Genoa, Hartland, Osceola and Tyrone

comment For all hours worked on Memorial Day, July 4, Labor Day, Thanksgiving Day, Christmas Day and New Years Day, double time is due

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.
### Official 2015 Prevailing Wage Rate Schedule
for Parking Lot, Road, Highway, Bridge and Airport Construction

#### Issue Date: 11/13/2015
Contract must be awarded by: 2/11/2016

---

**Construction Mechanic Classification**

<table>
<thead>
<tr>
<th>Straight Time Rate</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
</table>

- **CARPENTERS ZONE 2**
  - RBCZ2
  - WAGE $26.16 $39.24
  - FRINGE $18.45 $18.45

  **Apprentice Rates:**
  - **1ST YEAR**
    - WAGE $15.70 $23.55
    - FRINGE $18.45 $18.45
  - **2ND YEAR**
    - WAGE $18.31 $27.46
    - FRINGE $18.45 $18.45
  - **3RD YEAR**
    - WAGE $20.93 $31.40
    - FRINGE $18.45 $18.45
  - **4TH YEAR**
    - WAGE $22.24 $33.36
    - FRINGE $18.45 $18.45

**Carpenters Zone 2**
The entire state except those counties and townships listed in Zone 1

**Comment:** SUNDAYS PAID TIME AND ONE HALF
HOLIDAYS PAID DOUBLE

- **CEMENT MASONS ZONE 1**
  - RBCMZ1
  - WAGE $30.19 $45.29
  - FRINGE $12.84 $12.84

  **Apprentice Rates:**
  - **1ST YEAR**
    - WAGE $17.71 $26.56
    - FRINGE $12.84 $12.84
  - **2ND YEAR**
    - WAGE $21.84 $32.76
    - FRINGE $12.84 $12.84
  - **3RD YEAR**
    - WAGE $25.98 $38.97
    - FRINGE $12.84 $12.84

**CEMENT MASONS ZONE 1**
Genesee, Oakland, Macomb, Monroe, Washtenaw, Wayne, Livingston and Saginaw Counties.

**Comment:** If only Sat & Sun worked, time and one-half due

---

**Official Request #: 330**
Requestor: Michigan Technological University

Project Description: Build new masonry and concrete rooms and construct foundations for two

**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.
# Official 2015 Prevailing Wage Rate Schedule for Parking Lot, Road, Highway, Bridge and Airport Construction

**Issue Date:** 11/13/2015  
**Contract must be awarded by:** 2/11/2016  
**Page 3 of 23**

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEMENT MASONS ZONE 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RBCMZ2</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>WAGE</td>
<td>$28.69</td>
<td>$43.04</td>
<td></td>
<td>X X H X X H H Y</td>
</tr>
<tr>
<td>9/4/2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRINGE</td>
<td>$12.84</td>
<td>$12.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Apprentice Rates:**

- **1ST YEAR**
  - WAGE: $16.88  
  - FRINGE: $12.84  

- **2ND YEAR**
  - WAGE: $20.83  
  - FRINGE: $12.84  

- **3RD YEAR**
  - WAGE: $25.00  
  - FRINGE: $12.84  

**CEMENT MASONS ZONE 2**
All counties not listed in Zone 1

**IRONWORKER**

**Metal Fence & Guard Rail**

<table>
<thead>
<tr>
<th>IR-55-MF</th>
<th>WAGE</th>
<th>FRINGE</th>
<th>Overtime Code</th>
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<tbody>
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<td>10/9/2015</td>
<td>$20.00</td>
<td>$19.87</td>
<td>$30.00 $40.00 H H D H H H H D Y</td>
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</table>

**Lenawee**

**Monroe**

**Make up day allowed**

Four Tens allowed M-Th.  
Friday make-up day allowed if M-Th schedule not worked due to weather conditions or holiday.

---

**Official Request #:** 330  
**Requestor:** Michigan Technological University  
**Project Description:** Build new masonry and concrete rooms and construct foundations for two

---

**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.
Official 2015 Prevailing Wage Rate Schedule
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Issue Date: 11/13/2015
Contract must be awarded by: 2/11/2016

Page 4 of 23

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
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Apprentice Rates:

- 60%
  - WAGE $14.40 $21.60 $28.80
- 65%
  - WAGE $15.60 $23.40 $31.20
  - FRINGE $9.95 $9.95 $9.95
- 70%
  - WAGE $16.80 $25.20 $33.60
  - FRINGE $10.06 $10.06 $10.06
- 75%
  - WAGE $18.00 $27.00 $36.00
  - FRINGE $10.15 $10.15 $10.15
- 80%
  - WAGE $19.20 $28.80 $38.40
  - FRINGE $10.25 $10.25 $10.25
- 85%
  - WAGE $20.40 $30.60 $40.80
  - FRINGE $10.35 $10.35 $10.35

IRONWORKERS ZONE 1 Genesee, Oakland, Macomb, Washtenaw and Wayne Counties

Make up day allowed comment Four 10 hour work days may be worked Monday-Saturday.
Official 2015 Prevailing Wage Rate Schedule
for Parking Lot, Road, Highway, Bridge and Airport Construction

Issue Date: 11/13/2015
Contract must be awarded by: 2/11/2016

Page 5 of 23

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
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<tbody>
<tr>
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<td>$10.71</td>
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<tr>
<td>erection/installation work, and exterior signage work.</td>
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Apprentice Rates:

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<tr>
<th>%</th>
<th>WAGE</th>
<th>FRINGE</th>
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<tr>
<td>60%</td>
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IRONWORKERS ZONE 2

The entire state except those counties listed in Zone 1: Genesee, Oakland, Macomb, Monroe, Washtenaw and Wayne and Lenawee

Make up day allowed comment

Four 10 hour work days may be worked Monday-Saturday.

LABORERS
LABORERS CLASS 1 ZONE 1 RBLABC1Z1 WAGE $22.10 $33.15 X X X X X X H Y

9/3/2015 FRINGE $15.96 $17.44

Apprentice Rates:

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<tr>
<th>WORK HOURS</th>
<th>WAGE</th>
<th>FRINGE</th>
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<tr>
<td>0-1000</td>
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<td>1001-2000</td>
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<td>2001-3000</td>
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<tr>
<td>3001-4000</td>
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LABORERS ZONE 1
Genesee, Macomb, Monroe, Oakland, Washtenaw and Wayne

Official Request #: 330
Requestor: Michigan Technological University

Project Description: Build new masonry and concrete rooms and construct foundations for two

Official Rate Schedule

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**Issue Date:** 11/13/2015  
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Page 6 of 23

<table>
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<th>Construction Mechanic Classification</th>
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<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
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<tbody>
<tr>
<td>LABORERS CLASS 1 ZONE 2</td>
<td>RBLABC12Z</td>
<td>WAGE $20.26</td>
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**Apprentice Rates:**

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<tr>
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<th>WAGE $15.20</th>
<th>$22.80</th>
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<tr>
<td>FRINGE $15.75</td>
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<table>
<thead>
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**LABORERS ZONE 2**
Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Gratiot, Hillsdale, Huron, Ingham, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Muskegon, Saginaw, Sanilac, Shiawassee, St. Clair, St. Joseph, Tuscola, and Van Buren

| LABORERS CLASS 1 ZONE 3 & 4 | RBLABC12Z | WAGE $19.51 | $29.27 | X X X X X X X H Y |
| 9/3/2015 | FRINGE $15.75 | $17.15 | |

**Apprentice Rates:**

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<th>2001-3000 WORK HOURS</th>
<th>WAGE $16.58</th>
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<table>
<thead>
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<th>3001-4000 WORK HOURS</th>
<th>WAGE $18.53</th>
<th>$27.80</th>
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<td>FRINGE $15.75</td>
<td>$17.15</td>
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**LABORERS ZONE 3**
Alcona, Antrim, Arenac, Benzie, Charlevoix, Cheboygan, Clare, Crawford, Emmet, Gladwin, Grand Traverse, Ionia, Iosco, Isabella, Kalkaska, Kent, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montcalm, Montmorency, Newaygo, Oceana, Ogemaw, Osceola, Oscoda, Otsego, Ottawa, Presque Isle, Roscommon and Wexford

**LABORERS ZONE 4**
Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft
## Official Prevailing Wage Rate Schedule

### for Parking Lot, Road, Highway, Bridge and Airport Construction

**Issue Date:** 11/13/2015  
**Contract must be awarded by:** 2/11/2016  

<table>
<thead>
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<th>One Half Time Rate</th>
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</table>

### Apprentice Rates:

- **0-1000 WORK HOURS**
  - WAGE: $16.67  
  - FRINGE: $15.96  

- **1001-2000 WORK HOURS**
  - WAGE: $17.78  
  - FRINGE: $15.96  

- **2001-3000 WORK HOURS**
  - WAGE: $18.90  
  - FRINGE: $15.96  

- **3001-4000 WORK HOURS**
  - WAGE: $21.12  
  - FRINGE: $15.96

---

**LABORERS ZONE 1**  
Genesee, Macomb, Monroe, Oakland, Washtenaw and Wayne

### LABORERS CLASS 2 ZONE 2

- **RBLABC222**  
- **WAGE** $20.46 $30.69  
- **FRINGE** $15.75 $17.15

### Apprentice Rates:

- **0-1000 WORK HOURS**
  - WAGE: $15.34  
  - FRINGE: $15.75  

- **1001-2000 WORK HOURS**
  - WAGE: $16.37  
  - FRINGE: $15.75  

- **2001-3000 WORK HOURS**
  - WAGE: $17.39  
  - FRINGE: $15.75  

- **3001-4000 WORK HOURS**
  - WAGE: $19.44  
  - FRINGE: $15.75  

---

**LABORERS ZONE 2**  
Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Grant, Hillsdale, Huron, Ingham, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Muskegon, Saginaw, Sanilac, Shiawassee, St. Clair, St. Joseph, Tuscola, and Van Buren

---

**Official Request #:** 330  
**Requestor:** Michigan Technological University  
**Project Description:** Build new masonry and concrete rooms and construct foundations for two

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<th>Double Time Rate</th>
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<td>Apprentice Rates:</td>
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<tr>
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<tr>
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<td>LABORERS ZONE 4</td>
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<tr>
<td>Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft</td>
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<tr>
<td>LABORERS ZONE 1</td>
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<tr>
<td>Genesee, Macomb, Monroe, Oakland, Washtenaw and Wayne</td>
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### LABORERS CLASS 3 ZONE 2

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<th>Classification</th>
<th>Wage Rate (Straight Time)</th>
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<td>FRINGE $15.75 $17.15</td>
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#### Apprentice Rates:

- **0-1000 WORK HOURS**
  - **WAGE**: $15.52, $23.28
  - **FRINGE**: $15.75, $17.15
- **1001-2000 WORK HOURS**
  - **WAGE**: $16.56, $24.84
  - **FRINGE**: $15.75, $17.15
- **2001-3000 WORK HOURS**
  - **WAGE**: $17.60, $26.40
  - **FRINGE**: $15.75, $17.15
- **3001-4000 WORK HOURS**
  - **WAGE**: $19.66, $29.49
  - **FRINGE**: $15.75, $17.15

LABORERS ZONE 2

- Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Gratiot, Hillsdale, Huron, Ingham, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Muskegon, Saginaw, Sanilac, Shiawassee, St. Clair, St. Joseph, Tuscola, and Van Buren

### LABORERS CLASS 3 ZONES 3 & 4

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<tr>
<th>Classification</th>
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<th>Wage Rate (Time and One Half)</th>
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#### Apprentice Rates:

- **0-1000 WORK HOURS**
  - **WAGE**: $15.01, $22.52
  - **FRINGE**: $15.75, $17.15
- **1001-2000 WORK HOURS**
  - **WAGE**: $16.01, $24.02
  - **FRINGE**: $15.75, $17.15
- **2001-3000 WORK HOURS**
  - **WAGE**: $17.01, $25.52
  - **FRINGE**: $15.75, $17.15
- **3001-4000 WORK HOURS**
  - **WAGE**: $19.01, $28.52
  - **FRINGE**: $15.75, $17.15

LABORERS ZONE 3

- Alcona, Alpena, Antrim, Arenac, Benzie, Charlevoix, Cheboygan, Clare, Crawford, Emmet, Gladwin, Grand Traverse, Ionia, Iosco, Isabella, Kalkaska, Kent, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montcalm, Montmorency, Newaygo, Oceana, Ogemaw, Osceola, Oscoda, Otsego, Ottawa, Presque Isle, Roscommon and Wexford

LABORERS ZONE 4

- Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft

Official Request #: 330

Requestor: Michigan Technological University

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Issue Date: 11/13/2015
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Page 10 of 23

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Apprentice Rates:

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<td>3001-4000 WORK HOURS</td>
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FRINGE $15.96 $17.44

LABORERS ZONE 1
Genesee, Macomb, Monroe, Oakland, Washtenaw and Wayne

LABORERS CLASS 4 ZONE 2

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Apprentice Rates:

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<td>3001-4000 WORK HOURS</td>
<td>WAGE $20.00 $30.00</td>
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FRINGE $15.75 $17.15

LABORERS ZONE 2
Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Genesee, Hillsdale, Huron, Ingham, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Muskegon, Saginaw, Sanilac, Shiawassee, St. Clair, St. Joseph, Tuscola, and Van Buren

Official Request #: 330
Requestor: Michigan Technological University

Project Description: Build new masonry and concrete rooms and construct foundations for two

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.
# Official 2015 Prevailing Wage Rate Schedule
## for Parking Lot, Road, Highway, Bridge and Airport Construction

**Issue Date:** 11/13/2015  
**Contract must be awarded by:** 2/11/2016

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**LABORERS ZONE 3**

Alcona, Alpena, Antrim, Arenac, Benzie, Charlevoix, Cheboygan, Clare, Crawford, Emmet, Gladwin, Grand Traverse, Ionia, Iosco, Isabella, Kalkaska, Kent, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montcalm, Montmorency, Newaygo, Oceana, Ogemaw, Osceola, Oscoda, Otsego, Ottawa, Presque Isle, Roscommon and Wexford

**LABORERS CLASS 5 ZONE 1**

RBLABC5Z1 WAGE | 22.70 | 34.05 | X X X X X X X H Y |
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**LABORERS ZONE 1**

Genesee, Macomb, Monroe, Oakland, Washtenaw and Wayne

---

**Official Request #:** 330  
**Requestor:** Michigan Technological University  
**Project Description:** Build new masonry and concrete rooms and construct foundations for two

---

**Official Rate Schedule**

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**Official 2015 Prevailing Wage Rate Schedule**

*for Parking Lot, Road, Highway, Bridge and Airport Construction*

**Issue Date:** 11/13/2015  
**Contract must be awarded by:** 2/11/2016

**Page 12 of 23**

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**Apprentice Rates:**

- **0-1000 WORK HOURS**
  - WAGE $15.69  
  - FRINGE $15.75

- **1001-2000 WORK HOURS**
  - WAGE $16.74  
  - FRINGE $15.75

- **2001-3000 WORK HOURS**
  - WAGE $17.78  
  - FRINGE $15.75

- **3001-4000 WORK HOURS**
  - WAGE $19.87  
  - FRINGE $15.75

**LABORERS ZONE 2**

- Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Gratiot, Hillsdale, Huron, Ingham, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Muskegon, Saginaw, Sanilac, Shiawassee, St. Clair, St. Joseph, Tuscola, and Van Buren

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**Apprentice Rates:**

- **0-1000 WORK HOURS**
  - WAGE $15.05  
  - FRINGE $15.75

- **1001-2000 WORK HOURS**
  - WAGE $16.06  
  - FRINGE $15.75

- **2001-3000 WORK HOURS**
  - WAGE $17.06  
  - FRINGE $15.75

- **3001-4000 WORK HOURS**
  - WAGE $19.07  
  - FRINGE $15.75

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**LABORERS ZONE 3**

- Alcona, Alpena, Antrim, Arenac, Benzie, Charlevoix, Cheboygan, Clare, Crawford, Emmet, Gladwin, Grand Traverse, Ionia, Iosco, Isabella, Kalkaska, Kent, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montcalm, Montmorency, Newaygo, Oceana, Ogemaw, Osceola, Oscoda, Otsego, Ottawa, Presque Isle, Roscommon and Wexford

**LABORERS ZONE 4**

- Alger, Baraga, Chipewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft

Official Request #: 330  
Requestor: Michigan Technological University  
Project Description: Build new masonry and concrete rooms and construct foundations for two
### Construction Mechanic Classification

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#### LABORERS CLASS 6 ZONE 1
Genesees, Macomb, Monroe, Oakland, Washtenaw and Wayne

#### LABORERS CLASS 6 ZONE 2
Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Grafton, Hillsdale, Huron, Ingham, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Muskegon, Saginaw, Sanilac, Shiawassee, St. Clair, St. Joseph, Tuscola, and Van Buren

### Apprentice Rates:

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<td>3001-4000</td>
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### Project Description:
Build new masonry and concrete rooms and construct foundations for two construction sites, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.
### Official 2015 Prevailing Wage Rate Schedule
#### for Parking Lot, Road, Highway, Bridge and Airport Construction

**Issue Date:** 11/13/2015  
**Contract must be awarded by:** 2/11/2016

**Page 14 of 23**

<table>
<thead>
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<th>Construction Mechanic Classification</th>
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### Official Rate Schedule

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Project Description: Build new masonry and concrete rooms and construct foundations for two
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for Parking Lot, Road, Highway, Bridge and Airport Construction

**Issue Date:** 11/13/2015  
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**Page 15 of 23**

<table>
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**Apprentice Rates:**

- **0-1000 WORK HOURS**
  - WAGE: $18.05, $27.08
  - FRINGE: $15.96, $17.44

- **10001-2000 WORK HOURS**
  - WAGE: $19.26, $28.89
  - FRINGE: $15.96, $17.44

- **2001-3000 WORK HOURS**
  - WAGE: $20.46, $30.69
  - FRINGE: $15.96, $17.44

- **3001-4000 WORK HOURS**
  - WAGE: $22.87, $34.30
  - FRINGE: $15.96, $17.44

**LABORERS ZONE 1**  
Genesee, Macomb, Monroe, Oakland, Washtenaw and Wayne

**OPERATING ENGINEERS**

**OPERATING ENGINEERS CLASS I**

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**Apprentice Rates:**

- **1ST 6 MONTHS**
  - WAGE: $18.97, $28.46
  - FRINGE: $25.57, $27.60

- **2ND 6 MONTHS**
  - WAGE: $20.32, $30.48
  - FRINGE: $25.57, $27.60

- **3RD 6 MONTHS**
  - WAGE: $21.68, $32.52
  - FRINGE: $25.57, $27.60

- **4TH 6 MONTHS**
  - WAGE: $23.04, $34.56
  - FRINGE: $25.57, $27.60

- **5TH 6 MONTHS**
  - WAGE: $24.39, $36.58
  - FRINGE: $25.57, $27.60

- **6TH 6 MONTHS**
  - WAGE: $25.74, $38.61
  - FRINGE: $25.57, $27.60

**OPERATING ENGINEERS ZONE 1**  
Genesee, Oakland, Macomb, Monroe, Washtenaw and Wayne counties

**OPERATING ENGINEERS ZONE 2**  
The entire state except those counties listed in Zone 1: Genesee, Oakland, Macomb, Monroe, Washtenaw and Wayne counties

**Make up day allowed comment**

4 tens allowed M-Th or T-F. If work cannot be performed due to weather during the M-Th schedule, Friday may be worked as a make-up day.

---

**Official Request #:** 330  
**Requestor:** Michigan Technological University

**Project Description:** Build new masonry and concrete rooms and construct foundations for two structures.
### Construction Mechanic Classification

<table>
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**Official Request #: 330**

**Requestor: Michigan Technological University**

**Project Description:** Build new masonry and concrete rooms and construct foundations for two
## Official 2015 Prevailing Wage Rate Schedule
for Parking Lot, Road, Highway, Bridge and Airport Construction

**Issue Date:** 11/13/2015  
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<td>H H H H H Y</td>
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</tr>
<tr>
<td>OPERATING ENGINEERS ZONE 2</td>
<td>GENESSEE, OAKLAND, MACOMB, MONROE, WASHTENAW AND WAYNE COUNTY</td>
<td>Make up day allowed comment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPERATING ENGINEERS CLASS IV ZONE 2</td>
<td>RBOEC4Z2</td>
<td>$20.35</td>
<td>$30.53</td>
<td>H H H H H Y</td>
<td></td>
</tr>
<tr>
<td>OPERATING ENGINEERS ZONE 2</td>
<td>GENESSEE, OAKLAND, MACOMB, MONROE, WASHTENAW AND WAYNE COUNTY</td>
<td>Make up day allowed comment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Official Request #: 330  
Requestor: Michigan Technological University  
Project Description: Build new masonry and concrete rooms and construct foundations for two

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.
### Pipe and Manhole Rehab

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Laborer for rehab work or normal cleaning and cctv work-top man, scaffold man, CCTV assistant, jetter-vac assistant</td>
<td>$19.99</td>
<td>$29.99</td>
<td></td>
<td>H H H H H H H H N</td>
</tr>
</tbody>
</table>

Fringe:
- $8.21

### Tap cutter/CCTV Tech/Grout Equipment Operator

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Operator: unit driver and operator of CCTV; grouting equipment and tap cutting equipment</td>
<td>$24.49</td>
<td>$36.74</td>
<td></td>
<td>H H H H H H H H N</td>
</tr>
</tbody>
</table>

Fringe:
- $8.21

### CCTV Technician/Combo Unit Operator

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCTV Technician/Combo Unit Operator: unit driver and operator of cctv unit or combo unit in connection with normal cleaning and televising work</td>
<td>$23.24</td>
<td>$34.86</td>
<td></td>
<td>H H H H H H H H N</td>
</tr>
</tbody>
</table>

Fringe:
- $8.21
### Construction Mechanic Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Rate Code</th>
<th>WAGE</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiler Operator: unit driver and operator of steam/water heater units and all ancillary equipment</td>
<td>TM247-4</td>
<td>4/17/2015</td>
<td>$24.99 $37.49 H H H H H H H N</td>
</tr>
<tr>
<td>Combo Unit driver &amp; Jetter-Vac Operator</td>
<td>TM247-5</td>
<td>4/17/2015</td>
<td>$24.99 $37.49 H H H H H H H N</td>
</tr>
</tbody>
</table>
### Roadway Electrical

<table>
<thead>
<tr>
<th>Classification</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway Electrical</td>
<td>H H H H H H H D Y</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>WAGE</th>
<th>FRINGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC-17 Signal Tech, Communication</td>
<td>$36.97</td>
<td>$15.61</td>
</tr>
<tr>
<td>Tech, Tower Tech, Fiber Optic Splicer</td>
<td>$55.46</td>
<td>$20.79</td>
</tr>
<tr>
<td></td>
<td>$73.94</td>
<td>$25.97</td>
</tr>
</tbody>
</table>

### Apprentice Rates:

1st 6 months
- WAGE: $22.18
- FRINGE: $11.47

2nd 6 months
- WAGE: $24.03
- FRINGE: $14.58

3rd 6 months
- WAGE: $25.88
- FRINGE: $17.69

4th 6 months
- WAGE: $27.73
- FRINGE: $19.75

5th 6 months
- WAGE: $29.58
- FRINGE: $21.83

6th 6 months
- WAGE: $33.27
- FRINGE: $23.91

### Statewide

<table>
<thead>
<tr>
<th>Operator A - operates at least 3 of the following: backhoe, excavator, or boom/digger truck.</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAGE</td>
</tr>
<tr>
<td>FRINGE</td>
</tr>
</tbody>
</table>

Make up day allowed comment: 4 10s allowed M-Th; F make up day.

### Road Builder Statewide

<table>
<thead>
<tr>
<th>Make up day allowed comment</th>
<th>4 10s allowed M-Th; F make up day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official Request #: 330</td>
<td>Requestor: Michigan Technological University</td>
</tr>
<tr>
<td>Project Description: Build new masonry and concrete rooms and construct foundations for two construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.</td>
<td></td>
</tr>
</tbody>
</table>
### Construction Mechanic Classification

<table>
<thead>
<tr>
<th>Operation</th>
<th>WAGE</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operator B</strong> - operates any 2 of the</td>
<td>$29.27</td>
<td>$43.91</td>
<td>$58.54</td>
<td>H H H H H H D Y</td>
</tr>
<tr>
<td>following: backhoe, excavator,</td>
<td>6/12/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>directional bore or boom/digger</td>
<td>$13.46</td>
<td>$17.57</td>
<td>$21.67</td>
<td></td>
</tr>
<tr>
<td>truck</td>
<td>6/12/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Apprentice Rates:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WAGE</td>
<td>$0.00</td>
<td>$0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRINGE</td>
<td>$0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Road Builder Statewide**

- **Make up day allowed**
- **comment**: 4 10s allowed M-Th; F make up day

<table>
<thead>
<tr>
<th>Operation</th>
<th>WAGE</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Groundman</strong></td>
<td>$27.24</td>
<td>$40.86</td>
<td>$54.48</td>
<td>H H H H H H H D Y</td>
</tr>
<tr>
<td>6/12/2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FRINGE</strong></td>
<td>$12.89</td>
<td>$16.71</td>
<td>$20.53</td>
<td></td>
</tr>
<tr>
<td>6/12/2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TRUCK DRIVERS**

- **TRUCK DRIVERS ZONE 1 EUCLID**

<table>
<thead>
<tr>
<th>Type Equipment</th>
<th>WAGE</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD1</td>
<td>$25.15</td>
<td>$37.73</td>
<td>H H H H H H H Y</td>
<td></td>
</tr>
<tr>
<td>9/4/2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FRINGE</strong></td>
<td>$18.43</td>
<td>$10.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/4/2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TRUCK DRIVERS ZONE 1**

- Genesee, Oakland, Macomb, Monroe, Livingston, Washtenaw and Wayne

- **comment**: 4 tens allowed M-F
- **For hours after 40 per week, the OT rate is $38.23 per hour wages & fringes combined.**

- **TRUCK DRIVERS ZONE 2 EUCLID**

<table>
<thead>
<tr>
<th>Type Equipment</th>
<th>WAGE</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD2</td>
<td>$25.05</td>
<td>$37.58</td>
<td>H H H H H H H Y</td>
<td></td>
</tr>
<tr>
<td>9/4/2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FRINGE</strong></td>
<td>$18.43</td>
<td>$10.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/4/2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TRUCK DRIVERS ZONE 2**

- The entire state except those counties listed in Zone 1: Genesee, Oakland, Macomb, Monroe, Livingston, Washtenaw and Wayne

- **comment**: 4 tens allowed M-F
- **For hours after 40 per week, the OT rate is $38.08 per hour wages & fringes combined.**

---

**Official Request #: 330**

**Requestor:** Michigan Technological University

**Project Description:** Build new masonry and concrete rooms and construct foundations for two

---

**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.*
### Official 2015 Prevailing Wage Rate Schedule
#### for Parking Lot, Road, Highway, Bridge and Airport Construction

**Issue Date:** 11/13/2015  
**Contract must be awarded by:** 2/11/2016

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
<th>One Half Time Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRUCK DRIVERS ZONE 1</strong> 8 YARD CAPACITY OR GREATER</td>
<td>TD61 WAGE $25.00 $37.50 H H H H H H H Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9/4/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FRINGE $18.43 $10.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9/4/2015</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TRUCK DRIVERS ZONE 1**
Genesee, Oakland, Macomb, Monroe, Livingston, Washtenaw and Wayne

*comment* 4 tens allowed M-F
For hours after 40 per week, the OT rate is $38 per hour wages & fringes combined.

| **TRUCK DRIVERS ZONE 2** 8 YARD CAPACITY OR GREATER | TD62 WAGE $24.90 $37.35 H H H H H H H Y | | | |
| | 9/4/2015 | | | |
| | FRINGE $18.43 $10.99 | | | |
| | 9/4/2015 | | | |

**TRUCK DRIVERS ZONE 2**
The entire state except those counties listed in Zone 1: Genesee, Oakland, Macomb, Monroe, Livingston, Washtenaw and Wayne

*comment* 4 tens allowed M-F
For hours after 40 per week, the OT rate is $37.85 per hour wages & fringes combined.

| **TRUCK DRIVERS ZONE 1 ALL TRUCKS OF 8 CUBIC YARD CAPACITY OR LESS (except dump trucks of 8 cubic yard capacity or over, tandem axle trucks, transit mix and semis, euclid type equipment, double bottoms and low boys)** | TD91 WAGE $24.90 $37.35 H H H H H H H Y | | | |
| | 9/4/2015 | | | |
| | FRINGE $18.43 $10.99 | | | |
| | 9/4/2015 | | | |

**TRUCK DRIVERS ZONE 1**
Genesee, Oakland, Macomb, Monroe, Livingston, Washtenaw and Wayne

*comment* 4 tens allowed M-F
For hours after 40 per week, the OT rate is $37.85 per hour wages & fringes combined.

---

**Official Request #: 330**  
**Requestor:** Michigan Technological University  
**Project Description:** Build new masonry and concrete rooms and construct foundations for two
### Construction Mechanic Classification

<table>
<thead>
<tr>
<th>Construction Mechanic Classification</th>
<th>Straight Time Rate</th>
<th>Time and One Half Rate</th>
<th>Double Time Rate</th>
<th>Overtime Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUCK DRIVERS ZONE 2 8</td>
<td>TD92</td>
<td>WAGE</td>
<td>$24.80</td>
<td>$37.20</td>
</tr>
<tr>
<td>CUBIC YARD CAPACITY OR LESS</td>
<td>9/4/2015</td>
<td>FRINGE</td>
<td>$18.43</td>
<td>$10.99</td>
</tr>
<tr>
<td>(except dump trucks of 8 cubic cars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comment:** 4 tens allowed M-F

For hours after 40 per week, the OT rate is $37.70 per hour wages & fringes combined.

---

**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.
Official Request #: 1327
Requestor: Michigan Technological University
Project Description: Build new masonry and concrete rooms and construct foundations for two new Dynomometer Test Cells
Project Number: 102-15-01 Advance Power Systems Research Center

Houghton County
Official 2015 Prevailing Wage Rates for State Funded Projects
Issue Date: 11/13/2015
Contract must be awarded by: 2/11/2016

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Description</th>
<th>Last Updated</th>
<th>Straight Time and a Half</th>
<th>Double Time</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos &amp; Lead Abatement Laborer</td>
<td>Asbestos &amp; Lead Abatement Laborer</td>
<td>MLDC</td>
<td>10/30/2015</td>
<td>$40.75</td>
<td>$54.34</td>
<td>$67.93</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H</td>
<td>H</td>
<td>X</td>
</tr>
</tbody>
</table>

4 ten hour days @ straight time allowed
Monday-Saturday, must be consecutive

Asbestos & Lead Abatement, Hazardous Material Handler
Asbestos and Lead Abatement, Hazardous Material Handler
AS207 | 10/30/2015 | $40.75 | $54.25 | $67.75 |
| | | H | H | X | X | X | D | Y |

4 ten hour days @ straight time allowed
Monday-Saturday, must be consecutive

Boilermaker
Boilermaker
BO169 | 2/17/2015 | $54.70 | $81.08 | $107.45 |
| | | H | H | H | H | H | D | Y |

Apprentice Rates:
1st 6 months: $40.31, $59.49, $78.67
2nd 6 months: $41.45, $61.21, $80.95
3rd 6 months: $42.57, $62.88, $83.19
4th 6 months: $43.69, $64.57, $85.43
5th 6 months: $44.81, $66.24, $87.67
6th 6 months: $48.63, $72.50, $96.36
7th 6 months: $49.32, $73.01, $96.69
8th 6 months: $51.58, $76.40, $101.21

Official Request #: 1327
Requestor: Michigan Technological University
Project Description: Build new masonry and concrete rooms and construct foundations for two new Dynomometer Test Cells
Project Number: 102-15-01 Advance Power Systems Research Center
County: Houghton

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.
<table>
<thead>
<tr>
<th>Classification Name</th>
<th>Description</th>
<th>Last Updated</th>
<th>Straight Hourly</th>
<th>Half Hourly</th>
<th>Double Overtime</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bricklayer</td>
<td>Marble, Tile and Terrazzo Finisher</td>
<td>BR6 6/2/2014</td>
<td>$36.55</td>
<td>$45.79</td>
<td>$55.03</td>
<td>H H D X H H D Y</td>
</tr>
<tr>
<td></td>
<td>Make up day allowed comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Four 10s allowed Monday-Thurs. Make up days: Friday &amp; Saturday.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bricklayer, stone mason, mosaic worker, plasterer, tuck pointer, pointer, caulk &amp; cleaner</td>
<td>BR6-2 6/2/2014</td>
<td>$42.71</td>
<td>$55.03</td>
<td>$67.35</td>
<td>X X H X X H D Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Make up day allowed comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Saturday All time over 12 hours pr day - double</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Apprentice Rates:**

<table>
<thead>
<tr>
<th>Hours Range</th>
<th>Straight Hourly</th>
<th>Half Hourly</th>
<th>Double Overtime</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 749 hours</td>
<td>$32.85</td>
<td>$40.24</td>
<td>$47.63</td>
</tr>
<tr>
<td>750 - 1499 hours</td>
<td>$34.09</td>
<td>$42.10</td>
<td>$50.11</td>
</tr>
<tr>
<td>1500 - 2249 hours</td>
<td>$35.32</td>
<td>$43.95</td>
<td>$52.57</td>
</tr>
<tr>
<td>2250 - 2999 hours</td>
<td>$36.55</td>
<td>$45.79</td>
<td>$55.03</td>
</tr>
<tr>
<td>3000 - 3749 hours</td>
<td>$37.78</td>
<td>$47.63</td>
<td>$57.49</td>
</tr>
<tr>
<td>3750 - 4499 hours</td>
<td>$39.01</td>
<td>$49.48</td>
<td>$59.95</td>
</tr>
<tr>
<td>4500 - 5249 hours</td>
<td>$40.25</td>
<td>$51.34</td>
<td>$62.43</td>
</tr>
<tr>
<td>5250 - 6000 hours</td>
<td>$41.48</td>
<td>$53.19</td>
<td>$64.89</td>
</tr>
</tbody>
</table>

| Marble, Tile and Terrazzo Layer | BR6TL 6/2/2014 | $42.71 | $55.03 | $67.35 | H H D X H H D Y |
| Make up day allowed comment | | | | | |
| Four 10s allowed Monday-Thurs. Make up days: Friday & Saturday. | | | | | |
### Carpenter

**Carpenter, Drywall Taper & Finisher, & Floor**  
CA1510-C  
10/14/2015  
$42.00 $53.66 $65.32  
X X H X H H D Y  
Make up day allowed comment

**Apprentice Rates:**

- 1st 6 months: $32.67 $39.66 $46.66
- 2nd 6 months: $33.84 $41.42 $49.00
- 3rd 6 months: $35.00 $43.16 $51.32
- 4th 6 months: $36.17 $44.92 $53.66
- 5th 6 months: $37.34 $46.67 $56.00
- 6th 6 months: $38.50 $48.41 $58.32
- 7th 6 months: $39.67 $50.16 $60.66
- 8th 6 months: $40.83 $51.90 $62.98

### Piledriver

**Piledriver**  
CA1510-P  
10/14/2015  
$42.20 $53.96 $65.72  
X X H X H H D Y  
Make up day allowed comment

**Apprentice Rates:**

- 1st 6 months: $32.79 $39.84 $46.90
- 2nd 6 months: $33.97 $41.62 $49.26
- 3rd 6 months: $35.14 $43.37 $51.60
- 4th 6 months: $36.32 $45.14 $53.96
- 5th 6 months: $37.50 $46.91 $56.32
- 6th 6 months: $38.67 $48.66 $58.66
- 7th 6 months: $39.85 $50.44 $61.02
- 8th 6 months: $41.02 $52.19 $63.36
### Official 2015 Prevailing Wage Rates for State Funded Projects

**Issue Date:** 11/13/2015  
**Contract must be awarded by:** 2/11/2016  
**Page 4 of 25**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Description</th>
<th>Last Updated</th>
<th>Straight Time and a Half Hourly Provision</th>
<th>Double Time Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cement Mason</strong></td>
<td>BR6-CM</td>
<td>6/2/2014</td>
<td>$42.71</td>
<td>$55.03</td>
<td>$67.35</td>
</tr>
</tbody>
</table>

*Make up day allowed comment*

Four 10s allowed Monday-Thursday.  Make up days:  Friday and Saturday.

**Apprentice Rates:**

- **0 - 749 hours:** $34.09  
- **750 - 1499 hours:** $35.32  
- **1500 - 2249 hours:** $36.55  
- **2250 - 2999 hours:** $37.78  
- **3000 - 3749 hours:** $39.01  
- **3750 - 4500 hours:** $40.25

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Description</th>
<th>Last Updated</th>
<th>Straight Time and a Double Time Hourly Provision</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cement Mason</strong></td>
<td>PL16-16</td>
<td>10/23/2012</td>
<td>$30.30</td>
<td>$40.39</td>
<td>$50.47</td>
</tr>
</tbody>
</table>

*Make up day allowed comment*

Friday or Saturday for inclement weather.

**Apprentice Rates:**

- **1st year:** $23.24  
- **2nd year:** $25.26  
- **3rd year:** $27.27

---

**Official Request #: 1327**  
**Requestor:** Michigan Technological University  
**Project Description:** Build new masonry and concrete rooms and construct  
**Project Number:** 102-15-01 Advance Power Systems Research Center  
**County:** Houghton  

**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.
### Electrician

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Updated</th>
<th>Straight Hourly</th>
<th>Half Time</th>
<th>Double Time</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound and Communications Installer/Technician</td>
<td>EC-219-SC</td>
<td>3/12/2013</td>
<td>$33.43</td>
<td>$43.97</td>
<td>$54.51</td>
<td>H H H H H D Y</td>
</tr>
</tbody>
</table>

A 4 day 10 hour day schedule is allowed

**Apprentice Rates:**

<table>
<thead>
<tr>
<th>Period</th>
<th>Straight Hourly</th>
<th>Half Time</th>
<th>Double Time</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st period</td>
<td>$25.00</td>
<td>$31.32</td>
<td>$37.65</td>
<td></td>
</tr>
<tr>
<td>2nd period</td>
<td>$27.11</td>
<td>$34.49</td>
<td>$41.87</td>
<td></td>
</tr>
<tr>
<td>3rd period</td>
<td>$28.16</td>
<td>$36.07</td>
<td>$43.97</td>
<td></td>
</tr>
<tr>
<td>4th period</td>
<td>$29.22</td>
<td>$37.66</td>
<td>$46.09</td>
<td></td>
</tr>
<tr>
<td>5th period</td>
<td>$30.27</td>
<td>$39.23</td>
<td>$48.19</td>
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<tr>
<td>6th period</td>
<td>$31.33</td>
<td>$40.83</td>
<td>$50.31</td>
<td></td>
</tr>
</tbody>
</table>

Inside wireman for work above $180,000 total value.

A 4 ten schedule may be worked if 4 consecutive days, M-Th or Tues-F. **Make up day allowed**

**Apprentice Rates:**

<table>
<thead>
<tr>
<th>Hours Range</th>
<th>Straight Hourly</th>
<th>Half Time</th>
<th>Double Time</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,500-8,000 hours</td>
<td>$37.17</td>
<td>$50.94</td>
<td>$64.70</td>
<td></td>
</tr>
<tr>
<td>0-1,000 hours</td>
<td>$23.41</td>
<td>$30.29</td>
<td>$37.17</td>
<td></td>
</tr>
<tr>
<td>1,000-2,000 hours</td>
<td>$24.94</td>
<td>$32.58</td>
<td>$40.22</td>
<td></td>
</tr>
<tr>
<td>2,000-3,500 hours</td>
<td>$28.01</td>
<td>$37.19</td>
<td>$48.36</td>
<td></td>
</tr>
<tr>
<td>3,500-5,000 hours</td>
<td>$31.07</td>
<td>$41.77</td>
<td>$52.48</td>
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</tr>
<tr>
<td>5,000-6,500 hours</td>
<td>$34.13</td>
<td>$46.37</td>
<td>$58.60</td>
<td></td>
</tr>
</tbody>
</table>
Inside wireman for work below $180,000 total value.

A 4 ten schedule may be worked if 4 consecutive days, M-Th or Tues-F.

Make up day allowed

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
<th>Last Updated</th>
<th>Straight Hourly</th>
<th>Time and a Half Hourly</th>
<th>Double Time Hourly</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside wireman for work below $180,000 total value.</td>
<td>EC-219-ZB-below</td>
<td>3/12/2013</td>
<td>$42.47</td>
<td>$55.48</td>
<td>$68.49</td>
<td>H H H H D</td>
</tr>
</tbody>
</table>

| Elevator Constructor | Mechanic | EL-85 | 4/8/2013 | $70.77 | $116.32 | D D D D D D D Y |

4 tens allowed M-TH

Apprentice Rates:

<table>
<thead>
<tr>
<th>Hours</th>
<th>1st year</th>
<th>2nd year</th>
<th>3rd year</th>
<th>4th year</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1,000 hours</td>
<td>$50.27</td>
<td>$54.83</td>
<td>$57.10</td>
<td>$61.66</td>
</tr>
<tr>
<td>1,000-2,000 hours</td>
<td>$50.27</td>
<td>$54.83</td>
<td>$57.10</td>
<td>$61.66</td>
</tr>
<tr>
<td>2,000-3,500 hours</td>
<td>$50.27</td>
<td>$54.83</td>
<td>$57.10</td>
<td>$61.66</td>
</tr>
<tr>
<td>3,500-5,000 hours</td>
<td>$50.27</td>
<td>$54.83</td>
<td>$57.10</td>
<td>$61.66</td>
</tr>
<tr>
<td>5,000-6,500 hours</td>
<td>$50.27</td>
<td>$54.83</td>
<td>$57.10</td>
<td>$61.66</td>
</tr>
<tr>
<td>6,500-8,000 hours</td>
<td>$50.27</td>
<td>$54.83</td>
<td>$57.10</td>
<td>$61.66</td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Description</th>
<th>Updated</th>
<th>Last Updated</th>
<th>Straight Time and a Double Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Glazier</td>
<td>GL-826</td>
<td>7/16/2015</td>
<td></td>
<td>$44.16 $60.04 $75.91 H H H H H H D Y</td>
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<td></td>
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<td></td>
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<td></td>
<td>4 tens allowed on consecutive days</td>
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<tr>
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<tr>
<td></td>
<td>Heat and Frost Insulator</td>
<td>AS127</td>
<td>11/3/2014</td>
<td></td>
<td>$42.97 $55.93 $68.89 H H H D D D Y</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Make up day allowed</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Official Request #: 1327
Requestor: Michigan Technological University
Project Description: Build new masonry and concrete rooms and construct
Project Number: 102-15-01 Advance Power Systems Research Center
County: Statewide

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.
## Official 2015 Prevailing Wage Rates for State Funded Projects

### Page 8 of 25

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name Description</th>
<th>Last Updated</th>
<th>Straight Hourly</th>
<th>Time and a Half Hourly</th>
<th>Double Time Hourly</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ironworker</td>
<td>For work over $10 million: Structural, Ornamental, Machinery Rigger &amp; Reinforcing Ironworker; installation of sheet metal siding</td>
<td>IR-8-A 9/29/2014</td>
<td>$50.07</td>
<td>$69.76</td>
<td>$89.45</td>
<td>H H D D D Y</td>
</tr>
<tr>
<td></td>
<td>Make up day allowed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprentice Rates</td>
<td></td>
<td></td>
<td>$25.39</td>
<td>$37.75</td>
<td>$50.11</td>
<td></td>
</tr>
<tr>
<td>0 - 1,000 hours</td>
<td></td>
<td></td>
<td>$37.71</td>
<td>$51.22</td>
<td>$64.73</td>
<td></td>
</tr>
<tr>
<td>1,001 - 2,000 hours</td>
<td></td>
<td></td>
<td>$39.01</td>
<td>$53.17</td>
<td>$67.33</td>
<td></td>
</tr>
<tr>
<td>2,001 - 3,000 hours</td>
<td></td>
<td></td>
<td>$40.31</td>
<td>$55.12</td>
<td>$69.93</td>
<td></td>
</tr>
<tr>
<td>3,001 - 4,000 hours</td>
<td></td>
<td></td>
<td>$41.61</td>
<td>$57.07</td>
<td>$72.53</td>
<td></td>
</tr>
<tr>
<td>4,001 - 5,000 hours</td>
<td></td>
<td></td>
<td>$42.92</td>
<td>$59.04</td>
<td>$75.15</td>
<td></td>
</tr>
<tr>
<td>5,001 - 6,000 hours</td>
<td></td>
<td></td>
<td>$44.22</td>
<td>$60.98</td>
<td>$77.75</td>
<td></td>
</tr>
</tbody>
</table>

For work under $10 Million: Structural, Ornamental, Machinery Rigger & Reinforcing Ironworker; pre-engineered metal buildings

A 4-10 work week allowed Monday thru Thursday. Friday may be used as a make-up day. Hours in excess of 40 must be paid time and one half.

Make up day allowed

### Official Request #: 1327

Requestor: Michigan Technological University

Project Description: Build new masonry and concrete rooms and construct on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Project Number: 102-15-01 Advance Power Systems Research Center

County: Houghton

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.
<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Description</th>
<th>Last Updated</th>
<th>Straight Hourly</th>
<th>Half Time Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>Class A Laborer - construction laborer on building and heavy construction work, storm, and sanitary sewers on all construction sites and streets which are not included in the road builder rates, tool crib attendant, civil engineer helper, rodman, oxi-gun operator, propane or acetylene cutting torch operator, motor driven buggies, chipping hammers, tamping machines, green cutting, sand blasters, mason tenders, mortar mixers, mortar mixers, vibrator operators, concrete mixers, laborers with concrete crew, mixer to pour, including pour time from trucks.</td>
<td>L1329-B-A</td>
<td>10/15/2015</td>
<td>$33.40</td>
<td>$43.49</td>
</tr>
<tr>
<td></td>
<td>Apprentice Rates:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 - 1,000 hours</td>
<td>$28.36</td>
<td>$35.93</td>
<td>$43.49</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,001 - 2,000 hours</td>
<td>$29.37</td>
<td>$37.44</td>
<td>$45.51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,001 - 3,000 hours</td>
<td>$30.37</td>
<td>$38.94</td>
<td>$47.51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,001 - 4,000 hours</td>
<td>$32.39</td>
<td>$41.97</td>
<td>$51.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Class B Laborer - Cement gun nozzleman, blasters, miners, drillers, buster operators, layers of all non-metallic pipe</td>
<td>L1329-B-B</td>
<td>10/15/2015</td>
<td>$33.81</td>
<td>$44.10</td>
</tr>
<tr>
<td></td>
<td>Class C Laborer - caisson worker &amp; airtrack</td>
<td>L1329-B-C</td>
<td>10/15/2015</td>
<td>$34.17</td>
<td>$44.64</td>
</tr>
<tr>
<td></td>
<td>Class E Laborer - digester, tanks &amp; kilns</td>
<td>L1329-B-D</td>
<td>10/15/2015</td>
<td>$35.51</td>
<td>$46.65</td>
</tr>
</tbody>
</table>

Official Request #: 1327
Requestor: Michigan Technological University
Project Description: Build new masonry and concrete rooms and construct
Project Number: 102-15-01 Advance Power Systems Research Center
County: Houghton

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.
<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Description</th>
<th>Last Updated</th>
<th>Straight Time and a Double Time Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer - Hazardous</td>
<td>Class A - performing work in conjunction with site preparation and other preliminary work prior to actual removal, handling, or containment of hazardous waste substances not requiring use of personal protective equipment required by state or federal regulations; or a laborer performing work in conjunction with the removal, handling, or containment of hazardous waste substances when use of personal protective equipment level &quot;D&quot; is required.</td>
<td>LHAZ-Z11-A</td>
<td>11/7/2014</td>
<td>$32.91 $46.37 $59.82 H H H H H H D Y</td>
</tr>
<tr>
<td>Make up day allowed</td>
<td>comment</td>
<td>4 10s allowed M-Th or T-F; inclement weather makeup day Friday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprentice Rates:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-1,000 work hours</td>
<td>$27.93</td>
<td>$38.90</td>
<td>$49.86</td>
<td></td>
</tr>
<tr>
<td>1,001-2,000 work hours</td>
<td>$28.93</td>
<td>$40.40</td>
<td>$51.86</td>
<td></td>
</tr>
<tr>
<td>2,001-3,000 work hours</td>
<td>$29.92</td>
<td>$41.88</td>
<td>$53.84</td>
<td></td>
</tr>
<tr>
<td>3,001-4,000 work hours</td>
<td>$31.91</td>
<td>$44.86</td>
<td>$57.82</td>
<td></td>
</tr>
</tbody>
</table>

| Laborer - Hazardous | Class B - performing work in conjunction with the removal, handling, or containment of hazardous waste substances when the use of personal protective equipment levels "A", "B" or "C" is required. | LHAZ-Z11-B | 11/7/2014 | $33.91 $47.87 $61.82 H H H H H H D Y |
| Make up day allowed | comment | 4 10s allowed M-Th or T-F; inclement weather makeup day Friday |
| Apprentice Rates: | | | | |
| 0-1,000 work hours | $28.68 | $40.02 | $51.36 |
| 1,001-2,000 work hours | $29.73 | $41.60 | $53.46 |
| 2,001-3,000 work hours | $30.77 | $43.16 | $55.54 |
| 3,001-4,000 work hours | $32.86 | $46.29 | $59.72 |

Official Request #: 1327
Requestor: Michigan Technological University
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Project Number: 102-15-01 Advance Power Systems Research Center
County: Houghton

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.
### Official 2015 Prevailing Wage Rates for State Funded Projects

**Issue Date:** 11/13/2015  
**Contract must be awarded by:** 2/11/2016  

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name Description</th>
<th>Updated</th>
<th>Straight Hourly</th>
<th>Time and a Half Hourly</th>
<th>Double Time Hourly</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer Underground - Tunnel, Shaft &amp; Caisson</td>
<td>Class I - Tunnel, shaft and caisson laborer, dump man, shanty man, hog house tender, testing man (on gas), and watchman.</td>
<td>LAUCT-Z2-1 10/30/2014</td>
<td>$35.67</td>
<td>$47.07</td>
<td>$58.47</td>
<td>X X X X X X D Y</td>
</tr>
<tr>
<td>Laborer Underground - Tunnel, Shaft &amp; Caisson</td>
<td>Class II - Manhole, headwall, catch basin builder, bricklayer tender, mortar man, material mixer, fence erector, and guard rail builder.</td>
<td>LAUCT-Z2-2 10/30/2014</td>
<td>$35.76</td>
<td>$47.21</td>
<td>$58.65</td>
<td>X X X X X X D Y</td>
</tr>
</tbody>
</table>

**Apprentice Rates:**

- **0-1,000 work hours**
  - $30.52  
  - $39.35  
  - $48.17

- **1,001-2,000 work hours**
  - $31.55  
  - $40.90  
  - $50.23

- **2,001-3,000 work hours**
  - $32.58  
  - $42.44  
  - $52.29

- **3,001-4,000 work hours**
  - $34.64  
  - $45.53  
  - $56.41

---

**Official Request #:** 1327  
**Requestor:** Michigan Technological University  
**Project Description:** Build new masonry and concrete rooms and construct  
**Project Number:** 102-15-01 Advance Power Systems Research Center  
**County:** Houghton  

**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 III - Air tool operator (jack hammer man, bush hammer man and grinding man), first bottom man, second bottom man, cage tender, car pusher, carrier man, concrete man, concrete form man, concrete repair man, cement invert laborer, cement finisher, concrete shoveler, conveyor man, floor man, gasoline and electric tool operator, gunnite man, grout operator, welder, heading dinky man, inside lock tender, pea gravel operator, pump man, outside lock tender, scaffold man, top signal man, switch man, track man, tugger man, utility man, vibrator man, winch operator, pipe jacking man, wagon drill and air track operator and concrete saw operator (under 40 h.p.).

Apprentice Rates:

<table>
<thead>
<tr>
<th>Work Hours Range</th>
<th>Hourly Rate</th>
<th>Half Day Rate</th>
<th>Day Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1,000</td>
<td>$30.66</td>
<td>$39.56</td>
<td>$48.45</td>
</tr>
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<td>1,001-2,000</td>
<td>$31.70</td>
<td>$41.12</td>
<td>$50.53</td>
</tr>
<tr>
<td>2,001-3,000</td>
<td>$32.74</td>
<td>$42.68</td>
<td>$52.61</td>
</tr>
<tr>
<td>3,001-4,000</td>
<td>$34.82</td>
<td>$45.80</td>
<td>$56.77</td>
</tr>
</tbody>
</table>

Class IV - Tunnel, shaft and caisson mucker, bracer man, liner plate man, long haul dinky driver and well point man.

Apprentice Rates:

<table>
<thead>
<tr>
<th>Work Hours Range</th>
<th>Hourly Rate</th>
<th>Half Day Rate</th>
<th>Day Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1,000</td>
<td>$30.78</td>
<td>$39.74</td>
<td>$48.69</td>
</tr>
<tr>
<td>1,001-2,000</td>
<td>$31.83</td>
<td>$41.32</td>
<td>$50.79</td>
</tr>
<tr>
<td>2,001-3,000</td>
<td>$32.88</td>
<td>$42.89</td>
<td>$52.89</td>
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<tr>
<td>3,001-4,000</td>
<td>$34.97</td>
<td>$46.02</td>
<td>$57.07</td>
</tr>
</tbody>
</table>
### Classification Name Description

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class V - Tunnel, shaft and caisson miner, drill runner, keyboard operator, power knife operator, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars)</td>
<td>LAUCT-Z2-5</td>
<td>10/30/2014</td>
</tr>
</tbody>
</table>

**Apprentice Rates:**

| 0-1,000 work hours | $30.98 | $40.04 | $49.09 |
| 1,001-2,000 work hours | $32.04 | $41.63 | $51.21 |
| 2,001-3,000 work hours | $33.10 | $43.22 | $53.33 |
| 3,001-4,000 work hours | $35.22 | $46.40 | $57.57 |

| Class VI - Dynamite man and powder man. | LAUCT-Z2-6 | 10/30/2014 | $36.59 $48.45 $60.31 X X X X X X D Y |

**Apprentice Rates:**

| 0-1,000 work hours | $31.21 | $40.38 | $49.55 |
| 1,001-2,000 work hours | $32.28 | $41.99 | $51.69 |
| 2,001-3,000 work hours | $33.36 | $43.61 | $53.85 |
| 3,001-4,000 work hours | $35.51 | $46.84 | $58.15 |

| 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 and flagstones. | LAUCT-Z2-7 | 10/30/2014 | $28.86 $36.86 $44.85 X X X X X X D Y |

**Apprentice Rates:**

| 0-1,000 work hours | $25.41 | $31.68 | $37.95 |
| 1,001-2,000 work hours | $26.10 | $32.72 | $39.33 |
| 2,001-3,000 work hours | $26.79 | $33.76 | $40.71 |
| 3,001-4,000 work hours | $28.17 | $35.82 | $43.47 |
### Landscape Laborer

Landscape Specialist includes air, gas, and diesel equipment operator, skidsteer (or equivalent), lawn sprinkler installer on landscaping work where seeding, sodding, planting, cutting, trimming, backfilling, rough grading or maintenance of landscape projects occurs. Sundays paid at time & one half. Holidays paid at double time.

Skilled Landscape Laborer: small power tool operator, lawn sprinkler installers’ tender, material mover, truck driver on when seeding, sodding, planting, cutting, trimming, backfilling, rough grading or maintaining of landscape projects occurs. Sundays paid at time & one half. Holidays paid at double time.

### Operating Engineer - DIVER

Diver/Wet Tender/Tender/Rov Pilot/Rov Tender

### Operating Engineer - Marine Construction

Diver/Wet Tender, Engineer (hydraulic dredge)

---

**Official Request #: 1327**
Requestor: Michigan Technological University
Project Description: Build new masonry and concrete rooms and construct
Project Number: 102-15-01 Advance Power Systems Research Center
County: Statewide

---

Official Rate Schedule
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<table>
<thead>
<tr>
<th>Classification Name Description</th>
<th>Last Updated</th>
<th>Straight Time and Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friction, Lattice Boom or Crane License Certification</td>
<td>2/12/2014</td>
<td>$64.50 $84.10 $103.70 X X H H H D Y</td>
</tr>
<tr>
<td>Holiday pay = $123.30</td>
<td>Make up day allowed</td>
<td></td>
</tr>
<tr>
<td>Subdivision of county</td>
<td>All Great Lakes, islands therein, &amp; connecting &amp; tributary waters</td>
<td></td>
</tr>
<tr>
<td>Deck Equipment Operator, Machineryman, Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 lbs or more), Tug/Launch Operator, Loader, Dozer on Barge, Deck Machinery</td>
<td>2/12/2014</td>
<td>$59.30 $76.30 $93.30 X X H H H H D Y</td>
</tr>
<tr>
<td>Holiday pay = $110.30 per hour, wages &amp;</td>
<td>Make up day allowed</td>
<td></td>
</tr>
<tr>
<td>Subdivision of county</td>
<td>All Great Lakes, islands therein, &amp; connecting &amp; tributary waters</td>
<td></td>
</tr>
<tr>
<td>Deck Equipment Operator, (Machineryman/Fireman), (4 equipment units or more), Off Road Trucks, Deck Hand, Tug Engineer, &amp; Crane Maintenance 50 ton capacity and under or Backhoe 115,000 lbs or less, Assistant Tug Operator</td>
<td>2/12/2014</td>
<td>$53.60 $67.75 $81.90 X X H H H H D Y</td>
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<tr>
<td>Holiday pay = $96.05 per hour, wages &amp; fringes</td>
<td>Make up day allowed</td>
<td></td>
</tr>
<tr>
<td>Subdivision of county</td>
<td>All Great Lakes, islands therein, &amp; connecting &amp; tributary waters</td>
<td></td>
</tr>
<tr>
<td>Operating Engineer General Construction &amp; Underground</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crane 120’ boom &amp; jib</td>
<td>EN-324UP-120GU</td>
<td>7/1/2015</td>
</tr>
<tr>
<td>comment</td>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
</tr>
<tr>
<td>Crane 140’ boom &amp; jib</td>
<td>EN-324UP-140GU</td>
<td>7/1/2015</td>
</tr>
<tr>
<td>comment</td>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
</tr>
<tr>
<td>Crane with 300’ or longer main boom &amp; jib</td>
<td>EN-324UP-300GU</td>
<td>7/8/2015</td>
</tr>
<tr>
<td>comment</td>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Crane with 400' or longer main boom &amp; jib</td>
<td>EN-324UP-400GU</td>
<td></td>
</tr>
<tr>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class A- Regular equipment operator, crane, dozer, front end loader, pumpcrete, squeeze crete, job mechanic, welder, concrete pump, excavator, milling &amp; pulverizing machines, &amp; scraper (self-propelled &amp; tractor drawn).</td>
<td>EN-324UP-AGU</td>
<td></td>
</tr>
<tr>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprentice Rates:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st 6 months</td>
<td>$40.37</td>
<td>$50.19</td>
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<tr>
<td>2nd 6 months</td>
<td>$41.78</td>
<td>$52.31</td>
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<tr>
<td>3rd 6 months</td>
<td>$43.18</td>
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<td>4th 6 months</td>
<td>$44.58</td>
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<td>5th 6 months</td>
<td>$45.98</td>
<td>$58.61</td>
</tr>
<tr>
<td>6th 6 months</td>
<td>$47.39</td>
<td>$60.72</td>
</tr>
<tr>
<td>Class B- Air-Trac Drill, boom truck (non-swing), concrete mixers, material hoist and tugger, pumps 6&quot; and over, beltcrete, sweeping machine, trencher, head grease man, winches, well points and freeze systems</td>
<td>EN-324UP-BGU</td>
<td></td>
</tr>
<tr>
<td>Double time after 12 hours Mon-Sat</td>
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<td></td>
</tr>
<tr>
<td>Class C- Fork Truck, air compressor, conveyer, concrete saw, farm tractor(without attachments), generator, guard post driver, mulching machines, pumps under 6&quot;, welding machines,</td>
<td>EN-324UP-CGU</td>
<td></td>
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<tr>
<td>Double time after 12 hours Mon-Sat</td>
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<td></td>
</tr>
<tr>
<td>Class D- Oiler, fireman, heater operator, brock concrete breaker, elevators (other than passenger), end dump &amp; skid steer</td>
<td>EN-324UP-DGU</td>
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<tr>
<td>Double time after 12 hours Mon-Sat</td>
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<tr>
<td>Classification</td>
<td>Name Description</td>
<td>Updated</td>
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<tr>
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</tr>
<tr>
<td></td>
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<td>Hourly</td>
</tr>
<tr>
<td>Crane 220' boom &amp; jib</td>
<td>EN-324UP-GU</td>
<td>7/1/2015</td>
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<td>comment</td>
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</tr>
<tr>
<td></td>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
</tr>
<tr>
<td>Mechanic w/ truck &amp; tools</td>
<td>EN-324UP-MGU</td>
<td>7/1/2015</td>
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<td>comment</td>
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<td></td>
<td>Double time after 12 hours Mon-Sat</td>
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<tr>
<td>Operating Engineer Steel Work</td>
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<tr>
<td>Crane 120' boom &amp; jib</td>
<td>EN-324UP-120S</td>
<td>7/8/2015</td>
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<td>comment</td>
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<tr>
<td></td>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
</tr>
<tr>
<td>Crane 140' boom &amp; jib</td>
<td>EN-324UP-140S</td>
<td>7/8/2015</td>
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<tr>
<td></td>
<td>comment</td>
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</tr>
<tr>
<td></td>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
</tr>
<tr>
<td>Crane 220' boom &amp; jib</td>
<td>EN-324UP-220S</td>
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<tr>
<td></td>
<td>Double time after 12 hours Mon-Sat</td>
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<tr>
<td>Crane with 300' boom &amp; jib</td>
<td>EN-324UP-300S</td>
<td>7/8/2015</td>
</tr>
<tr>
<td></td>
<td>Make up day allowed</td>
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<tr>
<td></td>
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<td>Double time after 12 hours Mon-Sat</td>
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<tr>
<td>Crane with 400' boom &amp; jib</td>
<td>EN-324UP-400S</td>
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<td>comment</td>
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<td></td>
<td>Double time after 12 hours Mon-Sat</td>
<td></td>
</tr>
<tr>
<td>Compressor, Welder &amp; Forklift</td>
<td>EN-324UP-CWS</td>
<td>7/8/2015</td>
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<td></td>
<td>comment</td>
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<td></td>
<td>Double time after 12 hours Mon-Sat</td>
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<tr>
<td>Mechanic w/ truck &amp; tools</td>
<td>EN-324UP-MS</td>
<td>7/8/2015</td>
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<td>comment</td>
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<td></td>
<td>Double time after 12 hours Mon-Sat</td>
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<tr>
<td>Classification</td>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
<td>-------------</td>
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<tr>
<td>Oiler &amp; Fireman</td>
<td>EN-324UP-OFS</td>
<td>7/8/2015</td>
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<tr>
<td>Operator</td>
<td>EN-324UP-OS</td>
<td>7/8/2015</td>
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<tr>
<td>Painter</td>
<td>PT-1011</td>
<td>7/17/2015</td>
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</tr>
<tr>
<td>Apprentice Rates</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1st 6 months</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2nd 6 months</td>
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<td>5th 6 months</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6th 6 months</td>
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</tr>
</tbody>
</table>

Official Request #: 1327
Requestor: Michigan Technological University
Project Description: Build new masonry and concrete rooms and construct
Project Number: 102-15-01 Advance Power Systems Research Center
County: Houghton

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<table>
<thead>
<tr>
<th>Classification Name Description</th>
<th>Last Updated</th>
<th>Straight Hourly</th>
<th>Time and a Half Hourly</th>
<th>Double Time Hourly</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge Painter (under 30 feet)</td>
<td>8/26/2015</td>
<td>$35.89</td>
<td>$47.97</td>
<td>$60.04</td>
<td>H H H H H H D N</td>
</tr>
</tbody>
</table>

**Apprentice Rates:**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Straight Hourly</th>
<th>Time and a Half Hourly</th>
<th>Double Time Hourly</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st 1,000 hours</td>
<td>$26.23</td>
<td>$33.48</td>
<td>$40.72</td>
<td></td>
</tr>
<tr>
<td>2nd 1,000 hours</td>
<td>$27.44</td>
<td>$35.29</td>
<td>$43.14</td>
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</tr>
<tr>
<td>3rd 1,000 hours</td>
<td>$28.64</td>
<td>$37.09</td>
<td>$45.54</td>
<td></td>
</tr>
<tr>
<td>4th 1,000 hours</td>
<td>$29.85</td>
<td>$38.90</td>
<td>$47.96</td>
<td></td>
</tr>
<tr>
<td>5th 1,000 hours</td>
<td>$31.06</td>
<td>$40.72</td>
<td>$50.38</td>
<td></td>
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<tr>
<td>6th 1,000 hours</td>
<td>$32.27</td>
<td>$42.54</td>
<td>$52.80</td>
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</tr>
<tr>
<td>7th 1,000 hours</td>
<td>$33.48</td>
<td>$44.35</td>
<td>$55.22</td>
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</tr>
<tr>
<td>8th 1,000 hours</td>
<td>$34.68</td>
<td>$46.15</td>
<td>$57.62</td>
<td></td>
</tr>
</tbody>
</table>

| Drywall Finisher, Soundproofing, & Plural Component Applicator | PT-1011-DF | 7/17/2015 | $37.67 | $50.64 | $63.60 | H H H H H H D N |

**Apprentice Rates:**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Straight Hourly</th>
<th>Time and a Half Hourly</th>
<th>Double Time Hourly</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd 1,000 hours</td>
<td>$28.59</td>
<td>$37.02</td>
<td>$45.44</td>
<td></td>
</tr>
<tr>
<td>3rd 1,000 hours</td>
<td>$29.89</td>
<td>$38.96</td>
<td>$48.04</td>
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<tr>
<td>4th 1,000 hours</td>
<td>$31.19</td>
<td>$40.92</td>
<td>$50.64</td>
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</tr>
<tr>
<td>5th 1,000 hours</td>
<td>$32.48</td>
<td>$42.85</td>
<td>$53.22</td>
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<tr>
<td>6th 1,000 hours</td>
<td>$33.78</td>
<td>$44.80</td>
<td>$55.82</td>
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<tr>
<td>7th 1,000 hours</td>
<td>$35.08</td>
<td>$46.75</td>
<td>$58.42</td>
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</tr>
<tr>
<td>8th 1,000 hours</td>
<td>$36.37</td>
<td>$48.68</td>
<td>$61.00</td>
<td></td>
</tr>
</tbody>
</table>

**Pipe and Manhole Rehab**

| General Laborer for rehab work or normal cleaning and CCTV work-top man, scaffold man, CCTV assistant, jetter-vac assistant | TM247 | 4/17/2015 | $28.20 | $38.20 | H H H H H H H N |

| Tap cutter/CCTV Tech/Grout Equipment Operator: unit driver and operator of CCTV; grouting equipment and tap cutting equipment | TM247-2 | 4/17/2015 | $32.70 | $44.95 | H H H H H H H N |

**Official Request #: 1327**

**Requestor: Michigan Technological University**

**Project Description:** Build new masonry and concrete rooms and construct on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

**Project Number:** 102-15-01 Advance Power Systems Research Center

**County:** Statewide
<table>
<thead>
<tr>
<th>Classification Name Description</th>
<th>Last Updated</th>
<th>Straight Hourly</th>
<th>Time and Half Hourly</th>
<th>Double Time Hourly</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCTV Technician/Combo Unit Operator: unit driver and operator of cctv unit or combo unit in connection with normal cleaning and televising work</td>
<td>4/17/2015</td>
<td>$31.45</td>
<td>$43.07</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Boiler Operator: unit driver and operator of steam/water heater units and all ancillary equipment associated</td>
<td>4/17/2015</td>
<td>$33.20</td>
<td>$45.70</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Combo Unit driver &amp; Jetter-Vac Operator</td>
<td>4/17/2015</td>
<td>$33.20</td>
<td>$45.70</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Pipe Bursting &amp; Slip-lining Equipment Operator</td>
<td>4/17/2015</td>
<td>$34.20</td>
<td>$47.20</td>
<td>H</td>
<td>H</td>
</tr>
</tbody>
</table>

Plasterer

Plasterer

Apprentice Rates:

<table>
<thead>
<tr>
<th>Year</th>
<th>Straight Hourly</th>
<th>Half Hourly</th>
<th>Double Hourly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>$29.67</td>
<td>$38.06</td>
<td>$46.46</td>
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<tr>
<td>2nd year</td>
<td>$32.25</td>
<td>$41.94</td>
<td>$51.62</td>
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<tr>
<td>3rd year</td>
<td>$34.84</td>
<td>$45.82</td>
<td>$56.80</td>
</tr>
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</table>

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Project Description: Build new masonry and concrete rooms and construct

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County: Houghton

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### Plumber & Pipefitter

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Description</th>
<th>Updated</th>
<th>Last Updated</th>
<th>Straight Hourly</th>
<th>Time and a Half</th>
<th>Double Time</th>
<th>Overtime Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plumber &amp; Pipefitter</td>
<td>PL-111</td>
<td>Plumber &amp; Pipefitter</td>
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<td>$71.42</td>
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4 ten hour days may be worked only Monday-Thursday

*Make up day allowed*

#### Apprentice Rates:

<table>
<thead>
<tr>
<th>Apprentice</th>
<th>Hours</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st 6 months</td>
<td>40</td>
<td>$23.96</td>
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<tr>
<td>2nd 6 months</td>
<td>40</td>
<td>$25.44</td>
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<td>3rd 6 months</td>
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<td>$35.32</td>
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<td>9th 6 months</td>
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### Roofer

<table>
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<tr>
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<th>Name</th>
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<th>Last Updated</th>
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<th>Time and a Half</th>
<th>Double Time</th>
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<tbody>
<tr>
<td>Commercial Roofer</td>
<td>RO-149-UP</td>
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*Make up day allowed*

#### Apprentice Rates:

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<tr>
<th>Apprentice</th>
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<th>Rate</th>
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<tr>
<td>Apprentice 1</td>
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<td>Apprentice 2</td>
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<td>Apprentice 3</td>
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<td>Apprentice 4</td>
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<td>Apprentice 5</td>
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<td>Apprentice 6</td>
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### Sewer Relining

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<th>Classification</th>
<th>Name</th>
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<th>Time and a Half</th>
<th>Double Time</th>
<th>Overtime Provision</th>
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</thead>
<tbody>
<tr>
<td>Class I-Operator of audio visual CCTV system including remote in-ground cutter and other equipment used in conjunction with CCTV</td>
<td>SR-I</td>
<td>Sewer Relining</td>
<td>11/3/2014</td>
<td>11/3/14</td>
<td>$42.76</td>
<td>$57.75</td>
<td>$72.74</td>
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Official Request #: 1327

Requestor: Michigan Technological University

Project Description: Build new masonry and concrete rooms and construct...

Project Number: 102-15-01 Advance Power Systems Research Center

County: Statewide

**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.
<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class II-Operator of hot water heaters and circulation system; water jetters; and vacuum and mechanical debris removal systems and those assisting.</td>
<td>SR-II</td>
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</table>

Sheet Metal Worker

Sheet Metal Worker

Sheet Metal Worker

4 10s allowed as consecutive days, M-Th

Make up day allowed comment

Apprentice Rates:

1st 6 months $27.84 $34.14 $40.44
2nd 6 months $29.88 $36.88 $43.88
3rd 6 months $31.93 $39.64 $47.34
4th 6 months $33.96 $42.37 $50.77
5th 6 months $36.01 $45.12 $54.22
6th 6 months $38.05 $47.86 $57.66
7th 6 months $40.09 $50.60 $61.10
8th 6 months $42.13 $53.34 $64.54

Sprinkler Fitter

Sprinkler Fitter

Sprinkler Fitter

Make up day allowed

Apprentice Rates:

Class 1 & 2 $23.44 $31.31 $39.17
Class 3 $29.35 $37.75 $46.15
Class 4 $30.93 $40.12 $49.31
Class 5 $35.50 $45.47 $55.45
Class 6 $37.07 $47.83 $58.59
Class 7 $38.65 $50.20 $61.75
Class 8 $40.22 $52.55 $64.89
Class 9 $41.79 $54.91 $68.03
Class 10 $43.36 $57.27 $71.17

Official Request #: 1327
Requestor: Michigan Technological University
Project Description: Build new masonry and concrete rooms and construct
Project Number: 102-15-01 Advance Power Systems Research Center
County: Houghton

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.
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<thead>
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<th>Classification</th>
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<th>Half Time</th>
<th>Double Time</th>
<th>Overtime Provision</th>
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<tr>
<td>Truck Driver</td>
<td>TM-RB2</td>
<td>of all trucks of 8 cubic yd capacity or over</td>
<td>8/8/2013</td>
<td>$41.92</td>
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<td>TM-RB2A</td>
<td>of all trucks of 8 cubic yard capacity or less (except dump trucks of 8 cubic yard capacity or over, tandem axle trucks, transit mix and semis, euclid type equipment, double bottoms and low boys)</td>
<td>8/8/2013</td>
<td>$41.82</td>
<td>$37.70</td>
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<td>TM-RB2B</td>
<td>on euclid type equipment</td>
<td>8/8/2013</td>
<td>$41.35</td>
<td>$38.08</td>
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<td>H H H H H H H Y</td>
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<td>Underground Laborer Open Cut, Class I</td>
<td>LAUC-Z5-1</td>
<td>Construction Laborer</td>
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<td>3,001-4,000 work hours</td>
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<td></td>
<td>$31.87</td>
<td>$41.36</td>
<td>$50.85</td>
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<tr>
<td>Underground Laborer Open Cut, Class II</td>
<td>LAUC-Z5-2</td>
<td>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</td>
<td>10/30/2014</td>
<td>$32.89</td>
<td>$42.89</td>
<td>$52.89</td>
<td>X X X X X X D Y</td>
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<td>Apprentice Rates:</td>
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<td>0-1,000 work hours</td>
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<td>2,001-3,000 work hours</td>
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<td>$30.23</td>
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<td>3,001-4,000 work hours</td>
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<td>$32.00</td>
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<td>$51.11</td>
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</table>

Official Request #: 1327
Requestor: Michigan Technological University
Project Description: Build new masonry and concrete rooms and construct...
### Underground Laborer Open Cut, Class III

Air, gasoline and electric tool operator, vibrator operator, drillers, pump man, tar kettle operator, bracers, rodder, 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.

#### Apprentice Rates:

<table>
<thead>
<tr>
<th>Work Hours</th>
<th>Hourly</th>
<th>Half Time</th>
<th>Double Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1,000 work hours</td>
<td>$28.56</td>
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<td>$44.23</td>
</tr>
<tr>
<td>1,001-2,000 work hours</td>
<td>$29.45</td>
<td>$37.74</td>
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<td>2,001-3,000 work hours</td>
<td>$30.34</td>
<td>$39.07</td>
<td>$47.79</td>
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<tr>
<td>3,001-4,000 work hours</td>
<td>$32.13</td>
<td>$41.76</td>
<td>$51.37</td>
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</tbody>
</table>

### Underground Laborer Open Cut, Class IV

Trench or excavating grade man.

#### Apprentice Rates:

<table>
<thead>
<tr>
<th>Work Hours</th>
<th>Hourly</th>
<th>Half Time</th>
<th>Double Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1,000 work hours</td>
<td>$28.59</td>
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<td>$39.13</td>
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<td>3,001-4,000 work hours</td>
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### Underground Laborer Open Cut, Class V

Pipe Layer

#### Apprentice Rates:

<table>
<thead>
<tr>
<th>Work Hours</th>
<th>Hourly</th>
<th>Half Time</th>
<th>Double Time</th>
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</thead>
<tbody>
<tr>
<td>0-1,000 work hours</td>
<td>$28.63</td>
<td>$36.50</td>
<td>$44.37</td>
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<tr>
<td>1,001-2,000 work hours</td>
<td>$29.53</td>
<td>$37.86</td>
<td>$46.17</td>
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<tr>
<td>2,001-3,000 work hours</td>
<td>$30.43</td>
<td>$39.20</td>
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<td>3,001-4,000 work hours</td>
<td>$32.22</td>
<td>$41.89</td>
<td>$51.55</td>
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</tbody>
</table>
### 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.

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<thead>
<tr>
<th>Last Updated</th>
<th>Straight Time and Half Time Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/30/2014</td>
<td><strong>$30.50</strong>   <strong>$39.31</strong>   <strong>$48.11</strong></td>
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</table>

**X X X X X X D Y**

### Apprentice Rates:

- **0-1,000 work hours**: $26.66 $33.55 $40.43
- **1,001-2,000 work hours**: $27.43 $34.70 $41.97
- **2,001-3,000 work hours**: $28.20 $35.86 $43.51
- **3,001-4,000 work hours**: $29.73 $38.16 $46.57

### 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.

<table>
<thead>
<tr>
<th>Last Updated</th>
<th>Straight Time and Half Time Provision</th>
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</thead>
<tbody>
<tr>
<td>10/30/2014</td>
<td><strong>$28.61</strong>   <strong>$36.47</strong>   <strong>$44.33</strong></td>
</tr>
</tbody>
</table>

**X X X X X X D Y**

### Apprentice Rates:

- **0-1,000 work hours**: $25.25 $31.44 $37.61
- **1,001-2,000 work hours**: $25.92 $32.44 $38.95
- **2,001-3,000 work hours**: $26.59 $33.44 $40.29
- **3,001-4,000 work hours**: $27.94 $35.47 $42.99
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<th>Violations</th>
<th>Employer</th>
<th>Address</th>
<th>Claim</th>
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<td>1061 TREVOR PLACE Detroit, MI 48207</td>
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<td>Date</td>
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<td>A &amp; R ENTERPRISES INC</td>
<td>3721 W MICHIGAN AVE STE 102 LANSING, MI 48917</td>
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<td>BEAL CONSTRUCTION SERVICES INC</td>
<td>221 FELCH ST STE 11 ANN ARBOR, MI 48103</td>
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1-27-2011