



**Department  
of  
Public Works  
Infrastructure  
Services Division  
Facilities Development  
& Management Section**

**FRANK P. ZEIDLER MUNICIPAL BUILDING  
2012 EXTERIOR WALLS REPAIR**

841 North Broadway  
Milwaukee, Wisconsin

March, 2012

Project Number BU110110702  
Official Notice No. 49

CITY OF MILWAUKEE, WISCONSIN  
DEPARTMENT OF PUBLIC WORKS  
INFRASTRUCTURE SERVICES DIVISION  
FACILITIES DEVELOPMENT &  
MANAGEMENT SECTION

---

PROJECT MANUAL  
GOVERNING THE  
FRANK P. ZEIDLER MUNICIPAL BUILDING  
2012 EXTERIOR WALLS REPAIR  
841 NORTH BROADWAY  
MILWAUKEE, WISCONSIN

---

Project No. BU110110702

March, 2012

TABLE OF CONTENTS

<u>TABLE OF CONTENTS</u>	<u>PAGE NO.</u>
<u>DIVISION 0 &amp; 1 - BIDDING REQUIREMENTS</u>	
00030 City of Milwaukee General Official Notice	00030/1
00031 City of Milwaukee Specific Official Notice	00031/1
00100 Instructions to Bidders	00100/1-6
<u>DIVISION 1 - GENERAL CONDITIONS</u>	
00700 General Conditions	00700/1-4
00821 Inspection Charges	00821/1
00822 Prevailing Wage Scale	00822/1-32
00850 Drawing Schedule	00850/1
<u>DIVISION 1 - GENERAL REQUIREMENTS</u>	
01010 Summary of Work	01010/1-4
01210 Project Meetings	01210/1-2
01300 Submittals and Permits	01300/1-2
01500 Job Site Utilities, Facilities, and Security	01500/1-5
01505 Construction Waste Management	01505/1-4
01600 Materials and Equipment	01600/1-3
01700 Cleaning and Project Close-Out	01700/1-3
<u>TECHNICAL SPECIFICATIONS</u>	
<u>DIVISION 2 – EXISTING CONDITIONS</u>	
020500 Demolition	020500/1-2
<u>DIVISION 4 - MASONRY</u>	
040100 Maintenance of Masonry	040100/1-9
040513 Masonry Mortaring	040513/1-4
042000 Unit Masonry	042000/1-7
<u>DIVISION 7 – THERMAL AND MOISTURE PROTECTION</u>	
079200 Joint Sealants	079200/1-3
<u>DIVISION 9 - FINISHES</u>	
099000 Paints and Coatings	099000/1-5

00030/1

CITY OF MILWAUKEE  
GENERAL OFFICIAL NOTICE  
TO CONTRACTORS

Separate sealed bids for each project will be received until 10:30 A.M. of the bid opening date at which time bids will be publicly opened and read for furnishing all material and doing all work for each project in accordance with the requirements of the respective Official Notice on the bid form furnished in accordance with plans, specifications, contract documents, and proposed form of contract on file in the office of the Department of Public Works, Municipal Building, 841 N. Broadway, Room 506, Milwaukee, Wisconsin, 53202.

PROSPECTIVE BIDDERS ARE TO CAREFULLY EXAMINE AND REVIEW ALL CONTRACT DOCUMENTS AND MATERIALS IN SAID OFFICE BEFORE SUBMITTING BID.

AFFIDAVITS OF NO INTEREST MUST ACCOMPANY THE BIDS, AND THE FAILURE OF PROSPECTIVE BIDDERS TO COMPLY WITH THESE REQUIREMENTS MAY DISQUALIFY THE BID.

THE CONTRACTOR/LESSEE AGREES TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT OF 1990, 42 U.S.C. § 12101, ET. SEQ. THE TDD NUMBER FOR PUBLIC WORKS IS (414) 286-2025.

As part of the bid each bidder shall submit a list of anticipated subcontractors and the class of work to be performed by each, which list should not be added to nor altered without the written consent of the Commissioner of Public Works.

All contractor(s) and subcontractor(s) are required to furnish or have on file a certificate of insurance in accordance with the insurance provisions of the General Specifications.

All contractor(s) and subcontractor(s) are subject to the prevailing wage rates and hours of labor as prescribed by the Common Council of the City of Milwaukee consistent with provisions of Section 66.0903 of the Wisconsin Statutes.

Copies of the actual work classifications and wage and fringe benefit rates enforced on this project are available in Room 506 of the Municipal Building.

Corporate surety will be required on performance and payment bonds for all projects listed in the following Official Notices. All applicable charter and Statutory provisions and ordinances, all the provisions of this official notice, invitation to bid, general and detailed specifications, special provisions, proposal, schedule of fixed prices, addendum and plans for this project and all other contract documents set forth in the invitation to bid will be incorporated and made part of the contract as if therein set forth in full.

Tie bids, when the lowest ones, will be decided by the Commissioner of Public Works.

The Commissioner of Public Works reserves the right to reject any or all bids.

Signed: GHASSAN KORBAN,  
Commissioner of Public Works

Countersigned: W. MARTIN MORICS,  
City Comptroller

00031/1

CITY OF MILWAUKEE  
SPECIFIC OFFICIAL NOTICE NO. 49

Important Notice:

The Invitation to Bid, all bid documents and the Plans & Specifications for the project listed will be available electronically to prospective bidders via <http://www.mpw.net/bids/docs/49-2012>. Any required addenda or responses related to the listed projects will be posted on said website. Bidders are encouraged to utilize this electronic method of obtaining bid documents as the Department of Public Works intends to solely use this method for future projects. At this time however, a limited number of hard copies of the above documents will also be available at address listed below. **IF YOU ONLY PRINT THE DOCUMENTS FROM THE WEBSITE AND WOULD LIKE YOUR COMPANY'S NAME PLACED ON THE PLAN HOLDERS' LIST, PLEASE CALL 414-286-3314.**

Sealed bids will be opened on Tuesday, April 10, 2012 at 10:30 A.M. for the **EXTERIOR WALLS REPAIR**, located at Frank P Zeidler Municipal Building, 841 North Broadway, Milwaukee, WI.

Bid Security Required: Bond, Certified Check, Cashier's Check, or Cash to accompany bid: 10% of Contractor's Base Bid

Time for Completion: 91 Working Days. All work on this project shall be completed by Thursday, August 30, 2012. Contractor shall not begin work on this project prior to Monday, April 23, 2012.

Liquidated Damages, per diem: **\$150.00**  
The MWSBE requirement for this project is **25%** of the contract base bid.  
**(Can be met with 25% SBE)**

The residency requirement for this project is **40%** of all hours worked on the project.

The apprenticeship requirements for this project are: **1**

**Mason**

The contractor shall specifically note the MWSBE, residency, and apprenticeship forms for this project. If the forms are not filled out properly, it will be cause for rejection of the bid.

Plans and project manual will be furnished to the prospective bidders upon payment of a \$10.00 non-refundable fee in room 506, Frank P. Zeidler Municipal Building, 841 North Broadway, Milwaukee, Wisconsin 53202. For general questions call 414-286-3314.

A \$10.00 per set additional non-refundable fee is required to obtain bid documents by mail. Plans are sent via U.S. mail unless other arrangements are made by the contractor.

Contractor must comply with all provisions of the CITY OF MILWAUKEE GENERAL OFFICIAL NOTICE TO CONTRACTORS published herein and at [http://mpw.milwaukee.gov/services/bids\\_home](http://mpw.milwaukee.gov/services/bids_home)

**Pre-Bid Meeting:** A Pre-Bid Meeting is scheduled for Tuesday, March 27, 2012, at 2:00 p.m. in Room 606 of the Frank P. Zeidler Municipal Building, 841 North Broadway, Milwaukee, Wisconsin. Bidder participation is urged to become familiar with all aspects of the project and bidding requirements.

Signed:

---

GHASSAN KORBAN  
Commissioner of Public Works

SECTION 00100: INSTRUCTIONS TO BIDDERS

See also Instructions to Bidders in the "General Specifications" of the Department of Public Works, City of Milwaukee, Wisconsin, dated January 31, 1992, and all subsequent addenda.

BID FORM

BASE BID:

Submit a lump sum price for the work as indicated on the drawings (including keyed notes 1, 2, 4, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, & 17) and specified herein.

Bids will not be accepted in any form except on the bid form included with this project manual.

The contractor must recognize and abide by the right of the Owner (City of Milwaukee) to accept or reject any or all bids in the best interests of the City.

ALTERNATE BIDS:

Each bidder shall examine the plans and project manual thoroughly to determine what extent the Alternates will affect the Bid.

Alternate Bid 1: Replace Cracked Granite Units With New Granite Units

Provide a lump sum price for removing and replacing 8 cracked granite units with new matching granite units complete with new matching stainless steel pins, mortar and ties. Clean and prime and paint all existing support steel members per specifications. See keyed note 9A on sheets 4, 5 & 6 and details 3/8, 2/11 & 3/11.

Lump sum cost for Alternate 1 shall be the cost of performing all of the work listed above minus the cost of work under keyed note 9 on sheets 4, 5, & 6.

Alternate Bid 2: Replace 15 Kasota Limestone Units With New Matching Units

Provide a lump sum price for removing, replacing and resetting a total of 15 existing out-of-plane Kasota limestone cladding units. See keyed note 7A on sheet 4 and details 1/9, 2/9 and 2/10.

Lump sum cost for Alternate 2 shall be the cost of performing all of the work listed above minus the cost of work under keyed note 7 on sheet 4.

Alternate Bid 3: Replace And Resetting Of Kasota Limestone Units

Provide a lump sum price for removing, salvaging and resetting a total of 15 existing out-of-plane Kasota limestone cladding units per details 1/9, 2/9 and 2/10. Assume 11 units will require removal, salvage and resetting. Assume 4 units will require removal and full replacement with matching units instead of epoxy crack injection. See keyed note 7B on sheet 4.

The lump sum cost for Alternate 3 shall be the cost of performing all of the work listed above minus the cost of work under keyed note 7 on sheet 4.

Alternate Bid 4: Replacement Of Cracked Kasota Limestone Units

Provide a lump sum price for removing and replacing 11 existing cracked Kasota limestone units with new matching Kasota limestone units complete with new stainless steel anchors, ties, pins and mortar according to details 1/9, 2/9 and 2/10. Verify unit locations with engineer. See keyed note 8A on sheets 5 and 6.

The lump sum cost for Alternate 4 shall be the cost of performing all of the work listed above minus the cost of work under keyed note 8 on sheets 5 & 6.

Alternate Bid 5: Removal And Replacement Of 100% Sealant At Granite Cladding Unit Joints

Provide a lump sum price for removing and replacing existing deteriorated sealant at 100% of the existing granite cladding unit joints. Clean joints thoroughly after sealant removal and replace joint sealant with new specified sealant. For bidding purposes, assume 60% of the granite joints are mortar and 40% are sealant. See also keyed note 4A on sheets 3, 4, 5 and 6 and detail 5/7.

The lump sum cost for Alternate 5 shall be the cost of performing all of the work listed above minus the cost of work under keyed note 4 on sheets 3, 4, 5 & 6.

Alternate Bid 6: Replacement Of Spalled Kasota Limestone Units

Provide a lump sum price for removing 3 existing Kasota limestone cladding units that are spalled and replacing them with new matching limestone units complete with stainless steel pins, ties and mortar according to details 1/9, 2/9 and 2/10. See keyed note 16A on sheet 6.

The lump sum cost for Alternate 6 shall be the cost of performing all of the work listed above minus the cost of work under keyed note 16 on sheet 6.

Alternate Bid 7: 100% Tuck Pointing Of Granite Cladding Unit Joints

Provide a lump sum price for performing 100% of spot grinding and tuck pointing at the mortar joints of the existing granite cladding units. For bidding purposes, assume 60% of the granite joints are mortar and 40% are sealant. See keyed note 12A on sheet 4 and detail 2/7.

Unit cost for Alternate 7 shall be the cost of performing all of the work listed above minus the cost of work under keyed note 12 on sheet 4.

UNIT PRICES:

Each bidder shall provide on the bid proposal the following lump sum prices that were used in arriving at the Base Bid. **The unit price for additions or deductions to Unit Price F thru R work required under the contract will be determined by dividing the lump sum price by the stated quantity of units.**

Unit Price A:

Provide a lump sum price for general conditions and contractors fee including: mobilization, staging, etc.

Unit Price B:

Provide a lump sum price for scaffolding/swing stage.

Unit Price C:

Provide a lump sum price for providing public protection canopies as shown on sheet 2 of the plans.

Unit Price D:

Provide a lump sum price for providing temporary construction fencing.

Unit Price E:

Provide a lump sum price for removing, salvaging and resetting a total of 15 existing out-of-plane Kasota limestone cladding units. Assume 11 units will require removal, salvage and resetting. Assume 4 units will require removal and epoxy injection repair per detail 1/7 and resetting. Cost of epoxy injection is to be included with lump sum price. See keyed note 7 on sheet 4 and details 1/9, 2/9, & 1/10 for resetting and detail 1/7 for epoxy crack injection.

Unit Price E-1:

Provide a unit price for removing, salvaging and resetting one(1) out-of-plane Kasota Limestone cladding unit. Assume the unit does not require removal and epoxy injection repair. See keyed note 7 on sheet 4 and details 1/9, 2/9, & 1/10 for resetting.

Unit Price E-2:

Provide a unit price for removing, salvaging and resetting one(1) out-of-plane Kasota Limestone cladding unit. Assume the unit will require removal and epoxy injection repair per detail 1/7 and resetting. Cost of epoxy injection is to be included in the unit price. See keyed note 7 on sheet 4 and details 1/9, 2/9, & 1/10 for resetting and detail 1/7 for epoxy crack injection.

Unit Price E-3:

Provide a unit price for removing one(1) existing out-of-plane Kasota limestone cladding unit, and full replacement with one(1) new matching Kasota limestone cladding unit. See keyed note 7A on sheet 4 and details 1/9, 2/9 and 2/10.

Unit Price F:

Provide a lump sum price for removing 53 square feet of existing outer wythe brick veneer units at the inside face of the parapet wall where it has cracked, spalled and step cracked. Then repairing the existing backup masonry wall using new brick units and mechanical ties and replacing outer wythe of brick masonry veneer with new matching units and ties. Verify locations with field engineer. See keyed note 1 on sheets 3, 4, 5 & 6 and details 1/8 and 3/9.

Unit Price G:

Provide a lump sum price for grinding and tuckpointing at 100% of the brick joints of the inside face of the parapet wall located above the 11<sup>th</sup> floor roof. See keyed note 2 on sheets 3, 4, 5 & 6 and details 2/7 and 3/9.

Unit Price H:

Provide a lump sum price for repairing 8 cracked granite units using epoxy injection. See keyed note 9 on sheets 4, 5 & 6 and detail 1/7.

Unit Price I:

Provide a lump sum price for removing and replacing 1260 linear feet of deteriorated sealant at existing granite cladding unit joints. Clean joint thoroughly after sealant removal. Verify locations requiring repair with engineer. See keyed note 4 on sheets 3, 4, 5 & 6 and detail 5/7.

Unit Price J:

Provide a lump sum price for removing 100% of the existing sealant and then grinding out the existing deteriorated mortar and then tuckpointing joints for all of the existing Kasota limestone joints,. At existing shelf angle locations install new sealant joint immediately below the horizontal leg of the existing shelf angle. See keyed note 6 on sheets 3, 4, 5 & 6 and details 2/7, 5/7 and 2/9.

Unit Price K:

Provide a lump sum price for repairing 11 existing cracked Kasota limestone cladding units by epoxy injection. See keyed note 8 on sheets 5 & 6 and detail 1/7.

Unit Price L:

Provide a lump sum price for removing, salvaging and resetting 6 displaced granite cladding units. Repair existing brick back up wall with new matching brick units and mortar. Reinstall 6 granite cladding units using stainless steel pins, wall ties and mortar. See keyed note 10 on sheets 4, 5, & 6 and details 2/11, 3/11 (similar) and 3/8 as applicable.

Unit Price M:

Provide a lump sum price for performing 30 linear feet of spot grinding and tuckpointing at the mortar joints of the existing granite cladding units. See keyed note 12 on sheet 4 and detail 2/7.

Unit Price N:

Provide a lump sum price for removing 1 granite cladding unit that is spalled and replacing it with a new matching granite unit complete with stainless steel pins, ties and sealant. See keyed note 13 on sheet 5 and detail 3/8.

Unit Price O:

Provide a lump sum price for removing and replacing 2 broken decorative granite units with new matching decorative granite units complete with new matching stainless steel pins, mortar, ties and sealant. Clean and prime and paint all existing support steel members per specifications. See keyed note 14 on sheets 3 & 5 and detail 2/11, similar.

Unit Price P:

Provide a lump sum price for removing and resetting 1 displaced granite soffit unit. Provide new matching stainless steel pins, and anchors to match existing. See keyed note 15 on sheet 3 and detail 2/12.

Unit Price Q:

Provide a lump sum price for patching 3 existing Kasota limestone cladding units with specified patching material. See keyed note 16 on sheet 6 and detail 4/7.

Unit Price R:

Provide a lump sum price for removing and replacing 1 existing broken ashlar granite unit with new matching ashlar granite unit complete with new matching stainless steel pins, mortar, ties and sealant. Clean and prime and paint all existing support steel members per specifications. See keyed note 17 on sheet 3.

CONTRACT AWARD:

The Commissioner of Public Works will award the contract on the basis of the Base Bid only or the Base Bid and the Alternate Bid(s) as funds permit.

CONTRACT BREAKDOWN:

Shortly after the award of the contract, each contractor shall submit a list showing the cost breakdown of the items in his contract. This list will be used as a basis for estimates of work completed for partial payment.

SITE VISIT:

All contractors shall visit the site consult the drawings and project manual, be familiar with the work of other contractors and determine for himself all conditions affecting the work.

Failure by a contractor to be familiar with the project shall not release him from any obligation under this contract to complete the work in strict conformity with the plans and project manual and all City, State and Federal Codes or regulation pertaining to the work.

00100/6

CONSTRUCTION START AND COMPLETION DATES:

The start and completion dates are stated in the Specific Official Notices. The contractor may begin procuring materials and off-site fabricating (as appropriate and approved by the Architect/Engineer) on the date on the Notice to Proceed. The Notice to Proceed will be sent to the contractor directly in allowing the signing of the contract.

BASE BID EXCLUSIONS:

None at this time.

ADDITIONAL PLANS/PROJECT MANUALS:

The successful contractor will be responsible for furnishing all additional copies of plans, project manuals, addenda, etc., as may be needed by the contractor and subcontractors. The City will cooperate by making originals available to the contractor's printer of choice.

END OF SECTION

SECTION 00700: GENERAL CONDITIONS1. SCOPE:A. Index:

1. Scope
2. DPW General Specifications
3. Definitions
4. Control of Work and Materials
5. Samples and Tests
6. Project Coordination
7. Supervision of Work
8. Technical Specifications and Drawings
9. Safety Regulations
10. Code Rules

2. Department of Public Works General Specifications:

Provisions of the Department of Public Works General Specifications dated January 31, 1992, and subsequent addenda except as may be modified or expanded upon in this project manual, shall apply to all contractors and subcontractors working on the project. Copies of the General Specifications may be obtained from the Department of Public Works General Office, Room 501 Zeidler Municipal Building, 841 North Broadway, Milwaukee, Wisconsin, or from the Buildings & Fleet Services, Room 602, Zeidler Municipal Building.

3. Definitions:

- A. Owner: City of Milwaukee.
- B. Facilities Manager: The Facilities Manager of Buildings and Fleet Services.
- C. Project Inspector: The authorized representative of the Commissioner assigned to make detailed inspection of any or all portions of the work and materials thereof. These inspections are not a substitute to those required by the Department of Neighborhood Services for permit and code compliance.
- D. Addenda: Written or graphic instruments issued prior to the execution of the contract which modify or interpret the bidding documents, including drawings and project manual by additions, deletions, clarifications or corrections. Addenda will become part of the contract documents when the contract is executed.
- E. Contract Drawings: Drawings of the work to be done as listed hereafter in Section 00850 Drawing Schedule and/or Section 00870 Plans and Details.

4. Control of Work and Materials:

- A. Detail and Shop Drawings: Shop drawings and other additional drawings which may be required for each contract of the work shall be prepared by each respective contractor unless otherwise directed by the Facilities Manager. Prints shall be the same size as contract documents when practical. Prints of each drawing shall be submitted to the Facilities Manager for approval before proceeding with the work. Changes ordered by the Facilities Manager shall be made and revised prints submitted as above. The Facilities Manager's approval of drawings shall not relieve the contractor of responsibility for errors.

- B. Primary Lines and Grades: The City of Milwaukee will mark two building corners along a line and will establish a benchmark, with a relative elevation, within close proximity to the site. Once established by the City, the contractor shall preserve all points and benchmark as long as needed during construction. The contractor will bear all costs associated with re-establishing points and benchmark.
  - C. Construction Lines and Grades: The contractor must bear sole responsibility for the correct transferal of all construction lines and grades from the primary lines and grades points. He shall take such measurements from existing work as may be necessary to insure the proper construction of his work.
  - D. Material Orders and Shipping Statements: The contractor shall furnish to the Facilities Manager at least two (2) copies of all material orders and shipping statements. Itemized weights of the materials and individual units of finished work shall be shown.
  - E. Weighing of Materials and Fabricated Units: The weighing of materials and fabricated units such as structural steel, casings, etc., when required, shall be done in the presence of the Commissioner's representative. The contractor shall be responsible for the satisfactory weighing of such materials and units.
  - F. Consignment and Delivery of Materials: The materials for the work shall be consigned to the contractor and he shall be responsible for the delivery of all materials required for the completion of the contract.
5. Samples and Tests:
- A. Method of Sampling: Samples of the materials proposed or furnished for the work may be taken by the Commissioner at any time; at the point of manufacture, point of delivery or site of work. They will be selected, as far as practicable, in accordance with standard methods of sampling such materials as specified in the standard of the American Society for Testing Material. All sampling shall be done by authorized representatives of the Commissioner. Selections will be in an orderly and systematic manner, insuring samples representative of the lot.
  - B. A.S.T.M. Standards: Wherever the abbreviation A.S.T.M. is used in connection with the number of a standard specification, the specification referred to shall be the Standard of the American Society for Testing Materials, designated by that number, including all revisions in effect on the date of award of the contract. Should a revised or amended standard be issued by the American Society for Testing Materials which, in the opinion of the Commissioner, conflicts with or causes undesirable changes in the standards referred to herein, the Commissioner reserves the right, by means of addenda to the project manual, to continue under the provisions of the pertinent standard referred to herein.
  - C. Cost of Test Specimens and Samples: All test specimens of metals and all samples of non-metals required for tests shall be furnished by the contractor without cost to the City.
  - D. Costs of Tests: All tests on test specimens of metals will be made at the expense of the contractor and the original test on samples of non-metals will be made at the expense of the City. In all cases, the testing procedure will be in accordance with Standard A.S.T.M. tests for such materials. Subsequent tests of non-metals requested by the contractor, when such tests are permitted by A.S.T.M. Specifications and approved by the Commissioner or subsequent tests ordered by the Commissioner will be made at the expense of the contractor.

6. Project Coordination:

- A. Contractors are required, so far as possible, to arrange work and to dispose of materials so as not to interfere with the work or storage of materials of other contractors or City forces engaged upon the work.
- B. Contractors shall give full cooperation to other trades and furnish any information necessary to permit the work of all trades to be installed satisfactorily and with the least possible interference or delay.
- C. Where the work of a contractor will be installed in close proximity to the work of other trades, or where there is evidence that the work of a contractor will interfere with the work of other trades, he shall assist in working out space conditions to make satisfactory adjustments.
- D. If a contractor installs work before coordinating it with other trades or so as to cause interference with work of other trades, he shall make necessary changes in his work to correct the condition without extra charge.
- E. Contractors are required to join their work to that of others in a proper manner, and in accordance with the spirit of the plans and project manual, and to perform the work in the proper sequence in relation to that of other contractors, and as may be directed by the Project Inspector.

7. Supervision of Work:

- A. Contractors shall furnish the services of an experienced engineer or superintendent.
- B. He shall be constantly in charge of the installation of the work together with all subcontractors, skilled workers, helpers, and labor required to unload, transfer, erect, connect up, adjust, start, operate and test each system.
- C. He shall be thoroughly acquainted with and be responsible for the various subcontractors' work so that it is properly coordinated and supervised to the satisfaction of the Commissioner of Public Works or his representative.
- D. Upon written notice to a contractor of the lack of such coordination and supervision, the Commissioner of Public Works may authorize such services as may be required and deduct the cost of this service at an hourly rate of \$60.00 per hour per worker from the contract for the work.

8. Technical Specifications and Drawings:

A. Governing order of Contract Documents:

- 1. The following provision modifies DPW General Specifications Item 2.1.3.1:

Anything mentioned in the Technical Specifications and not shown on the drawings or shown on the drawings and not mentioned in the Technical Specifications, shall be as if shown on or mentioned in both. In case of difference between drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in drawings or Technical Specifications, the matter shall be immediately submitted to Buildings & Fleet Services for decision. Said discrepancy shall not be adjusted by the contractor.

B. All contractors shall have complete sets of plans and project manuals on the job site at all times.

9. Safety Regulations:

All work shall be done in accordance with the safety requirements referenced in the International Building Code, as adopted and amended by the State of Wisconsin and OSHA.

10. Code Rules:

The rulings, regulations and laws of the following shall be complied with in the completion of this project:

International Building Code, as amended and adopted by the State of Wisconsin  
Plumbing and Drainage Codes of the City of Milwaukee  
Ordinances of the City of Milwaukee  
National Board of Fire Underwriters  
OSHA  
NFPA  
FAA  
NEC  
IEEE  
UL

00821/1

SECTION 00821: INSPECTION CHARGES

The contractor will be charged a fee for inspection for each and every day such inspection is required after the time allowed for completion has expired.

The amount of the fee for inspection shall be \$325.00 per day.

*Rev. 2/08*

The time allowed for completion is stated in the Specific Official Notice and shall start with the date on the Notice to Proceed which will be sent to the contractor directly following the signing of the contract. The time allowed includes the time required for fabricating and procuring material and doing the work at the building site.

## PREVAILING WAGE RATE DETERMINATION

Issued by the State of Wisconsin  
Department of Workforce Development  
Pursuant to s. 66.0903, Wis. Stats.  
Issued On: 01/13/2012  
Amended On: 03/02/2012

**DETERMINATION NUMBER:** 201200107

**EXPIRATION DATE:** Prime Contracts MUST Be Awarded or Negotiated On Or Before 12/31/2012. If NOT, You MUST Reapply.

**PROJECT NAME:** ALL PUBLIC WORKS PROJECTS UNDER SEC. 66.0903, STATS.-CITY OF MILWAUKEE

**PROJECT LOCATION:** MILWAUKEE CITY, MILWAUKEE COUNTY, WI

**CONTRACTING AGENCY:** CITY OF MILWAUKEE-DEPT OF PUBLIC WORKS

<b>CLASSIFICATION:</b>	Contractors are responsible for correctly classifying their workers. Either call the Department of Workforce Development (DWD) with trade or classification questions or consult DWD's Dictionary of Occupational Classifications & Work Descriptions on the DWD website at: <a href="http://dwd.wisconsin.gov/er/prevailing_wage_rate/Dictionary/dictionary_main.htm">dwd.wisconsin.gov/er/prevailing_wage_rate/Dictionary/dictionary_main.htm</a> .
<b>OVERTIME:</b>	<p>Time and one-half must be paid for all hours worked:</p> <ul style="list-style-type: none"><li>- over 10 hours per day on prevailing wage projects</li><li>- over 40 hours per calendar week</li><li>- Saturday and Sunday</li><li>- on all of the following holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25;</li><li>- The day before if January 1, July 4 or December 25 falls on a Saturday;</li><li>- The day following if January 1, July 4 or December 25 falls on a Sunday.</li></ul> <p>Apply the time and one-half overtime calculation to whichever is higher between the Hourly Basic Rate listed on this project determination or the employee's regular hourly rate of pay. Add any applicable Premium or DOT Premium to the Hourly Basic Rate before calculating overtime.</p> <p>A DOT Premium (discussed below) may supersede this time and one-half requirement.</p>
<b>FUTURE INCREASE:</b>	When a specific trade or occupation requires a future increase, you MUST add the full hourly increase to the "TOTAL" on the effective date(s) indicated for the specific trade or occupation.
<b>PREMIUM PAY:</b>	If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.
<b>DOT PREMIUM:</b>	This premium only applies to highway and bridge projects owned by the Wisconsin Department of Transportation and to the project type heading "Airport Pavement or State Highway Construction." DO NOT apply the premium calculation under any other project type on this determination.
<b>APPRENTICES:</b>	Pay apprentices a percentage of the applicable journey person's hourly basic rate of pay and hourly fringe benefit contributions specified in this determination. Obtain the appropriate percentage from each apprentice's contract or indenture.
<b>SUBJOURNEY:</b>	Subjourney wage rates may be available for some of the trades or occupations indicated below with the exception of laborers, truck drivers and heavy equipment operators. Any employer interested in using a subjourney classification on this project MUST complete Form ERD-10880 and request the applicable wage rate from the Department of Workforce Development PRIOR to using the subjourney worker on this project.

This document **MUST BE POSTED** by the **CONTRACTING AGENCY** in at least one conspicuous and easily accessible place **on the site of the project**. A local governmental unit may post this document at the place normally used to post public notices if there is no common site on the project. This document **MUST** remain posted during the entire time any worker is employed on the project and **MUST** be physically incorporated into the specifications and all contracts and subcontracts. If you have any questions, please write to the Equal Rights Division, Labor Standards Bureau, P.O. Box 8928, Madison, Wisconsin 53708 or call (608) 266-6861.

**The following statutory provisions apply to local governmental unit projects of public works and are set forth below pursuant to the requirements of s. 66.0903(8), Stats.**

**s. 66.0903 (1) (f) & s. 103.49 (1) (c) "PREVAILING HOURS OF LABOR"** for any trade or occupation in any area means 10 hours per day and 40 hours per week and may not include any hours worked on a Saturday or Sunday or on any of the following holidays:

1. January 1.
2. The last Monday in May.
3. July 4.
4. The first Monday in September.
5. The 4th Thursday in November.
6. December 25.
7. The day before if January 1, July 4 or December 25 falls on a Saturday.
8. The day following if January 1, July 4 or December 25 falls on a Sunday.

**s. 66.0903 (10) RECORDS; INSPECTION; ENFORCEMENT.**

(a) Each contractor, subcontractor, or contractor's or subcontractor's agent performing work on a project of public works that is subject to this section shall keep full and accurate records clearly indicating the name and trade or occupation of every person performing the work described in sub. (4) and an accurate record of the number of hours worked by each of those persons and the actual wages paid for the hours worked.

**s. 66.0903 (11) LIABILITY AND PENALTIES.**

(a) 1. Any contractor, subcontractor, or contractor's or subcontractor's agent who fails to pay the prevailing wage rate determined by the department under sub. (3) or who pays less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor is liable to any affected employee in the amount of his or her unpaid wages or his or her unpaid overtime compensation and in an additional amount as liquidated damages as provided under subd. 2., 3., whichever is applicable.

2. If the department determines upon inspection under sub. (10) (b) or (c) that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the department shall order the contractor to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages within a period specified by the department in the order.

3. In addition to or in lieu of recovering the liability specified in subd. 1. as provided in subd. 2., any employee for and in behalf of that employee and other employees similarly situated may commence an action to recover that liability in any court of competent jurisdiction. If the court finds that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the court shall order the contractor, subcontractor, or agent to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages.

5. No employee may be a party plaintiff to an action under subd. 3. unless the employee consents in writing to become a party and the consent is filed in the court in which the action is brought. Notwithstanding s. 814.04 (1), the court shall, in addition to any judgment awarded to the plaintiff, allow reasonable attorney fees and costs to be paid by the defendant.

<b>BUILDING OR HEAVY CONSTRUCTION</b>
---------------------------------------

Includes sheltered enclosures with walk-in access for the purpose of housing persons, employees, machinery, equipment or supplies and non-sheltered work such as canals, dams, dikes, reservoirs, storage tanks, etc. A sheltered enclosure need not be "habitable" in order to be considered a building. The installation of machinery and/or equipment, both above and below grade level, does not change a project's character as a building. On-site grading, utility work and landscaping are included within this definition. Residential buildings of four (4) stories or less, agricultural buildings, parking lots and driveways are NOT included within this definition.

<b>SKILLED TRADES</b>
-----------------------

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
		\$	\$	\$
101	Acoustic Ceiling Tile Installer	33.43	19.31	52.74
102	Boilermaker	31.09	21.87	52.96
103	Bricklayer, Blocklayer or Stonemason Future Increase(s): Add \$.50 on 6/01/2012; Add \$1.45/hr on 6/01/2013 Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	35.58	16.37	51.95
104	Cabinet Installer	29.06	15.16	44.22
105	Carpenter Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.43	19.31	52.74
106	Carpet Layer or Soft Floor Coverer	31.68	18.55	50.23
107	Cement Finisher	30.87	16.33	47.20
108	Drywall Taper or Finisher Future Increase(s): Add \$2.20/hr on 6/1/2012	28.97	17.74	46.71
109	Electrician Future Increase(s): Add \$1.40/hr on 6/1/2012. Add \$1.60/hr on 6/1/2013. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	31.54	20.95	52.49
110	Elevator Constructor	43.79	25.48	69.27
111	Fence Erector	27.00	0.00	27.00
112	Fire Sprinkler Fitter	36.82	19.03	55.85
113	Glazier	32.25	16.20	48.45
114	Heat or Frost Insulator	33.28	22.45	55.73

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
115	Insulator (Batt or Blown)	23.62	11.55	35.17
116	Ironworker	31.31	21.54	52.85
117	Lather	31.68	18.41	50.09
118	Line Constructor (Electrical)	35.97	18.08	54.05
119	Marble Finisher	31.16	16.27	47.43
120	Marble Mason	35.53	15.92	51.45
121	Metal Building Erector	21.05	7.82	28.87
122	Millwright	28.30	23.29	51.59
123	Overhead Door Installer	26.53	0.00	26.53
124	Painter Future Increase(s): Add \$2.20/hr on 6/1/2012. Premium Increase(s): Add \$.20/hr for paperhanging; Add \$.35/hr for bridge, iron and drywall; Add \$.75/hr for spraying and sandblasting; Add \$.60/hr for EIFS work; Add \$1.00/hr for lead based paint removal.	28.97	17.74	46.71
125	Pavement Marking Operator	26.00	0.00	26.00
126	Piledriver	28.11	23.94	52.05
127	Pipeline Fuser or Welder (Gas or Utility)	30.52	18.84	49.36
129	Plasterer	20.13	1.03	21.16
130	Plumber	36.97	17.47	54.44
132	Refrigeration Mechanic	37.21	19.04	56.25
133	Roofer or Waterproofor Future Increase(s): Add \$.50/hr. effective 06/01/2012	29.40	15.05	44.45
134	Sheet Metal Worker	37.20	16.37	53.57
135	Steamfitter	38.26	19.49	57.75
137	Teledata Technician or Installer Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	24.65	15.67	40.32
138	Temperature Control Installer	29.63	19.17	48.80
139	Terrazzo Finisher	18.00	5.35	23.35
140	Terrazzo Mechanic	31.16	16.27	47.43

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
141	Tile Finisher	23.76	16.05	39.81
142	Tile Setter	29.95	15.64	45.59
143	Tuckpointer, Caulker or Cleaner Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	34.35	15.92	50.27
144	Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01
146	Well Driller or Pump Installer	25.32	15.30	40.62
147	Siding Installer	36.60	16.37	52.97
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	27.42	15.10	42.52
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	28.78	15.16	43.94
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	17.80	9.00	26.80
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	23.38	12.48	35.86
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.30	10.97	32.27

**TRUCK DRIVERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle	32.32	16.75	49.07
203	Three or More Axle Future Increase(s): Add \$1.75/hr on 6/1/2012; Add \$1.85/hr on 6/1/2013. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	22.50	16.19	38.69
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	33.32	17.60	50.92
205	Pavement Marking Vehicle	19.25	10.84	30.09
207	Truck Mechanic	24.91	15.35	40.26

**LABORERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer Premium Increase(s): Add \$.11 for mortar mixer, fork lift operator, air and electric equipment and power buggy operators; Add \$.22 for jackhammer operator, certified welder, gunite machineman.	28.82	15.61	44.43
302	Asbestos Abatement Worker	21.58	17.83	39.41
303	Landscaper	12.50	2.20	14.70
310	Gas or Utility Pipeline Laborer (Other Than Sewer and Water)	19.14	15.53	34.67
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased) Premium Increase(s): DOT PREMIUMS: Pay two times the hourly basic rate on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	17.24	15.00	32.24
314	Railroad Track Laborer	17.00	1.06	18.06

**HEAVY EQUIPMENT OPERATORS  
SITE PREPARATION, UTILITY OR LANDSCAPING WORK ONLY**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
501	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Milling Machine; Boring Machine (Directional, Horizontal or Vertical); Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Backhoe (Track Type) Having a Mfgr's Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Crane, Shovel, Dragline, Clamshells; Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Grader or Motor Patrol; Master Mechanic; Mechanic or Welder; Robotic Tool Carrier (With or Without Attachments); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Tractor (Scraper, Dozer, Pusher, Loader); Trencher (Wheel Type or Chain Type Having Over 8 Inch Bucket).	32.32	18.18	50.50
502	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Environmental Burner; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Jeep Digger; Screed (Milling Machine); Skid Rig; Straddle Carrier or Travel Lift; Stump Chipper; Trencher (Wheel Type or Chain Type Having 8 Inch Bucket & Under).	33.32	17.60	50.92

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
503	Air Compressor (&/or 400 CFM or Over); Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Greaser; High Pressure Utility Locating Machine (Daylighting Machine); Mulcher; Oiler; Post Hole Digger or Driver; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	32.32	17.59	49.91
504	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	36.20	18.81	55.01
505	Work Performed on the Great Lakes Including Crane or Backhoe Operator; Assistant Hydraulic Dredge Engineer; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder; 70 Ton & Over Tug Operator. Premium Increase(s): Add \$.50/hr for friction crane, lattice boom or crane certification (CCO).	37.45	19.45	56.90
506	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	26.80	18.52	45.32
507	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	27.75	19.15	46.90

**HEAVY EQUIPMENT OPERATORS  
EXCLUDING SITE PREPARATION, UTILITY, PAVING LANDSCAPING WORK**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
508	Boring Machine (Directional); Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Premium Increase(s): Crane Operators with CCO certification add \$.50/hr. Cranes with boom length over 200 ft. not exceeding 300 ft. OR lifting capacity over 200 ton not exceeding 300 ton add \$.50/hr. Over 300 ton OR 300 ft. add \$.01/hr. per foot OR ton whichever is greater.	39.16	19.10	58.26

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>				
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		<b>\$</b>	<b>\$</b>	<b>\$</b>
509	Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Boring Machine (Horizontal or Vertical); Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Pile Driver; Versi Lifts, Tri-Lifts & Gantrys (20,000 Lbs. & Over). Premium Increase(s): Crane Operators with CCO certification add \$.50/hr.	38.66	19.10	57.76
510	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Dredge (NOT Performing Work on the Great Lakes); Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Hydro-Blaster (10,000 PSI or Over); Milling Machine; Skid Rig; Traveling Crane (Bridge Type). Premium Increase(s): Crane Operators with CCO certification add \$.50/hr.	38.16	19.10	57.26
511	Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Environmental Burner; Gantrys (Under 20,000 Lbs.); Grader or Motor Patrol; High Pressure Utility Locating Machine (Daylighting Machine); Manhoist; Material or Stack Hoist; Mechanic or Welder; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tining or Curing Machine; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket). Premium Increase(s): Crane Operators with CCO certification add \$.50/hr.	38.16	19.10	57.26
512	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Grout Pump; Hoist (Tugger, Automatic); Industrial Locomotives; Jeep Digger; Lift Slab Machine; Mulcher; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames.	37.47	19.10	56.57

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
513	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Boatmen (NOT Performing Work on the Great Lakes); Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Elevator; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Forklift; Generator (&/or 150 KW or Over); Greaser; Heaters (Mechanical); Loading Machine (Conveyor); Oiler; Post Hole Digger or Driver; Prestress Machine; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	30.44	19.10	49.54
514	Gas or Utility Pipeline, Except Sewer & Water (Primary Equipment). Future Increase(s): Add \$2/hr. on 1/1/2013.	34.89	19.68	54.57
515	Gas or Utility Pipeline, Except Sewer & Water (Secondary Equipment).	31.26	17.40	48.66
516	Fiber Optic Cable Equipment	25.74	15.85	41.59

<b>SEWER, WATER OR TUNNEL CONSTRUCTION</b>
--

Includes those projects that primarily involve public sewer or water distribution, transmission or collection systems and related tunnel work (excluding buildings).

<b>SKILLED TRADES</b>
-----------------------

<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason	35.53	15.92	51.45
105	Carpenter Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.43	19.31	52.74
107	Cement Finisher Future Increase(s): Add \$1.86 on 6/1/12; Add \$1.87 on 6/1/13; Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	27.14	19.22	46.36
109	Electrician Future Increase(s): Add \$1.40/hr on 6/1/2012. Add \$1.60/hr on 6/1/2013. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	31.54	20.95	52.49
111	Fence Erector	27.00	0.00	27.00
116	Ironworker Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	31.31	22.22	53.53
118	Line Constructor (Electrical)	35.97	18.08	54.05
125	Pavement Marking Operator	26.00	0.00	26.00
126	Piledriver	28.11	23.94	52.05
130	Plumber	36.18	16.86	53.04
135	Steamfitter	35.81	19.04	54.85
137	Teledata Technician or Installer	24.65	15.17	39.82

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
143	Tuckpointer, Caulker or Cleaner	34.30	15.47	49.77
144	Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01
146	Well Driller or Pump Installer	24.22	14.80	39.02
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	27.42	15.10	42.52
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	28.78	15.16	43.94
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	17.80	9.00	26.80
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	23.38	12.48	35.86
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.30	10.97	32.27

**TRUCK DRIVERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle	23.00	8.64	31.64
203	Three or More Axle	17.54	13.41	30.95
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$1.75/hr on 6/1/2012; Add \$1.85/hr on 6/1/2013. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	22.50	16.19	38.69
205	Pavement Marking Vehicle	19.25	10.84	30.09
207	Truck Mechanic	17.54	13.41	30.95

**LABORERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer Future Increase(s): Add \$1.73/hr on 6/4/2012. Premium Increase(s): Add \$1.92 for bottomman; Add \$2.03 for concrete manhole builder, bracer, jointman, or pipelayer; Add \$4.83 for blaster. Add \$2.00 for all tunnel work under 15 lbs. compressed air; Add \$2.00 for 0-30 lbs. compressed air; Add \$3.00 for over 30 lbs. compressed air.	27.72	15.61	43.33

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>				
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		\$	\$	\$
303	Landscaper	12.50	2.20	14.70
304	Flagperson or Traffic Control Person	22.50	12.90	35.40
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.09	14.40	31.49
314	Railroad Track Laborer	17.00	1.06	18.06

**HEAVY EQUIPMENT OPERATORS  
SEWER, WATER OR TUNNEL WORK**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>				
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		\$	\$	\$
521	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Master Mechanic; Pile Driver. Premium Increase(s): Crane Operators with CCO certification add \$.50/hr. Cranes with boom length over 200 ft. not exceeding 300 ft. OR lifting capacity over 200 ton not exceeding 300 ton add \$.50/hr. Over 300 ton OR 300 ft. add \$.01/hr. per foot OR ton whichever is greater.	39.16	19.10	58.26
522	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Spreader & Distributor; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Dredge (NOT Performing Work on the Great Lakes); Milling Machine; Skid Rig; Telehandler; Traveling Crane (Bridge Type). Future Increase(s): Add \$2.05/hr on 6/4/2012. Premium Increase(s): Add \$.25/hr for operating tower crane.	33.91	18.55	52.46

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
523	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Boring Machine (Horizontal or Vertical); Bulldozer or Endloader (Over 40 hp); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Manhoist; Material or Stack Hoist; Mechanic or Welder; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket). Future Increase(s): Add \$2.05/hr on 6/4/2012. Premium Increase(s): Add \$.25/hr for operating tower crane.	32.96	18.55	51.51
524	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Environmental Burner; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Hoist (Tugger, Automatic); Grout Pump; Jeep Digger; Lift Slab Machine; Mulcher; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Tining or Curing Machine; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames.	30.89	18.12	49.01
525	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Loading Machine (Conveyor); Post Hole Digger or Driver; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$2.05/hr on 6/4/2012. Premium Increase(s): Add \$.25/hr for operating tower crane.	30.51	18.55	49.06
526	Boiler (Temporary Heat); Forklift; Greaser; Oiler.	29.44	18.10	47.54
527	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	36.20	18.81	55.01

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
528	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	36.20	18.81	55.01
529	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	26.80	18.52	45.32
530	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under), Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	26.80	18.52	45.32

<b>AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION</b>
---

Includes all airport projects (excluding buildings) and all projects awarded by the Wisconsin Department of Transportation (excluding buildings).

---

**SKILLED TRADES**

---

<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		
		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		<b>\$</b>	<b>\$</b>	<b>\$</b>
103	Bricklayer, Blocklayer or Stonemason	32.66	15.92	48.58
105	Carpenter Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.43	19.31	52.74
107	Cement Finisher Future Increase(s): Add \$1.86 on 6/1/12; Add \$1.87 on 6/1/13; Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	29.33	17.03	46.36
109	Electrician	31.64	23.78	55.42
111	Fence Erector	35.62	0.00	35.62
116	Ironworker	31.31	21.54	52.85
118	Line Constructor (Electrical)	35.97	18.08	54.05
124	Painter	27.87	14.39	42.26
125	Pavement Marking Operator	27.87	14.39	42.26
126	Piledriver Premium Increase(s): Add \$.65/hr for Piledriver Loftsmen; Add \$.75/hr for Sheet Piling Loftsmen. DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	29.56	24.96	54.52
133	Rofer or Waterproofer	28.85	14.60	43.45
137	Teledata Technician or Installer	24.65	15.17	39.82
143	Tuckpointer, Caulker or Cleaner	34.30	15.47	49.77
144	Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	33.87	16.10	49.97
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	29.64	14.64	44.28
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.18	13.07	38.25
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	23.38	12.48	35.86
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.30	10.97	32.27

### TRUCK DRIVERS

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle Future Increase(s): Add \$1.75/hr on 6/1/2012; Add \$1.85/hr on 6/1/2013. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	22.35	16.19	38.54
203	Three or More Axle	24.91	15.63	40.54
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$1.75/hr on 6/1/2012; Add \$1.85/hr on 6/1/2013. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	22.50	16.19	38.69
205	Pavement Marking Vehicle	23.84	14.70	38.54
206	Shadow or Pilot Vehicle	24.76	15.35	40.11
207	Truck Mechanic	24.91	15.63	40.54

## LABORERS

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer Future Increase(s): Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1/2014. Premium Increase(s): Add \$.15/hr for air tool operator, joint sawer and filler (pavement), vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.35/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.50/hr for line and grade specialist; Add \$.65/hr for blaster and powderman; Add \$2.01/hr for topman; Add \$2.46/hr for bottomman; Add \$3.23/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	24.34	17.85	42.19
302	Asbestos Abatement Worker	22.00	16.86	38.86
303	Landscaper	23.71	15.03	38.74
304	Flagperson or Traffic Control Person Future Increase(s): Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1/2014. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	20.83	17.85	38.68
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.09	14.40	31.49
314	Railroad Track Laborer	17.00	1.06	18.06

**HEAVY EQUIPMENT OPERATORS  
AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
531	Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	34.22	18.90	53.12
532	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	33.72	18.90	52.62

**Fringe Benefits Must Be Paid On All Hours Worked**

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
533	<p>Air Track, Rotary or Percussion Drilling Machine &amp;/or Hammers, Blaster; Asphalt Heater, Planer &amp; Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. &amp; Under); Bituminous (Asphalt) Plant &amp; Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb &amp; Gutter Machine; Concrete Spreader &amp; Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane Wlth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches &amp; A-Frames.</p> <p>Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).</p>	33.22	18.90	52.12

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
534	<p>Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed &amp; Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver &amp; Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.</p> <p>Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).</p>	32.96	18.90	51.86
535	<p>Air Compressor (&amp;/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical &amp; Horizontal); Automatic Belt Conveyor &amp; Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&amp;/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.</p> <p>Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).</p>	32.67	18.90	51.57
536	Fiber Optic Cable Equipment.	24.39	15.45	39.84
537	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	36.20	18.81	55.01

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
538	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	36.20	18.81	55.01
539	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	26.80	18.52	45.32
540	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	26.80	18.52	45.32

<b>LOCAL STREET OR MISCELLANEOUS PAVING CONSTRUCTION</b>
--

Includes roads, streets, alleys, trails, bridges, paths, racetracks, parking lots and driveways (except residential or agricultural), public sidewalks or other similar projects (excluding projects awarded by the Wisconsin Department of Transportation).

<b>SKILLED TRADES</b>
-----------------------

<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason	35.53	15.92	51.45
105	Carpenter	29.06	15.16	44.22
107	Cement Finisher	27.57	16.33	43.90
109	Electrician Future Increase(s): Add \$.50/hr. effective 06/04/2012. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	28.74	17.86	46.60
111	Fence Erector	27.00	0.00	27.00
116	Ironworker	31.31	21.54	52.85
118	Line Constructor (Electrical)	35.97	18.08	54.05
124	Painter	28.47	16.74	45.21
125	Pavement Marking Operator	26.00	0.00	26.00
126	Piledriver	28.11	23.94	52.05
133	Rofer or Waterproofer	28.85	14.60	43.45
137	Teledata Technician or Installer	24.65	15.17	39.82
143	Tuckpointer, Caulker or Cleaner	34.30	15.47	49.77
144	Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.42	12.90	48.32
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	28.78	14.42	43.20
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.18	13.07	38.25
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	23.38	12.48	35.86
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.30	10.97	32.27

**TRUCK DRIVERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle	15.00	0.00	15.00
203	Three or More Axle	20.00	6.00	26.00
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$1/hr on 6/3/2012; Add \$1/hr on 6/2/2013.	31.89	17.98	49.87
205	Pavement Marking Vehicle	19.25	10.84	30.09
206	Shadow or Pilot Vehicle	15.00	0.00	15.00
207	Truck Mechanic	20.00	6.00	26.00

**LABORERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer	21.73	17.04	38.77
303	Landscaper	22.96	15.37	38.33
304	Flagperson or Traffic Control Person Future Increase(s): Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1/2014. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	23.55	13.45	37.00
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.09	14.40	31.49
314	Railroad Track Laborer	17.00	1.06	18.06

**HEAVY EQUIPMENT OPERATORS  
CONCRETE PAVEMENT OR BRIDGE WORK**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
541	<p>Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &amp;/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic.</p> <p>Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).</p>	34.22	18.90	53.12
542	<p>Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. &amp; Under; Crane, Tower Crane Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &amp;/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.</p> <p>Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).</p>	33.72	18.90	52.62

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
543	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.	31.89	18.22	50.11
544	Backfiller; Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	33.22	18.90	52.12

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
545	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.	30.42	17.58	48.00
546	Fiber Optic Cable Equipment.	24.39	15.45	39.84
547	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	36.20	18.81	55.01
548	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	36.20	18.81	55.01
549	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or more); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	26.80	18.52	45.32
550	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	26.80	18.52	45.32

**HEAVY EQUIPMENT OPERATORS  
ASPHALT PAVEMENT OR OTHER WORK**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
551	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads and/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic.	38.06	18.10	56.16

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b><u>TOTAL</u></b>
<b><u>CODE</u></b>	<b><u>TRADE OR OCCUPATION</u></b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
552	<p>Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity Of 4,000 Lbs. &amp; Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &amp;/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.</p> <p>Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).</p>	33.72	18.90	52.62
553	<p>Air, Track, Rotary or Percussion Drilling Machine &amp;/or Hammers, Blaster; Asphalt Heater, Planer &amp; Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. &amp; Under); Bituminous (Asphalt) Plant &amp; Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Laser/Screed; Concrete Slipform Placer Curb &amp; Gutter Machine; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches &amp; A-Frames.</p>	31.52	17.50	49.02

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
554	Backfiller; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self-Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.	32.67	18.55	51.22
555	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.	32.67	18.55	51.22
556	Fiber Optic Cable Equipment.	24.39	15.45	39.84

<b>RESIDENTIAL OR AGRICULTURAL CONSTRUCTION</b>
---

Includes single family houses or apartment buildings of no more than four (4) stories in height and all buildings, structures or facilities that are primarily used for agricultural or farming purposes, excluding commercial buildings. For classification purposes, the exterior height of a residential building, in terms of stories, is the primary consideration. All incidental items such as site work, driveways, parking lots, private sidewalks, private septic systems or sewer and water laterals connected to a public system and swimming pools are included within this definition. Residential buildings of five (5) stories and above are NOT included within this definition.

<b>SKILLED TRADES</b>
-----------------------

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
		\$	\$	\$
101	Acoustic Ceiling Tile Installer	27.00	1.16	28.16
102	Boilermaker	31.09	21.87	52.96
103	Bricklayer, Blocklayer or Stonemason	26.22	13.80	40.02
104	Cabinet Installer	26.00	2.33	28.33
105	Carpenter	31.68	7.03	38.71
106	Carpet Layer or Soft Floor Coverer	21.40	6.01	27.41
107	Cement Finisher	28.00	10.10	38.10
108	Drywall Taper or Finisher Future Increase(s): Add \$2.20/hr on 6/1/2012	28.97	17.74	46.71
109	Electrician	31.10	6.01	37.11
110	Elevator Constructor	43.79	25.48	69.27
111	Fence Erector	17.64	4.66	22.30
112	Fire Sprinkler Fitter	36.39	16.97	53.36
113	Glazier	36.23	8.04	44.27
114	Heat or Frost Insulator	29.04	19.73	48.77
115	Insulator (Batt or Blown)	11.00	2.51	13.51
116	Ironworker	23.05	4.06	27.11
117	Lather	28.15	15.14	43.29
119	Marble Finisher	31.16	16.27	47.43
120	Marble Mason	35.53	15.92	51.45
121	Metal Building Erector	15.19	2.00	17.19
123	Overhead Door Installer	23.00	8.00	31.00
124	Painter	23.00	2.81	25.81

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
125	Pavement Marking Operator	26.00	0.00	26.00
129	Plasterer	30.36	7.15	37.51
130	Plumber	37.42	17.92	55.34
132	Refrigeration Mechanic	25.00	0.51	25.51
133	Rofer or Waterproofor Future Increase(s): Add \$.50/hr. effective 06/01/2012	29.40	15.05	44.45
134	Sheet Metal Worker	28.15	15.14	43.29
135	Steamfitter	32.59	11.05	43.64
137	Teledata Technician or Installer	19.23	5.32	24.55
138	Temperature Control Installer	22.00	2.64	24.64
139	Terrazzo Finisher	18.00	5.35	23.35
140	Terrazzo Mechanic	31.16	16.27	47.43
141	Tile Finisher	23.96	15.50	39.46
142	Tile Setter	27.00	1.91	28.91
143	Tuckpointer, Caulker or Cleaner	32.50	1.62	34.12
146	Well Driller or Pump Installer	27.60	0.00	27.60
147	Siding Installer	16.00	0.00	16.00

**TRUCK DRIVERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle	16.25	2.25	18.50
203	Three or More Axle	17.00	7.63	24.63
205	Pavement Marking Vehicle	19.25	10.84	30.09
207	Truck Mechanic	19.00	1.75	20.75

**LABORERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer	17.50	6.16	23.66
302	Asbestos Abatement Worker	17.00	2.21	19.21
303	Landscaper	11.00	2.07	13.07
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.09	14.40	31.49

**HEAVY EQUIPMENT OPERATORS  
RESIDENTIAL OR AGRICULTURAL CONSTRUCTION**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
557	Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type); Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Crane, Shovel, Dragline, Clamshells; Forestry Equipment, Timberco, Tree Shear, Tub Grinder, Processor; Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type); Winches & A-Frames.	32.56	10.76	43.32
558	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Backfiller; Belting, Burlap, Texturing Machine; Boiler (Temporary Heat); Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Jeep Digger; Lift Slab Machine; Mulcher; Oiler; Post Hole Digger or Driver; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Roller (Rubber Tire, 5 Tons or Under); Screed (Milling Machine); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Stump Chipper; Telehandler; Vibratory Hammer or Extractor, Power Pack.	17.40	0.44	17.84

\*\*\*\*\* END OF RATES \*\*\*\*\*

SECTION 00850: DRAWING SCHEDULE

The following listed drawings accompany and form a part of the project contract documents along with this project manual and generally illustrate the nature of the work.

<u>Sheet No.</u>	<u>Title</u>
1.	Title, Owner, Engineer Information, List of Drawings and Location Map
2.	Site Utilization Plan
3.	North Elevation
4.	East Elevation
5.	South Elevation
6.	West Elevation
7.	Repair Details
8.	Repair Details
9.	Repair Details
10.	Repair Details
11.	Repair Details
12.	Repair Details

SECTION 01010: SUMMARY OF WORK:

1. SCOPE:

A. Index:

1. Scope
2. Project Description
3. Work by Others
4. Scheduling of Work

2. PROJECT DESCRIPTION:

- A. In general, the project consists of the repair of the exterior stone and masonry wall cladding of the Frank P. Zeidler Municipal Building.
- B. The City will occupy the site during construction. The contractor is required to coordinate all construction with the City or agent to minimize impact to City operations and to ensure the safety of City employees and property. Coordination shall include the placement of field offices, public protection canopies, construction site fencing, scaffolding, interruption of utility service, demolition of existing building cladding, site clearing, delivery and storage of materials, and erection of building cladding components requiring crane equipment.
- C. The following outline is intended to serve as a general guide only, and not as a complete listing of work, operations, or materials. Consult the Table of Contents for a complete listing of items included.
  1. The Work consists of repair of the exterior wall masonry and stone cladding elements as identified on the drawings.
  2. Existing Construction:
    - a. The Frank P. Zeidler Municipal Building is constructed of a concrete frame consisting of concrete beams, columns, roof and floor slabs. The building's exterior walls are clad with Kasota limestone, brick masonry, three different types of granite, plaster, aluminum fins and panels, aluminum louvers, and glass glazed aluminum window frames.
  3. Summary of Work – consists of repair and replacement of the masonry and stone cladding elements of the exterior walls. The work includes, but is not limited to the following (Refer to elevation drawings and bid form for the quantity of each repair listed below):
    - a. Remove existing outer wythe brick veneer units at the inside face of the parapet wall where cracked, spalled and step cracked. Repair existing backup masonry wall using new brick units and mechanical

ties. Replace outer wythe of brick masonry veneer with new matching units and ties. Verify locations with field engineer. See details on drawings.

- b. Perform grinding and tuck pointing at 100% of the brick joints of the inside face of the parapet wall for the building. See details on drawings.
- c. Repair existing cracked granite units using epoxy injection. Verify units requiring epoxy injection with engineer. See detail on drawings.
- d. Remove existing deteriorated sealant at existing granite cladding unit joints. Clean joint thoroughly after sealant removal and replace joint sealant with new specified sealant. Verify locations requiring repair with engineer. See detail on drawings.
- e. At 100% of the existing Kasota limestone joints, remove existing sealant and then grind out existing deteriorated mortar and tuck point joints per detail 2/7. At existing shelf angle locations install new sealant joint immediately below the horizontal leg of the existing shelf angle. See details on drawings.
- f. Remove, salvage and reset existing out-of-plane Kasota limestone cladding units and epoxy inject cracked units according to the details on the drawings. Verify unit locations with engineer.
- g. Repair existing cracked limestone cladding units by epoxy injection according to detail on the drawings. Verify locations of cracked units with engineer.
- h. Repair existing cracked granite cladding units by epoxy injection according to detail on the drawings. Verify unit locations with engineer.
- i. Remove, salvage and reset existing displaced granite cladding units. Repair existing brick back up wall with new matching brick units and mortar. Reinstall salvaged granite cladding unit using stainless steel pins, wall ties and mortar. See details on drawings and verify unit locations with engineer.
- j. Perform spot grinding and tuck pointing at the mortar joints of the existing granite cladding units. Verify unit locations with engineer. See detail on drawings.
- k. Remove existing granite cladding unit that is spalled and replace with new matching granite unit complete with stainless steel pins, ties and sealant. See detail on drawings and verify locations with engineer.

- l. Remove and replace existing broken decorative granite unit with new matching decorative granite unit complete with new matching stainless steel pins, mortar, ties and sealant. Clean and prime and paint all existing support steel members per specifications. Verify units requiring replacement with engineer.
- m. Remove and reset existing displaced granite soffit unit. Provide new matching stainless steel pins, and anchors. Verify units requiring resetting with engineer. Refer to detail on drawings.
- n. Patch existing Kasota limestone cladding units with specified patching material per detail on the drawings. Verify unit locations with engineer.
- o. Remove and replace existing broken ashlar granite unit with new matching ashlar granite unit complete with new matching stainless steel pins, mortar, ties and sealant. Clean and prime and paint all existing support steel members per specifications. Verify unit requiring replacement with engineer.

D. Examine Documents and Visit Site:

- 1. Before submitting a bid proposal, bidders should carefully examine the drawings and specifications; visit the site of work; fully inform themselves as to all existing conditions and limitations, including those of labor; and shall include in the bid proposal a sum sufficient to cover the cost of all items contemplated by the construction documents.
- 2. Each sub-bidder further represents that they have inspected the site of the proposed work to ascertain any obstacles that might be encountered and other matters and conditions relevant to their work.
- 3. The nature of the work required demands thorough review of all drawings and the project manual, and diligent and careful site inspection by all prospective sub-bidders as a means of determining the extent of work and conditions under which the work is to be performed.
- 4. Additional charges will not be as considered for work which, prior to bidding, could reasonably be inferred as appropriate by examination of the drawings and specifications, visiting the site, and closely reviewing the work as indicated above. No representations as to subsurface conditions are made.

3. WORK BY OTHERS:

- A. Not used.

4. SCHEDULING OF WORK:

- A. A pre-construction conference will be held prior to the start of Work.
- B. It is the intent to start work for this project on April 23, 2012.
- C. Work is to be substantially completed by August 31, 2012. By substantially completed, it is intended all work included as part of this Contract be completed except for minor punch-list items.
- D. All work is to be fully completed by September 14, 2012. By fully completed, it is intended all work included as part of this Contract be completed, including punch-list items and completion of final submittals. An inspection will be conducted to verify that the Work is fully complete.
- E. The Contractor agrees that said Work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will ensure full completion thereof within the time stipulated. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for completion of the Work described herein is a reasonable time for climatic range and usual industrial conditions prevailing in this locality. It is further understood and mutually agreed that the date of beginning, rate of progress, and the time for completion of the Work to be done hereunder are essential conditions of this Contract. Costs caused by delays or by improperly timed activities or defective construction by the contractor or subcontractors shall be borne by the contractor responsible therefor.
- F. Do not start work during threatening weather.
- G. If adverse weather conditions are the basis for requests for additional time, such requests shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.
- H. The contractor shall provide a construction schedule which includes all phases of construction, indicating the anticipated start and completion times for each of those phases. The contractor shall provide that complete schedule at the Pre-Construction Meeting arranged by the City.
- I. All work, unless otherwise specifically approved, is to be done during normal working hours.

END OF SECTION

SECTION 01210: PROJECT MEETINGS1. SCOPE:A. Index:

1. Scope
2. Pre-Construction Meeting
3. Progress Meetings

2. PRE-CONSTRUCTION MEETING:

- A. Soon after the award of the contract and prior to the start of construction, the contractor shall attend a pre-construction conference with representatives/agents of the City.
- B. The contractor shall have at the meeting responsible representatives from subcontractors who are to perform major work on the project.
- C. The purpose of the meeting is to discuss in detail the plans and specifications. The discussion shall include:
  1. Schedule
  2. Equipment
  3. Material Storage
  4. Traffic Control
  5. Inspection Requirements
  6. Protection Procedures for the structure, adjacent facilities, environment, and personnel.
  7. Hours of Work
- D. The contractor shall submit the construction schedule to the architect/engineer at this meeting and a listing of subcontractors and their work. The contractor shall describe, in detail, when each portion of the work is expected to be accomplished. The subcontractors shall participate in the discussion. The architect/engineer will serve to interpret the contract documents should such questions arise.
- E. Any other questions that the contractor or his subcontractors have about the work or its scheduling shall be raised at these meetings.
- F. Requirements for contract administration and construction operations will be defined for participants.
- G. The architect/engineer will determine time, date, and place of the meeting.

3. PROGRESS MEETINGS:

- A. Bi-weekly meetings will be held for the purpose of coordinating and expediting the work.
- B. Attendance at project meetings by the contractor is mandatory. These meetings shall also be attended by representatives of each subcontractor who is either working at the site or is affected by work being done at the site. The contractor shall submit an updated construction schedule at these meetings and a short narrative should be written, describing the cause of any delays and intended action to remedy these delays.

01210/2

- C. Contractors shall give a verbal report of progress on the project, discuss the work schedule for the coming period, and present all conflicts, discrepancies, or other difficulties for resolution.

SECTION 01300: SUBMITTALS/PERMITS1. SCOPE:A. Index:

1. Scope
2. Submittals
3. Permits
4. Inspection

2. SUBMITTALS:

## A. Comply with the requirements of the General Conditions and as follows:

1. Forward Submittals not more than 20 calendar days after the Notice to Proceed date. No work, as indicated on any shop drawing, samples, hardware list, etc., shall be started until those submittals have been reviewed and work authorized.
2. All submittals must be thoroughly reviewed by the prime contractor for conformance to contract documents, prior to submission to the City, or its agents, for review. Shop drawings and catalog information shall be stamped "Reviewed By" and signed by the contractor's reviewer. The prime contractor shall review all subcontractor submittals prior to submittal to the City for compliance with contract documents and to coordinate all work.
3. Include with each submittal a transmittal letter signed and dated by the prime contractor containing the following:
  - a. Name of Contractor
  - b. Name of Project
  - c. List of Submittals
  - d. Name of Manufacturer or Supplier
  - e. Additional information as required for the items being provided.

B. Shop Drawings, Catalog Information, Calculations, and Samples:

1. Shop Drawings: Submit one blue/black line print review. The City will notify the contractor in writing and return one copy marked "REVIEWED - NO EXCEPTIONS TAKEN" with minor or no notations. The City will also notify the contractor in writing and return one copy, along with comments, when the drawings are marked either "REJECTED" or "REVISE AND RESUBMIT". For those shop drawings, the contractor will be responsible for resubmitting a new print.
2. Catalog Information and Calculations: Submit four copies for City's record and additional numbers of copies required for the contractor's purpose. The City will notify the contractor in writing and return the contractor's copies, with or without notation, marked either "REVIEWED - NO EXCEPTIONS TAKEN", "REVISE AND RESUBMIT", OR "REJECTED". Catalog information or calculations marked "REVISE AND RESUBMIT" or "REJECTED" must be resubmitted in the same quantities as originally required.

3. Samples: Submit two samples of requested materials for the City's records and additional samples, if desired, to be returned to the contractor. The City will notify the contractor in writing, whether the samples are approved or rejected. If they are rejected, new samples must be resubmitted as originally required.
  4. Corrections or comments made on the submittals during the review do not relieve the contractor from compliance with requirements of the contract documents. The check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. Contractors are responsible for conforming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating their work with that of all other trades; and performing their work in a safe manner.
- C. "Or Equal": Whenever the words "or equal" or similar term is used, it shall mean as determined by the Commissioner of Public Works or agent. All drawings, data and bulletins necessary to make an "or equal" determination shall be submitted to the City or agent. "Or equal" products will not be considered without accompanying documentation for comparison with specified products. Such review shall apply to design only and shall in no way relieve the contractor from the responsibilities as outlined in Item 2B above. Evaluation of "or equal" products will be made at the time of shop drawing submission. Any change required in design and coordination between all contractors, subcontractors, or trades due to the use of "or equal" materials shall become the contractor's responsibility. Any costs for detailed engineering reviews and/or any costs to incorporate "or equal" products will be borne by the contractor.

3. PERMITS:

- A. The City of Milwaukee will provide the general building and occupancy permits.
- B. Contractors shall obtain, from the City of Milwaukee Department of City Development and/or other government or private agencies, all special permits as may be necessary in their work.
- C. Contractors shall obtain all permits to occupy or work in the public way as may be necessary for their work.
- D. Contractors shall notify the City and/or appropriate utilities when making utility connections as part of the project.

4. INSPECTION:

- A. The City and/or agent will provide daily inspection to verify compliance with contract documents, identify contractors and crews on the job, verify compliance with contract conditions (MWSBE, residency, wage requirements), and record job progress and conditions.

Rev. 1/04

- B. Contractors shall arrange with the Department of Neighborhood Services/Construction Trades Division and permit issuing agencies for all code compliance inspections as required by all permits including, but not limited to, the general building and all special permits issued by that agency.**
- C. Contractors shall arrange with the appropriate City agency for compliance inspections, as required, for all permits including, but not limited to, curb and pavement cuts and patches, and public way occupancy and utility connections.**

SECTION 01500: JOB SITE UTILITIES, FACILITIES, AND SECURITY

1. SCOPE:

A. Index:

1. Scope
2. Building Security
3. Temporary or Trial Usage
4. Occupancy During Construction
5. Scaffolding
6. Electrical Power
7. Water
8. Toilet Facilities
9. Security and Weather Protection
10. Parking

2. BUILDING SECURITY:

A. General:

The Downtown Complex is open to the public from 8:00 AM until 4:45 PM, Monday through Friday, excluding holidays. Since most contracted work takes place outside normal business hours, it is essential that contractors and their City agents understand and abide by security policy.

Outlying buildings are not generally open to the public. Contracted work in these buildings can take place at any time. It is essential that contractors and their City agents understand and abide by security policy.

B. Police Access (General):

1. Access to Milwaukee Police Department facilities requires the contractor to meet the following access procedures.
2. The Police Department require that all contractors, vendors, visitor or other who intend to do business at any Police Department site must have a background check performed by the Milwaukee Police Department **PRIOR** to any access.
3. All contractors' staff requiring access to the site, including any subcontractors, suppliers or vendors will be required to submit their full name (including full middle name) and birth date to allow the Department to perform the necessary background check. The contractor shall provide a staff list two weeks before work begins. At this time contractor shall provide a brief outline of the work, project schedule, and company contact information (company name, contact name and title, phone number and address).
4. To add staff during the course of the project provide the same information as above and allow 48 hours for a response.
5. The Contractor will be notified if the worker does not pass the background check.
6. Sign in and sign out will be required at all Milwaukee Police Department facilities.

C. Scope:

At the beginning of any project, a copy of this policy and procedure statement will be added to the project manual for bid consideration and shall be distributed at the Pre-Construction Meeting. All City agents/officials responsible for engaging contractors, all contractors, and all subcontractors shall be held responsible for following the procedures.

D. City Agents/Officials:

1. Any City agents/officials who commission outside contractors to work in any of the facilities managed by Buildings and Fleet Services shall provide the following information no less than twenty-four (24) hours in advance of the work:

a. The names of any contract or subcontract employees who will be present in the facilities (for the purpose of designing badges appropriate to their work area):

Green – Zeidler Municipal Building, 841 North Broadway  
Red – City Hall, 200 East Wells Street  
Yellow – 809 North Broadway  
Gold – Any outlying buildings

These names must be listed on a sign-in sheet available in the Zeidler Municipal Building, Room 602, DPW Facilities Dev. & Management. City shall be responsible to ensure the sheet and badges are transported to the appropriate location where the work is to be completed (City Hall Information Center for the Downtown Complex, for outlying buildings to the designated Facility Manager) before work is to begin.

b. A list of keys and/or access cards required for access only to the areas necessary for work involved in the project. The keys and card will be received from the Security Manager or his designee and signed out to the City agents/officials responsible for the contracted work. The City employee will take the keys and/or access cards to the City Hall Information Center or the person responsible for controlling access in the outlying building where they shall be logged under the name of the contractor's company. When a project is complete, the City agents/officials must retrieve the keys/cards and return them to Facilities Development and Management support staff in Room 602 of the Zeidler Municipal Building.

E. Contractors:

1. Contractors shall abide by City security policy and procedures at all times during the scope of their participation in a project. Failure to comply will result in the contracted employee being escorted from the premises and the resulting lost time and expense shall be deducted from the contractor's invoice or penalties of \$50.00 per occurrence as determined by the contracting City agent/official.

a. All access should be provided in advance through the City agent/official. Contractors shall enter and exit only through those doors designated by the City (the Market Street entrance to City Hall and the doors established by the person responsible for access at outlying buildings). All other exterior doors are locked and alarmed and are not to be used as delivery points unless the City agent/official has been provided 24 hour notification to provide additional security coverage at that point while the delivery is in progress.

- b. All of the contractor's employees and all of the employees of any of his subcontractors shall wear at all times while on the site, in a clearly visible location, an identification card. The identification card is to have a minimum 1" x 1" color photo of the head and shoulders. The photo is to have been taken no more than one year previously. The card is to be laminated with clear plastic and is to contain the company name, employee's name, and the employee's signature, and is to be furnished by the contractor or respective subcontractor.
- F. Key or Key Card Access: Effective October 1, 2004 - The following policy has been established to maintain control of City Property and to ensure the physical protection of the City Hall Complex. signing out access cards and/or keys from the Information Center will be following the steps below.
- 1) Sign in on the sheet assigned to the project you are working on and pull that sheet and provide it to the Operator noting that you will need to sign out City property to access the building.
  - 2) Provide the Operator your driver's license as collateral for the return of City property.
  - 3) Sign out the property in the sign out book as per current policy.
  - 4) The Operator will file your driver's license until such time as you sign in and return the City property at which time your license will be returned.
  - 5) Sign out at the end of your workday on the sign out sheet.
  - 6) Under NO circumstances will keys or cards be disbursed without the user signing for the property and providing the City Hall Operator their driver's license as collateral.
  - 7) In the event that keys or cards are not returned daily the contractor in question will have a deduct (security violation) **\$50.00** penalty for each occurrence.as per the contract. Individuals who loose or fail to return keys will be responsible for the cost of re-keying to the City.
  - 8) Contractors shall not ask custodians or mechanics to unlock doors. In the rare case where access is not provided, the City Hall Operator may be contacted to assist in providing access. The contractor should be prepared to allow searches of equipment when leaving, and should remain only in the areas designated on the sign-in sheets.
- G. Dock Access: If the contractor requires use of the loading dock in Upper Parking, 24 hour advance notice shall be given to the City agent/official to make arrangements to provide additional security coverage while the delivery is in progress. The contractor or subcontractor shall meet the delivery driver and take delivery at that point. At no time shall a driver be allowed in the facilities without following the access procedure stated above.
- H. Outlying Building Access:
- 1) If after normal business hours work is required in the outlying buildings, all subcontractors and trades will arrange appropriate security measures and lock-up

procedures with the contractor in writing. Any work completed at night shall be left "open" for City inspection of the work. The contractor shall notify the City agent/official 24 hours in advance of after-hours work in writing, indicating the type of work to be done and the security measures to be taken by the contractor.

- 2) The contractor shall provide plywood door and window closures during construction to secure the structure from weather and damage from vandalism. The contractor is responsible to maintain the security of the space where they are working during construction.
- 3) If proper notification is not provided to the contractor, the subcontractor or trades shall be liable for any subsequent damage/vandalism/inspection cost, etc., due to lack of security/inspection coordination.
- 4) Use of City materials is strictly prohibited unless pre-arranged through the City employee contact.
- 5) At no time shall any interior doors that control access or exterior doors be propped open.

3 TEMPORARY OR TRIAL USAGE:

The owner shall have the right to make temporary or trial usage of any mechanical device, machinery, apparatus, equipment, work, material or construction supplied under contract before final completion or acceptance of the work, and the same shall not be construed as evidence of acceptance of the work by the owner.

4. OCCUPANCY DURING CONSTRUCTION:

The owner will occupy the premises while work is in progress. Contractor is to coordinate his work as to not interfere with the owner's operation or compromise building security.

5. SCAFFOLDING:

General Contractor shall provide protective sidewalk scaffolding and any additional measures as required to protect the public and allow safe use of this entrance into the facility during the entire construction period.

All scaffolding, swing stages and lifts as required to perform work defined in this contract document shall be provided and maintained by the General Contractor and shall be removed when no longer needed. The General Contractor is solely responsible for the design, safety and security of any scaffolding erected under this contract for this project. All scaffolding, swing stages and lifts shall be available with operators for access to the project for the Project Engineer, City Liaison and City Inspectors.

Exterior scaffolding access (up & down) shall be provided. Access through to the facility will be strictly limited. Adequate security must be provided by the General Contractor to limit the opportunity of unauthorized access of scaffolding.

Submittals for the scaffolding and egress protection shall be provided and reviewed before proceeding with erection. Scaffolding and egress protection submittals shall be stamped by a professional engineer. The scaffolding engineer shall design any foundations or anchoring points as required. The scaffolding system shall be properly grounded.

All anchors and other attachments into building shall be limited. All anchors and attachment shall be clearly indicated on submittals. All costs for scaffolding including installation of anchoring, foundation, erection and patching of all anchor and attachment points at the conclusion of the project shall be included in the base bid. Patching of all anchor or attachment points shall match existing façade materials. On site patching sample shall be provided and approved before proceeding with all patch work. Any damage to sidewalks, pavement or landscaped areas shall be restored to existing pre-construction conditions after the removal of the scaffolding.

Swing stages shall be installed and operated in accordance with all OSHA requirements.

rev 10/07

6. ELECTRICAL POWER:

Contractor may use existing outlets for power. Available outlets are 120 and 240 Volt single phase and 480 Volt three phase. Contractor is to supply his own lines. OSHA regulations require that employers use either ground fault circuit interrupters or an assured equipment grounding conductor program in addition to any other regulations for equipment grounding conductors. The cost of the current used will be paid for by the City.

7. WATER:

Contractor may use existing hose bibs for water. Contractor is to supply his own hoses. Contractor's hoses shall be leak free and contractor is to regulate the flow to limit it to project related use. The cost of the water will be paid for by the City.

8. TOILET FACILITIES:

Contractor shall provide their own temporary outside toilet facilities.

9. SECURITY AND WEATHER PROTECTION:

Contractor is to maintain a weather tight protection of the building for the duration of the project.

10. PARKING:

Contractor is responsible for parking of vehicles. No parking areas will be provided by the City.

SECTION 01505: CONSTRUCTION WASTE MANAGEMENT

**PART 1 - GENERAL**

1.1 SCOPE:

- A. This section specifies requirements for salvaging, recycling and disposing of construction waste for purposes of protecting the environment and reducing project cost.

Requirements include the following:

1. Developing a Construction Waste Management Plan including waste management goals and provisions for waste reduction and recycling.
2. Implementing, monitoring and documenting the waste management plan.
3. Incorporating special programs.
4. Evaluating construction waste management.

1.2 RELATED DOCUMENTS AND SECTIONS:

- A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.
- B. Related documents include the following
  1. Section 01010 "Summary of Work"
  2. Section 01300 "Submittal & Permits"
  3. Section 01500 "Utilities, Facilities, and Security" for environmental-protection measures during construction.

1.3 PRECONSTRUCTION MEETING:

- A. After award of Contract and prior to the commencement of the Work, schedule and conduct a meeting with the Owner and Architect/Engineer to discuss the proposed Construction Waste Management Plan and to develop a mutual understanding regarding details of environmental protection.

1.4 CONSTRUCTION WASTE MANAGEMENT PLAN:

- A. Construction Waste Management Plan
  1. The purpose of the Construction Waste Management Plan is to identify construction waste reduction goals, identify targeted materials, and explain specific waste reduction actions to be taken, by whom, and when.
  2. The Contractor shall develop a Construction Waste Management Plan for this Project within 15 working days after Contract award or prior to any waste removal. The Owner and the Architect/Engineer will furnish the Contractor with information that will assist in the development of the Construction Waste Management Plan. Submit the Construction Waste Management Plan (include document/report form) to the Architect/Engineer for approval prior to implementing the Plan.

- B. Progress Documentation: Document solid waste disposal and diversion. Include the date of removal, type of waste removed, quantity by weight and volume, final destination and use (recycled, reused or landfilled), and net cost or income.
  - 1. Document on the form acceptable to the Owner and Architect/Engineer.
  - 2. With each Application for Payment, submit updated documentation identifying solid waste disposal and diversion.
  - 3. With each Application for Payment, submit manifests, weight tickets, receipts and invoices identifying the Project and construction waste material.
- C. Record Submittals: Submit the following:
  - 1. Summary of solid waste disposal and diversion. Submit on form acceptable to the Owner and Architect/Engineer.
  - 2. End-of-Project recycling rates and landfill rates demonstrating the percentage of construction waste that was recycled or reused.

1.5 WASTE MANAGEMENT GOALS:

- A. Develop Construction Waste Management Plan that results in end-of-Project rates for the reuse/recycling of **50%** percent by weight or volume of total waste generated by the Project. Record the total construction waste reduction goal on the Construction Waste Management Plan Form.
- B. Reduce: The Project shall generate the least amount of waste and methods shall be used that minimize waste due to error, poor planning, breakage, mishandling, contamination, or similar factors. Promote the resourceful use of materials to the greatest extent possible.
- C. Reuse: The Contractor and Subcontractors shall reuse materials to the greatest extent possible. Reuse includes the following:
  - 1. Salvage reusable materials for resale, for reuse on this Project, or for storage for use on future projects.
  - 2. Return reusable items (e.g., pallets or unused products) to the material suppliers.
- D. Recycle: As many of the waste materials not able to be eliminated in the first place or salvaged for reuse shall be recycled. Waste disposal in landfills shall be minimized to greatest extent possible.

1.6 MATERIALS HANDLING AND SORTING:

- A. Handling:
  - 1. Materials that are contaminated prior to placing in collection containers shall be properly cleaned. Deliver materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to recycling processes.
  - 2. Cover materials with tarps and keep truckloads level so as to prevent spillage.
  - 3. Arrange for collection by or delivery to the appropriate recycling or reuse facility.
  - 4. Hazardous Waste and Hazardous Materials: Handle in accordance with applicable regulations. If encountered, such waste and materials shall be abated under separate contract.
- B. The following sorting methods are acceptable:
  - 1. Sorting recyclable materials at the Project site and transporting them to recycling markets directly from the Project site.

2. Employing haulers who make use of a materials-recovery facility or a transfer station where recyclable materials are sorted from the waste and recycled before disposing of the remainder. If using a hauler or recycling facility to sort out recyclables, verify that the hauler sorts out all construction waste loads and is not limited to those that are not acceptable at the landfill. Also, verify that the hauler or recycling facility recycles at least three types of materials.

1.11 WASTE MANAGEMENT PLAN IMPLEMENTATION:

- A. The Contractor shall designate a party (or parties) who shall be responsible for instructing construction personnel and overseeing and documenting results of the Construction Waste Management Plan.
- B. Distribution: The Contractor shall distribute copies of the Construction Waste Management Plan to the Project Foreman, each Subcontractor, the Owner, and the Architect/Engineer.
- C. Instruction: The Contractor shall provide on-site instruction regarding appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all construction personnel at the appropriate phases of the Project.
- D. Separation Facilities: The Contractor shall lay out and identify a specific area on the Project site to facilitate separation of materials for recycling, salvage, reuse, and return. Recycling and waste bin areas shall be kept neat and clean, and clearly marked to avoid contamination of materials. Materials for recycling include concrete, non-fibrous wallboard, paper, clean corrugated cardboard (no pizza boxes), non-treated wood, metals (steel, aluminum and copper), and glass bottles (no windows). Provide separate containers, preferably near the job trailer, with smaller containers located at convenient places throughout the job site. Empty smaller containers into larger containers every night or when full. Cover outdoor containers to keep out rain, snow, and wind-driven debris. Lock containers whenever site is not in use to prevent illegal dumping.
- E. Hazardous Waste: Hazardous waste shall be separated, stored, and disposed of according to applicable regulations.
- F. Application for Payments: With each Application for Payment, the Contractor shall submit a Summary of Waste generated by the Project. Failure to submit this information shall render the Application for Payment void, thereby delaying the Progress Payment. The Summary of Waste shall contain the following information:
  1. The amount (in tons and/or cubic yards) of material landfilled from the Project, the identity of the landfill, and the related disposal cost. Include corresponding manifests, weight tickets, receipts, and invoices.
  2. For each material recycled from the Project, the amount (in tons and/or cubic yards), the date removed from the Project site, the receiving party, the transportation cost, the amount of any money paid or received for the recycled or salvaged material, and the net total cost or savings of recycling. Include corresponding manifests, weight tickets, receipts, and invoices.
- G. Implementing the Plan: The Contractor shall designate a party (or parties) responsible for implementing the Construction Waste Management Plan. This party (or parties) shall explain to Contractor's and Subcontractor's construction personnel, the Plan's goals and methods for achieving those goals.

1.12 SPECIAL PROGRAMS:

- A. The Contractor shall be responsible for final implementation of programs involving tax credits, rebates, or similar incentives related to recycling, if applicable to the Project. Revenues or other savings obtained for recycling or returns shall accrue to the Contractor.

01505/4

- B. The Contractor shall be responsible for obtaining information packets related to the special programs prior to commencing Work.
- C. The Contractor shall document work methods, recycled materials, etc., as required for the tax credits, rebates, or other savings described above.

END OF SECTION

SECTION 01600: MATERIALS AND EQUIPMENT1. SCOPE:A. Index:

1. Scope
2. Materials
3. Equipment
4. Hazardous Material Requirements
5. Material Storage
6. Protection
7. Revisions

2. MATERIALS:

- A. Furnish materials of the type, qualities, and characteristics specified. The specification of a trade name and catalog number is intended to establish quality, type, character, and operating characteristics of the material required. Materials by other manufacturers of equal specifications will be accepted, excepting as may be specifically stated otherwise.
- B. Materials shall be delivered adequately protected, in merchantable condition, and in original unbroken packages if normally packaged. They shall be stored and handled so as to protect and maintain their merchantable condition.
- C. The Commissioner of Public Works or his representative shall have the right to reject material not in compliance with the project manual, as well as damaged material, and the contractor shall remove such material from the construction site when and as directed.

3. EQUIPMENT:

- A. Internal combustion engine and compressor shall be equipped with mufflers to reduce noise to a minimum and shall not be operated in enclosed areas without adequate ventilation.
- B. All materials and work procedures used shall be in accordance with all air pollution control regulations in effect at the work site.

4. HAZARDOUS MATERIAL REQUIREMENTS:

- A. The requirements set forth in the OSHA Hazard Communication Standard, 29CFR19101.1200, U.S. Environmental Protection Agency (EPA), and Wisconsin Department of Natural Resources in the Wisconsin Administrative Code NR600, shall be met by each on-site contractor.

1. Material Safety Data Sheets (M.S.D.S.):

- a. All contractors, which may/may not include the City of Milwaukee, shall provide the M.S.D.S. for all hazardous chemicals to which any person may be exposed at the work site.
- c. A master list will be kept in the office of the Project Supervisor/Construction Manager and updated as materials are delivered.

2. Container Labeling:

a. Each container of hazardous material at the work site shall be clearly labeled with:

- (1) Identity of the hazardous chemical(s).
- (2) Appropriate hazard warning(s).
- (3) Name and address of the manufacturer.

B. The City of Milwaukee reserves the right to stop the work of a contractor if compliance with OSHA regulations is inadequate. Work will not proceed until all applicable safety and health procedures are implemented by the contractor.

5. MATERIAL STORAGE:

A. The storage areas shall be kept in good order and free of all rubbish and debris.

B. Coordinate the delivery and storage of all materials and equipment with the Facilities Development and Management's Project Inspector.

C. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.

D. Store and protect products in accordance with manufacturers' instructions.

E. Store with seals and labels intact and legible.

F. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

G. For exterior storage of fabricated products, place on sloped supports above ground.

H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

I. Prevent contact with material that may cause corrosion, discoloration, or staining.

J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

6. PROTECTION:

A. The premises and the work shall be adequately protected from damage from the commencement of work to the date of final acceptance.

B. All construction work and traffic shall remain within the construction area.

01600/3

- C. All damage shall be corrected or repaired by the contractor or contractors causing same at his or their own expense.
- D. All open pipes, pipe threads, fittings, and insulation must be protected during construction.

7. REVISIONS:

The right is reserved to make modifications to a reasonable extent as building conditions may require, or as may be required to conform to code rulings, or manufacturer's standards without extra cost to the City.

SECTION 01700: CLEANING AND PROJECT CLOSE-OUT

1. SCOPE:

A. Index:

1. Scope
2. General
3. Safety Cleaning
4. Progress Cleaning
5. Disposal
6. Final Cleaning
7. Charges
8. Record Drawings
9. Operating Instructions and Maintenance Manuals
10. Guarantees

2. GENERAL:

Article 2.5.4 of the General Requirements of City of Milwaukee Department of Public Works shall be supplemented as specified hereinafter.

3. SAFETY CLEANING:

Safety cleaning: Each contractor is responsible for safety cleaning, which includes but is not limited to the following:

- A. Keep work areas, passageways, ramps, stairs, free of debris and scrap.
- B. Form and scrap lumber shall have nails withdrawn or bent over and lumber shall be stacked or removed.
- C. Remove spills of oil, grease, or other liquids immediately or sprinkle with sand.
- D. Hazardous material shall be handled in accordance with Section 01600. Each container of hazardous material at the work site shall be clearly labeled with:
  - a. Identity of the hazardous chemical(s).
  - b. Appropriate hazard warning(s).

4. PROGRESS CLEANING:

- A. Prime Contractor and subcontractor shall remove his rubbish and debris from building site promptly upon its accumulation, and prior to the contractor's regular Friday general clean up. Contractor shall perform broom cleaning of all appropriate surfaces each Friday afternoon.
- B. Combustible waste shall be stored in fire resistive containers and disposed of regularly.
- C. Oily, flammable or hazardous wastes such as caustics, acids, harmful dusts, etc., shall be stored in appropriate covered containers.

5. DISPOSAL:

- A. No burning of rubbish or debris will be allowed at site. No rubbish shall be thrown through opening or from heights without proper protection. Where dust will be generated or flying debris is likely to occur, provide dust tight chutes or other means to control dust.
- B. Containers: Contractor shall provide mobile industrial type waste containers in the number and size required, placed at adequate locations to handle debris or provide other methods of disposing of debris.
- C. Oil, flammable or hazardous wastes such as, but not limited to, caustics, acids, harmful dusts, etc., shall be placed in properly marked containers as necessary and disposed of at a site designed for such wastes.

6. FINAL CLEANING:

- A. Immediately prior to substantial completion.
- B. Contractors shall expedite or perform thorough cleaning, sweeping, washing and polishing of work to remove from work and equipment provided under his contract, all foreign matter, spots and soil, so as to put all such work and equipment, including finishes, in a complete and finished condition ready for acceptance and use intended.
- C. The contractor is responsible for final sweeping and dusting not covered by other subcontractors. This general cleaning shall include all areas and floors of the building, including the site outside the building.

7. CHARGES:

- A. If prime contractors do not remove rubbish or clean building as specified above, owner reserves right to have work done by others at contractor's expense.
- B. Employees of the owner who are required to clean up any rubbish or to sweep any floors will record all hours involved to complete such work. The cost incurred by the owner for this special cleaning and sweep-up work shall be charged against the contract price of the contractor as determined by owner.

8. RECORD DRAWINGS:

- A. At the completion of work and prior to final payment, the mechanical and electrical contractors shall provide Facilities Development and Management with three (3) marked up sets of prints showing all changes or variations from contract drawings, and not specified on change order drawings theretofore issued. Contractors providing buried or concealed piping, conduit, or similar items shall locate such items by dimensions and elevations.
- B. Other contractors shall provide one (1) marked up set of prints showing all changes or variations from contract drawings.
- D. Drawings shall show complete layout of revised piping, equipment, etc., as actually installed.

9. OPERATING INSTRUCTIONS AND MAINTENANCE MANUALS:

- A. The contractor shall, upon completion of all work, furnish the necessary skilled labor to instruct City personnel in the operation, adjustment, and maintenance of all equipment furnished.
- B. At termination of work, the contractor shall submit maintenance and operating manuals presenting full details of care and maintenance and operation of mechanical and electrical equipment of every nature. See specific requirements in relevant sections as applicable.
- C. The manual shall include manufacturer's instructions for maintenance and operation and shall be completely indexed, including the spare parts list. See specific requirements in relevant sections.
- D. Submit three (3) final copies in hard bound cover to Facilities Development and Management.
- E. The contractor shall allow for a four (4) hour training session for City maintenance personnel on all equipment and controls installed under this contract.

10. GUARANTEES:

- A. Each contractor shall guarantee to replace or repair promptly at his own expense, as directed by the Commissioner of Public Works or his agent, all workmanship or materials in which defects may develop within five (5) years from the date of final acceptance of his work. This guarantee includes all damage done to the City due to faulty equipment, poor installation or poor construction.
- B. Guarantee periods other than the five year time period are indicated in specific specification sections.



**SECTION 02 05 00  
DEMOLITION**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Demolition work
  - 2. Legal disposal of items and debris not scheduled for salvage, storage, or reinstallation
- B. Related Sections:
- C. 1. 01 50 05 Waste Management

**1.02 PROTECTION**

- A. Coordinate demolition activities with the City's use of the buildings. Maintain safe passage around the construction area and entrance and exit facilities where possible.
- B. Provide, erect, and maintain barricades or guardrails as required to protect occupants of the buildings, workers, and pedestrians. Temporary dustproof protective shields shall be provided, if necessary, to prevent the spread of dust. Substantial temporary closures shall be provided at window, door, and wall openings to prevent the penetration of dust
- C.

**1.03 SEQUENCING AND SCHEDULING**

- A. The Work shall be performed in a planned sequence that is coordinated with the progress of the various stages of the Work and with the completion of the protection work on specified items and building components, unless otherwise agreed upon at the pre-construction meeting.

**1.04 SUBMITTALS**

- A. Pre-demolition Photographs: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by demolition operations.

**PART 2 PRODUCTS**

**2.01 MATERIALS**

- A. Except where noted otherwise, maintain possession of the materials being demolished. Immediately remove from the site and legally dispose of off site.

## **PART 3 EXECUTION**

### **3.01 PREPARATION**

- A. Locate exterior barricades and guardrails as necessary and post clearly visible warning signs.
- B. Install protective covering or shields over the existing exterior aluminum, glass, and wall openings.
- C. Schedule the demolition work to cause as little inconvenience to the use of the building as possible.

### **3.02 DEMOLITION**

- A. Before proceeding with the demolition, verify that all work required to precede the demolition has been accomplished.
- B. Demolition to be performed in a manner so as not to overload or damage portions of the existing building to remain.
- C. Demolish in an orderly and careful manner as required to accommodate the new work.
- D. Repair all demolition in excess of that required at no cost to the Owner.
- E. Coordinate with Contractors performing work of Division 7 to keep the area watertight at all times.
- F. Use a fine spray of water to minimize dust during demolition work.

END OF SECTION

**04 01 00**  
**MAINTENANCE OF MASONRY**

**PART 1 GENERAL**

**1.01 SUMMARY**

A. Section Includes:

1. Repair and replacement of damaged Kasota Limestone, Granite and Brick masonry units
2. Tuckpointing mortar joints
3. Anchoring, patching, and repairing cracks and spalls in Kasota Limestone and Granite construction

B. Related Sections:

1. Section 07 92 00 - Joint Sealants
2. Section 04 05 13 – Masonry Mortaring

**1.02 SUBMITTALS**

A. Mortar samples: As specified in Section 04 05 13.

B. Repair material samples:

1. Samples of all specified materials and Material Safety Data Sheets (MSDS) as appropriate.
2. Install mortar samples on masonry – preferably on the building. Do not make samples in cups or apply to plywood or other non-masonry surfaces.
3. Written verification from the Contractor that all specified items will be used. Provide purchase orders, shipping tickets, receipts, etc. to prove that the specified materials were ordered and received.

**1.03 QUALITY ASSURANCE**

- A. Work not specifically noted on the Drawings or in the specifications shall be in accordance with current recommendations of the Brick Industry Association, National Concrete Masonry Association, Indiana Limestone Institute of America, National Building Granite Quarries Association Inc..
- B. Contractor shall have a minimum of five years successful experience in comparable masonry restoration projects, and shall employ personnel skilled in the restoration process and operations indicated.
- C. Obtain materials from same source throughout.

- D. A competent supervisor with a minimum of five years successful experience in comparable masonry restoration projects shall be in charge of the Work at all times. The same supervisor shall be in charge from start to completion of the Project.
- E. To verify color match, Architect/Engineer may request test panels of restored masonry be cleaned 14 days after mortar placement.
- F. Field Construction Mock-Ups: Prior to start of general masonry restoration, prepare the following sample panels and sample areas on building where directed by the Architect/Engineer and Owner. Obtain Architect/Engineers and Owners acceptance of visual qualities before proceeding with the work. Retain acceptable panels in undisturbed condition, suitably marked, during restoration as a standard for judging completed work.
  - 1. Crack and Patch Repair: Prepare a sample area for each type of crack and patch repair required for each type of limestone and granite units. Repair shall demonstrate methods and quality of workmanship expected for crack and patch repair.
  - 2. The samples of each type of repair work shall be done in an area that will be exposed to the same weathering conditions as the building. Allow samples to cure at least three days before obtaining acceptance of color, texture, and detailing match. Visual acceptance will be at the discretion of the Architect/Engineer and Owner when viewed by the Architect/Engineer and Owner from a distance of ten (10) feet.

#### **1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Masonry units shall be delivered and handled, strapped or tied together on pallets or other suitable cartons, to prevent chipping and breakage. Units shall be covered from wetting by waterproof tarp.
- B. Deliver and store restoration material in manufacturer's original, unopened containers with the grade, batch, and production data shown on the container or packaging.
- C. Protect masonry restoration materials during storage from wetting by rain or ground water.
- D. Protect mortar components from deterioration by moisture and temperature. Store in dry location or in covered containers. Keep containers tightly closed. Follow material manufacturer's recommendations for storage. Protect mortar components from contamination by intermixture with earth or other materials. Cover sand aggregate stockpile.
- E. Protect liquid components from freezing. Comply with manufacturer's recommendations for minimum and maximum temperature requirements for storage.

#### **1.05 PROJECT CONDITIONS**

- A. Weather Conditions:

1. Do not lay masonry units, repair masonry units, repoint mortar joints, wash down or wet surfaces without heated enclosures when temperature is less than, or will drop below 4°C (40°F) within 48 hours.
2. When temperature drops below 4°C (40°F), laying of new stone, granite and brick masonry units, repairing of masonry units, tuckpointing mortar joints, and cleaning of masonry shall be done in a heated enclosure. The temperature of the enclosure shall be maintained above 4°C (40°F) for a minimum of 48 hours after completing any of above-mentioned work.

B. Protection:

1. Protect areas of removed and newly installed masonry units from moisture penetration at the completion of each day's work. Secure coverings against wind.
2. Protect trees, shrubs, lawns and other features remaining as a portion of final landscaping.
3. Protect surrounding surfaces from damage by covering, masking, sealing or other means of protection. Immediately remove mortar that contacts surfaces, which are not to receive mortar.
4. Provide 3/4 in. plywood over 1 in. expanded polystyrene insulation for protection of the existing roof membrane a minimum of 8 ft from adjacent walls; on traffic paths; and under staging equipment.
5. Immediately report any damage to the Owner and Architect/Engineer.

## **1.06 WARRANTY**

- A. Provide a signed warranty covering all workmanship and materials specified herein for a period of five (5) years from the date of final completion, as indicated in the General Conditions. Refer to the form at the end of this Section.

## **PART 2 PRODUCTS**

### **2.01 MASONRY MATERIALS**

- A. Stone Masonry: As specified in Section 04 20 00.
- B. Brick: as specified in Section 04 20 00.

### **2.02 MORTAR MATERIALS**

- A. As specified in Section 04 05 13.

### **2.03 CRACK REPAIR SURFACE EPOXY**

- A. Emecole 322 Surface Seal-N-Peel, as manufactured by Emecole, Inc, PO Box 7486, Romeoville, IL 60446, 800-844-2713, or approved equal.

#### **2.04 CRACK REPAIR EPOXY INJECTION**

- A. Sikadur 52, as manufactured by Sika Corporation, 1682 Marion Williamsport Road, Marion, Ohio 43302, 410-782-9150, or approved equal.
- B. Crack-Pac Injection Epoxy, as manufactured by Simpson Strong-Tie, (800)-999-5099.
- C. Seal Boss, Corp. 1669 E. Wilshire Avenue, #609, Santa Ana, CA, 92705, (877)-932-2293.

#### **2.05 STONE PATCHING/RESTORATION MATERIAL**

- A. Mimic, as manufactured by Conproco Corporation, 17 Production Drive, Dover, New Hampshire 03820.
- B. Custom System 45 Type LC, as manufactured by Edison Coating, Inc., 3 Northwest Drive, Plainville, Connecticut 06062.
- C. Jahn Restoration Mortar, as manufactured by Cathedral Stone Products, Inc., 7266 Park Circle Drive, Hanover, Maryland, 21076, (800)-684-0901.

#### **2.06 CLEANING MATERIALS AND EQUIPMENT**

- A. As specified in Section 04 20 00.

#### **2.07 MORTAR MEASUREMENT, MIXING AND PROPORTIONS**

- A. As specified in Section 04 05 13.

#### **2.07 REINFORCING/ANCHORING MATERIALS**

- A. Stone anchors and attachments: Provide stainless steel, Type 304 for strap anchors embedded within stone. Type and size are specified herein and as shown on the Drawings.
- B. Pins/threaded rods: Type and size as shown on the Drawings. Pins and threaded rods shall be fabricated from stainless steel Type 304.
- C. Adhesive: Two component 10:1 ration acrylic based. Product shall be applicable to metals, masonry, concrete, and other substrates as required, and shall be appropriate for use at ambient temperatures from 0 to 100 F.
  - 1. Simpson StrongTie
  - 2. Hilti
  - 3. Powers.
- D. Mechanical anchors shall be a threaded stud with an integral cone expander and a single piece expansion clip. Anchors shall be stainless steel Type 304.

## **PART 3 EXECUTION**

### **3.01 PREPARATION**

- A. Architect/Engineer will identify and mark each type of repair in the field. Contractor shall prepare and coordinate repair work accordingly.
- B. Verify that surfaces to be cleaned and restored are ready for Work of this Section.
- C. Beginning of installation means acceptance of existing surfaces and conditions.
- D. Protect elements surrounding the Work of this Section from damage or disfiguration.
- E. Install test samples for each type of repair at a location approved by A/E. A/E must be present at test sample installation. Obtain Owner and A/E approval of test sample installations and color matching before proceeding with contract repairs.

### **3.02 FULL STONE/GRANITE REPLACEMENT**

- A. Removal:
  - 1. Carefully remove by hand at marked locations units that are cracked, broken, damaged, spalled, or deteriorated.
  - 2. Cut out full units from joint to joint in manner to permit replacement with full size units.
  - 3. Support and protect remaining masonry that surrounds removal area.
  - 4. Salvage as many whole, undamaged units as possible.
  - 5. Remove mortar, loose particles and soil from remaining units at edges of removal areas, and from salvaged units by cleaning with brushes and water. Store for reuse.
- B. Rebuilding:
  - 1. Fit replacement units into bonding and coursing pattern of existing units.
  - 2. If cutting is required, use motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
  - 3. Install stone ties to existing masonry or concrete backup as shown on the Drawings.
  - 4. Lay replacement units with completely filled bed, head and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place.
  - 5. Maintain joint width to match existing.
  - 6. Tool mortar joints in repaired areas to match joint profile of surrounding work.

### **3.03 LINTEL REPLACEMENT (IF REQUESTED BY A/E)**

- A. Remove stone veneer minimum three courses of brick above lintels and approximately 12 inches beyond ends of existing lintels. Remove lintel.
- B. Install new steel lintel 8 in. minimum past opening at each end.
- C. Install flashing over lintels, extend flashing 6 in. minimum past end of lintel and turn flashing up 2 in. minimum to provide end dams. Extend the flashing a minimum 1/4 in. out from the bottom edge of the lintel to form a drip.
- D. Fold flashing corners. Seal flashing laps with sealant.
- E. Reinstall masonry above lintels and flashings.
- F. Maintain soft joint thickness as specified on plans.

### **3.04 CRACK INJECTION AND STONE/GRANITE PATCHING**

- A. As recommended by manufacturers sections 2.03, 2.04 and 2.05 and approved by the Architect/Engineer and Owner.
- B. Color matching has to be approved by the Architect/Engineer and Owner.

### **3.05 TUCKPOINTING EXISTING MORTAR**

- A. Solid tuck pointing includes all mortar joints for removal and repointing in a specified area.
- B. Spot tuck pointing includes removal and repointing of only cracked or deteriorated mortar joints as determined by the Architect/Engineer, in specifically designated areas for a specified amount (i.e.; linear feet, square feet, or percentage of elevation).
- C. Raking Mortar Joints:
  - 1. Rake out mortar from joints, as shown on the Drawings, to a minimum depth of 3/4 in., but not less than that required to expose sound, unweathered mortar.
  - 2. Remove mortar from masonry surfaces within raked-out joints to provide reveals with square backs and to expose masonry for contact with pointing mortar.
  - 3. Brush, vacuum, or flush joints with water to remove dirt and loose debris.
  - 4. Do not spall edges of masonry units or widen joints. Replace units that become damaged (not to be included in unit replacement allowance).
  - 5. If power driven tools damage existing units in any way, cut out old mortar by hand with chisel and mallet.
  - 6. Power operated rotary handsaws and grinders will be permitted based on a satisfactory quality control program and demonstrated ability of operators to use

tools without damage to masonry. Quality control program shall include provisions for supervising performance and preventing damage due to fatigue.

D. Tuck Pointing Mortar Joints:

1. Rinse masonry joint surfaces with water to remove dust and mortar particles. Time application of rinsing so that, at time of pointing, excess water has evaporated or run off, and joint surfaces are damp but free of standing water.
2. Apply first layer of pointing mortar to areas where existing mortar was removed to depths greater than 3/4 inch. Apply pointing mortar in layers not greater than 1/4 inch until a 3/4 inch uniform depth is formed. Compact each layer thoroughly and allow mortar joint to become thumbprint-hard before applying next layer.
3. After joints have been filled to a uniform depth, place remaining pointing mortar in 1/4 to 3/8 inch layers. Fully compact each layer and allow to become thumbprint-hard before applying next layer.
4. Recess final layer slightly from face where existing units have rounded edges. Take care not to spread mortar over edges onto exposed masonry surfaces, or to featheredge mortar.
5. Tool joints to match concavity of the existing joints when mortar is thumbprint hard.
6. Brush excess mortar from edges of joint.
7. Cure mortar by maintaining a damp condition for not less than 72 hours.
8. At completion of masonry work, remove defective joints, holes, and cracks in new mortar joints to a depth of 3/4 inch and repoint.

**3.06 CLEANING**

- A. Clean minimum 4 foot by 4 foot test panel of each type of masonry material prior to beginning full scale cleaning operation to determine effectiveness of cleaning compound and manufacturer's cleaning procedures. Test panels shall be available for inspection and approval by the Architect/Engineer and Owner.
- B. Clean restored masonry, existing masonry parapets, coping stones, and stone cornices in an orderly manner, making sure that all surfaces are clean and a uniform appearance is obtained.
- C. Clean only after mortar has cured to its full strength, not less than 14 days.
- D. Remove mortar particles with water, nonmetallic scrapers and fiber bristle brushes. Sandblasting, wet aggregate blasting, or use of other abrasive materials will not be allowed.
- E. Provide an adequate water supply during the cleaning process to assure a thorough presoaking and rinsing of the surfaces.

- F. Protect adjacent non-masonry surfaces, including trees, shrubs, plantings, lawn, glass, and metal and painted surfaces, from exposure to cleaning compounds. Use polyethylene sheet to cover and seal window glass and frames.
- G. Beware of wind drift onto auto and pedestrian traffic.
- H. Use cleaning compounds in strict accordance with manufacturer's printed instructions.
- I. Remove mortar from surfaces not specified to receive mortar; such as walls, windows, curbs, sidewalks, etc.

END OF SECTION

## MASONRY RESTORATION WARRANTY

Owner

---

Address

---

Project

---

Project Address

---

Project No.

---

Date of Final Acceptance

---

Contractor

---

Address

---

Phone No.

---

This warranty stipulates that the above-named Contractor shall, during a period of five (5) years from the date of final acceptance of the work, repair all defects which result from faulty workmanship or defective materials, without further cost to the Owner.

The warranty shall include repair costs for any damages to the building or the contents that are caused by or related to faulty workmanship or defective materials.

Before expiration of the above warranty period, the Contractor shall inspect the area of work in the presence of the Architect/Engineer and Owner and make necessary correction of all deficiencies not considered normal. The warranty shall remain in force until the necessary repair work has been done.

Signed

---

Title

---

Date

---

**04 05 13**  
**MASONRY MORTARING**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes: Mortar
- B. Related Sections:
  - 1. Section 04 20 00 - Unit Masonry
  - 2. Section 04 01 00 – Maintenance of Masonry

**1.02 SUBMITTALS**

- A. Submit the following in accordance with Section 01300.
  - 1. Product Data
    - a. Submit manufacturer's instructions, product data and MSDS
    - b. Submit data indicating proportion or property specifications used for each type of mortar including Portland cement, lime sand and coloring admixtures, if any.
  - 2. Samples: Submit cured samples or colored mortar to Architect/Engineer and Owner for initial review.
  - 3. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- B. Submit the following mortar data:
  - 1. Mortar Mix Design.
  - 2. Submit test reports for mortar indicating conformance with ASTM C270 property specifications.
- C. If pre-batched mortar is approved for use by the Architect/Engineer and Owner, submit the following:
  - 1. Batch proportion records: Submit one hard copy and 1 digital copy of proposed batch weights and reduced mix proportions to the Architect/Engineer and Owner prior to batching for review and written approval.
  - 2. Batch proportion records: The supplier to maintain records of proportions per batch and retain as permanent record for at least five (5) years after Project final completion. Provide one hard copy and one digital copy of records for each batch to the Architect/Engineer and Owner for review and comparison to the proposed batch weights and proportions prior to delivery to the Project site.

3. Testing information: Submit one hard copy and one digital copy of manufacturer's compressive strength testing data for the proposed pre-batched mix design.

### **1.03 QUALITY ASSURANCE**

- A. Provide mortar needed for mockup specified in Section 04 05 13.

## **PART 2 PRODUCTS**

### **2.01 MATERIALS**

- A. Conform to ASTM standard specifications.
- B. Portland cement: ASTM C150, Type I
- C. Hydrated lime: ASTM C207, Type S
- D. Aggregate for mortar: ASTM C144, unless indicated otherwise
- E. Water: Potable water, clean, free of oils, acids, alkalis and organic matter.
- F. Match size, texture, and gradation of existing mortar.
- G. Colored mortar pigment: Inorganic material and/or synthetic iron oxides. DCS Power Pigment manufactured by DCS Color and Supply Company, Inc., Milwaukee, Wisconsin; or approved equal. Color match of mortar shall be approved by Architect/Engineer and Owner.
- H. Masonry cement shall not be used.
- I. If pre-batched mortar is used: pre-batched, pre-bagged mortar with cementitious materials and aggregates as described above, Spec Mix manufactured by Packaged Concrete, Inc., Quick Crete Products Corporation or Lycon, Inc.

### **2.02 MIXES**

- A. Conform to Proportion Specifications of ASTM C270.
- B. Modify proportions of mortar materials to conform with recommendations of "Cross Brick Tensile Bond Test" results.
- C. Type of Mortar Required:
  1. Mortar for repairing existing backup wall brick wythes shall be ASTM C270, Type S.
  2. Mortar for parapet wall tuck pointing shall be ASTM C270, Type S.
  3. Mortar for tuck pointing limestone and granite stone veneer and stone mullions shall be ASTM C270, Type N.

4. If colored mortar pigments are used, do not exceed pigment to cement ratio of 1:10 by weight.
- D. Method of measurement shall be by dry volume or equivalent weight.
  - E. Measurement by shovel is not permitted.
  - F. Control and accurately maintain specified proportions of mortar materials during the entire progress of work.
  - G. Thoroughly machine mix cementitious materials and aggregates with amount of water required to produce satisfactory workability.
  - H. Mix mortar as required for immediate use and discard if not used within 2-1/2 hours.
  - I. Mortar without color additive may be retempered by adding water and remixing within two hours after initial mixing.
  - J. Do not retemper mortar with color additive.
  - K. Admixtures shall not be used in mortar unless otherwise indicated.
  - L. If pre-batched mortar is approved and used:
    1. No on-site mixing of mortar or grout materials other than adding water to pre-blended mixture is allowed. Mix in quantities as large as economically possible. Use same measuring method and personnel throughout the Project. Combine in mixer with water as discussed in the current specification under mixing mortar, except mixing cementitious and aggregate materials sentence.
    2. Pre-batched mortar shall meet the compressive strength criteria indicated above.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. Type of Mortar Required:
  1. All wythes of parapet walls; Type S Portland cement-lime.
- B. Pre-dampen masonry surfaces to receive repointing mortar for a minimum of 20 minutes prior to mortar placement. Masonry surfaces should be saturated but free of excess or standing water at time of mortar placement.
- C. Fill mortar into joints in ¼ inch "lifts". Start by filling deeper sections, compacting each layer, packing it into the rear and corners of the joint.
- D. As soon as the mortar reaches "thumbprint" hardness, apply the next layer at ¼ inch thickness. A minimum of three (3) layers are required.
- E. When final layer is thumbprint hard, tool to specified profile. Match to adjacent existing profile or to original profile as instructed by the Architect/Engineer.

- F. To avoid changing the appearance of the building, it may be necessary to slightly recess the mortar from the masonry surface. Do not flush fill joints in worn masonry if this results in a visually wider joint than the original.
- G. Remove excess mortar and smears using a stiff natural bristle brush and clean water before it has set.
- H. Wet cure tooled joints as required by lightly misting with clean water periodically for up to three (3) days following installation. Misting should be performed every hour or two on the first day, as required to maintain the mortar in a wet condition and this may be reduced to every three or four hours on subsequent days.
- I. Allow mortar to fully cure for a minimum of 28 days before final cleaning. Longer cure times selected by Architect/Engineer are required in cooler weather. Only low pressure should be used to avoid damaging newly repointed joints.

### **3.02 FIELD QUALITY CONTROL**

#### **A. Mortar Compressive Tests:**

- 1. Provide cured 2"x2" mortar cubes for testing conducted for Owner by independent testing laboratory.
- 2. Prepare and test according to ASTM C780.
- 3. Provide one cylinder per 400 cubic feet of masonry construction of each type of mortar specified.
  - a. If masonry construction area is less than 400 square feet, provide a minimum of six 2"x2" mortar cubes for testing for each type of mortar specified.

END OF SECTION

**04 20 00  
UNIT MASONRY**

**PART 1 GENERAL**

**1.01 SUMMARY**

A. Section Includes:

1. Brick
2. Kasota limestone
3. Granite
4. Reinforcing
5. Anchors
6. Flashing

B. Related Sections:

1. Section 04 05 13 - Masonry Mortaring
2. Section 07 92 00 - Joint Sealants

**1.02 SUBMITTALS**

A. Samples:

1. Submit minimum of six bricks in stack with artificial joints.
2. Furnish and deliver 12 units of each type of brick to independent testing laboratory for "Cross Brick Tensile Bond Test" conducted and paid for by the Owner, if requested by the Architect/Engineer.
3. Kasota Limestone Samples: The Contractor shall submit a minimum of six (6) samples, 4" wide x 4" high x 1" thick, for selection and approval by the Architect/Engineer and Owner. The sample shall in general be selected to match the texture, color, and finish of the existing Kasota limestone.
4. Granite Samples: The Contractor shall submit a minimum of six (6) samples, 4" wide x 4" high x 1" thick for each of the three different granite unit types and color that are scheduled for replacement.

B. Reports:

1. Furnish test reports in duplicate from suppliers or manufacturers of materials indicating conformance with specified requirements.

### **1.03 QUALITY ASSURANCE**

- A. Work not specifically noted on the Drawings or in the specifications shall be in accordance with current recommendations of the Brick Industry Association, National Concrete Masonry Association, Indiana Limestone Institute of America, National Stone Council, National Building Granite Quarries of America.
- B. Obtain materials from same source throughout the project.
- C. A competent supervisor with a minimum of five (5) years of experience with the type of work shall be in charge of the Work at all times. The same supervisor shall be in charge from start to completion of the Project.
- D. A pre-installation conference will be held a minimum of one week prior to starting wall work. Those in attendance shall include masonry supplier, Kasota Limestone and Granite Supplier, installer, mortar installer/supplier, reinforcing and tie supplier, insulation supplier, wall membrane supplier, flashing supplier, Architect/Engineer, and Owner's Representative. Review items will include construction sequence, product delivery and storage, site restrictions, and other related topics. Site construction of required mock-ups will be included in this meeting.

### **1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Masonry units shall be delivered and handled, strapped or tied together on pallets or other suitable cartons, to prevent chipping and breakage. Units shall be covered from wetting by waterproof tarp.
- B. Keep masonry units, accessories, and reinforcing dry, clean and free of scale, rust, ice, or other harmful coatings.

### **1.05 PROJECT CONDITIONS**

- A. Do not lay masonry units, repoint mortar joints, wash down or wet surfaces without heated enclosures when temperature is less than, or will drop below 40 degrees F within 48 hours.
- B. Heat masonry materials to at least 40 degrees F and, after laying, maintain air temperature above 40 degrees F for at least 48 hours.
- C. Protect exposed masonry with wind breaks when wind velocities exceed 15 mph.
- D. Protection:
  - 1. Protect areas of removed masonry from moisture penetration at the completion of each day's work. Secure coverings against wind.
  - 2. Protect trees, shrubs, lawns, and other features remaining as a portion of final landscaping.

3. Protect surrounding surfaces from damage by covering, masking, sealing or other means of protection. Immediately remove mortar which contacts surfaces which are not to receive mortar.
4. Provide 3/4 in. plywood over 1 in. expanded polystyrene insulation for protection of the existing roof membrane a minimum of 8 ft. from adjacent walls; on traffic paths; and under staging equipment.
5. Immediately report any damage to the Owner and Architect/Engineer.

## **PART 2 PRODUCTS**

### **2.01 MASONRY MATERIALS**

- A. General: Conform to ASTM Standard Specifications for each material. Include closure units, jamb units, control joint units, headers, and special shapes and sizes required to complete masonry work as shown on the Drawings.
- B. Brick for Repair of Multi-Wythe Brick Masonry Walls:
  1. ASTM C216, Grade SW, Type FBS, modular size of 3-5/8" x 2-1/4" x 7-5/8". Color and texture as selected by Architect/Engineer to match existing color and texture of existing face brick.
  2. Initial rate of absorption: Not less than 5 grams/min/30 square inches, nor more than 30 grams/min/30 square inches.
  3. Units shall pass pre-construction testing for above requirements, prior to use.
  4. Units shall have a minimum compressive strength of 10,000 psi.
- C. Stone Masonry
  1. Kasota Limestone, as quarried in southern Minnesota. Stone shall be standard grade matching the existing stone in size, color, and texture and approved by the Architect/Engineer and Owner.
  2. Granite shall be standard grade matching the existing granite in size, color, and texture and approved by the Architect/Engineer and Owner and as cut and manufactured by "Cold Spring Granite", Cold Spring, Minnesota.

### **2.02 ANCHORS AND TIES**

- A. Acceptable Manufacturers:
  1. Wire Bond – (800)-849-6722
  2. Dur-O-Wall –
  3. Hohmann & Barnard, Inc. – (631)-234-0600
- B. Minimum 1/8" thick ASTM A580 Grade 304 stainless steel clip angles with stainless steel pins and stainless steel screw anchors and adhesive anchors installed at a

maximum spacing of 16" on center in each direction or as otherwise detailed on the drawings.

- C. Brick veneer ties to existing masonry and concrete back-up: Stainless steel Adjustable Veneer Anchors, Dur-O-Wall, D/A 5801 or equal.
- D. Stone & Granite Anchors: Type 304 stainless steel anchors as shown on plans.

## **2.03 MASONRY CLEANER**

### **A. Cleaners:**

1. Manufacturer: ProSoCo Inc., Phone 800-255-4255.
2. Face Brick: Sure-Klean No. 600 Detergent or Heavy Duty Restoration Cleaner by PROSOCO, Inc.
3. Limestone Masonry:
  - a. Limestone Restorer
  - b. Sure Klean Limestone Prewash and Limestone Restorer. Use if Sure Klean Limestone Restorer does not remove existing stains to Architect/Engineer's and Owner's satisfaction.
  - c. BioKlean. Use if Sure Klean Limestone Prewash and Limestone Restorer do not move existing stains to Owner's satisfaction.
4. For granite surfaces use:
  - a. Heavy Duty Restoration Cleaner by PROSOCO, Inc.
5. Follow manufacturer's instructions for each type of cleaner application.
6. All surfaces to be cleaned shall be proof tested at an inconspicuous location on the building selected by the Architect/Engineer and Owner and approved for use by the Architect/Engineer and Owner before proceeding.

B. Water: Potable, clean, free of oils, acids, alkalis, salts, organic matter, or other substances in mounts that may be harmful to mortar, grout, or embedded materials.

C. Brushes: Fiber bristles only.

D. Spray equipment: Provide necessary equipment for the controlled spraying of water at the required pressure.

## **PART 3 EXECUTION**

### **3.01 BUILDING-IN WORK OF OTHERS**

A. Properly build in anchors, ties, plates, joists, beams, lintels, flashings, inserts, and other items which come in contact with masonry work.

- B. Fill space around built-in items solidly with mortar and masonry unless otherwise indicated on the Drawings.

### **3.02 PROTECTION**

- A. Protect facing material against staining and keep top of walls continuously covered with non-staining weighted waterproof coverings when work is not in progress.
- B. Clean loose mortar and deleterious material from top surface prior to resuming work.
- C. Brace walls as necessary during construction.

### **3.03 WETTING BRICK**

- A. Wet brick having an initial rate of absorption in excess of 28.4 g/194 sq.cm./minute (1 oz, determined in accordance with ASTM C67, sufficiently so that rate of absorption when laid does not exceed 28.4 g/194 sq.cm/min..
- B. Uniformly wet units from three to four hours prior to use to ensure a uniform initial rate of absorption in accordance with the above mentioned limit.
- C. During freezing weather, wet and store units that require wetting in heated enclosure or sprinkle units with warm water just before laying.

### **3.04 CONSTRUCTION TOLERANCES**

- 1. External vertical corners, expansion joints, conspicuous lines:
  - a. Maximum 1/4" in 20 feet
  - b. Maximum 1/2" in 40 or more feet
- 2. Alignment of head joints:
  - a. Maximum  $\pm$  1/4" in 10 feet
  - b. Maximum 1/2" in 10 feet or more
- B. Variation from level
  - 1. Bed joints and lines of exposed lintels, sills, or other conspicuous lines:
    - a. Maximum 1/4" in 20 feet
    - b. Maximum 1/2" in 40 or more feet
- C. Variation of linear building line from position indicated on Drawings
  - 1. Maximum 1/2" in 20 feet
  - 2. Maximum 3/4" in 40 or more feet
- D. Variation in thickness of walls from dimensions indicated on Drawings

1. Maximum minus 1/4"
  2. Maximum plus 1/4"
- E. Variation mortar joint thickness
1. Bed joint: 3/8" Maximum  $\pm$  1/8" not to exceed 1/2" joint thickness
  2. Bed joint thickness compared with bed joint thickness of adjacent course: Maximum 1/8"
  3. Head joint: 3/8" Maximum  $\pm$  1/8", maximum joint thickness 1/2"
  4. Head joint thickness compared with adjacent head joint thickness: Maximum 1/8"

### **3.05 LAYING BRICK - WALLS**

- A. Pattern: Running bond, unless noted otherwise
- B. Lay brick plumb and true to line with level and accurately spaced courses, with corners plumb and true.
- C. Scaffold for and lay face brick from face side.
- D. Free units of any and all ponded water on surfaces.
- E. Set lintels, anchors, and ties in full bed of mortar.
- F. Lay brick with full mortar joints with mortar beds spread smooth.
- G. Butter ends of bricks with sufficient mortar to completely fill head joints top to bottom and front to back.
- H. When mortar has become thumb print hard, tool exterior joints with jointing tool to smooth concave joint.
- I. Remove extruded mortar to provide flush mortar joints facing cavity. Prevent mortar droppings from falling in cavity. Fill cavity with mortar where shown on drawings.

### **3.06 ANCHORS AND TIES**

- A. Provide stainless steel clip angle ties with stainless steel pins at a maximum spacing of 16" on-center vertically and horizontally. Refer to drawings for stainless steel clip angle tie information.

### **3.07 DRIP EDGE, FLASHING, AND WEEPS (IF REQUESTED BY A/E)**

- A. Install throughwall flashing as indicated.

- B. Install throughwall flashing at steel lintels, steel angle, window and louver heads, roof terminations, and at other locations as shown on the Drawings.
  - 1. Install flashing minimum 8" above horizontal surface to be flashed.
  - 2. Extend counterflashing vertically up wall and lap under termination bar.
  - 3. Extend flashing horizontally through face wythe and extend 1/2" beyond outside face of wall.
- C. Install honeycomb polypropylene weep vents at lintels and at cavity wall base flashing. Space 24" on-center maximum.
  - 1. Use Quadro-Vent by Hohmann & Barnard or Equal.

### **3.08 CONTROL AND EXPANSION JOINTS (IF REQUESTED BY A/E)**

- A. Do not continue horizontal joint reinforcement through control and expansion joints.
- B. Install preformed control joint device in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions.
- C. Size control joint in accordance with Section 07920 for sealant performance.
- D. Form expansion joint as detailed.

### **3.09 CLEANING AND POINTING**

- A. Point holes or defective mortar joints and, where necessary for proper pointing installation, cut out and repoint defective joints.
- B. At completion of work, clean exposed masonry in accordance with masonry cleaner manufacturer's published recommendations.

END OF SECTION

**07 92 00  
JOINT SEALANTS**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Primer
  - 2. Backer rod
  - 3. Elastomeric sealant
- B. Related Sections:
  - 1. Section 04 01 00 – Maintenance of Masonry

**1.02 SUBMITTALS**

- A. Submit color samples of sealant.

**1.03 PROJECT CONDITIONS**

- A. Removal and new work shall only be accomplished in dry weather with no precipitation expected during the work period.
- B. Protect areas of removed sealant from moisture penetration at the completion of each day's work.
- C. Do not apply materials when ambient temperature is below 4°C (40°F) or above 38°C (100°F).

**1.04 WARRANTY**

- A. Submit manufacturer's standard warranty covering installed sealants and accessories against failure to achieve a watertight seal or loss of adhesion, cohesion, or color stability. Minimum warranty period shall be ten (10) years.

**PART 2 PRODUCTS**

**2.01 SEALANT**

- A. Sealants used as specified herein shall match the type of the sealant used in the existing sealant joints. Contractor shall field verify existing sealant type used in an existing joint and install the same sealant type after removal and thorough cleaning of the joint.
- B. Elastomeric sealant: ASTM C920, color selected and approved by Architect/Engineer and Owner.

1. Sonneborn NP-1 or NP-2
  2. Tremco DyMonic or DYmeric
  3. Mameco Vulkem 116, 921, or 922
- C. Polyurethane sealant: ASTM C920, color selected and approved by Architect/Engineer and Owner.
1. Acceptable non-sag products:
    - a. Pecora Dynatred
    - b. Sika Sikaflex-2c NS
    - c. Tremco DyMonic
  2. Acceptable self-leveling products:
    - a. Pecora NR-200 Urexpan
    - b. Sika Sikaflex-2c SL
    - c. Tremco THC-900

## **2.02 MISCELLANEOUS**

- A. Primer: Non-staining, quick-drying type and consistency recommended by the sealant manufacturer.
- B. Backer rod: Open cell, non-staining, non-gassing polyurethane foam rod of diameter 25%-50% greater than width of joint. Backer rod shall be compatible with sealant.
1. Denver Foam, supplied by Advance Shoring Company, St. Paul, Minnesota
  2. Sof-Rod by Nomaco, Zebulon, North Carolina, (800) 345-7279
- C. Bond breaker tape: As recommended by sealant manufacturer.
- D. Compressible joint filler: Closed cell neoprene pad, 10 mm (3/8 in.) thick, ASTM D1056, Class RE41, with compressibility of greater than 50%, Rapid Soft-Joint/Expansion Joint manufactured by Dur-O-Wal, Inc.

## **2.03 COMPRESSIBLE JOINT MATERIAL**

- A. Foamtech closed cell polyethylene by NMW, Inc. (317) 898-0292. Thickness shown on the Drawings or dictated by the existing condition to match. Order material score cut by manufacturer for easy "peel-off" of top for rod and sealant installation.

## **PART 3 EXECUTION**

### **3.01 REMOVAL OF EXISTING**

- A. Remove existing sealant and backer rod in area of new work.
- B. Remove or modify existing work to extent necessary to join new work to existing construction and otherwise complete the Work.

- C. Removal of existing material and installation of new sealant in area removed shall be completed and watertight at the end of each day's work and before start of any form of precipitation.

### **3.02 PREPARATION OF SURFACES**

- A. Surfaces to receive new material shall be free of all dirt, debris, loose materials and free moisture in any form. Masonry surfaces to receive new materials shall have existing materials cleaned off as necessary to expose a clean surface.
- B. Verify that surfaces to receive new materials have no defects or errors which would result in poor application or cause latent defects in workmanship.
- C. Mask surfaces as necessary to provide a neat, clean, acceptable application.

### **3.03 INSTALLATION**

- A. Primer: Apply to substrate surfaces in accordance with sealant manufacturer's directions. Do not apply to exposed finish surfaces.
- B. Backer Rod: Install in joints using a blunt instrument to avoid puncturing. Do not twist the backer rod while installing. Install so that joint depth is 50% of joint width, minimum 1/4 in. deep. Install dry and free of tears or holes.
- C. Bond Breaker Tape: Install in accordance with manufacturer's instructions.
- D. Sealant:
  - 1. Apply in joints using a pressure gun with nozzle cut to fit joint width. Ensure sealant is deposited in a uniform, continuous bead without gaps, wrinkles or air pockets.
  - 2. Tool joints to match the configuration indicated on the Drawings.
  - 3. Do not paint over sealant.

### **3.04 PROTECTION AND CLEANING**

- A. Protect areas adjacent to joints from sealant smears.
- B. Remove excess materials adjacent to joints by means recommended by the material manufacturer, or mask to prevent evidence of spillage or damage to adjacent surfaces.
- C. Leave finished work in a neat, clean condition with no evidence of spillovers onto adjacent surfaces.

END OF SECTION

**SECTION 09 91 00  
PAINTS & COATINGS**

**PART 1 GENERAL**

**1.01 SUMMARY**

B. Section Includes:

1. Surface Preparation
2. Priming
3. Painting

C. Related Sections

1. Section 04 01 00 – Maintenance of Masonry
2. Section 07 92 00 – Joint Sealants

**1.02 COORDINATION**

- A. The Contractor shall coordinate with the other trades for the painting activities so as not to interrupt the conductance of the work nor to mar a finished painted section. Painting shall be accomplished and allowed to thoroughly dry/cure before coming into contact with subsequent work.

**1.03 WORK INCLUDED**

- A. This Section includes all labor, materials, equipment and related services necessary to perform the following Work:
1. Proper preparation of all surfaces (steel shelf angles, plates, bolts, etc.) to be painted.
  2. Apply prime coat.
  3. Apply intermediate and finish coats to all surfaces.
  4. Clean up.

**1.04 REFERENCES**

- A. References shall refer to the most recent standard.
1. American Society for Testing and Materials (ASTM).
  2. Federal Specification (FS).
  3. Occupational Safety and Health Administration (OSHA).

4. Code of Federal Regulations (CFR)  
29 CFR 1910.1000, Air Contaminants
5. Commercial Item Descriptions (CID)  
CID A-A-2904, Thinner, Paint, Mineral Spirits, Regular and Odorless
6. Steel Structures Painting Council (SSPC)  
SSPC PA3, Safety in Paint Application (1995)  
SSPC SP1, Solvent Cleaning (1982)

## **1.02 SUBMITTALS**

- A. Submit manufacturer's application instructions and material safety data sheets.
- B. Submit color samples for selection by Architect/Engineer and Owner.

## **1.03 DELIVERY, STORAGE, AND HANDLING**

- A. Paints shall be in sealed containers with legible manufacturers identifying information.
- B. Store in accordance with manufacturer's written directions, and as a minimum, stored off the ground, under cover, with sufficient ventilation to prevent the buildup of flammable vapors, and at temperatures between 40<sup>o</sup> F to 95<sup>o</sup>F.
- C. Safety Methods: Apply coating materials using safety methods and equipment in accordance with the following:
  1. SSPC PA3
  2. 29 CFR 190.1000
  3. Manufacturer's material safety data sheets (MSDS)
  4. To protect personnel from overexposure to toxic materials, conform to the guidance of the chemical manufacturer when using mineral spirits or other chemicals. Use recommended protective clothing and equipment to avoid exposure of skin, eyes, and respiratory system. Conduct work in manner to minimize exposure of building occupants and the general public.

## **1.04 PROJECT CONDITIONS**

- A. Apply materials only in dry weather with no precipitation expected during the work period.
- B. For exterior coatings, do not apply materials when surface temperatures are less than 5 degrees F above the dew point; or below 40 degrees F for oil-based paints; below 50 degrees F for latex paints; or above 95 percent F.

## **1.06 WARRANTY**

- A. Submit manufacturer's standard warranty covering applied products used. Manufacturer's warranty shall be for a minimum of five (5) years.

## **PART 2 PRODUCTS**

**2.01 The Contractor is responsible for furnishing the following materials in the amount required for completion of the entire Project specified herein.**

### **2.02 ACCEPTABLE MANUFACTURERS**

- A. Provide products by Manufacturers specified herein which meet or exceed standards as set forth in this Section. No materials specified or approved shall contain asbestos.
- B. All materials shall be new.

### **2.03 MATERIALS**

#### **A. STRUCTURAL STEEL PAINT**

##### **1. System No. 10 -- Exposed Metal:**

- a. Type: High-build epoxy finish coat having a minimum volume solids of 60%, with an inorganic zinc prime coat and a pigmented polyurethane finish coat having a minimum volume solids of 52%.
- b. Service Conditions: For use with metal structures, plates, lintels, shelf angles, pipes, or valves subjected to water condensation; exposed to weather.
- c. Surface Preparation: SSPC SP-10.
- d. Prime Coat: Self-curing, two-component inorganic zinc-rich coating recommended by the manufacturer for overcoating with a high-build epoxy finish coat. Minimum zinc content shall be 12 pounds per gallon. Apply to a thickness of 3 mils. Products: Tnemec 90E-92, Devco Catha-Coat 304 or 304V, International Interzinc 22HS, Ameron 9HS, Sherwin-Williams Zinc-Clad II Plus, PPG METALHIDE® 28 Inorganic Zinc-Rich Primer 97-672, or District approved equal.
- e. Intermediate Coat: Tnemec 104, ICI Devco Devran 224HS or 231, International Interseal 670HS, Ameron 385, Sherwin-Williams Macropoxy 646 B58-600, PPG PITT-GUARD® Direct-to-Rust Epoxy Mastic Coating 97-145 series, or District approved equal; 5 mils.
- f. Finish Coat: Two-component pigmented acrylic or aliphatic polyurethane recommended by the manufacturer for overcoating a high-build epoxy coating. Apply to a thickness of at least 2 mils. Products: Tnemec Series 1075, ICI Devco Devthane 379, International Interline 990HS, Ameron 450HS, Sherwin-Williams Hi-Solids Polyurethane B65-300, PPG PITTHANE® Ultra Gloss Urethane Enamel 95-812 series, or District approved equal.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. The Contractor shall have the sole responsibility for the accuracy of all measurements and for the estimate of material quantities required and necessary to satisfy the requirements of these Specifications.

### **3.02 PROTECTION OF AREAS AND SPACES**

- A. Prior to surface preparation and painting applications, remove, mask, or otherwise protect items that are not to be painted such as windows and walls. Restore surfaces contaminated by painting materials to original condition and repair damaged items.

### **3.03 SURFACE PREPARATION**

- A. Near-White Blast Cleaning (SSPC-SP10): All surfaces from which all oil, grease, dirt, rust, scale, corrosion products, oxides, loose mill scale, loose rust and loose paint or coatings have been completely removed. At least 95% of any given square inch has the appearance of "White Metal" and the remainder is limited to slight discolorations.
- B. Materials, equipment, procedures, and safety equipment for personnel shall conform to the steel structures painting council.

### **3.04 APPLICATION**

- A. General:
  - 1. Proper protective measure must be taken such that nearby properties shall not be damaged by over spraying, dripping, and wind blowing or other related problems.
  - 2. All exposed metal surfaces after surface preparation must be primed within 24 hours to prevent rusting.
  - 3. Prior to the actual painting work, a small area shall be set up to test the compatibility of the existing and the new paint. Observation shall continue for at least 48 hours on paint adhesion. The paint compatibility test shall be subject to the approval of the Owner and the Architect/Engineer.
  - 4. Apply in accordance with SSPC PA1. Thoroughly work coating materials into joints, crevices, and open spaces. Touch up damaged coatings before applying subsequent coats. Interior areas shall be clean and dust free before and during the application of coating materials.
  - 5. Drying time: Allow time between coats, as recommended by the manufacturer, to permit thorough drying, but not to present topcoat adhesion problems. Provide each coat in specified condition to receive next coat.
  - 6. Primers and intermediate coats: Do not allow primers or intermediate coats to dry more than 30 days, or longer than recommended by the manufacturer, before applying subsequent coats. Follow manufacturer's recommendations for surface preparation if primers or intermediate coats are allowed to dry longer

than recommended by manufacturers of subsequent coatings. Each coat shall cover surface of preceding coat or surface completely and there shall be a visually perceptible difference in shades of successive coats.

7. Finished surfaces: Provide finished surfaces free from runs, drops, ridges, waves, laps, brush marks, and variations in colors.
  8. Thermosetting paints: Topcoats over thermosetting paints (epoxies and urethanes) should be applied while the intermediate coat is still tacky, within a few days. Otherwise, apply a mist-coat 1 to 2 mils of MIL-P-24441/20 and allow to cure to tack, a minimum of 4 hours, before top coating.
- B. Equipment: Apply with approved brushes, rollers, or spray equipment, unless specified otherwise. Spray areas made inaccessible to brushing by items such as ducts and other equipment.
- C. Thinning of Paints: Reduce paints to proper consistency by adding fresh paint, except when thinning is mandatory for the type of paint being used. Obtain written permission from the Architect/Engineer to use thinners. The written permission shall include quantities and types of thinners to use.
- D. Priming: Apply prime coat as recommended by the paint manufacturer.
- E. Painting:
1. Apply intermediate coat and finish coat. Allow time between coats as recommended by the paint manufacturer.

### **3.05 PROTECTION AND CLEANING**

- A. Protect areas adjacent to surfaces being painted.
- B. Remove excess materials adjacent to painted surfaces by means recommended by the paint manufacturer.
- C. At the conclusion of the painting work, remove all tools, scaffolding, equipment and construction debris from the construction site. The areas shall be broom cleaned and left in a condition similar to the condition before the start of the work.
- D. Leave finished work in a neat, clean condition with no evidence of spillovers onto adjacent surfaces.

END OF SECTION