

CITY OF WORCESTER MASSACHUSETTS



**PROJECT MANUAL
WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
DIVISIONS 0 THROUGH 26**

JUNE 8, 2023

SET NUMBER

SECTION 00 01 10

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CITY OF WORCESTER
INVITATION TO BID / NOTICE TO CONTRACTORS
WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 Southbridge St.
Worcester, Massachusetts 01608

The City of Worcester, the Awarding Authority, invites sealed bids for: **WORCESTER FIRE STATION #2 SOUTH DIVISION BUILDING RENOVATION, 180 Southbridge St., Worcester, Massachusetts 01608** in accordance with documents prepared by Mount Vernon Group Architects, Inc., 178 Albion St., Suite 240, Wakefield, MA 01880, for the City of Worcester, 455 Main Street, Worcester, MA 01608.

The Worcester Fire Station #2 South Division Building Renovation consists of removing the existing overhead garage door, enlarge the existing overhead door opening, re-pipe old water heater, reconnect power to relocated existing door opener, and provide a new electric cabinet heater.

The estimated Project cost is **\$130,000.00**.

The City of Worcester has purchased a new overhead door and contracted the Overhead Door Company of Worcester to install the new overhead door, door tracks, and reinstall the existing door opener.

SEALED GENERAL BIDS for **WORCESTER FIRE STATION #2 SOUTH DIVISION BUILDING RENOVATION** will be received at the Department of Public Facilities, 50 Officer Manny Familia Drive, Worcester, MA 01605 no later than 11:00 a.m., Wednesday, June 28, 2023, and will be publicly opened thereafter and read aloud.

General Bids must be accompanied by:

- (1) A fully executed **FORM FOR THE GENERAL BID; Specification Section 00 40 00.**
- (2) City of Worcester form of Tax Payment Certificate;
Specification Section 00 85 00.
- (3) **Affidavit of Acknowledgment and Certificate of Compliance** for the City of Worcester Minority/Women Business Enterprise & Worker Utilization. **M/WBEP-Form EOO-101; Specification Section 00 95 00.**
- (4) **Initial Statement and Certification of Compliance** with the Responsible Employer Ordinance, **Form REO-101 page 2. Specification Section 00 95 00.**
- (5) **Provide Evidence** of Compliance with the Responsible Employer Ordinance (**REO**). As per Specification Section 00 95 00.
- (6) **A Certificate of Eligibility** certifying the bidder's qualification in the category of **General Building Construction** issued by the Division of Capital Asset Management, DCAM (formerly the Division of Capital Planning and Operations, DCPO), showing that the Bidder has been approved to bid on projects the size and nature of this project. In order to be eligible to be awarded this contract, a general bidder must be certified in the appropriate category and for the total Project Cost including all alternates elected (if applicable) to be taken by the Owner.

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- (7) **A Contractor Update Statement**, DCPO FORM CQ3. It is the Bidder's responsibility to obtain the necessary forms and make application to DCAM (DCPO) in sufficient time for DCAM (DCPO) to evaluate the application and issue a Certificate of Eligibility. A sample of the **Contractor Update Statement**, DCAM FORM CQ3 (revised December, 1999) is located at the end of Section 001500.
- (8) Bid deposit for the general bid in the amount of **five (5) percent** of the value of the bid or a bid bond.
- (9) **Foreign Corporation Certificate of Registration** from the Commonwealth of Massachusetts State Secretary (if applicable).
- (10) **CORI Form**
- (11) **Wage Theft Form**

Plans and Specifications will be available on Wednesday, June 14, 2023, at the Department of Public Facilities, 50 Officer Manny Familia Drive, Worcester, MA 01605, Phone: (508) 799-8588, Fax: (508) 799-8188. Plans and specifications are also available at <http://bids.worcesterma.gov/>. The last day of questions will be Friday, June 23, 2023.

Contract Documents may be viewed, but not removed, at the following locations:

Department of Public Facilities
50 Officer Manny Familia Drive (formerly Skyline Drive)
Worcester, MA 01605

WAGE RATES - Bids are subject to the provisions of M.G.L., Chapter 149, Section 44A to J inclusive, as amended to date, and such other Federal, State and Municipal laws or regulations.

Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and to the fact that not less than the minimum wage rates set forth in the Contract Documents shall be paid on this project. Minimum wage rates are per M.G.L., Chapter 149, Sections 26 & 27 inclusive.

MINORITY/WOMEN BUSINESS ENTERPRISE PROGRAM - The City of Worcester has established goals for the participation of minorities and women workers, contractors, subcontractors, and suppliers on all City projects. Bids must demonstrate the contractor's ability to utilize minorities and women in all phases of this project. The City of Worcester has established a program to enhance contract opportunities to minority and women-owned businesses through its Minority/Women Business Enterprise Program. This program contains minimum participation goals of ten (10) percent by MBE's and five (5) percent by WBE's calculated as a percentage of the total bid price. Accordingly, all general bidders must execute and submit with their respective bids M/WBEP Form EOO-101, Contractor's Certification.

RESPONSIBLE EMPLOYER ORDINANCE - The performance of the work derived from this bid is subject to the City's Responsible Employer Ordinance, Chapter 2, Section 35 of WRO (2008). Accordingly, all general bidders must execute and submit with their respective bids Form REO-101 page 2, Contractor's Initial Certification.

NOISE ORDINANCE – **All Contractors must adhere to the provision of § 1A(e)(9) of chapter nine of the Revised Ordinances of the city by limiting their on-site, noise producing construction and related work to the hours specified by said ordinance.**

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PRE-BID CONFERENCE / SITE VISIT - The pre-bid conference / site visit will be held on Tuesday, June 20, 2023, at the project site, Worcester Fire Station #2 South Division Building, 180 Southbridge St., Worcester, MA 01608 beginning at 10:00 a.m. with a brief overview and tour of the construction areas. It is recommended that all Bidders attend this meeting.

WORK UNDER SEPARATE CONTRACTS AND BY OWNER – The Owner may do other work during construction with its own forces or by separate contract.

COMMENCEMENT OF WORK AND TIME OF COMPLETION – The selected General Bidder must agree to commence work within five (5) days of the execution of a General Contract and to be substantially complete on September 15, 2023.

The Awarding Authority reserves the right to waive any informality in, or to reject any or all general bids, if it were in the public interest to do so.

The City of Worcester is an equal opportunity/affirmative action employer.

City of Worcester, Massachusetts
Executive Office of the City Manager

END OF SECTION

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CITY OF WORCESTER

INSTRUCTIONS TO BIDDERS

SECTION 1 - INTRODUCTION; DEFINITIONS

In accordance with an Advertisement for Bids, a copy of which is bound herewith, the City of Worcester (the "Owner") has invited bids for the Worcester Fire Station #2 South Division Building Renovation. The project scope generally includes remove existing overhead garage door, enlarge the existing overhead door opening, re-pipe old water heater, reconnect power to relocated existing door opener, provide a new electric cabinet heater, and any other related work necessary to complete all the Work of the respective Sections and indicated on the drawings.

- 1.1 These Instructions to bidders (the "Instructions") are intended to assist bidders (which term as used in these Instructions shall include general bidders and sub-bidders if applicable) in the preparation of their bids, to call attention to various legal requirements and to set forth certain conditions upon which bids are submitted and received.
- 1.2 The award of the contract is governed by Chapter 149, Sections 44A-44J of the Massachusetts General Laws. Certain provisions of the foregoing statute and of other applicable statutes are summarized in these Instructions. Whenever these Instructions or any other contract documents set forth or summarize applicable statutory provisions, whether or not the statutes have been specifically referred to, such summaries are for convenience only, do not purport to be complete or correct as summaries of any particular material, and shall in no respect supersede, expand or limit rights or duties of the Owner or bidders in matters governed by the statute.
- 1.3 The following definitions shall apply in these Instructions and in the other Contract Documents:
 - (1) The term "bidding documents" shall include the Advertisement for Bids, these Instructions, the bid forms, contract forms and other Contract Documents bound herewith, the Drawings, the Specifications, and all Addenda issued prior to receipt of bids.
 - (2) The terms "Addenda" and "Addendum" shall mean written documents and/or drawings issued by the Owner prior to execution of the contract, which supplement, modify, correct, explain, or interpret the bidding documents.
 - (3) All definitions set forth in the Conditions of the Contract or the other Contract Documents as therein defined are applicable to these Instructions and to the other bidding documents.

SECTION 2 - AVAILABILITY OF CONTRACT DOCUMENTS

- 2.1 Plans and specifications are available at <http://bids.worcesterma.gov/>.
- 2.2 The Owner shall prepare and update daily a list of persons who have requested a set of drawings and specifications for the project, which list shall be sent each week to the Central Register published by the Massachusetts Secretary of State.

SECTION 3 - EXAMINATION OF SITE AND CONTRACT DOCUMENTS; PRE-BID CONFERENCE

- 3.1 Before submitting a bid, each bidder must: (a) thoroughly examine the Contract Documents (b) visit the site to fully examine and acquaint himself with local conditions that may in any manner affect cost, progress or performance of the Work, (c) familiarize himself with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work, and (d) study and carefully correlate his observations with the requirements of the Contract Documents. Failure of a bidder to visit the site and acquaint himself with the Contract Documents or to attend the pre-bid conference, if any, shall in no way relieve the bidder from any obligation with respect to his bid.
- 3.2 On request, the Owner will provide each bidder access to the site to conduct such reasonable investigations and tests as such bidder deems necessary to prepare his bid.
- 3.3 Each bidder shall promptly notify Chris Gagliastro, Special Project Manager, City of Worcester, Department of Public Facilities, 50 Officer Manny Familia Drive, Worcester, MA 01605, (508) 688-2694 of any ambiguity, inconsistency, or error he may discover upon examination of the Contract Documents, the site or other local conditions. The submission of a bid will constitute a representation by the bidder that he has complied with every requirement of this Section 3 and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work of this contract.
- 3.4 A pre-bid conference will be held at the place and time set forth in the Advertisement for Bids.

SECTION 4 - ADDENDA AND INTERPRETATION OF CONTRACT DOCUMENTS

- 4.1 All questions and requests for clarifications or interpretations of the meaning of the Contract Documents shall be in writing, or Facsimile Telephone Transmission (FAX), addressed to Jeremy C. Flansburg, Special Project Coordinator, City of Worcester, Department of Public Facilities, 50 Officer Manny Familia Drive, Worcester, MA 01605, phone: (508) 799-8588, fax (508) 799-8188, email: purchasing@worcesterma.gov and to be given consideration must be received at least five (5) days prior to the date fixed for opening of bids.

- 4.2 Clarifications or such interpretations and any supplemental instructions or forms, if issued, will be issued in the form of written Addenda and when possible, not later than two (2) days before the date fixed for opening of bids. Addenda will be sent by email to the contact listed on the receipt for drawings and specifications. Each bidder shall be responsible for determining that he has received all Addenda issued, and failure of any bidder to receive any such Addendum shall not relieve such bidder from any obligation under its bid as submitted. Failure to acknowledge receipt of an Addendum on the Bid Form by the Bidder may be cause for rejection of the Bid.
- 4.3 All Addenda so issued shall become part of the Contract Documents.
- 4.4 Oral clarifications or interpretations will be of no legal effect. The Owner will not be responsible for, and no bidder may rely upon or use as the basis of a claim against the Owner or the Architect, any information, explanation or interpretation of the Contract Documents rendered in any fashion except as herein provided.

SECTION 5 - PRE QUALIFICATION BY DIVISION OF CAPITAL ASSET MANAGEMENT (DCAM formerly DCPO) (CHAPTER 149 PROJECTS)

- 5.1 **GENERAL BIDS** on this contract must be accompanied by a copy of a Certificate of Eligibility issued by the Deputy Commissioner of the Massachusetts Division of Capital Asset Management (formerly the "DCPO") showing that the bidder has the classification and capacity rating to perform the work required. In order to be eligible to be awarded this contract, a general bidder must be certified by the DCAM for the total Project Cost, including all alternates elected (if applicable) to be taken by the Owner, and certified in the category of General Building Construction.
- 5.2 Each general bid must also be accompanied by a Contractor Qualifications Statement Update ("Update Statement"). The Owner will furnish copies of the Update Statement form to bidders on request. (Note: A sample copy of the Update Statement is located at the end of this Section.). Any general bid submitted without a currently valid Certificate of Eligibility and Update Statement shall be invalid and will not be accepted by the Owner.
- 5.3 The Owner may at its discretion give the bidder notice of defects or omissions in the bidder's Update Statement and an opportunity to make revisions to this statement. A contractor's bid shall not be rejected if there are mistakes or omissions of form in its Update Statement, provided the contractor promptly corrects those mistakes or omissions upon request by the Owner.
- 5.4 The Owner will consider the information contained in the Update Statement, which it may verify by its own investigation, and material that it may request from the DCAM according to 810 CMR 4.03 (12) in determining whether the low bidder is eligible for contract award pursuant to M.G.L. Chapter 149, Section 44A (2). The Owners eligibility review of the low bidder will concentrate on the bidder's performance since its last certification by the DCAM, provided, however, that the Owner may bring information to the DCAM's attention concerning a contractor's qualifications, if the DCAM was not aware of that information when it certified the contractor.

- 5.5 The low bidder may not be awarded a contract which, when added to the cost to complete all other currently held contracts, would exceed the contractor's aggregate rating limit.
- (1) The Owner will use the information provided in the Update Statement to compute the amount of work the bidder has underway.
- (2) If the contractor provides the Owner with evidence that its outstanding balance of contracts will be within its aggregate rating limit by the start date of the project for which it is low bidder, the Owner may, at its discretion, make the contract award.
- 5.6 Should the lower bidder be determined not to be eligible, the Owner shall review the next low bidder's eligibility, in accordance with these procedures and the applicable legal requirements until a bidder is determined to be eligible for contract award.
- 5.7 The contract shall not be awarded to any bidder whose submitted background information when investigated and verified by the Owner, raises significant question as to his ability to successfully complete the project in question due to problems with his competence and responsibility.

SECTION 6 - WAGE RATES

- 6.1 Minimum rates of wages for work performed under this contract will be as predetermined by the Commissioner of Labor and Industries of the Commonwealth of Massachusetts in accordance with the provisions of Sections 26 to 27C, inclusive, of Chapter 149 of the Massachusetts General Laws.
- 6.2 Section 27B of said Chapter 149 provides record-keeping requirements for contractors and subcontractors with respect to employees, hours, wages and other matters.
- 6.3 Bidders' attention is called to Section 148 of Chapter 149 of the Massachusetts General Laws, relating to the weekly payment of wages.

SECTION 7 - SALES TAX

- 7.1 Section 6(f) of Chapter 54H of the Massachusetts General Laws exempts from Massachusetts sales tax, building materials and supplies to be used in the project, and bidders shall not include in their bids any amount therefore. The number of the certificate granted by the Commissioner of Revenue for use in obtaining the exemption may be obtained from the City of Worcester.

SECTION 8 - PREPARATION AND SUBMISSION OF BIDS

- 8.1 Each bid shall be submitted upon the bid forms furnished by the Owner, copies of which are bound with the bid documents. The bid forms may be submitted without the balance of the Contract Documents. All blank spaces shall be filled in, in ink or typewritten, in words or figures. The bid prices for each item on the bid forms shall be stated in both words and figures. Where itemized lump sum or unit prices are called for, the bidder shall

provide all such prices. In the event of a discrepancy between prices written in words and prices written in figures, the written words shall govern. In the event of a discrepancy between the indicated sum of any column of figures and the correct sum thereof, the correct sum shall govern. The bid shall state the legal name of the bidder and shall be signed in ink by a person or persons legally authorized to bind the bidder to a contract. The name and title of the person or persons signing the bid shall be typed or printed below the signatures.

- 8.2 Each bid and the bid deposit (described below) shall be submitted to the Owner at the place stated in the Advertisement for Bids in a sealed envelope bearing on the outside the name of the bidder, his address and the title of the project for which the bid is submitted. If forwarded by mail, the sealed bid and the bid deposit shall be enclosed in an envelope with the notation "BID ENCLOSED" on the face and addressed as indicated in the Advertisement for Bids. A Certificate of Eligibility and an Update Statement in accordance with Section 5 shall if applicable, accompany each general bid.
- 8.3 Each sub-bid shall be submitted as specified in Paragraph 8.2 above, and, in addition, the notation "SUB-BID" and the name of the sub-trade for which the sub-bid is submitted shall be placed on the outside of the sealed envelope containing the sub-bid.
- 8.4 The Form for General Bid requires the general bidder to indicate whether performance and payment bonds will be required by the general bidder to be furnished by one or more filed sub-bidders. If the general bidder requests one or more filed sub-bidders to furnish such bonds, the general bidder must pay the premiums for all such bonds requested, and must include the costs of such premiums in his general bid.
- 8.5 Section 39L of Chapter 30 of the Massachusetts General Laws prohibits the Owner from entering into a contract for this work with, and shall not approve as a subcontractor furnishing labor and materials for a part of any such work, a foreign corporation which has not filed with the Owner, a certificate of the State Secretary stating that such corporation has complied with Massachusetts General Laws Chapter 181, Sections 3 and 5. Therefore, every Foreign Corporation, whether submitting a general or sub-bid, must furnish a certified copy of its Certificate of Registration that has been duly filed with the State Secretary's office. Any bid, general or sub, of a foreign corporation submitted without a Certificate may be invalid and may be rejected pursuant to Section 11.

SECTION 9 - RECEIPT OF BIDS

- 9.1 All bidders are cautioned to allow ample time for transmittal of bids. Bidders are solely responsible for delivery to and receipt by the Owner of bids at the place stated in the Advertisement for Bids. Bids received after the specified time or at other than the specified location will not be accepted or recognized and will be returned to the Bidder unopened. The time of receipt will determine the acceptability of mailed bids, regardless of postmark.
- 9.2 Any bid may be withdrawn by the bidder or his duly authorized representative by written notice received by the Owner at the address for receipt of bids specified in the Advertisement for Bids prior to the time scheduled for the opening of such bids or authorized postponement thereof. No bid may be withdrawn for sixty (60) days, Saturdays,

Sundays, and legal holidays excluded, after the opening of general bids. No telephone or telegraphic bid, change in bid or withdrawal of bid will be received or recognized. A bid may be amended or modified only by withdrawing the bid and resubmitting another bid prior to the time for the opening of bids.

- 9.3 Bids will be opened and read publicly at the place and time stated in the Advertisement for Bids or the authorized postponement thereof. Bidders or their authorized representatives are invited to be present.

SECTION 10 - BID DEPOSIT

- 10.1 A bid deposit in the form of a bid bond, or cash, or a certified check must accompany each bid, or a treasurer's or cashier's check issued by a responsible bank or trust company, payable to the City of Worcester. A bid bond shall be (a) in form satisfactory to the Owner and substantially conforming to the sample contained in the Contract Documents, (b) with a Surety company qualified to do business (licensed) in the Commonwealth of Massachusetts and satisfactory to the Owner and conditioned upon the faithful performance by the principal of the agreements contained in the bid. The bid deposit shall be in the amount of five (5) percent of the value of the bid.

SECTION 11 - REJECTION OF BIDS

- 11.1 The Owner reserves the right to reject any or all general bids if it were in the public interest to do so. The Owner reserves the right to reject any sub-bid on any sub-trade, if it determines that such sub-bid does not represent the sub-bid of a person competent to perform the work as specified or that less than three (3) such sub-bids were received and that the prices are not reasonable for acceptance without further competition.
- 11.2 Within two (2) days, Saturdays, Sundays and legal holidays excluded, after opening sub-bids, the Owner will reject every sub-bid which is not accompanied by the required bid deposit or which otherwise does not conform to statutory requirements, or which is on a form not completely filled in, or which is incomplete, conditional or obscure, or which contains any addition not called for; provided, however, that the failure of the Owner to reject such a sub-bid within such period shall not validate such a sub-bid nor preclude the Owner from subsequently rejecting it.
- 11.3 The Owner shall reject every general bid and filed sub-bid which is not accompanied by the required bid deposit, or which otherwise does not conform to the statutory requirements or the bid documents.
- 11.4 The Owner reserves the right to reject any and all general bids which contains erasures, alterations, additions, errors or irregularities of any kind, or which contains proposed prices for any class or item of work which are, in the judgment of the Owner, substantially less or more than the actual cost to complete the work; provided, however, that the Owner reserves the right to waive any and all informalities as to form. Matters as to substance shall not be waived.

SECTION 12 - AWARD OF CONTRACT

- 12.1 The general contract will be awarded to the lowest responsible and eligible general bidder complying with the conditions and requirements provided in these Instructions, the bid forms, and the other bid documents.
- 12.2 Award of the contract will be made within thirty (30) days, Saturdays, Sundays, and legal holidays excluded, after (i) the opening of the general bids or (ii) the receipt by the Owner of any approvals necessary from federal or state agencies in connection with the project, whichever is later.
- 12.3 The successful bidder will be notified in writing, by mail or otherwise, that their bid has been accepted and that he has been awarded the contract. The successful bidder shall execute the contract and furnish the required bonds, at the offices of the Owner if requested, within five (5) days, Saturdays, Sundays, and legal holidays excluded, after presentation of the contract to him or notice to him that the contract is ready for execution.
- 12.4 If the bidder selected as the general contractor fails to perform his agreement to execute the contract in accordance with the terms of his bid and furnish a performance bond and also a labor and materials payment bond as stated in his bid, the award will be made to the next lowest responsible and eligible general bidder, subject to the provisions of Sections 44A-44J, inclusive, of said Chapter 149 of the Massachusetts General Laws.
- 12.5 After the apparent lowest eligible and responsible general bidder is selected, it shall promptly confer with the Owner on the question of sub-bidders. Upon the Owner's acceptance of the sub-bidders to be utilized, the selected bidder shall promptly present subcontracts to its filed sub-bidders, and in all cases, the presentment of subcontracts must be made a minimum of six days prior to the presentment of the general contract to the general bidder by the Owner. The general bidder shall submit copies of the executed subcontracts to the Owner as a prerequisite to the Owner's presentment of the general contract. As provided in the statutory subcontract form, the validity of the subcontracts is contingent upon execution of the general contract. [Massachusetts General Laws Chapter 149, Section 44F(4)(c)].

SECTION 13 - CERTIFICATES AND DOCUMENTS TO BE FURNISHED PRIOR TO EXECUTION OF THE CONTRACT

- 13.1 If the amount or the estimated amount of this contract is greater than \$100,000, then, pursuant, to Section 39R of Chapter 30 of the Massachusetts General Laws, the Contract Documents require the general contractor to make and keep books, records and accounts pertaining to the contractor's financial affairs and to file with the Deputy Commissioner of Capital Asset Management and the Owner the statements and certificates described below in Paragraphs 13.2, 13.3 and 13.4.
- 13.2 Prior to the execution of the contract the general contractor shall file with the Owner:
 - (1) A statement of management controls.

- (2) A statement prepared and signed by an independent certified public accountant, stating that he and or she has examined the statement of management on internal accounting controls, and expressing an opinion as to:
 - (a) whether the representations of management are consistent with the result of management's evaluation of the system of internal accounting controls; and
 - (b) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts, which would be material when measured in relation to the applicant's financial statements.
- 13.3 Prior to execution of the contract, and annually during the term of the contract, the general contractor shall file with the Deputy Commissioner of Capital Asset Management a Financial Statement prepared by an independent certified public accountant on the basis of an audit by such accountant. All statements shall be accompanied by an accountant's report.
- 13.4 Pursuant to Sections 49A of Chapter 62C of the Massachusetts General Laws the contractor must certify that it has complied with all laws of the Commonwealth of Massachusetts relating to taxes. A form of certificate for this purpose is included in the Contract Documents.
- 13.5 Prior to commencement of work, the contractor must furnish to the Owner certificates evidencing required insurance coverage in accordance with the provisions of the insurance requirements contained in the Supplementary General Conditions of the Contract.
- 13.6 The affidavit of compliance with certain laws of the Commonwealth relating to corporations, and evidence of corporate authority with respect to execution of the contract documents on behalf of the contractor, on the form contained in the bidding documents, must be furnished by the contractor to the Owner at the time of execution of the contract.
- 13.7 The general contractor as stated in the bid form must furnish a performance bond and a labor and materials payment bond, each in the amount of the contract sum. Such bonds must be on the forms similar to those contained in the bid documents and must be executed and delivered to the Owner at the time of execution of the contract. Each attorney-in-fact who executes such a bond on behalf of the surety must affix thereto a certified and current copy of his power of attorney.
- 13.8 A performance and a labor and materials payment bond furnished by a subcontractor, at the request of a general contractor, shall secure the performance of the sub-contract by the subcontract; and shall indemnify and hold harmless the general contractor and the surety or sureties under the labor and materials payment bond furnished by the general contractor to the Owner against (1) any and all expense arising out of any and all claims in connection with the performance of said subcontract which would be required to be paid under the labor and materials payment bond furnished by the general contractor to the Owner and (2) attorney's fees in the event that the subcontractor, after the notice, fails to assume the defense and defend such claims.

- 13.9 The subcontract agreement between the general contractor and each filed subcontractor shall be in the form contained in the Contract Documents bound with the instructions, as required by Section 44 F of said Chapter 149 of the Massachusetts General Laws.

SECTION 14 - FILED SUB-BID PROCEDURE

- 14.1 As stated in the Advertisement for Bids, the Owner has requested FILED SUB-BIDS on the following classes of work:
- (1) There are no Filed Sub-Bids
- 14.2 Every sub-bidder duly filing a sub-bid with the Owner shall be bound thereby to every general bidder not excluded therein from the use thereof; and any variance from such sub-bid communicated to a general bidder shall be of no effect.
- 14.3 Each sub-bidder shall list in the sub-bid form the name and bid price of each person, firm or corporation performing each class of work or part thereof for which the section of the specifications for that sub-trade requires such listings; provided that in the absence of a contrary provision in the specification, any sub-bidder may, without listing any bid price, list his own name for any such class of work or part thereof and perform that work with persons on his own payroll if such sub-bidder after sub-bid opening, shows to the satisfaction of the Owner that he does customarily perform such class of work or the part thereof with employees on his own payroll who are mechanics or laborers referred to in Section 26 of said Chapter 149, of the Massachusetts General Laws, and is qualified so to do.
- 14.4 **FILED SUB-BIDS** on this contract must be accompanied by a copy of a Certificate of Eligibility issued by the Deputy Commissioner of the Massachusetts Division of Capital Asset Management (formerly the "DCPO") showing that the bidder has the classification and capacity rating to perform the work required. In order to be eligible to be awarded this contract, each filed sub-bidder must be certified by the DCAM for their total Project Cost, including all alternates elected (if applicable) to be taken by the Owner, and certified in their respective trade category.
- 14.5 Each filed sub-bid must also be accompanied by a Contractor Qualifications Statement Update ("Update Statement"). The Owner will furnish copies of the Update Statement form to bidders on request. (Note: A sample copy of the Update Statement is located at the end of this Section.). Any filed sub-bid submitted without a currently valid Certificate of Eligibility and Update Statement shall be invalid and will not be accepted by the Owner.
- 14.6 Not later than the second day, Saturdays, Sundays and legal holidays excluded, before the day fixed by the Owner for the opening of general bids, the Owner shall mail to every person on record as having taken a set of Drawings and Specifications a list of sub-bidders arranged by sub-trades and listing for each sub-trade the name, address and sub-bid price of every sub-bidder submitting a sub-bid thereon not rejected by the Owner, and the general bidders excluded from using such sub-bid. A person shall not be named by a general bidder

as a sub-bidder for a sub-trade on the general bid form unless such person is included for such sub-trade in said list.

- 14.7 All sub-bidders, when finally selected, shall be notified in writing of their selection with forty-eight (48) hours thereafter by the general bidder. The selected general bidder and each of the selected sub-bidders shall promptly execute the subcontract agreements, and fully executed copies of all subcontract agreements shall be delivered to the Owner prior to presentment of the Owner-Contractor Agreement to the selected general bidder for execution. The selected General Bidder shall promptly and without delay, notify the Owner of any selected sub-bidder who fails to execute a sub-contract or furnish the requisite bonds and/or insurance within five (5) days of presentment thereof.

SECTION 15 - MINORITY AND WOMEN BUSINESS ENTERPRISE PROGRAM

- 15.1 The Owner has established goals for the participation of minority and women contractors and subcontractors on all City projects. **In furtherance thereof, the City of Worcester's Supplemental Equal Employment Opportunity Anti-Discrimination And Affirmative Action Program is included in the Bidding Documents, and all bidders shall comply with the requirements set forth therein.** Any bidder who has any questions about the forms and procedures should contact Jeremy Flansburg, Special Project Coordinator, Department of Public Facilities, Room C3, 50 Officer Manny Familia Way, Worcester, MA 01605, Telephone: (508) 799-8561.

SECTION 16 - RESPONSIBLE EMPLOYER ORDINANCE

- 16.1 The performance of the work derived from this bid is subject to the city's Responsible Employer Ordinance, Chapter 2, Section 35 of the Worcester Revised Ordinances (2008). Bidders are hereby instructed to review and familiarize themselves with the requirements thereof. The complete text of the ordinance is contained in the Supplementary General Conditions - Part I.

SAMPLE DCAM FORM CQ3 CERTIFICATE OF ELIGIBILITY UPDATE STATEMENT ON THE FOLLOWING PAGES

SPECIAL NOTICE TO AWARDING AUTHORITY
BIDDERS' UPDATE STATEMENTS ARE NOT PUBLIC RECORDS AND
ARE NOT OPEN TO PUBLIC INSPECTION (M.G.L. C.149, §44D)

Commonwealth of Massachusetts
Division of Capital Asset Management

UPDATE STATEMENT

TO ALL BIDDERS AND AWARDING AUTHORITIES

A COMPLETED AND SIGNED UPDATE STATEMENT MUST BE SUBMITTED WITH EVERY BID FOR A CONTRACT SUBJECT TO M.G.L. C.149, §44A. ANY BID SUBMITTED WITHOUT AN APPROPRIATE UPDATE STATEMENT IS INVALID AND MUST BE REJECTED.

AWARDING AUTHORITIES

If the Awarding Authority determines that the bidder does not demonstrably possess the skill, ability, and integrity necessary to perform the work on the project, it must reject the bid.

BIDDER'S AFFIDAVIT

I swear under the pains and penalties of perjury that I am duly authorized by the bidder named below to sign and submit this Update Statement on behalf of the bidder named below, that I have read this Update Statement, and that all of the information provided by the bidder in this Update Statement is true, accurate, and complete as of the bid date.

Bid Date

Print Name of Bidder

Project Number (or
name if no number)

Business Address

Awarding Authority

Telephone Number

SIGNATURE ⇨

Bidder's Authorized Representative

INSTRUCTIONS

INSTRUCTIONS TO BIDDERS

- You must give complete and accurate answers to all questions and provide all of the information requested. MAKING A MATERIALLY FALSE STATEMENT IN THIS UPDATE STATEMENT IS GROUNDS FOR REJECTING YOUR BID AND FOR DEBARRING YOU FROM ALL PUBLIC CONTRACTING.
- Information is to cover the period from the date your most recent annual Certificate of Eligibility was issued (not extended) to the date of the bid.
- You must use this official form of Update Statement. Copies of this form may be obtained from the awarding authority and from the Asset Management Web Site: www.state.ma.us/cam/.
- If additional space is needed, please copy the appropriate page of this Update Statement and attach it as an additional sheet.
- See the section entitled "Bidding Limits" in the *Instructions to Awarding Authorities* for important information concerning your bidding limits.

INSTRUCTIONS TO AWARDING AUTHORITIES

Determination of Bidder Qualifications

- It is the awarding authority's responsibility to determine who is the lowest eligible and responsible bidder. You must consider all of the information in the low bidder's Update Statement in making this determination. **Remember:** this information was not available to the Division of Capital Asset Management at the time of certification.
- The bidder's performance on the projected listed in Parts 1 and 2 must be part of your review. Contact the project references.
- AWARDING AUTHORITIES ARE STRONGLY ENCOURAGED TO REVIEW THE LOW BIDDER'S ENTIRE CERTIFICATION FILE AT THE DIVISION OF CAPITAL ASSET MANAGEMENT. Telephone (617) 727-9320 for an appointment.

Bidding Limits

Single Project Limit: The total amount of the bid, including all alternates, may not exceed the bidder's Single Project Limit.

Aggregate Work Limit: The annual value of the work to be performed on the contract for which the bid is submitted, when added to the annual cost to complete the bidder's other currently held contracts, may not exceed the bidder's Aggregate Work Limit. Use the following procedure to determine whether the low bidder is within its Aggregate Work Limit:

Step 1

Review Update Statement Question #2 to make sure that all requested information is provided and that the bidder has accurately calculated and totaled the annualized value of all incomplete work on its currently held contracts (column 9).

Step 2

Determine the annual dollar value of the work to be performed on your project. This is done as follows:

- (i) If the project is to be completed in less than 12 months, the annual dollar value of the work is equal to the full amount of the bid.
- (ii) If the project will take more than 12 months to complete, calculate the number of years given to complete the project by dividing the total number of months in the project schedule by 12 (calculate to 3 decimal places), then divide the amount of the bid by the calculated number of years to find the annual dollar value of the work.

Step 3

Add the annualized value of all of the bidder's incomplete contract work (the total of column 9 on page 5) to the annual dollar value of the work to be performed on your project. **The total may not exceed the bidder's Aggregate Work Limit.**

Correction of Errors and Omissions in Update Statements

Matters of Form: An awarding authority shall not reject a contractor's bid because there are mistakes or omissions of form in the Update Statement submitted with the bid, provided the contractor promptly corrects those mistakes or omissions upon request of the awarding authority. [810 CMR 4.09(1)].

Correction of Other Defects: An awarding authority may, in its discretion, give a contractor notice of defects, other than mistakes or omissions of form, in the contractor's Update Statement, and an opportunity to correct such defects, provided the correction of such defects is not prejudicial to fair competition. An awarding authority may reject a corrected Update Statement if it contains unfavorable information about the contractor that was omitted from the Update Statement filed with the contractor's bid. [810 CMR 4.09(2)].

PART 1 - COMPLETED PROJECTS

LIST ALL PUBLIC AND PRIVATE *BUILDING* PROJECTS YOUR FIRM HAS COMPLETED SINCE THE DATE YOUR CURRENT CERTIFICATE OF ELIGIBILITY WAS ISSUED (NOT EXTENDED). *

PROJECT TITLE & LOCATION	WORK CATEGORY	CONTRACT PRICE	START DATE	DATE COMPLETED

Attach additional sheets if necessary

* If your firm has been terminated from a project prior to completion of the work or has failed or refused to complete its work under any contract, full details and an explanation must be provided. See Part 3 of this Update Statement.

PROVIDE THE FOLLOWING REFERENCE INFORMATION FOR EACH COMPLETED PROJECT LISTED ON THE PREVIOUS PAGE.

PROJECT TITLE	COMPANY NAME	CONTACT PERSON	TELEPHONE
	OWNER		
	DESIGNER		
	GC		
	OWNER		
	DESIGNER		
	GC		
	OWNER		
	DESIGNER		
	GC		
	OWNER		
	DESIGNER		
	GC		
	OWNER		
	DESIGNER		
	GC		
	OWNER		
	DESIGNER		
	GC		

Is your company or any individual who owns, manages or controls your company affiliated with any owner, designer or general contractor named above, either through a business or family relationship? ☐ YES ☐ NO

Are any of the contact persons named above affiliated with your company or any individual who owns, manages or control your company, either through a business or family relationship? ☐ YES ☐ NO

If you have answered YES to either question, explain. _____

PART 2 - CURRENTLY HELD CONTRACTS

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

LIST ALL PUBLIC AND PRIVATE BUILDING AND NON-BUILDING CONSTRUCTION PROJECTS YOUR FIRM HAS UNDER CONTRACT ON THIS DATE REGARDLESS OF WHEN OR WHETHER THE WORK COMMENCED.

1	2	3	4	5	6	7	8	9
PROJECT TITLE & LOCATION	WORK CATEGORY	START AND END DATES	ON SCHEDULE (yes / no)	CONTRACT PRICE	% NOT COMPLETE	\$ VALUE OF WORK NOT COMPLETE (col. 5 x col. 6)	NO. OF YEARS REMAINING (see note below)	ANNUALIZED VALUE OF INCOMPLETE WORK (col. 7 ÷ col. 8)

ANNUALIZED VALUE OF ALL INCOMPLETE CONTRACT WORK (Total of Column 9) \$ _____

Column 8 • If less than one year is left in the project schedule, write 1.
• If more than 12 months are left in the project schedule, divide the number of months left in the project schedule by 12 (calculate to three decimal places).
PROVIDE THE FOLLOWING REFERENCE INFORMATION FOR EACH INCOMPLETE PROJECT LISTED ON THE PREVIOUS PAGE.

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

PROJECT TITLE	COMPANY NAME	CONTACT PERSON	TELEPHONE
	OWNER DESIGNER GC		
	OWNER DESIGNER GC		
	OWNER DESIGNER GC		
	OWNER DESIGNER GC		
	OWNER DESIGNER GC		
	OWNER DESIGNER GC		

Is your company or any individual who owns, manages or controls your company affiliated with any owner, designer or general contractor named above either through a business or family relationship? ☐ YES ☐ NO

Are any of the contact persons named above affiliated with your company or any individual who owns, manages or control your company, either through a business or family relationship? ☐ YES ☐ NO

If you have answered YES to either question, explain. _____

PART 3 - PROJECT PERFORMANCE

Please answer the following questions. Information is to cover the period from the date your current Certificate of Eligibility was issued to the bid date.

If you answer YES to any question, on a separate page provide a complete explanation. Include all details [project name(s) and location(s), names of all parties involved, relevant dates, etc.].

	YES	NO
A. Has your firm been terminated on any contract prior to completing its work?	<input type="checkbox"/>	<input type="checkbox"/>
B. Has your firm failed or refused either to perform or complete any of its work under any contract prior to substantial completion?	<input type="checkbox"/>	<input type="checkbox"/>
C. Has your firm failed or refused to complete any punchlist work under any contract?	<input type="checkbox"/>	<input type="checkbox"/>
D. Has your surety taken over or been asked to complete any of your work under any contract?	<input type="checkbox"/>	<input type="checkbox"/>
E. Has your surety made payment to a materials supplier or other party under your payment bond on any contract?	<input type="checkbox"/>	<input type="checkbox"/>
F. Has any subcontractor filed a demand for direct payment with an awarding authority on a public project for any of your contracts?	<input type="checkbox"/>	<input type="checkbox"/>
G. Have any of your subcontractors or suppliers filed litigation to enforce a mechanic's lien against property in connection with work performed or materials supplied under any of your contracts?	<input type="checkbox"/>	<input type="checkbox"/>
H. Have there been any deaths of employee or others occurring in connection with any of your projects?	<input type="checkbox"/>	<input type="checkbox"/>
I. Has any employee or other person suffered an injury resulting in complete disability in excess of thirty working days in connection with any of your projects?	<input type="checkbox"/>	<input type="checkbox"/>

PART 4 - LEGAL PROCEEDINGS

Please answer the following questions. Information is to cover the period from the date your current Certificate of Eligibility was issued to the bid date.

The term "Administrative Proceeding" as used in this Update Statement includes (i) any action or proceeding brought by a governmental agency, department or officer to enforce any law, regulation, code or other legal requirement, except for those brought in state or federal courts, and (ii) any action taken by a governmental agency, department or officer imposing penalties, fines or other sanctions for failure to comply with any such legal requirement.

If you answer YES to any question, on a separate page provide a complete explanation of each proceeding and any judgement or decision. Include all details (name of court or administrative agency, title of case or proceeding, case number, date action was commenced, date judgement or decision was entered, fines or penalties imposed, etc.).

YES NO

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

A. Have any judicial proceedings (other than criminal proceedings) been brought or concluded adversely against your firm or a principal or officer of your firm relating to the procurement or performance of any construction contract, including actions to obtain payment brought by subcontractors, suppliers or others?	<input type="checkbox"/>	<input type="checkbox"/>
B. Have any criminal proceedings been brought or concluded adversely against your firm or a principal or officer of your firm relating to any of the following offenses: graft, embezzlement, forgery, bribery, falsification or destruction of records, receipt of stolen property or environmental offenses?	<input type="checkbox"/>	<input type="checkbox"/>
C. Have any judicial or administrative proceedings been brought or concluded adversely against your firm or a principal or officer of your firm relating to a violation of state or federal antitrust laws arising out of the submission of bids or proposals?	<input type="checkbox"/>	<input type="checkbox"/>
D. Have any judicial or administrative proceedings been brought or concluded adversely against your firm or a principal or officer of your firm relating to a violation of state or federal laws regulating campaign contributions?	<input type="checkbox"/>	<input type="checkbox"/>
E. Have any judicial or administrative proceedings been brought or concluded adversely against your firm or a principal or officer of your firm relating to a violation of chapter 268A of the Massachusetts General Laws?	<input type="checkbox"/>	<input type="checkbox"/>
F. Have any judicial or administrative proceedings been brought or concluded adversely against your firm or a principal or officer of your firm relating to a violation of any state or federal law regulating prevailing wages?	<input type="checkbox"/>	<input type="checkbox"/>
G. Have any judicial or administrative proceedings been brought or concluded adversely against your firm or a principal or officer of your firm relating to a violation of any state or federal law regulating hours of labor, minimum wages, overtime pay, equal pay, child labor or worker's compensation?	<input type="checkbox"/>	<input type="checkbox"/>
H. Have any judicial or administrative proceedings been brought or concluded adversely against your firm or a principal or officer of your firm relating to a violation of any state or federal law prohibiting discrimination in employment?	<input type="checkbox"/>	<input type="checkbox"/>
I. Have any judicial or administrative proceedings been brought or concluded adversely against your firm or a principal or officer of your firm relating to a claim of repeated or aggravated violation of any state or federal law regulating labor relations or occupational health or safety?	<input type="checkbox"/>	<input type="checkbox"/>
J. Have any proceedings been brought by any state or federal agency to debar or suspend your firm or any principal or officer of your firm from public contracting?	<input type="checkbox"/>	<input type="checkbox"/>
K. Has your firm been fined by OSHA or any other state or federal agency for violations of any laws or regulations related to occupational health or safety?	<input type="checkbox"/>	<input type="checkbox"/>

PART 5 - SUPERVISORY PERSONNEL

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

List all supervisory personnel, such as project managers and superintendents, who will be assigned to the project if your firm is awarded the contract. **Attach the resume of each person listed below.**

NAME	TITLE OR FUNCTION

PART 6 - CHANGES IN BUSINESS ORGANIZATION OR FINANCIAL CONDITION

Have there been any changes in your firm's business organization, financial condition or bonding capacity since the date your current Certificate of Eligibility was issued? ☐ Yes ☐ No
If YES, attach a separate page providing complete details.

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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CITY OF WORCESTER

**GENERAL CONDITIONS OF THE
CONTRACT FOR CONSTRUCTION**

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GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

ARTICLE 1 - GENERAL PROVISIONS

1.1 DEFINITIONS

1.1.1 THE CONTRACT DOCUMENTS

- 1.1.1.1 The Contract Documents consist of the Owner-Contractor Agreement, the Conditions of the Contract (General, Supplementary and other Conditions), Performance Bond, Payment Bond, Vote of Corporation, Instructions to Bidders, Bid Proposal, the Drawings, the Specifications, and all Addenda issued prior to and all Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a written interpretation issued by the Architect pursuant to Article 2, or (4) a written order for a minor change in the Work issued by the Architect pursuant to Article 12. The Contract Documents do not include Bidding Documents such as, sample forms, or portions of Addenda relating to any of these, or any other documents, unless specifically enumerated in the Owner-Contractor Agreement. The Drawings of this Contract shall be as listed on the cover sheet of the Drawings, as applicable. The Specifications of this Contract shall be listed on the Index to the Technical Specifications.

In the event of any conflict among the Contract Documents, the Documents shall be construed according to the following priorities: Highest Priority - Modifications, Second Priority- Agreement, Third Priority - Addenda-later date to take precedence, Fourth Priority - Special Requirements, Fifth Priority - Special Conditions, Sixth Priority - Supplementary General Conditions, Seventh Priority - General Conditions, Eighth Priority - Specifications, Ninth Priority - Drawings.

1.2 THE CONTRACT

- 1.2.1 The Contract Documents form the Contract for Construction. This Contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification as defined in Article 1. These General Conditions, wherever applicable, shall be construed consistent with, and not to the exclusion of any terms of the Owner-Contractor Agreement, provided further however, that the terms of such Agreement shall take precedence, as provided in Article 1. Except for the special agreements in Article 4, nothing contained in the Contract Documents shall be construed to create any contractual relationship of any kind between the Architect and the Contractor. Nothing contained in the Contract Documents shall create any contractual relationship between the Owner or the Architect and any Subcontractor or Sub-subcontractor.

1.3 THE WORK

- 1.3.1 The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated in such construction.

1.4 THE PROJECT

- 1.4.1 The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part.

1.5 EXECUTION, CORRELATION AND INTENT

- 1.5.1 The Owner and Contractor shall sign the Contract Documents in duplicate.
- 1.5.2 By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents.
- 1.5.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations, which have well-known technical or trade meanings are used in the Contract Documents in accordance with such, recognized meanings. All work mentioned or indicated in the Contract Documents shall be performed by the Contractor as part of this Contract unless it is specifically indicated in the Contract Documents that such work is to be done by others. Should the drawings or the Specifications disagree in themselves or with each other, the Contractor shall provide the better quality or greater quantity of work and/or materials unless otherwise directed by written addendum to the Contract.
- 1.5.4 The organization of the Specifications into divisions, sections and articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. The Contractor and all Subcontractors shall refer to all of the Drawings, including those showing primarily the work of the mechanical, electrical and other specialized trades, and to all of the Sections of the Specifications, and shall perform all work reasonably inferable therefrom as being necessary to produce the indicated results.
- 1.5.5 All indications or notations which apply to one of a number of similar situations, materials or processes shall be deemed to apply to all such situations, materials or processes wherever they appear in the Work, except where a contrary result is clearly indicated by the Contract Documents.
- 1.5.6 Where codes, standards, requirements and publications of public and private bodies are referred to in the Specifications, references shall be understood to be to the latest revision prior to the date of receiving bids, except where otherwise indicated.
- 1.5.7 Where no explicit quality or standards for materials or workmanship are established for work, such work is to be of good quality for the intended use and consistent with the quality of the surrounding work and of the construction of the Project generally.
- 1.5.8 All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's written or printed directions and instructions unless otherwise indicated in the Contract Documents.

- 1.5.9 The Mechanical and Electrical Drawings are diagrammatic only, and are not intended to show the exact physical locations or configurations of work. Such work shall be installed to clear all obstructions, permit proper clearances for the work of other trades, and present an orderly appearance where exposed. Exact locations of fixtures and outlets shall be obtained from the Architect as provided in Article 4 before the work is roughed in; work installed without such information from the Architect shall be relocated at the Contractor's expense.
- 1.5.10 Except for work governed by M.G.L. c.149 §44F, the Owner and Architect assume no liability arising out of jurisdictional issues raised or claims advanced by trade organizations or other interested parties based on the arrangement or manner of subdivision of the content of the Plans and Specifications. The Contractor shall make all necessary arrangements to reconcile any such jurisdictional conflicts without delay, damage, or cost to the Owner, unless otherwise agreed to by the parties hereto.

1.6 OWNERSHIP AND USE OF DOCUMENTS

- 1.6.1 All Drawings and Specifications furnished by the Architect, and all copies thereof and the copyright therein, are the property of the Architect or the Owner. They are to be used only with respect to this Project and are not to be used on any other project. With the exception of one contract set for each party to the Contract, such documents are to be returned or suitably accounted for to the Architect on request at the completion of the Work. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Owner's common law copyright or other reserved rights.

ARTICLE 2 - ARCHITECT

2.1 DEFINITION

- 2.1.1 The Architect is the person lawfully licensed to practice Architecture, or an entity lawfully practicing architecture identified as such in the Owner-Contractor Agreement, and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Architect means the Architect or his Authorized Representative.

2.2 ADMINISTRATION OF THE CONTRACT

- 2.2.1 The Architect will provide administration of the Contract as herein described and pursuant to the terms of the Design Services Agreement between the Architect and the Owner.
- 2.2.2 The Architect will be the Owner's representative during construction and until final payment is due. The Architect will advise and consult with the Owner. The Owner's instructions to the Contractor shall be forwarded through the Architect. The Architect will have the authority to act on behalf of the Owner only to the extent provided in the Contract Documents and the Design Services Agreement between the two, unless otherwise modified by written instrument in accordance with Article 2.

- 2.2.3 The Architect will visit the site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of his on-site observations as an Architect, he will keep the Owner informed of the progress of the Work, and will endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor.
- 2.2.4 The Architect will not be responsible for, and will not have control or charge of, construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and he will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect will not be responsible for or have control or charge over the acts or omissions of the Contractor, Subcontractors, or any of their agents or employees, or any other persons performing any of the Work.
- 2.2.5 The Architect shall at all times have access to the Work wherever it is in preparation and progress. The Contractor shall provide facilities for such access so the Architect may perform his functions under the Contract Documents.
- 2.2.6 Based on the Architect's observations and an evaluation of the Contractor's Applications for Payment, the Architect will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in Article 9.
- 2.2.7 The Architect will be the interpreter of the requirements of the Contract Documents and the judge of the performance there under by both the Owner and Contractor.
- 2.2.8 The Architect will render interpretations necessary for the proper execution or progress of the Work, with reasonable promptness and in accordance with M.G.L. Chapter 30, Section 39P, or any lesser time limit agreed upon. Either party to the Contract may make written request to the Architect for such interpretations.
- 2.2.9 Claims, disputes and other matters in question between the Contractor and the Owner relating to the execution of progress of the Work or the interpretation of the Contract Documents shall be referred initially to the Architect for decision, which he will render in writing within a reasonable time.
- 2.2.10 All interpretations and decisions of the Architect shall be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. In his capacity as interpreter and judge, he will endeavor to secure faithful performance by both the Owner and the Contractor, will not show partiality to either, and will not be liable for the result of any interpretation or decision rendered in good faith, and in the absence of negligence, in such capacity.
- 2.2.11 The Architect's decisions in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents.

- 2.2.12 The Architect will have authority to reject Work, which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the Work in accordance with Article 7, whether or not such Work be then fabricated, installed or completed. However, neither the Architect's authority to act under this Article 2 nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Architect to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.
- 2.2.13 The Architect will review and approve or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Architect's approval of a special item shall not indicate approval of an assembly of which the item is a component.
- 2.2.14 The Architect will prepare Change Orders in accordance with Article 12, and will have authority to order minor changes in the Work as provided in Article 12.
- 2.2.15 The Architect will conduct inspections to determine the dates of Substantial Completion and final completion, will receive and forward to the Owner for the Owner's review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate of Payment upon compliance with the requirements of Article 9.
- 2.2.16 In case of the termination of the employment of the Architect, the Owner shall appoint an Architect against whom the Contractor makes no reasonable objection whose status under the Contract Documents shall be that of former Architect.

ARTICLE 3 - OWNER

3.1 DEFINITION

- 3.1.1 The term Owner means the City of Worcester, acting by and through its city manager and such representatives as the city manager shall assign to the Project.

3.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

- 3.2.1 The Owner shall, at the request of the Contractor, at the time of execution of the Owner-Contractor Agreement, furnish to the Contractor reasonable evidence that he has made financial arrangements to fulfill his obligations under the Contract. Unless such reasonable evidence is furnished, the Contractor is not required to execute the Owner-Contractor Agreement or to commence the Work.
- 3.2.2 The Owner shall furnish existing surveys, if any, describing the physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site.
- 3.2.3 Except as provided in Article 4, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

- 3.2.4 The Owner shall furnish information or services under the Owner's control with reasonable promptness after receipt from the Contractor of a written request for such information or services.
- 3.2.5 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, all copies of available bid documents, Drawings, and Specifications. The Contractor may at any time order additional sets at the Contractor's expense.
- 3.2.6 The Owner shall forward all instructions to the Contractor through the Architect.
- 3.2.7 The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Work by Owner or by Separate Contractors, Payments and Completion, and Insurance in Articles 6, 9 and 11 respectively.

3.3 OWNER'S RIGHT TO STOP THE WORK

- 3.3.1 If the Contractor fails to correct defective Work as required by Article 13 or persistently fails to carry out the Work in accordance with the Contract Documents, the Owner, by a written order signed personally or by an agent specifically so empowered by the Owner in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Article 6.

3.4 OWNER'S RIGHT TO CARRY OUT THE WORK

- 3.4.1 3.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within ten (10) days after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Architect's additional services made necessary by such default, neglect or failure. Such action by the Owner and the amount charged to the Contractor are both subject to prior notice being given to the Architect by the Owner. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

ARTICLE 4 - CONTRACTOR

4.1 DEFINITION

- 4.1.1 The Contractor is the person or entity identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his Authorized Representative.

4.2 REVIEW OF CONTRACT DOCUMENTS

- 4.2.1 Before starting the Work, and at frequent intervals during the progress thereof, the Contractor shall carefully study and compare the Agreement, Conditions of the Contract, Drawings, Specifications, Addenda and other Contract Documents and shall at once report to the Architect any error, inconsistency or omission he may discover. Any necessary change shall be ordered as provided in Article 12 and other provisions of the Contract Documents. If the Contractor proceeds with the Work without such notice to the Architect, having discovered such errors, inconsistencies or omissions, or if by reasonably study of the Contract Documents he could have discovered such, the Contractor shall bear all costs arising there from.
- 4.2.2 The Contractor shall give the Architect timely notice of any additional design drawings, specifications, or instructions required to define the Work in greater detail, or to permit the proper progress of the Work.
- 4.2.3 The Contractor shall not proceed with any Work not clearly and consistently defined in detail in the Contract Documents, but shall request additional drawings or instructions from the Architect as provided in Article 4. If the Contractor proceeds with such Work without obtaining further drawings or instructions, he shall correct Work incorrectly done at his own expense.
- 4.2.4 The Contractor may submit Requests For Information (RFI) to the Architect to help facilitate the Contractor's performance of the Contract. Prior to submitting each RFI, the Contractor shall first carefully study and compare the Contract Documents, field conditions, other Owner provided information, Contractor and Subcontractor prepared Coordination Drawings and prior Project correspondence and documentation to determine that the information to be requested is not reasonably obtainable from such sources after such careful study and comparison.
- 4.2.5 Each RFI shall be submitted by the Contractor to the Architect for determination. Each RFI shall be in writing, on such form and with such accompanying information as the Architect may require for such purpose. Each RFI shall identify a single item or topic and the specific sources which were reviewed by the Contractor in its efforts to determine the information requested, and a statement that the information being requested could not be determined from such sources.
- 4.2.6 The Contractor shall submit each RFI sufficiently in advance of the date by which such information is required in order to allow the Architect sufficient time, in the Architect's professional judgment, to permit adequate review and response and to permit Contractor compliance with the latest Construction Schedule.
- 4.2.7 The Contractor shall reimburse the Owner amounts charged to the Owner by the Architect for responding to excessive or unnecessary RFI's where such information is available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner provided information, Contractor prepared Coordination Drawings, or project correspondence or documentation.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- 4.3.1 The Contractor shall supervise and direct the Work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.
- 4.3.2 The Contractor shall be responsible to the Owner for the acts and omissions of his employees, Subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor.
- 4.3.3 The Contractor shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Architect in his administration of the Contract, or by inspections, tests or approvals required or performed under Article 7 by persons other than the Contractor.
- 4.3.4 Where the Contract Documents refer to particular construction means, methods, techniques, sequences or procedures or indicate or imply that such are to be used in the Work, such mention is intended only to indicate that the operations of the Contractor shall be as to produce at least the quality of work implied by the operations described, but the actual determination of whether or not the described operations may be safely and suitably employed on the Work shall be the responsibility of the Contractor, who shall notify the Architect in writing of the actual means, methods, techniques, sequences or procedures which will be employed on the Work, if these differ from those mentioned in the Contract Documents. All loss, damage, or liability, or cost of correcting defective work arising from the employment of any construction means, methods, techniques, sequences or procedures shall be borne by the Contractor, notwithstanding that such construction means, methods, techniques, sequences or procedures are referred to, indicated or implied by the Contract Documents, unless the Contractor has given timely notice to the Architect in writing that such means, methods, techniques, sequences or procedures are not safe or suitable, and the Contractor has then been instructed in writing by the Owner to proceed at the Owner's risk.

4.4 LABOR AND MATERIALS

- 4.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. The word 'provide' shall mean furnish and install complete, including connections, unless otherwise specified.
- 4.4.2 The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him.
- 4.4.3 The Contractor shall procure its materials from such sources and employ labor subject to contract terms and conditions so as to ensure harmonious labor relations on the site and prevent strikes or labor disputes. The Contractor, in the event of a labor dispute including strikes, shall take the necessary and appropriate action required at no expense to the Owner to prevent the disruption of the Work.

WARRANTY

- 4.4.4 The Contractor warrants to the Owner and the Architect that all materials and equipment furnished under this Contract will be new and of recent manufacture unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective.
- 4.4.5 The Contractor shall be responsible for determining that all materials furnished for the Work meet all requirements of the Contract Documents. The Architect may require the Contractor to produce reasonable evidence that a material meets such requirements, such as certified reports of past tests by qualified testing laboratories, reports of studies by qualified experts, or other evidence which, in the opinion of the Architect, would lead to a reasonable certainty that any material used, or proposed to be used, in the Work meets the requirements of the Contract Documents. All such data shall be furnished at the Contractor's expense. This provision shall not require the Contractor to pay for periodic testing of different batches of the same material, unless such testing is specifically required by the Contract Documents to be performed at the Contractor's expense.
- 4.4.6 If the Contractor proposed to use a material which, while suitable for the intended use, deviates in any way from the detailed requirements of the Contract Documents, he shall inform the Architect in writing of the nature of such deviations at the time the material is submitted for approval, and shall request written approval of the deviation from the requirements of the Contract Documents.
- 4.4.7 In requesting approval of the deviations or substitutions, the Contractor shall provide, upon request, evidence leading to a reasonable certainty that the proposed substitution or deviation will provide a quality of result at least equal to that otherwise attainable. If, in the opinion of the Architect, the evidence presented by the Contractor does not provide a sufficient basis for such reasonable certainty, the Architect may reject such substitution or deviation without further investigation.
- 4.4.8 The Contract Documents are intended to produce a building of consistent character and quality of design. All components of the building including visible items of mechanical and electrical equipment have been selected to have a coordinated design in relation to the overall appearance of the building. The Architect shall judge the design and appearance of proposed substitutes on the basis of their suitability in relation to the overall design of the project, as well as for their intrinsic merits. The Architect will not approve as equal to materials specified proposed substitutes, which, in his opinion, would be out of character, obtrusive, or otherwise inconsistent with the character or quality of design of the project. In order to permit coordinated design of color and finishes the Contractor shall, if required by the Architect, furnish the substituted material in any color, finish, texture, or pattern which would have been available from the manufacturer originally specified, at no additional cost to the Owner.
- 4.4.9 Any additional cost, or any loss or damage arising from the substitution of any material or any method for those originally specified shall be borne by the Contractor, notwithstanding approval or acceptance of such substitution by the Owner or the Architect, unless such substitution was made at the written request or direction of the Owner.
- 4.4.10 The warranty provided in this Article 4 shall be in addition to and not in limitation of any other warranty required by the Contract Documents or otherwise prescribed by law.

- 4.4.11 The Contractor shall procure and deliver to the Architect, no later than the date claimed by the Contractor as the date of Substantial Completion, all special warranties required by the Contract Documents. Delivery by the Contractor shall constitute the Contractor's guarantee to the Owner that the warranty will be performed in accordance with its terms and conditions.
- 4.4.12 The Contractor shall guarantee all Work for a period of a minimum of one year (unless otherwise required in the specifications to have a longer warranty time) after Date of Substantial Completion or by the terms of any special warranty required by the Contract Documents. The Contractor shall, upon written notice from the Architect, promptly correct defective Work or Work not in accordance with the Contract Documents.

4.5 TAXES

- 4.5.1 The Contractor shall pay all sales, consumer, use and other similar taxes for the Work or portions thereof provided by the Contractor which are legally enacted at the time bids are received, whether or not yet effective.
- 4.5.2 **IMPORTANT TAX NOTE:** This project, being constructed for a political subdivision of the Commonwealth of Massachusetts, is exempt from certain taxes. It is therefore required that the Contractor and all Subcontractors purchasing taxable goods covered by the governing tax codes make known to suppliers the tax-exempt status of the institution in order that such taxes will not appear in the Contract Sum. The Owner will provide the necessary evidence and certificates of its tax exemption upon request of those concerned. The most applicable taxes concerned are:
- (1) Federal Excise Taxes as applied to articles, which are taxable under Chapter 12 of the Internal Revenue Code of 1954, as amended.
 - (2) Commonwealth of Massachusetts Sales Tax.
 - (3) Tax Exempt Number: 046-001-418.

4.6 PERMITS, FEES AND NOTICES

- 4.6.1 The Contractor and all subcontractors shall secure, coordinate and pay for the building permit and for all other permits and governmental fees, licenses and inspections necessary for the proper execution and completion of the Work.
- 4.6.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and lawful orders of any public authority bearing on the performance of the Work.
- 4.6.3 It is not the responsibility of the Contractor to make certain the Contract Documents are in accordance with the applicable laws, statutes, building codes and regulations. If the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Architect in writing, and any necessary changes shall be accomplished by appropriate Modification.
- 4.6.4 If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Architect, he shall assume full responsibility therefore and shall bear all costs attributable thereto.

4.7 ALLOWANCES

- 4.7.1 Note that the use of such Allowances are prohibited in any contract or work subject to the provisions of M.G.L. c. 149, §44A.

4.8 PROJECT MANAGEMENT

- 4.8.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site full time daily including work performed outside normal working hours during the progress of the Work until the date of substantial completion, and for such additional time thereafter as the Architect may determine to be necessary for the expeditious completion of the Work. Only under extenuating circumstances, and with approval of the Architect and Owner, will the Contractor be allowed to substitute superintendents prior to the date of Substantial Completion. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be so confirmed on written request in each case.
- 4.8.2 The Contractor shall retain a competent Registered Professional Engineer or Registered Land Surveyor, acceptable to the Architect and Owner who shall establish the exterior lines and required elevations of all buildings and structures to be erected on the site and shall establish sufficient lines and grades for the construction of associated work such as, but not limited to, roads, utilities and site grading. The Engineer or Land Surveyor shall certify as to the actual location of the constructed facilities in relation to property lines, building lines, easements, and other restrictive boundaries.
- 4.8.3 The Contractor shall attend job meetings with the Architect and such other persons as the Architect may from time to time wish to have present. The Contractor shall be represented by a principal, project manager, general superintendent or other authorized main office representative, as well as by the Contractor's own superintendent. An authorized representative of any Subcontractor or Sub-subcontractor shall attend such meetings, if the representative's presence is requested by the Architect. Such representatives shall be empowered to make binding commitments on all matters to be discussed at such meetings including costs, payments, change orders, time schedules and manpower. Any notices required under the Contract may be serviced on such representatives. Refer to specification section 01200 Project Meetings for additional requirements.
- 4.8.4 The Contractor shall establish the building grades, lines, levels, column, wall, and partition lines required by the various subcontractors in laying out their work.
- 4.8.5 The Contractor shall coordinate and supervise the work performed by Subcontractors to the end that the work is carried out without conflict between trades and so that no trade at any time causes delay to the general progress of the Work. The Contractor and all Subcontractors shall at all times afford each trade, any separate contractor, or the Owner, every reasonable opportunity for the installation of work and the storage of materials.

4.9 PROGRESS SCHEDULE

- 4.9.1 The Contractor shall prepare and submit to the Architect a progress schedule as described in Article 8.

4.10 DOCUMENTS AND SAMPLES AT THE SITE

4.10.1 The Contractor shall maintain at the site for the Owner a record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples. These shall be available to the Architect and shall be delivered to him for the Owner upon completion of the Work.

4.10.2 Refer to Specifications Section 017700 entitled PROJECT CLOSEOUT, for additional requirements for Record Drawings and Operating and Maintenance Manuals.

4.11 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

4.11.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor, or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

4.11.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.

4.11.3 Samples are physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

4.11.4 The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents.

4.11.5 By approving and submitting Shop Drawings, Product Data, and, Samples, the Contractor thereby represents that he has determined and verified all dimensions, quantities, field dimensions, relations to existing work, coordination with work to be installed later, coordination with information on previously accepted Shop Drawings, Product Data, or Samples and verification of compliance with all the requirements of the Contract Documents. The accuracy of all such information is the responsibility of the Contractor. In reviewing Shop Drawings, Product Data, and Samples, the Architect shall be entitled to rely upon the Contractor's representation that such information is correct and accurate.

4.11.6 The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data or Samples under Article 2 unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submission and the Architect has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Architect's approval thereof.

- 4.11.7 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Architect on previous submittals. Unless such written notice has been given, the Architect's approval of a resubmitted Shop Drawing, Product Data, or Sample shall not constitute approval of any changes not requested on the prior submittal.
- 4.11.8 No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been approved by the Architect as provided in Article 2. All such portions of the Work shall be in accordance with approved submittals.
- 4.11.9 Refer to Specifications Section 013300, SUBMITTALS, for additional requirements.

4.12 USE OF SITE

- 4.12.1 The right of possession of the premises and the improvements made thereon by the Contractor shall remain at all times in the Owner. The Contractor's right of entry and use thereof arises solely from the permission granted by the Owner under the Contract Documents. The Contractor shall confine their apparatus; the storage of materials and the operations of his workmen to limits indicated by law, ordinances, the Contract Documents and permits and/or directions by the Architect and shall not unreasonably encumber the premises with his materials.

4.13 CUTTING AND PATCHING WORK

- 4.13.1 The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.
- 4.13.2 The Contractor shall not damage or endanger any portion of the Work or the work of the Owner or any separate contractors by cutting, patching or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the Owner or any separate contractor except with the written consent of the Owner and of such separate contractor. The Contractor shall not unreasonably withhold from the Owner or any separate contractor his consent to cutting or otherwise altering the Work.

4.14 CLEANING UP

- 4.14.1 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials. Immediately prior to the Architect's inspection for Substantial Completion, the Contractor shall completely clean the premises.
- 4.14.2 If the Contractor fails to maintain a clean site, free of accumulation of waste, rubbish and materials, the Owner may do so after twenty-four hour notification in accordance with Article 3 and the cost thereof shall be charged to the Contractor.
- 4.14.3 If the Contractor fails to clean up at the completion of the Work, the Owner may do so as provided in Article 3 and the cost thereof shall be charged to the Contractor. Refer to Specifications Section 017000, PROJECT CLOSEOUT, for additional requirements.

4.15 COMMUNICATIONS

- 4.15.1 The Contractor shall forward all communications to the Owner through the Architect. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall communicate through the Architect. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with other Owner's contractors shall be through the Architect.

4.16 ROYALTIES AND PATENTS

- 4.16.1 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Architect shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Architect.

4.17 INDEMNIFICATION

- 4.17.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Architect and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of; or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person, described in this Article 4.
- 4.17.2 In any and all claims against the Architect or any of his agents or employees, by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Article 4 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.
- 4.17.3 The obligations of the Contractor under this Article 4 shall not extend to the liability of the Architect, his agents or employees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Architect, his agents or employees provided, such giving or failure to give is the primary cause of the injury or damage.

ARTICLE 5 - SUBCONTRACTOR

5.1 DEFINITION

- 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform any of the Work at the site and as further defined by M.G.L. Chapter 30, Section 39F(3). The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Subcontractor or his authorized representative. The term Subcontractor does not include any separate contractor or his subcontractors.
- 5.1.2 A Sub-subcontractor is a person or entity that has a direct or indirect contact with a Subcontractor to perform any of the Work at the site. The term Sub-subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Sub-subcontractor or an authorized representative thereof.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

- 5.2.1 Unless otherwise required by the Contract Documents or the Bidding Documents, the Contractor, as soon as practicable after the award of the Contract, shall furnish to the Owner and the Architect, in writing, the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work. The Architect will promptly reply to the Contractor in writing stating whether or not the Owner or the Architect, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Architect to reply promptly shall constitute notice of no reasonable objection.
- 5.2.2 The Contractor shall not contract with any such proposed person or entity to which the Owner or the Architect has made reasonable objection under the provisions of Article 5. The Contractor shall not be required to contract with anyone to whom he has a reasonable objection.
- 5.2.3 If the Owner or the Architect has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the Owner or the Architect has no reasonable objection, and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued; however, no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting names as required by Article 5.
- 5.2.4 The Contractor shall make no substitution for any Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such substitution.

5.3 SUBCONTRACTUAL RELATIONS

- 5.3.1 By an appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner and the Architect. Said agreement shall preserve and protect the rights

of the Owner and the Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the Contractor-Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with his Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Article 5, and identify to the Subcontractor any terms and conditions of the proposed Subcontract which may be at variance with the Contract Documents. Each Subcontractor shall similarly make copies of such Documents available to his Sub-subcontractors.

ARTICLE 6 - WORK BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

- 6.1.1 The Owner reserves the right to perform work related to the Project with his own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under these or similar Conditions of the Contract. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, he shall make such claim as provided elsewhere in the Contract Documents.
- 6.1.2 When separate contracts are awarded for different portions of the Project or other work on the site, the term Contractor in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.
- 6.1.3 The Owner will provide for the coordination of the work of his own forces and of each separate contractor with the Work of the Contractor, who shall cooperate therewith as provided in Article 6.
- 6.1.4 The General Contractor shall permit the Owner to place and install as much equipment during the progress of the work as is possible before the completion of the various parts of the work, and agrees that such placing and the installation of equipment shall not in any way evidence the completion of the work or any portion of it, nor shall it signify the Owner's completion of the work or any portion thereof.

6.2 MUTUAL RESPONSIBILITY

- 6.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate his Work with theirs as required by the Contract Documents.
- 6.2.2 If any part of the Contractor's Work depends for proper execution or results upon the work of the Owner or any separate contractor, the Contractor shall, prior to proceeding with the Work, promptly report to the Architect any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acceptance of the Owner's or separate contractors' work as fit and proper to receive his Work, except as to defects, which may subsequently become apparent in such work by others.

- 6.2.3 Any costs caused by defective or ill-timed work shall be borne by the party responsible therefore.
- 6.2.4 Should the Contractor wrongfully cause damage to the work or property of the Owner, or to other work on the site, the Contractor shall promptly remedy such damages as provided in Article 10.
- 6.2.5 Should the Contractor wrongfully cause damage to the work or property of any separate contractor, the Contractor shall upon due notice promptly attempt to settle with such other contractor by agreement, or otherwise to resolve the dispute. If such separate contractor sues the Owner on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor.

6.3 OWNER'S RIGHT TO CLEAN UP

- 6.3.1 If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up as required by Article 4, the Owner may clean up and charge the cost thereof to the contractors responsible therefore as the Architect shall determine to be just.

ARTICLE 7 - MISCELLANEOUS PROVISIONS

7.1 GOVERNING LAW

- 7.1.1 The law of the Commonwealth of Massachusetts shall govern the Contract.

7.2 SUCCESSORS AND ASSIGNS

- 7.2.1 The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any moneys due or to become due to him hereunder, without the previous written consent of the Owner.
- 7.2.2 If, after making final payment, the Owner conveys to a third party any building or other improvement constructed under the Contract, any rights with respect to the property so conveyed which the Owner may have against the Contractor under Article 13 or by virtue of claims which, under the terms of Article 9, are reserved to the Owner after the making and acceptance of final payment, shall automatically transfer to such third party.

7.3 WRITTEN NOTICE

- 7.3.1 Written notice shall be deemed to have been duly served if delivered in person to an authorized representative of the person or entity for whom it was intended, or if delivered at or sent by registered or certified mail to the address of such person or entity set forth in the Agreement or in a subsequent written notice or by other means as specified in the Contract Documents.

7.4 CONSENT OR WAIVER

- 7.4.1 No consent or waiver, express or implied, by the Owner or the Architect to, or of, any breach of any covenant, condition or duty of the Contractor shall be construed as a consent to or waiver of any other breach of the same or any other covenant, condition or duty.

7.5 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

- 7.5.1 The Owner shall have the right to require the Contractor to furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising there under if and as required in the Bidding Documents or in the Contract Documents.

7.6 RIGHTS AND REMEDIES

- 7.6.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

7.7 TESTS

- 7.7.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give the Architect timely notice of its readiness so the Architect may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, tests or approvals conducted by public authorities. Unless otherwise provided, the Owner shall bear all costs of other inspections, tests or approvals.
- 7.7.2 If the Architect determines that any Work requires special inspection, testing, or approval which Article 7 does not include, he will, upon written authorization from the Owner, instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in Article 7. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents, the Contractor shall bear all costs thereof, including compensation for the Architect's additional services made necessary by such failure, otherwise the Owner shall bear such costs, and an appropriate Change Order shall be issued.
- 7.7.3 The Contractor shall obtain and deliver promptly to the Architect any occupancy permit or any certificates of final inspection of any part of his work or operating permits for any mechanical apparatus, such as elevators, escalators, boilers, air compressors, etc., which may be required by law to permit full use and occupancy of the premises by the Owner. Receipt of such permits or certificates by the Architect shall be a condition precedent to Substantial Completion of the Work.

ARTICLE 8 - TIME

8.1 DEFINITIONS

- 8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for Substantial Completion of the Work as defined in Article 8, including authorized adjustments thereto.

- 8.1.2 The Date of Commencement of the Work is the date of the execution of the Owner-Contractor Agreement. The Contractor shall not commence Work on the site until the Architect issues a Notice to Proceed.
- 8.1.3 The Date of Substantial Completion of the Work or designated portion thereof is the date certified by the Architect when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion thereof for the use for which it is intended and only minor items which can be corrected or completed without substantial interference with the Owner's use of the Work remain to be corrected or completed. The Date of Substantial Completion shall be on or after the date of issuance of a Certificate of Occupancy as defined in 780 CMR for the Work without reservations or conditions by the Building Official.
- 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.
- 8.1.5 The term "working day" shall mean any calendar day except Saturdays, Sundays, and legal holidays at the place of the building.

8.2 PROGRESS AND COMPLETION

- 8.2.1 All time limits stated in the Contract Documents are of the essence to the Contract.
- 8.2.2 The Contractor shall begin the Work on the date of commencement as defined in Article 8. He shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.
- 8.2.3 Within two (2) weeks after award of the Contract, the Contractor shall submit to the Architect a Progress Schedule showing for each class of work included in the Schedule of Values, the percentage completion to be obtained and the total dollar value of work to be completed as of the first of each month until Substantial Completion. All calculations shall be on the basis of work in place, but not including the value of materials delivered but not in place.
- 8.2.4 The Progress Schedule shall be based on an orderly progression of the Work, allowing adequate time for each operation, and leading to a reasonable certainty of Substantial Completion by the date established in the Agreement. The Progress Schedule will be reviewed by the Architect for compliance with the requirements of this Article and will be accepted by him or returned to the Contractor for revision and resubmittal. Unless specifically required by law, no payment under this Contract shall be due until the Progress Schedule has been approved by the Architect.
- 8.2.5 If in any Application for Payment the total value of the completed Work in place, as certified by the Architect, is less than 90% of the total value of the Work in place estimated in the Progress Schedule, the Owner may, at his option, require the Contractor to accelerate the progress of the Work without cost to the Owner by increasing the work force or hours of work, or by other reasonable means approved by the Architect.

- 8.2.6 If each of three (3) successive applications, as certified by the Architect, indicate that the actual work completed is less than 90% of the values estimated in the Progress Schedule to be completed by the respective dates, the Owner may at his option, treat the Contractor's delinquency as a default justifying the action permitted under Article 13 of the document entitled CONTRACT, included elsewhere in the Contract Documents.
- 8.2.7 If the Architect has determined that the Contractor should be permitted to extend the time for completion, as provided in Paragraph 8.3, the calendar dates in the Progress Schedule shall be adjusted accordingly to retain their same relationship to the adjusted Date of Substantial Completion, and the dollar value of work to be completed as of the first of each month shall be adjusted pro-rata.
- 8.2.8 If the Contractor fails to submit any Application for Payment in any month, the Architect shall, for the purpose of this evaluation of progress, certify separately to the actual value of the work in place and completed as of the first of the month, to the best of his knowledge.
- 8.2.9 Nothing herein shall limit the Owner's right to liquidated or other damages for delays by the Contractor or to any other remedy which he may possess under other provisions of the Contract Documents or by law.

8.3 DELAYS AND EXTENSIONS OF TIME

- 8.3.1 Any delay and subsequent request for an extension of time shall be governed by M.G.L. Chapter 30, Section 39(O) and the Owner-Contractor Agreement.
- 8.3.2 No work shall be suspended without the written permission of the Owner or his representative.
- 8.3.3 If no agreement is made stating the dates upon which interpretations as provided in Article 2 shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until thirty (30) days after written request is made for them, and not unless such claim is reasonable.
- 8.3.4 This Article 8 does not exclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

- 9.1.1 The Contract Sum is stated in the Owner-Contractor Agreement and, including authorized adjustments thereto, is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Documents.

9.2 SCHEDULE OF VALUES

- 9.2.1 Before the first Application for Payment, the Contractor shall submit to the Architect a Schedule of Values allocated to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require and shall be revised if later found by the Architect to be inaccurate. This schedule, unless object to by the Architect, shall be used only as a basis for the Contractor's Application for Payment.

9.3 APPLICATIONS FOR PAYMENT

- 9.3.1 In accordance with Section 012900 of the Specifications, the Contractor shall submit to the Architect an itemized Application for Payment, notarized and supported by such data substantiating the Contractor's right to payment as the Owner or the Architect may require, and reflecting retainage, if any, as provided in Supplemental General Conditions, Article I. The format and number of copies of such Applications for Payment shall be as noted in Section 012900.
- 9.3.2 Unless otherwise provided in the Contract Documents, payments will be made on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site and, if approved in advance by the Owner, payments may similarly be made for materials or equipment suitably stored at some other location agreed upon in writing. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest, including applicable insurance and transportation to the site for those materials and equipment stored off the site. The Contractor shall reimburse the Owner for any loss or damage to such unincorporated materials or equipment not covered by insurance.
- 9.3.3 The Contractor warrants that title to all Work, materials and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens". The Contractor further agrees that the submission of any Application for Payment shall conclusively be deemed to waive all liens with respect to said work, materials and labor to which the Contractor then may be entitled; provided, however, that in no event shall such waiver of lien rights waive right to payment for said Work, materials and labor.
- 9.3.4 Each Application for Payment or periodic estimate requesting payment must be accompanied by a certificate from each Subcontractor stating that he has been paid all amounts due him on the basis of the previous periodic payment to the Contractor, or else stating the amount not so paid and the reason for the discrepancy. In the event, of any such discrepancy, the Contractor shall be required to furnish his own written explanation. See Section 01027.

9.4 CERTIFICATES FOR PAYMENT

- 9.4.1 The Architect will, within seven (7) days after the receipt of the Contractor's Application for Payment, either issue a Certificate for Payment to the Owner, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor in writing his reasons for withholding a Certificate as provided in Article 9.

9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on his observations at the site as provided in Article 2 and the data comprising the Application for Payment, that the Work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to the results of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in his Certificate); and that the Contractor is entitled to payment in the amount certified. However, by certifying a Certificate for Payment, the Architect shall not thereby be deemed to represent that he has made exhaustive or continuous on-site inspections to check the quality or quantity of the Work or that he has reviewed the construction means, methods, techniques, sequences or procedures, or that he has made any examination to ascertain how or for what purpose the Contractor has used the moneys previously paid on account of the Contract.

9.5 PROGRESS PAYMENTS

9.5.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents. The Owner retains the right to modify the amount of payment certified by the Architect. Reasons for modification shall be described in writing to the Architect and Contractor.

9.5.2 The Contractor shall promptly pay each Subcontractor upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's Work, the amount to which said Subcontractor is entitled, reflecting the percentage actually retained, if any, from payments to the Contractor on account of such Subcontractor's Work. The Contractor shall, by an appropriate agreement with each Subcontractor, require each Subcontractor to make payments to his Sub-subcontractors in similar manner.

9.5.3 The Architect may, on request and at his discretion, furnish to any Subcontractor, if practicable, information regarding the percentages of completion or the amounts applied for by the Contractor and the action taken thereon by the Architect on account of Work done by such Subcontractor.

9.5.4 Neither the Owner nor the Architect shall have any obligation to pay or to see the payment of any moneys to any Subcontractor except as may otherwise be required by law.

9.5.5 No Certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the Owner, shall constitute an acceptance of any Work not in accordance with the Contract Documents.

9.6 PAYMENTS WITHHELD

9.6.1 The Architect may decline to certify payment and may withhold his Certificate in whole or in part, to the extent reasonably necessary to protect the Owner, if in his opinion he is unable to make representations to the Owner as provided in Article 9. If the Architect is unable to make representations to the Owner as provided in Article 9 and to certify payment in the amount of the Application, he will notify the contractor as provided in Article 9. If the Contractor and the Architect cannot agree on a revised amount, the Architect will promptly certify a Certificate for

Payment for the amount for which he is able to make such representations to the Owner. The Architect may also decline to certify payment or because of subsequently discovered evidence or subsequent observations, he may nullify the whole or any part of any Certificate for Payment previously issued, to such extent as may be necessary in his opinion to protect the Owner from loss because of:

- (1) Defective Work not remedied,
- (2) Third party claims filed or reasonable evidence indicating probable filing of such claims,
- (3) Failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment,
- (4) Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum,
- (5) Damage to the Owner,
- (6) Reasonable evidence that the Work will not be completed within the Contract Time or
- (7) Persistent failure to carry out the Work in accordance with the Contract Documents, or
- (8) Failure of mechanical trades or electrical trades subcontractors to comply with mandatory requirements for maintaining record drawings. The Contractor shall be required to check record drawings each month. The Architect shall require written confirmation that the record drawings are "up-to-date" before approval of the Contractor's monthly payment requisition will be considered.

9.6.2 When the above grounds in Article 9 are removed, payment shall be made for amounts withheld because of them.

9.7 FAILURE OF PAYMENT

9.7.1 If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven (7) days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor as required by the Contract Documents any amount certified by the Architect, then the Contractor may, upon seven (7) additional days written notice to the Owner and the Architect, stop the Work until payment of the amount owing has been received.

9.8 SUBSTANTIAL COMPLETION

9.8.1 When the Contractor considers that the Work, or a portion thereof designated in the Contract Documents for separate completion, is substantially complete as defined in Article 8, the Contractor shall submit to the Architect (1) a list of items to be completed or corrected, and (2) all special warranties required by the Contract Documents endorsed by the Contractor and in a form reasonably acceptable to the Architect. The failure to include any items on the list mentioned in the preceding sentence does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Architect on the basis of an inspection determines that the Work or designed portion thereof is substantially complete, and when the Contractor has submitted to the Architect the special warranties, as provided in the first sentence of this subparagraph, the Architect will then certify a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion of the

Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.

- 9.8.2 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Architect, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof, as provided in the Contract Documents.

9.9 FINAL COMPLETION AND FINAL PAYMENT

- 9.9.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when he finds the Work acceptable under the Contract Documents and the Contract fully performed, he will promptly certify a final Certificate of Payment stating that to the best of his knowledge, information and belief, and on the basis of his observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable. The Architect's final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Article 9 have been fulfilled.
- 9.9.2 Unless otherwise required by applicable law, neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, if any, to final payment and (3), if required by the Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens, arising out of the Contract, to the extent and in such form as may be designated by the Owner. If the Contractor fails to furnish such releases or waivers as the Owner reasonably requires satisfying the Owner that there are not outstanding claims, the Owner may require the Contractor, as a condition of final payment, to furnish a bond satisfactory to the Owner to indemnify the Owner against any such claims.
- 9.9.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by the issuance of Change Orders affecting final completion, and the Architect so confirms, the Owners shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Contract Documents, and if bonds have been furnished as provided in Article 7, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

- 9.9.4 The making of final payment shall constitute a waiver of all claims by the Owner except those arising from: (1) unsettled claims under the Bonds required elsewhere in the Contract Documents, (2) faulty or defective Work appearing after Substantial Completion, (3) failure of the Work to comply with the requirements of the Contract Documents, or (4) terms of any special warranties required by the Contract Documents.
- 9.9.5 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final Application for Payment.

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

- 10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

10.2 SAFETY OF PERSONS AND PROPERTY

- 10.2.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to: (1) all employees on the Work and all other persons who may be affected thereby; (2) all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Subcontractors or Sub-subcontractors; and (3) other neighboring property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 10.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss.
- 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.
- 10.2.4 When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.
- 10.2.5 The Contractor shall promptly remedy all damage or loss (other than damage or loss insured under Article 11) to any property referred to in Article 10 caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone whose acts any of them may be liable and for which the Contractor is responsible under Article 10 except damage or loss attributable to the acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either by of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the

Contractor. The foregoing obligations of the Contractor are in addition to his obligations under Article 4.

- 10.2.6 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and the Architect.
- 10.2.7 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.

10.3 EMERGENCIES

- 10.3.1 In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 12 for the Changes in the Work.

ARTICLE 11 - INSURANCE

11.1 CONTRACTOR'S LIABILITY INSURANCE

- 11.1.1 The Contractor shall purchase and maintain in a company or companies to which the Owner has no reasonable objection, such insurance as will protect him from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations be by himself or by any Subcontractor or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
- (1) Workmen's Compensation –Massachusetts Statutory / Employers Liability
 - (2) Commercial Liability- Per Occurrence / Aggregate \$1,000,000 / \$2,000,000
 - (3) Automobile Liability/Combined Single Limit - \$2,000,000 (all owned, hired and non-owned autos).
 - (4) Excess / Umbrella Liability –\$2,000,000
 - (5) Independent Contractors -Same limits as above
 - (6) Products and Completed Operations -Same limits as above commencing with issuance of final Certificate of Payment.
 - (7) Contractual Liability - Same limits as above.
- 11.1.2 The insurance required by Article 11 shall include all major divisions of coverage, and shall be on a comprehensive general basis including Premises and Operations (including X-C-U), Owner's and Contractor's Protective Products and Completed Operations, and Owned, Non-owned, and Hired Motor Vehicles. Such insurance shall be written for not less than any limits of liability required by law or those set forth below, whichever is greater.
- (1) Workmen's Compensation -Statutory/Employers Liability
 - (2) Commercial Liability - Per Occurrence / Aggregate \$1,000,000.00 / 2,000,000.00
 - (3) Automobile Liability/Combined Single Limit – \$2,000,000.00 (all owned, hired and non-owned autos).
 - (4) Excess / Umbrella Liability - \$2,000,000.00

- (5) Independent Contractors -Same limits as above
- (6) Products and Completed Operations -Same limits as above commencing with issuance of final Certificate of Payment
- (7) Contractual Liability - Same limits as above

11.1.3 The insurance required by Article 11 shall include contractual liability insurance applicable to the Contractor's obligations under Article 4.

11.1.4 Certificates of Insurance acceptable to the Owner shall be filed with the Owner. These Certificates shall contain a provision that coverage afforded under the policies will not be canceled until at least thirty (30) days prior written notice has been given to the Owner.

11.1.5 These certificates shall set forth evidence of all coverage required by Article 11. The Contractor shall furnish to the Owner copies of any endorsements that are subsequently issued amending limits of coverage.

11.2 OWNER'S LIABILITY INSURANCE

11.2.1 The Owner shall be responsible for maintaining his own liability insurance and, at his option, may purchase and maintain such insurance as will protect him against claims, which may arise from operations under the Contract.

11.3 PROPERTY INSURANCE

11.3.1 The Contractor shall purchase and maintain property insurance upon the entire Work at the site as provided above in Article 11. This insurance shall include the interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work and shall include "all risk" insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief.

11.3.2 The Owner shall purchase and maintain such boiler and machinery insurance as may be required by the Contract Documents or by law. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work.

11.3.3 Any loss insured under Article 11 is to be adjusted with the Contractor and made payable to the Contractor as trustee for the insureds, as their interests may appear, subject to the requirements of any applicable mortgagee clause and of Subparagraph.

11.3.4 The Contractor shall pay each Subcontractor a just share of any insurance moneys received by the Contractor, and by appropriate agreement, written where legally required for validity, shall require each Subcontractor to make payments to his Sub-subcontractors in similar manner.

11.3.5 The Contractor shall file a copy of all policies with the Owner before an exposure to loss may occur. All property insurance shall remain in effect until the date of final completion or the date Premises/Property in put in service by the Owner, whichever is earlier.

- 11.3.6 The Owner and Contractor waive all rights against (1) each other and the Subcontractors, Sub-subcontractors, agents and employees each of the other, and (2) the Architect and separate contractors, if any, and their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to this Article 11 or any other property insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by the Contractor as trustee. The foregoing waiver afforded the Architect, his agents and employees shall not extend to the liability imposed by Article 4. The Owner or the Contractor, as appropriate, shall require of the Architect, separate contractors, Subcontractors, and Sub-subcontractors by appropriate agreements, written where legally required for validity, similar waivers each in favor of all other parties enumerated in this Article 11.
- 11.3.7 If required in writing by any party in interest, the Contractor as trustee shall, upon the occurrence of an insured loss, give bond for the proper performance of his duties. He shall deposit in a separate account any money so received, and he shall distribute it in accordance with the direction of a court of competent jurisdiction.
- 11.3.8 The Contractor as trustee shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within five days after the occurrence of loss to the Contractor's exercise of this power. If such objection were made, the Contractor as trustee shall make settlement with the insurers in accordance with the direction of a court of competent jurisdiction.

11.4 LOSS OF USE INSURANCE

- 11.4.1 The Owner, at his option, may purchase and maintain such insurance as will insure him against loss of use of his property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of his property including consequential losses due to fire or other hazards however caused, to the extent covered by insurance under this Article 11.

ARTICLE 12 - CHANGES IN THE WORK

12.1 CHANGE ORDERS

- 12.1.1 The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents.
- 12.1.2 A Change Order is a written order to the Contractor signed by the Owner and the Architect, issued after execution of the Contract, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. Only Change Orders may change the Contract Sum and the Contract Time. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum or the Contract Time.

- 12.1.3 If the Contractor does not agree with the terms of the Change Order, the Contractor shall return the unsigned Change Order to the Owner. In such event, the Work, Contract Sum and/or Contract Time shall be adjusted as reflected in the Change Order, subject to the Contractor's rights under M.G.L. Chapter 30, Section 39J, but in no event shall the Contractor refuse to perform the Work as modified by the Change Order.

12.2 CLAIMS FOR ADDITIONAL COST

- 12.2.1 If the Contractor claims that any instructions or orders, whether oral, written, or drawings, or otherwise, involve extra cost or time, and such instructions or orders are not accompanied by a written acknowledgment by the Owner and Architect that extra payment will be made or time extended, he shall promptly so notify the Architect in writing and shall not proceed with the work until he has received a further written order to proceed, except, as provided in Article 10, in the case of an emergency affecting life or property.
- 12.2.2 Upon receipt from the Contractor of a written notice of claim as provided in Article 12, the Architect shall review such claim and if he determines that any work in dispute should proceed, he shall issue to the Contractor a written order, signed by the Owner, (1) to proceed in which he shall approve or deny the Contractor's claim, in whole or in part, or (2) to proceed subject to a later determination by the Architect of the Contractor's right to extra payment.
- 12.2.3 To the extent that the Architect, when issuing the written order to proceed described in Article 12, approves the contractor's claim, Change Order shall adjust the Contract Sum and/or Contract Time. If the Architect, when issuing his written order to proceed, denies, in whole or in part, the Contractor's claim, the Contractor shall proceed with the work without delay, subject to the Contractor's rights under M.G.L. Chapter 30, Section 39(J). If the Architect, when issuing his written order to proceed, instructs the Contractor to proceed with the work subject to a later determination by the Architect of the Contractor's right to extra payment or time, the Contractor shall proceed with the Work without delay or impact to the schedule.
- 12.2.4 No extension of time shall be granted because of seasonal or abnormal variations in temperature, humidity or precipitation, which conditions shall be wholly at the risk of the Contractor, whether occurring within the time originally scheduled for completion or within the period of any extension granted. There shall be no increase in the Contract Sum on account of any additional costs of operations or conditions resulting therefrom.
- 12.2.5 Time Limits on Claims: Claims by the Contractor must be made within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claims must be made by written notice. An additional Claim made after the initial Claim has been implemented by Change Order will not be considered unless submitted in a timely manner.

12.3 MINOR CHANGES IN THE WORK

12.3.1 The Architect shall have the authority to order minor changes in the Work that do not involve an adjustment in the Contract Sum or an extension of the Contract Time, and are not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order, and shall be binding on the Owner and the Contractor. The Contractor shall carry out such written orders promptly without delay or impact to the schedule.

12.4 EQUITABLE ADJUSTMENTS

12.4.1 Equitable adjustments in the Contract Sum shall be determined according to one of the following methods, or a combination thereof; as determined by the Owner:

- (1) fixed price basis, provided that the price shall be inclusive of items 3(a) through 3(d), below, and shall be computed in accordance with those provisions.
- (2) estimated lump sum basis to be adjusted in accordance with Contract unit prices, or other agreed upon unit prices, provided that the unit prices shall be inclusive of all costs related to such equitable adjustments.
- (3) time and materials basis, based upon a not to exceed, predetermined upset amount to be subsequently adjusted on the basis of actual costs comprised of items (a) through (d) below:
 - (a) the costs at prevailing rates for direct labor, material and use of equipment;
 - (b) plus, the costs of Workmen's Compensation Insurance, Liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation; or as an alternative, the Contractor may elect to add a flat twenty-five (25%) percent to the total labor rate in (a), above;
 - (c) plus, ten (10) percent of (a), above, for overhead, superintendence and profit which will be paid to the Contractor for the work of the Contractor and all his subcontractors. The contracting parties referred to in this subparagraph shall agree upon the distribution of the ten (10) percent as a matter of contract between each other;
 - (d) plus actual direct premium costs of payment and performance bonds required of the Contractor provided there would be an appropriate credit for premiums for a credit change order.

12.4.2 If the net change is an addition to the Contract Sum, it shall include the Contractor's overhead, superintendence and profit. On any change that involves a net credit, no allowance for overhead superintendence and profit shall be figured. For any change that does not include labor performed or materials installed in the Project, there will be no markup for the contractor's overhead, superintendence, and profit, notwithstanding any net increase in the Contract Sum. Charges for small tools known as "tools of the trade" are not to be computed in the amount of an equitable change.

ARTICLE 13 - UNCOVERING AND CORRECTION OF WORK

13.1 UNCOVERING OF WORK

- 13.1.1 If any portion of the Work should be covered contrary to the request of the Architect or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Architect, be uncovered for his observation and shall be replaced at the Contractor's expense.
- 13.1.2 If any other portion of the Work has been covered which the Architect has not specifically requested to observe prior to being covered, the Architect, with the approval of the Owner, may request to see such Work and it shall be uncovered by the Contractor. If such Work is found in accordance with the Contract Documents, appropriate Change Order shall charge the cost of uncovering and replacement charged to the Owner. If such Work is found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by the Owner or a separate contractor as provided in Article 6, in which event the Owner shall be responsible.

13.2 CORRECTION OF WORK

- 13.2.1 The Contractor shall promptly correct all Work rejected by the Architect as defective or as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the Architect's additional services made necessary thereby and any costs, loss, or damages to the Owner resulting from such failure or defect.
- 13.2.2 If, within one (1) year after the Date of Substantial Completion of the Work or designated portion thereof or within one (1) year after acceptance by the Owner of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. This obligation shall survive termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.
- 13.2.3 The Contractor shall remove from the site all portions of the Work which are defective or non-conforming and which have not been corrected under Articles 4 and 13, unless the Owner waives removal.
- 13.2.4 If the Contractor fails to correct defective or non-conforming Work as provided in Articles 4 and 13, the Owner may correct it in accordance with Article 3.
- 13.2.5 If the Contractor does not proceed with the correction of such defective or non-conforming Work within a reasonable time fixed by written notice from the Architect, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten (10) days thereafter, the Owner may upon ten (10) additional days written notice, sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for the Architect's additional services made necessary thereby.

If such proceeds of sale do not cover all costs, which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

- 13.2.6 The Contractor shall bear the cost of making good all work of the Owner or separate contractors destroyed or damaged by such correction or removal.
- 13.2.7 Nothing contained in this Article 13 shall be construed to establish a period of limitation with respect to any other obligation, which the Contractor might have under the Contract Documents, including Article 4 hereof. The establishment of the time period of one (1) year after the Date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the Work.

13.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK

- 13.3.1 If the Owner prefers to accept defective or non-conforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect a reduction in the Contract Sum where appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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SUPPLEMENTARY GENERAL CONDITIONS

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PUBLIC CONSTRUCTION CONTRACTS
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**SUPPLEMENTARY GENERAL CONDITIONS
STATUTORY PROVISIONS FOR MASSACHUSETTS
PUBLIC CONSTRUCTION CONTRACTS**

The following provisions are required by or are intended to be consistent with requirements of Massachusetts statutes governing public construction contracts in the Commonwealth of Massachusetts (hereinafter referred by statute to be included herein shall be deemed to be so included. In addition, the parties recognize that other rights, duties, and obligations with respect to public construction contracts are provided for in the Contract Documents. In case of conflict between the provisions of these Supplementary General Conditions and other provisions in the Contract Documents, the provisions of these Supplementary General Conditions shall govern. In case of conflict between the provisions of these Supplementary General Conditions and the provisions of any applicable statute, the statutory provisions shall govern. Where the term “awarding authority” appears in the following paragraphs, it shall be taken as meaning the Owner.

ARTICLE 1 – PAYMENT, CONTRACT ADMINISTRATION, etc.

1.1 “Or Equal” Clause: (Statutory reference: M.G.L. Chapter 30, Section 39M(b))
This Paragraph 1.1 applies to every contract subject to M.G.L. Chapter 30, Section 39M(b).

This Paragraph 1.1 applies to every contract for the construction, reconstruction or repair of any public work or for the purchase of any material by the Commonwealth, any political subdivision thereof, or any county, city, town, district or housing authority (above certain dollar limits, as stated in the statute), and to contracts awarded pursuant to M.G.L. Chapter 149, Sections 44A through 44H. The said Sections 44A through 44H apply to every contract for the construction, reconstruction, installation, demolition, maintenance or repair of any building by a department, agency, board, commission, authority, or other instrumentality or the Commonwealth or political subdivision thereof, or two or more subdivisions thereof, but not including the Massachusetts Bay Transportation Authority, estimated to cost more than a dollar amount set forth in M.G.L. Chapter 149, Section 44A.

Every such contract shall provide that an item equal to that named or described in the said specifications may be furnished. Where products or materials are prescribed by manufacturer name, trade name, or catalog reference, the words “or approved equal” shall be understood to follow. An item shall be considered equal to the item so named or described if, in the opinion of the awarding authority:

- a. It is at least equal in quality, durability, appearance, strength, and design;
- b. it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased, and

- c. it conforms substantially, even with deviations, to the detailed requirements for the items as indicated by the specifications. For each item of material the specifications shall provide for either a minimum of three named brands of material or a description of material which can be met by a minimum of three manufacturers or producers, and for the equal of any one of said name or described materials.

Any structural or mechanical changes made necessary to accommodate substituted equipment under this paragraph shall be at the expense of the Contractor or Subcontractor responsible for the work item. See other paragraphs of General and Supplementary Conditions for procedures to be used in determining compliance with the standards of this paragraph.

1.2 Delays: (Statutory reference: Chapter 30, Section 39O). This Paragraph 1.2 applies to every contract subject to M.G.L. Chapter 30, Section 39M and to every contract subject to Chapter 149, Sections 44A through 44H.

In the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other.

Except as otherwise provided by law and by this Paragraph 1.2, the Contractor shall not be entitled to damages on account of any hindrances or delays, avoidable or unavoidable; but if such delay be occasioned by the awarding authority, the Contractor may be entitled to an extension of time only, in which to complete the work, to be determined by the Architect.

(a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the awarding authority to act within the time specified in this contract, the awarding authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the awarding authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.

(b) The general contractor must submit the amount of a claim under provision (a) to the awarding authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the awarding authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act or failure to act involved in the claim.

1.3 Deviations: (Statutory referenced: M.G.L. Chapter 30, section 39I) This Paragraph 1.3 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public building or public works for the Commonwealth or any political subdivision thereof.

The Contractor shall perform all the work required by this contract in conformity with the plans and specifications contained therein. No willful and substantial deviation from said plans and specifications shall be made unless authorized in writing by the awarding authority or by the Engineer or Architect in charge of the work who is duly authorized by the awarding authority to approve such deviations. In order to avoid delays in the prosecution of the work required by such contract, such deviation from the plans or specifications may be authorized by a written order of the awarding authority or such Engineer or Architect so authorized to approve such deviation. Within thirty days thereafter, such written order shall be confirmed by a certificate of the awarding authority stating: (1) If such deviation involves any substitution or elimination of materials, fixtures or equipment, the reasons why such materials, fixtures or equipment were included in the first instance and the reasons for substitution or elimination, and, if the deviation is of any other nature, the reasons for such deviation, giving justification therefor (2) that the specified deviation does not materially injure the project as a whole; (3) that either the work substituted for the work specified is the same cost and quality, or that an equitable adjustment has been agreed upon between the awarding authority and the Contractor and the amount in dollars of said adjustment; and (4) that the deviation is in the best interest of the awarding authority.

Such certificate shall be signed under the penalties of perjury and shall be a permanent part of the file record of the work contracted for.

Whoever violates any provision of this section wilfully and with intent to defraud shall be punished by a fine of not more than five thousand dollars or by imprisonment for not more than six months, or both.

1.4 Finality of Decisions by Awarding Authority or Architect: (Statutory reference: M.G.L. Chapter 30, Section 39J) This Paragraph 1.4 applies to every contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public works by the Commonwealth or by any county, city, district, board, commission, or other public body, when the amount of the contract exceeds the amount stated in M.G.L. Chapter 30, Section 39J.

Notwithstanding any contrary provision of this contract, a decision by the contracting body or by any administrative board, official or agency, or by any architect or engineer, on a dispute, whether of fact or of law, arising under said contract shall not be final or conclusive if such decision is made in bad faith, fraudulently, capriciously, or arbitrarily, is unsupported by substantial evidence, or is based upon error of law.

1.5 Differing Site Conditions: (Statutory reference: M.G.L. Chapter 30, Section 39N) This Paragraph 1.5 applies to every contract subject to M.G.L. Chapter 30, Section 39M and to every contract subject to M.G.L. Chapter 49, Sections 44A through 44H.

If, during the progress of the work, the Contractor or the awarding authority discovers that the actual subsurface or latent physical conditions encountered at the site differ substantially or materially from those shown on the plans or indicated in the Contract Documents, either the Contractor or the contracting authority may request an equitable adjustment in the contract price of the contract applying to work affected by the differing site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a Contractor, or upon its own initiative, the awarding authority shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the Contract Documents or from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the plans and Contract Documents and are such a nature as to cause an increase or decrease in the cost of the work, the contracting authority shall make an equitable adjustment in the contract price and the contract shall be modified in writing accordingly.

1.6 Timely Decision by Awarding Authority: (Statutory reference: M.G.L. Chapter 30, Section 39P) This Paragraph 1.6 applies to every contract subject to M.G.L. Chapter 30, Section 39M, and to every contract subject to M.G.L. Chapter 149, Sections 44A through 44H.

In every case in which this contract requires the awarding authority, any official, its Architect or Engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, the decision shall be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the awarding authority, the official, Architect or Engineer shall, within thirty days after the receipt of the

submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty-day period and the date by which the decision will be made.

1.7 Certificate of Appropriation: (Statutory reference: M.G.L. Chapter 44, Section 31C) This Paragraph 1.7 applies to contracts for construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public work by any city or town costing more than the amount set forth in M.G.L. Chapter 44, Section 31C.

This Contract shall not be deemed to have been made until the auditor or accountant or other officer of the city or town having similar duties has certified thereon that an appropriation in the amount of such contract is available therefor and that an officer or agent of the city, town, or awarding-authority has been authorized to execute said contract and approve all requisitions and change orders. No order to the Contractor for a change in or addition to the work to be performed under a contract subject to this section, whether in the form of a drawing, plan, detail or any other written instruction, unless it is an order which the Contractor is willing to perform without any increase in the contract price, shall be deemed to have been given until the auditor or accountant, or other officer of the awarding authority having similar duties, has certified thereon that an appropriation in the amount of such order is available therefor; but such certificate shall not be construed as an admission by the awarding authority of its liability to pay for such work. The certificate of the auditor or accountant or other officer of the awarding authority having similar duties, that an appropriation in the amount of such contract or order is available shall bar any defense by the awarding authority on the ground of insufficient appropriation; and any law barring payment in excess of appropriations shall not apply to amounts covered by any certificate under this section.

1.8 Method of Payment: (Statutory reference: M.G.L. Chapter 30, Section 39K) This Paragraph 1.8 applies to every contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building by the Commonwealth, or by any county, city, town, district, board, commission or other public body, when the amount is more than two thousand dollars, or the amount set forth in M.G.L. Chapter 30, Section 39K.

1.8.1 Within fifteen days after receipt from the Contractor, at the place designated by the awarding authority if such a place is so designated, of a periodic estimate requesting payment of the amount due for the preceding month, the awarding authority will make a periodic payment to the Contractor for the work performed during the preceding month and for the materials not incorporated in the work but delivered and suitably stored at the site (or at some location agreed upon in writing) to which the Contractor has title or to which a Subcontractor has title and has authorized the Contractor to transfer title to the awarding authority, upon certification by the contractor that he is the lawful owner and that the materials are free from all encumbrances, but less (1) a retention based on its estimate of the fair value of its claims against the Contractor

and less (2) a retention for direct payments to Subcontractors based on demands for same in accordance with the provisions of Paragraph 1.10 of these Supplementary General Conditions, and less (3) a retention not exceeding five percent of the approved amount of the periodic payment. After the receipt of a periodic estimate requesting final payment and within sixty-five days after (a) the Contractor fully completes the work or substantially completes the work so that the value of the work remaining to be done is, in the estimate of the awarding authority, less than one percent of the original contract price, or (b) the Contractor substantially completes the work and the awarding authority takes possession for occupancy, whichever occurs first, the awarding authority shall pay the contractor the entire balance due on the contract less (1) a retention based on its estimate of the fair value of its claims against the Contractor and of the cost of completing the incomplete and unsatisfactory items of work and less (2) a retention for direct payments to Subcontractors based on demands for same in accordance with the provisions of Paragraph 1.10 of these Supplementary General Conditions, or based on the record of payments by the Contractor to the Subcontractors under this contract if such record of payment indicates that the Contractor has not paid Subcontractors as provided in Paragraph 1.10. If the awarding authority fails to make payment as herein provided, there shall be added to each such payment daily interest at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston commencing on the first day after said payment is due and continuing until the payment is delivered or mailed to the contractor; provided, that no interest shall be due, in any event, on the amount due on a periodic estimate for final payment until fifteen days...after receipt of such periodic estimate from the Contractor, at the place designated by the awarding authority if such a place is so designated. The Contractor agrees to pay to each Subcontractor a portion of any such interest paid in accordance with the amount due each Subcontractor.

1.8.2 The awarding authority may make changes in any periodic estimate submitted by the Contractor, and the payment due on said periodic estimate shall be computed in accordance with the change so made, but such changes or any requirement for a corrected periodic estimate shall not affect the due date for the periodic payment or the date for the commencement of interest charges on the amount of the periodic payment computed in accordance with the changes made, as provided herein; provided, that the awarding authority may, within seven days after receipt, return to the Contractor for correction, any periodic estimate which is not in the required form or which contains computations not arithmetically correct and, in that event, the date of receipt of such periodic estimate shall be the date of receipt of the corrected periodic estimate in proper form and with arithmetically correct computations. The date of receipt of a periodic estimate received on a Saturday shall be the first working day thereafter.

1.8.3 All periodic estimates shall be submitted to the awarding authority, or to its designee as set forth in writing to the Contractor, and the date of receipt by the awarding authority or its designee shall be marked on the estimate. All periodic estimates shall contain a separate item for each subtrade and each sub-subtrade listed in sub-bid form as required by the specifications, and a column listing the amount paid to each subcontractor and sub-subcontractor as of the date the periodic estimate is filed. The person making payment for the awarding authority shall add the daily interest provided for herein to each payment for each day beyond the due date based on the date of receipt marked on the estimate.

1.8.4 A certificate of the Architect to the effect that the Contractor has fully or substantially completed the work shall, subject to the provisions of Paragraph 1.4 of these Supplementary General Conditions, be conclusive for the purposes of this Paragraph 1.8.

1.8.5 Notwithstanding the provisions of this section, at any time after the value of the work remaining to be done is, in the estimation of the awarding authority, less than 1 per cent of the adjusted contract price, or the awarding authority has determined that the contractor has substantially completed the work and the awarding authority has taken possession for occupancy, the awarding authority may send to the general contractor by certified mail, return receipt requested, a complete and final list of all incomplete and unsatisfactory work items, including, for each item on the list, a good faith estimate of the fair and reasonable cost of completing such item. The general contractor shall then complete all such work items within 30 days of receipt of such list or before the contract completion date, whichever is later. If the general contractor fails to complete all incomplete and unsatisfactory work items within 45 days after receipt of such items furnished by the awarding authority or before the contract completion date, whichever is later, subsequent to an additional 14 days written notice to the general contractor by certified mail, return receipt requested, the awarding authority may terminate the contract and complete the incomplete and unsatisfactory work items and charge the cost of same to the general contractor and such termination shall be without prejudice to any other rights or remedies the awarding authority may have under the contract. The awarding authority shall note any such termination in the evaluation form to be filed by the awarding authority pursuant to the provisions of section 44D of chapter 149.

1.9 Method of Payment: (Statutory reference: M.G.L. Chapter 30, section 39G) This Paragraph 1.9 applies to every contract for the construction, reconstruction, alteration, remodeling, repair or improvement of public ways; including bridges and other highway structures, sewers and water mains, airports and other public works entered into with the commonwealth, or any agency or political subdivision thereof.

1.9.1 Upon substantial completion of the work required by a contract with the commonwealth, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair or improvement of public ways, including bridges and other highway structures, sewers and water mains, airports and other public works, the contractor shall present in writing to the awarding authority its certification that the work has been substantially completed. Within twenty-one days thereafter, the awarding authority shall present to the contractor either a written declaration that the work has been substantially completed or an itemized list of incomplete or unsatisfactory work items required by the contract sufficient to demonstrate that the work has not been substantially completed. The awarding authority may include with such list a notice setting forth a reasonable time, which shall not in any event be prior to the contract completion date, within which the contractor must achieve substantial completion of the work. In the event that the awarding authority fails to respond, by presentation of a written declaration or itemized list as aforesaid, to the contractor's certification within the twenty-one day period, the contractor's certification shall take effect as the awarding authority's declaration that the work has been substantially completed.

1.9.2 Within sixty-five days after the effective date of a declaration of substantial completion, the awarding authority shall prepare and forthwith send to the contractor for acceptance a substantial completion estimate for the quality and price of the work done and all but one percent retainage on that work, including the quantity, price and all but one percent retainage for the undisputed part of each work item and extra work item in dispute but excluding the disputed part thereof, less the estimated cost of completing all incomplete and unsatisfactory work items and less the total periodic payments made to date for the work. The awarding authority also shall deduct from the substantial completion estimate an amount equal to the sum of all demands for direct payments filed by subcontractors and not yet paid to subcontractors or deposited in joint accounts pursuant to section 1.10, but no contract subject to said section 1.10 shall contain any other provision authorizing the awarding authority to deduct any amount by virtue of claims asserted against the contract by subcontractors, material suppliers or others.

1.9.3 If the awarding authority fails to prepare and send to the contractor any substantial completion estimate required by section 1.9.2, on or before the date herein above set forth, the awarding authority shall pay to the contractor interest on the amount which would have been due to the contractor pursuant to such substantial completion estimate, at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston from such date to the date on which the awarding authority sends that substantial completion estimate to the contractor for acceptance or to the date of payment therefor, whichever occurs first. The awarding authority shall include the amount of such interest in the substantial completion estimate.

1.9.4 Within fifteen days after the effective date of the declaration of substantial completion, the awarding authority shall send to the contractor by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory work items, and unless delayed by causes beyond his control, the contractor shall complete all such work items within forty-five days after the receipt of such list or before the then contract completion date, whichever is later. If the contractor fails to complete such work within such time, the awarding authority may, subsequent to seven days' written notice to the contractor by certified mail, return receipt requested, terminate the contract and complete the incomplete or unsatisfactory work items and charge the cost of same to the contractor.

1.9.5 Within thirty days after receipt by the awarding authority of a notice from the contractor stating that all of the work required by the contract has been completed, the awarding authority shall prepare and forthwith send to the contractor for acceptance, a final estimate for the quantity and price of the work done and all retainage on that work less the payments made to date, unless the awarding authority's inspection shows that work items required by the contract remain incomplete or unsatisfactory, or that documentation required by the contract has not been completed. If the awarding authority fails to prepare and sends to the contractor the final estimate within thirty days after receipt of notice of completion, the awarding authority shall pay to the contractor interest on the amount which would have been due to the contractor pursuant to such final estimate at the rate hereinabove provided from the thirtieth day after such completion until the date on which the awarding authority sends the final estimate to the contractor for acceptance or the date of payment therefor, whichever occurs first, provided that the awarding authority's inspection shows that no work items required by the contract remain incomplete or unsatisfactory. Interest shall not be paid hereunder on amounts for which interest is required to be paid in connection with the substantial completion estimate as hereinabove provided. The awarding authority shall include the amount of the interest required to be paid hereunder in the final estimate.

1.9.6 The awarding authority shall pay the amount due pursuant to any substantial completion or final estimate within thirty-five days after receipt of written acceptance for such estimate from the contractor and shall pay interest on the amount due pursuant to such estimate at the rate hereinabove provided from that thirty-fifth day to the day of payment. Within 15 days after receipt from the contractor, if such place is so designated by the awarding authority, if such place is so designated, of a periodic estimate requesting payment of the amount due for the preceding periodic estimate period, the awarding authority shall make a periodic payment to the contractor for the work performed during the preceding periodic estimate period and for the materials not incorporated in the work but delivered and suitably stored at the site, or at some location agreed upon in writing, to which the contractor has title or to which a subcontractor has title and has authorized the contractor to transfer title to the awarding authority, upon certification by the contractor that he is the lawful owner and that materials are free from all encumbrances. The awarding authority shall include with each such payment interest

on the amount due pursuant to such periodic estimate at the rate herein above provided from the due date. In the case of periodic payments, the contracting authority may deduct from its payment a retention based on its estimate of the fair value of its claim against the contractor, a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section 1.10, and a retention to secure satisfactory performance of the contractual work not exceeding five percent of the approved amount of any periodic payment, and the same right to retention shall apply to bonded subcontractors entitled to direct payment under section 1.10; provided, that a five percent value of all items that are planted in the ground shall be deducted from the periodic payments until final acceptance.

1.9.7 No periodic, substantial completion or final estimate or acceptance or payment thereof shall bar a contractor from reserving all rights to dispute the quantity and amount of, or the failure of the awarding authority to approve a quantity and amount of, all or part of any work item or extra work item.

1.9.8 Substantial completion, for the purpose of this section 1.9, shall mean either that the work required by the contract has been completed except for work having a contract price of less than one percent of the then adjusted total contract price, or substantially all of the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract.

1.10 Direct Payment: (Statutory reference: M.G.L. Chapter 30, Section 39F) This Paragraph 1.10 applies to every contract awarded pursuant to M.G.L. Chapter 149, Sections 44A through 44J, and (with the exception of Subparagraph 1.10.9) to every contract awarded pursuant to M.G.L. Chapter 30, Section 39M.

1.10.1 Forthwith after the General Contractor receives payment on account of a periodic estimate, the General Contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by that Subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the General Contractor.

1.10.2 Not later than the sixty-fifth day after each Subcontractor substantially completes the work in accordance with the plans and specifications, the entire balance due under the subcontract, less amounts retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the Subcontractor; and the awarding authority shall pay that amount to the General Contractor. The General Contractor shall forthwith pay to the Subcontractor the full amount received from the awarding authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the General Contractor.

1.10.3 Each payment made by the awarding authority to the General Contractor pursuant to Subparagraphs 1.10.1 and 1.10.2 of this Paragraph 1.10 for the labor performed and the materials furnished by a Subcontractor shall be made to the General Contractor for the account of that Subcontractor; and the awarding authority shall take reasonable steps to compel the General Contractor to make each such payment to each such Subcontractor. If the awarding authority has received a demand for direct payment from a Subcontractor for any amount which has already been included in a payment to the General Contractor for payment to the Subcontractor as provided in Subparagraphs 1.10.1 and 1.10.2, the awarding authority shall act upon the demand as provided in this Paragraph 1.10.

1.10.4 If, within seventy days after the Subcontractor has substantially completed the subcontract work, the Subcontractor has not received from the Contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the General Contractor, less any amount retained by the awarding authority as to the estimated cost of completing the incomplete and unsatisfactory items of work, the Subcontractor may demand direct payment of that balance from the awarding authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the General Contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract work. Any demand made after substantial completion of the subcontract work shall be valid even if delivered or mailed prior to the seventieth day after the Subcontractor has substantially completed the subcontract work. Within ten days after the Subcontractor has delivered or so mailed the demand to the awarding authority and delivered or so mailed a copy to the General Contractor, the General Contractor may reply to the demand. The reply shall be a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the Subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the General Contractor and of the amount due for each claim made by the General Contractor against the Subcontractor.

1.10.5 Within fifteen days after receipt of the demand by the awarding authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the awarding authority shall make direct payment to the Subcontractor of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the General Contractor, less any amount (i) retained by the awarding authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the General Contractor in the sworn reply; provided, that the awarding authority shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by Subparagraph 1.10.4. The awarding authority shall make further direct payments to the Subcontractor forthwith

after the removal of the basis for deduction from direct payments made as provided in parts (i) and (ii) of this Subparagraph.

1.10.6 The awarding authority shall forthwith deposit the amounts deducted from a direct payment as provided in part (iii) of the Subparagraph 1.10.5 in an interest-bearing joint account in the names of the General Contractor and the Subcontractor in a bank in Massachusetts selected by the awarding authority or agreed upon by the General Contractor and the Subcontractor and shall notify the General Contractor and the Subcontractor of the date of the deposit and the account, including accrued interest, as provided in an agreement between the General Contractor and the Subcontractor or as determined by decree of a court of competent jurisdiction.

1.10.7 All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to Subparagraph 1.10.6 shall be made out of amounts payable to the General Contractor at the time of receipt of a demand for direct payment from a Subcontractor and out of amounts which later become payable to the General Contractor and in the order or receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the awarding authority to the Contractor to the extent of such payment.

1.10.8 The awarding authority shall deduct from payments to a General Contractor amounts which, together with the deposits in interest-bearing accounts pursuant to Subparagraph 1.10.6, are sufficient to satisfy all unpaid balances of demands for direct payments received from Subcontractors. All such amounts shall be earmarked for such direct payments, and the Subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the General Contractor.

1.10.9 If the Subcontractor does not receive payment as provided in Subparagraph 1.10.1 or if the General Contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the Subcontractor and the Subcontractor does not receive payment for same when due less the deductions provided for in Subparagraph 1.10.1, the Subcontractor may demand direct payment by following the procedure in Subparagraph 1.10.4 and the General Contractor may file a sworn reply as provided in that same Subparagraph. A demand made after the first day of the month following that for which the Subcontractor performed or furnished the labor and materials for which the Subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the General Contractor. Thereafter the awarding authority shall proceed as provided in Subparagraphs 1.10.5, 1.10.6, 1.10.7 and 1.10.8.

1.10.10 Any assignment by a Subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of M.G.L. Chapter 149, Section 29 shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the awarding authority or which are on deposit pursuant to Subparagraph 1.10.6 shall be subordinate to the rights of all Subcontractors who are entitled to be paid under this section and who have not been paid in full.

1.10.11 "Subcontractor" as used in this Paragraph 1.10 (i) for contracts awarded as provided in M.G.L. Chapter 149, Sections 44A-44J, inclusive, shall mean a person who files a sub-bid and receives a subcontract as a result of that filed sub-bid or who is approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the General Contractor, (ii) for contracts awarded as provided in M.G.L. Chapter 30, Section 39M(a), shall mean a person approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the General Contractor.

1.10.12 A General Contractor or a Subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposited as provided in Subparagraph 1.1.6 by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A Subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in Subparagraph 1.10.6 by a petition in equity in the superior court against the awarding authority and the Contractor shall not be a necessary party. Upon motion of any party the court shall advance for speedy trial any petition filed as provided in this paragraph. M.G.L. Chapter 231, Sections 59 and 59B shall apply to such petitions. The Court shall enter an interlocutory decree upon which execution shall issue for any part of a claim found due pursuant to Sections 59 and 59B and, upon motion of any party, shall advance for speedy trial the petition to collect the remainder of the claim. Any party aggrieved by such interlocutory decree shall have the right to appeal therefrom as from a final decree. The court shall not consolidate for trial the petition of any Subcontractor with the petition of one or more Subcontractors or the same general contract unless the court finds that a substantial portion of the evidence of the same events during the course of construction (other than the fact that the claims sought to be consolidated arise under the same general contract) is applicable to the petitions sought to be consolidated and that such consolidation will prevent unnecessary duplication of evidence. A decree in any such proceeding shall not include interest on the disputed amount deposited in excess of the interest earned for the period of any such deposit. No person except a Subcontractor filing a demand for direct payment for which no funds due the Contractor are available for direct payment shall have a right to file a petition in a court of equity against the awarding authority claiming a demand for direct payment is premature, and such Subcontractor must file the petition before the awarding authority has made a direct payment to the Subcontractor and has made a deposit of the disputed portion as provided in part (iii) of Subparagraph 1.10.5 and in Subparagraph 1.10.6.

1.10.13 In any petition to collect any claim for which a Subcontractor has filed a demand for direct payment the court shall, upon motion of the General Contractor, reduce by the amount of any deposit of a disputed amount by the awarding authority as provided in part (iii) of Subparagraph 1.10.5 and in Subparagraph 1.10.6 any amount held under a trustee writ or pursuant to a restraining order or injunction.

1.11 Discharge or Release of Bonds (Statutory reference: M.G.L. c.30, section 40) This Paragraph 1.11 applies to every contract awarded for the construction or repair of public buildings or other public works.

1.11.1 Bonds given to the commonwealth, any county, city, town or political subdivision to secure the performance of contracts for the construction or repair of public buildings or other public works may be discharged or released by the awarding authority, upon such terms as it deems expedient, after the expiration of one year from the time of completion, subject to Section 1.8, of the work contracted to be done; provided that no claim filed under said bond is pending, and provided further, that no such bonds shall be discharged or released prior to the expiration of all special guarantees provided for in the contract unless new bonds in substitution therefor specifically relating to the unexpired guarantees shall be taken.

ARTICLE 2 – WAGES AND EMPLOYMENT PRACTICES

2.1 Preference To Veterans and Citizens In Public Works; Rate of Wages: (Statutory reference: M.G.L. c. 149, Section 26) This Paragraph 2.1 applies to every contract or subcontract for the construction of public works by the Commonwealth or by a county, town or district.

2.1.1 In the employment of mechanics and apprentices, teamsters, chauffeurs and laborers, preference shall first be given to citizens of the Commonwealth who have been residents of the Commonwealth for at least six months at the commencement of their employment, who are veterans as defined in M.G.L. Chapter 4, Section 7, clause 43, and who are qualified to perform the work to which the employment relates and, within such preference, preference shall be given to service-disabled veterans; and secondly, to citizens of the Commonwealth generally who have been residents of the Commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States, and every contract for such work shall contain a provision to this effect. Each county, town or district in the construction of public works, or persons contracting or subcontracting for such works, shall give preference to veterans and citizens who are residents of such county, town, authority or district, and within such preference, preference shall be given to service-disabled veterans.

2.1.2 The rate per hour of the wages paid to said mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works shall not be less than the rate or rates of wages to be determined by the Commissioner as hereinafter provided; provided that the wages paid to laborers employed on said works shall not be less than those paid to laborers in the municipal service of the town or towns where said works are being constructed; provided further, that where the same public work is to be constructed in two or more towns, the wages paid to laborers shall not be less than those paid to laborers in the municipal town paying the highest rate; provided further, that if, in any of the towns where the works are to be constructed, a wage rate or wage rates have been established in certain trades and occupations by collective agreements or understandings in the private construction industry between organized labor and employers, the rate or rates to be paid on said works shall not be less than the rates so established; provided further, that in towns where no such rate or rates have been established, the wages paid to mechanics, teamsters, chauffeurs and laborers on public works, shall not be less than the wages paid to the employees in the same trades and occupations by private employers engaged in the construction industry. This section shall also apply to regular employees of the Commonwealth or a county, town, authority or district, when such employees are employed in the construction, addition to or alteration of public buildings for which special appropriations of more than one thousand dollars are provided. Payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans under collective bargaining agreements or understandings between organized labor and employers shall be included for the purpose of establishing minimum wage rates as herein provided.

2.2 List of Jobs; Classifications; Determination of Rate of Wages; Schedule: (Statutory reference: M.G.L. Chapter 149, Section 27) This Paragraph 2.2. applies to every contract or subcontract for the construction of public works by the Commonwealth, or by a county, town or district.

2.2.1 The commissioner shall prepare, for the use of such public officials or public bodies whose duty it shall be to cause public works to be constructed, a list of the several jobs usually performed on various types of public works upon which mechanics and apprentices, teamsters, chauffeurs and laborers are employed, including the transportation of gravel or fill to the site of said public works or the removal of surplus gravel or fill from such site. The commissioner shall classify said jobs, and he may revise such classification from time to time, as he may deem advisable. Prior to awarding a contract for the construction of public works, said public official or public body shall submit to the commissioner a list of the jobs upon which mechanics and apprentices, teamsters, chauffeurs and laborers are to be employed, and shall request the commissioner to determine the rate of wages to be paid on each job. Each year after the awarding of the contract, the public official or public body shall submit to the commissioner a list of the jobs upon which mechanics and apprentices and laborers are to be employed and shall request that the commissioner update the determination of the rate of wages to be paid on each job. The general contractor shall annually obtain updated rates from the public

official or public body and no contractor or subcontractor shall pay less than the rates so established. Said rates shall apply to all persons engaged in transporting gravel or fill to the site of said public works or removing gravel or fill from such site, regardless of whether such persons are employed by a contractor or subcontractor or are independent contractors or owner-operators. The commissioner, subject to the provisions of Section 2.1, shall proceed forthwith to determine the same, and shall furnish said official or public body with a schedule of such rate or rates of wages as soon as said determination shall have been made. In advertising or calling for bids for said works, the awarding official or public body shall incorporate said schedule in the advertisement or call for bids by an appropriate reference thereto, and shall furnish a copy of said schedule, without cost, to any person requesting the same. Said schedule shall be made a part of the contract for said works and shall continue to be the minimum rate or rates of wages for said employees during the life of the contract. Any person engaged in the construction of said works shall cause a legible copy of said schedule and subsequent updates to be kept posted in a conspicuous place at the site of said works during the life of the contract. An apprentice performing work on a project subject to this section shall maintain in his possession an apprentice identification card issued pursuant to section M.G.L. Chapter 23, Section 11W. The aforesaid rates of wages in the schedule of wage rates shall include payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans as provided in said Section 2.1, and such payments shall be considered as payments to persons under this section performing work as herein provided. Any employer engaged in the construction of such works who does not make payments to a health and welfare plan, a pension plan and a supplementary unemployment benefit plan, where such payments are included in said rates of wages, shall pay the amount of said payments directly to each employee engaged in said construction. Whoever shall pay less than said rate or rates of wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, on said works to any person performing work within classifications as determined by the commissioner, and whoever, for himself, or as representative, agent or officer of another, shall take or receive for his own use or the use of any other person, as a rebate, refund or gratuity, or in any other guise, any part or portion of the wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, paid to any such person for work done or service rendered on said public works, shall have violated this section and shall be punished or shall be subject to a civil citation or order as provided in M.G.L. Chapter 149, Section 27C. The president and treasurer of a corporation and any officers or agents having the management of such corporation shall also be deemed to be employers of the employees of any corporation within the meaning of Sections 2.1 to 2.3, inclusive. Offers of restitution or payment of restitution shall not be considered in imposing such punishment.

2.2.2 When an investigation by the attorney general's office reveals that a contractor or subcontractor has violated this section by failing to pay said rate or rates of wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, on said works to any person performing work within classifications as determined by the commissioner, or that a contractor or subcontractor has, for himself, or as representative, agent or officer of another, taken or received for his own use or the use of any other person, as a rebate, refund or gratuity, or in any other guise, any portion of the wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, paid to any such person for work done or service rendered on said public works, the attorney general may, upon written notice to the contractor or subcontractor and the sureties of the contractor or subcontractor, and after a hearing thereon, order work halted on the part of the contract on which such wage violations occurred, until the defaulting contractor or subcontractor has filed with the attorney general's office a bond in the amount of such penal sum as the attorney general shall determine, conditioned upon payment of said rate or rates of wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages, on said works to any person performing work within classifications as determined by the commissioner.

An employee claiming to be aggrieved by a violation of this section may, 90 days after the filing of a complaint with the attorney general, or sooner if the attorney general assents in writing, and within 3 years after the violation, institute and prosecute in his own name and on his own behalf, or for himself and for others similarly situated, a civil action for injunctive relief, for any damages incurred, and for any lost wages and other benefits. An employee so aggrieved who prevails in such an action shall be awarded treble damages, as liquidated damages, for any lost wages and other benefits and shall also be awarded the costs of the litigation and reasonable attorneys' fees.

2.3 Employment Records To Be Kept By Contractor, Subcontractors; Statement of Compliance: (Statutory reference: M.G.L. c. 149, Section 27B) This Paragraph 2.3 applies to every contract or subcontract for the construction of public works by the Commonwealth, or by a county, town or district.

Every Contractor, Subcontractor or public body engaged in said public works to which Paragraph 2.3 of these Supplementary General Conditions applies shall keep a true and accurate records of all mechanics and apprentices, teamsters, chauffeurs and laborers employed thereon, showing the name, address and occupational classification of each such employee on said works, and hours worked by, and wages paid to, each such employee, and shall promptly furnish to the Attorney General or his representative, upon his request, a copy of said record, signed by the employer or his authorized agent under the penalties of perjury. For every week in which an apprentice is employed by a contractor, subcontractor or public body subject to this section, a photocopy of the apprentice's apprentice identification card, issued pursuant to M.G.L. Chapter 23, Section 11W, shall be attached to the records submitted under this section. Such records shall be open to inspection by any authorized representative of the department at any reasonable

time, and as often as may be necessary. Every contractor and subcontractor required to keep such a record shall submit a copy of said record to the awarding authority directly and on a weekly basis.

Each such Contractor, Subcontractor or public body shall preserve its payroll records for a period of three years from the date of completion of the contract.

Each such Contractor, Subcontractor or public body shall furnish to the awarding authority directly within fifteen days after completion of its portion of the work a statement, executed by the Contractor, Subcontractor, or public body who supervises the payment of wages, in the following form.

STATEMENT OF COMPLIANCE

I, _____
(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by

(Contractor, Subcontractor or public body)

on the _____ and that all mechanics
(building or project)

and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty-nine of the General Laws.

Signature _____

Title _____

The above-mentioned copies of payroll records and statements of compliance shall be available for inspection by any interested party filing a written request to the awarding authority for such inspection and copying.

2.4 Wages Paid to Operators of Trucks and Other Equipment: (Statutory reference: M.G.L. c. 149, Section 27F) This Paragraph 2.4 applies to every contract for the construction of public works by the Commonwealth, or by a county, city, town or district.

No agreement of lease, rental or other arrangement, and no order or requisition under which a truck or any automotive or other vehicle or equipment is to be engaged in public works by the commonwealth or by a county, city, town or district, shall be entered into or given by any public official or public body unless said agreement, order or requisition contains a stipulation requiring prescribed rates of wages, as determined by the commissioner, to be paid to the operators of said trucks, vehicles or equipment. Any such agreement, order or requisition which does not contain said stipulation shall be invalid, and no payment shall be made thereunder. Said rates of wages shall be requested of said commissioner by said public official or public body, and shall be furnished by the commissioner in a schedule containing the classifications of jobs, and the rate of wages to be paid for each job. Said rates of wages shall include payments to health and welfare plans, or, if no such plan is in effect between employers and employees, the amount of such payments shall be paid directly to said operators. Whoever pays less than said rates of wages, including payments to health and welfare funds, or the equivalent in wages, on said works, and whoever accepts for his own use, or for the use of any other person, as a rebate, gratuity or in any other guise, any part or portion of said wages or health and welfare funds, shall have violated this section and shall be punished or shall be subject to a civil citation or order as provided in M.G.L. Chapter 149, Section 27C.

An employee claiming to be aggrieved by a violation of this section may, 90 days after the filing of a complaint with the attorney general, or sooner if the attorney general assents in writing, and within 3 years after the violation, institute and prosecute in his own name and on his own behalf, or for himself and for others similarly situated, a civil action for injunctive relief, for any damages incurred, and for any lost wages and other benefits. An employee so aggrieved who prevails in such an action shall be awarded treble damages, as liquidated damages, for any lost wages and other benefits and shall also be awarded the costs of the litigation and reasonable attorneys' fees.

2.5 Reserve Police Officers: (Statutory reference: M.G.L. Chapter 149, Section 34B) This Paragraph 2.5 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public works for the Commonwealth or any political subdivision thereof.

The contractor shall pay to any reserve police officer employed by him in any city or town the prevailing rate of wages paid to regular police officers in such city or town.

2.6 Eight-hour Day, etc.: (Statutory reference: M.G.L. Chapter 149, Sections 30, 34, and 34A) This Paragraph 2.6 applies only to contracts which are subject to the provisions of the aforesaid sections of the Massachusetts General Laws.

No laborer, worker, mechanic, foreman or inspector working within this Commonwealth in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of extraordinary emergency.

2.7 Lodging, etc.: (Statutory reference: M.G.L. Chapter 149, Section 25) This paragraph 2.7 applies to every contract for the doing of public work with the Commonwealth, a county, city or town, or with a department, board, commission, or officer acting therefor.

Every employee under this contract shall lodge, board and trade where and with whom he elects, and neither the Contractor nor his agents or employees shall, either directly or indirectly, require as a condition of the employment of any person that the employee shall lodge, board or trade at a particular place or with a particular person.

2.8 Access to Contractor's Records: (Executive Order No. 195) This Paragraph 2.8 applies to every contract for the purchase of services or materials by any agency, bureau, board, commission, institution, or department of the Commonwealth or a municipal contract funded, in whole or in part, by the Commonwealth.

The Governor or his designee, the secretary of administration and finance, and the state auditor or his designee shall have the right at reasonable times and upon reasonable notice to examine the books, records and other compilations of data of the Contractor which pertain to the performance and requirements of this contract.

2.9 Worker's Compensation Insurance: (Statutory reference: M.G.L. chapter 149, Section 34) This Paragraph 2.9 applies to every contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public building or other public works for the Commonwealth or any political subdivision thereof.

The Contractor shall, before commencing performance of the contract, provide by insurance for the payment of and the furnishing of other benefits under M.G.L. Chapter 152 to all persons to be employed under the contract, and the Contractor shall continue such insurance in full force and effect during the term of the contract. Sufficient proof of compliance with this Paragraph 2.9 must be furnished at the time of execution of this contract. Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of the contract and shall operate as an immediate termination thereof. No cancellation of such insurance, whether by the insurer or by the insured, shall be valid unless written notice thereof is given by the party proposing cancellation to other party and to the awarding authority at least fifteen days prior to the intended effective date thereof, which date shall be expressed in said notice.

Notice of cancellation sent by the party proposing cancellation by registered mail, postage prepaid, with a return receipt of the addressee requested, shall be a sufficient notice. An affidavit of any officer, agent or employee of the insurer or of the insured, as the case may be, duly authorized for the purpose, that he has so sent such notice addressed as aforesaid shall be prima facie evidence of the sending thereof as aforesaid. This section shall apply to the legal representative, trustee in bankruptcy, receiver, assignee, trustee and the successor in interest of any such contractor. The superior court shall have jurisdiction in equity to enforce this section.

Whoever violates any provision of this section shall be punished by a fine of not more than one hundred dollars or by imprisonment for six months, or both; and, in addition, any contractor who violates any provision of this section shall be prohibited from contracting, directly or indirectly, with the commonwealth or any political subdivision thereof, for the construction, alteration, demolition, maintenance or repair of, or addition to, any public works or public building for a period of two years from the date of conviction of said violation.

ARTICLE 3 – CONTRACTOR’S ACCOUNTING METHOD REQUIREMENTS

3.1 (Statutory reference: M.G.L. Chapter 30, Section 39R)

This Article 3 applies to “Contracts” and “Contractors”, as defined in Subparagraph 3.1.1 and 3.1.2, below.

3.1.1 “Contractor” means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to Sections 38A 1/2 to 38O, inclusive, of Chapter 7, Section 39M of Chapter 30, Sections 44A-44J, inclusive, of Chapter 149, or Section 11C of Chapter 25A which is for an amount or estimated amount that exceeds the dollar amount set forth in M.G.L. Chapter 30, Section 39R.

3.1.2 “Contract” means any contract awarded or executed pursuant to Sections 38A 1/2 to 38O, inclusive, of Chapter 7, Section 39M of Chapter 30, Sections 44A-44J, inclusive, of Chapter 149, or Section 11C of Chapter 25A which is for an amount or estimated amount that exceeds the dollar amount set forth in M.G.L. Chapter 30, Section 39R.

3.1.3 “Records” means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.

3.1.4 “Independent Certified Public Accountant” means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his residence or principal office who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant’s independence shall not be

confined to the relationships existing in connection with the filing of reports with the awarding authority.

3.1.5 “Audit”, when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepting accounting principles and auditing standards for the purpose of expressing a *certified* opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.

3.1.6 “Accountant’s Report”, when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed, the reasons therefor shall be stated. An accountant’s report shall include as a part thereof a signed statement by the responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the auditing financial statement is a true and complete statement of the financial condition of the Contractor.

3.1.7 “Management”, when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the Contractor.

3.1.8 Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

3.2 Subparagraph 3.1.2 hereof notwithstanding, every agreement or contract awarded or executed pursuant to Sections 38A 1/2 to 38O, inclusive, of Chapter 7, Section 39M of Chapter 30, Sections 44A-44J, inclusive, of Chapter 149, or Section 11C of Chapter 25A, shall provide that:

3.2.1 The Contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the Contractor; and

3.2.2 Until the expiration of six years after final payment, the awarding authority, office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any books, documents, papers or records of the Contractor or his Subcontractors that directly pertain to, and involve transactions relating to, the Contractor or his Subcontractors; and

3.2.3 If the agreement is a contract as defined herein, the Contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the Contractor's independent certified public accountant approving or otherwise commenting on the changes.

3.2.4 If the agreement is a contract as defined herein, the Contractor has filed a statement of management on internal accounting controls as set forth in Paragraph 3.3 below prior to the execution of the contract.

3.2.5 If the agreement is a contract as defined herein, the Contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in Paragraph 3.5 below.

3.3 Every Contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the Contractor and its subsidiaries reasonably assures that:

3.3.1 transactions are executed in accordance with management's general and specific authorization:

3.3.2 transactions are recorded as necessary

(i) to permit preparation of financial statements in conformity with generally accepted accounting principles, and

(ii) to maintain accountability for assets;

3.3.3 Access to assets is permitted only in accordance with management's general or specific authorization; and

3.3.4 The recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

3.4 Every Contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he/she has examined the statement of management on internal accounting controls, and expressing an opinion as to:

3.4.1 Whether the representations of management in response to this paragraph and Paragraph 3.2 above are consistent with the result of management's evaluation of the system of internal accounting controls; and

3.4.2 Whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.

3.5 Every Contractor awarded a contract by the Commonwealth or by any political subdivision thereof shall annually file with the commissioner of capital asset management and maintenance during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report.

ARTICLE 4 – MISCELLANEOUS

4.1 Weather Protection: This Paragraph 4.1 applies to every contract subject to M.G.L. Chapter 149, Section 44A.

4.1.1 The Contractor shall install weather protection and provide adequate heat in the protected area from November 1 to March 31, as required by M.G.L. Chapter 149 Section 44F(1).

4.2 Form for Sub-contract: This Paragraph 4.2 applies to every contract subject to M.G.L. Chapter 149 Section 44A.

4.2.1 The Contractor when sub-contracting with sub-bidders filed pursuant to M.G.L. Chapter 149, Section 44F shall use the form for sub-contract in Chapter 149 Section 44F(4)(c).

4.3 Foreign Corporations: This Paragraph 4.3 applies to every contract with the Commonwealth, a county, city, town, district, board, commission, or other public body for the construction, reconstruction, alteration, remodeling, repair, or demolition of any public building or other public works.

4.3.1 The Contractor, if a foreign corporation, shall comply with M.G.L. Chapter 30, Section 39L.

4.4 Shoring: (Statutory reference: M.G.L. Chapter 149, Section 129A). This Paragraph 4.4 applies to every construction project carried on by any city, town, county, or other subdivision of the Commonwealth in which a trench is to be dug to a depth of five feet or more, except a trench for laying of water pipes dug to a depth of six and one-half feet which will be open less than 48 hours, and except for digging of graves.

4.4.1 Such trenches shall be shored and braced in conformity with rules and regulations for the prevention of accidents in construction operations, as adopted and enforced by the Attorney General.

4.5 Certification of Compliance with Tax Laws: (Statutory reference: M.G.L. Chapter 62C, Section 49A) This Paragraph 4.5 applies to contracts for goods or services furnished by any department, board, commission, division, authority, district or other agency of the Commonwealth or any subdivision of the Commonwealth, including a city, town or district.

4.5.1 By executing this contract, the Contractor certifies, under penalties of perjury, that to the best of his information, knowledge and belief he has complied with all laws of the Commonwealth relating to taxes.

4.6 Verification of Construction Debris Disposal: (Worcester Revised Ordinances Chapter 8, Section 7) This paragraph 4.6 shall apply to every contract entered into by the City of Worcester for the demolition, renovation, rehabilitation, or alteration of a building or structure.

- a. In furtherance of the requirements set forth in G.L. c.40, §54, and §114.1.3 of the State Building Code, the building commissioner shall require any person who obtains a permit for the demolition, renovation, rehabilitation, or alteration of a building or structure to provide verification that the debris resulting from such activities was disposed of at the licensed solid waste facility named in conjunction with the permit application.
- b. The verification required under sub-section (a), above, shall consist of the following:
 - 1) a dated receipt, signed by the owner/operator of the licensed solid waste disposal facility where the debris was deposited.
 - 2) the receipt shall contain a description of the debris disposed of, and its weight, or volume.
 - 3) the permit holder shall also provide the building commissioner with an affidavit that the receipt submitted is true and accurate to the best of the permit holder's knowledge.
 - 4) if the permit holder cannot dispose of the debris at the location indicated, it shall be the permit holder's obligation to obtain an amendment to the permit reflecting the new disposal location. The building commissioner shall be so notified, and the permit amended, prior to the disposal of the debris at the new disposal location.
- c. This section shall not apply to the construction of a new building or structure.

4.7 Responsible Employer Ordinance: (Worcester Revised Ordinances, Chapter 2, Section 35) This paragraph 4.7 shall apply to every contract entered into by the City of Worcester for the construction, reconstruction, installation, demolition, maintenance or repair of any building, where the contract amount is more than one hundred thousand dollars.

- a. The city council hereby finds and determines that taxpayer money is most efficiently and productively spent by awarding construction contracts to firms that include and enforce provisions requiring compliance with state laws governing the payment of prevailing wages, the provision of workers compensation coverage, and the proper classification of individuals as employees and not as independent contractors, as well as provisions concerning health insurance coverage and state-certified apprenticeship programs. The city council hereby further finds and determines that it is appropriate for it to exercise its entrepreneurial discretion by requiring firms that are awarded such contracts to comply with this ordinance because failure to comply is injurious to the life, health, and happiness of individuals employed by such firms and is deleterious to the quality of life in the city where most of such individuals reside.
- b. Every contract awarded by the city under G.L. c.149 and G.L. 149A shall be deemed to incorporate by reference the provisions of sub-parts (c)(1) through (8) of together with the provisions of subsections (d) and (e) of this section. Any person, company or corporation shall acknowledge, in writing, receipt of said requirements with their bid or proposal.
- c. All bidders or proposers and all subcontractors and trade contractors, including subcontractors that are not subject to G.L. c.149, Section 44F, under the bidder for projects subject to G.L. c.149, Section 44A(2), and proposers under G.L. c. 149A, shall as a condition for bidding or subcontracting verify under oath and in writing at the time of bidding or subcontracting verify under oath and in writing at the time of bidding or submittal in response to and RFP or in any event prior to entering into a subcontract at any tier, that they comply with the following conditions for bidding or subcontracting and, for the duration of the project, shall comply with the following obligations:
 - 1) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must comply with the obligations established under G.L. c. 149 to pay the appropriate lawful prevailing wage rates to their employees.

The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must at the time of bidding maintain or participate in a bona fide apprentice training program as defined by G.L. c.23, Sections 11H and 11I for each apprenticable trade or occupation represented in their workforce that is approved by the Division

of Apprentice Standards of the Department of Labor and Workforce Development, regardless of whether or not the program qualifies as an employee welfare benefit plan under ERISA, and must register all apprentices with the Division and abide by the apprentice to journeyman ratio for each trade prescribed therein in the performance of any work on the project. This provision does not require the program to be an ERISA plan; the program need only have been approved by the Division of Apprentice Standards. All general bidders or proposers and all trade contractors and sub-bidders at every tier must submit with its bid or proposal an original, stamped Sponsor Verification letter from the Commonwealth of Massachusetts, Department of Labor and Workforce Development – Division Apprentice Standards, issued within the past 90 days, evidencing that at the time of submitting a bid or proposal, the bidder or proposer is currently an Approved Sponsor of Apprentices. Any bid or proposal submitted without the above documentation shall be rejected; **{COMPLIANCE WITH THE APPRENTICE TRAINING PROVISION OF THE RESPONSIBLE EMPLOYER ORDINANCE IS CURRENTLY SUSPENDED}**

- 2) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must maintain appropriate industrial accident insurance coverage for all the employees on the project in accordance with G.L. c. 152;
- 3) The bidder or proposer and all trade contractors and subcontractors under the bidder must properly classify employees as employees rather than independent contractors and treat them accordingly for purposes of workers' compensation insurance coverage, unemployment taxes, social security taxes and income tax withholding. (G.L. c.149, Section 148B on employee classification);
- 4) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must at the time of bidding certify that, at the time employees begin work at the worksite, all employees will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration, and shall ensure that all employees working at the worksite possess such qualifications at all times throughout the duration of their work on the project and furnish documentation of successful completion of the course;

- 5) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must be in compliance with the health and hospitalization requirements of the Massachusetts Health Care Reform law established by Chapter 58 of the Acts of 2006, as amended, and regulations promulgated under that statute by the Commonwealth Health Insurance Connector Authority.
 - 6) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer must make arrangements to ensure that each employee of every contractor entering or leaving the project individually completes the appropriate entries in a daily sign-in/out log. The sign-in/out log shall include: the location of the project; current date; printed employee name; signed employee name; and the time of each entry or exiting. The log shall contain a prominent notice that employees are entitled under state law to receive the prevailing wage rate for their work on the project. Such sign-in/out logs shall be provided to the City on a daily basis.
 - 7) The bidder or proposer and all trade contractors and subcontractors under the bidder or proposer, prior to bidding or, if not subject to bidding requirements, prior to performing any work on the project, shall sign under oath and provide to the City a certification that they are not debarred or otherwise prevented from bidding for or performing work on a public project in the Commonwealth of Massachusetts or in the City.
- d. A proposal or bid submitted by any general bidder or by any trade contractor or subcontractor under the general bidder or proposer that does not comply with any of the foregoing conditions for bidding shall be rejected, and no subcontract for work outside the scope of G.L. c.149, Section 44F shall be awarded to a subcontractor that does not comply with the foregoing conditions.
 - e. All bidders or proposers and all trade contractors and subcontractors under the bidder or proposer who are awarded or who otherwise obtain contracts on the projects subject to G.L. c.149, Section 44A(2) or c.149A, shall comply with each of the obligations set forth in this Section 4.7 for the entire duration of their work on the project, and an officer of each bidder or subcontractor under the bidder shall certify under oath and in writing on a weekly basis that they are in compliance with such obligations.
 - f. Any proposer, bidder, trade contractor or subcontractor under the bidder or proposer who fails to comply with any one of the obligations set forth in this Section 4.7 for any period of time shall be, at the sole discretion of the City, subject to one or more of the following sanctions:
 - 1) cessation of work on the project until compliance is obtained;

- 2) withholding of payment due under any contract or subcontract until compliance is obtained;
 - 3) permanent removal from any further work on the project;
 - 4) liquidated damages payable to the City in the amount of 5% of the dollar value of the contract.
- g. In addition to the sanctions outlined in subsection (f) above, a proposer, general bidder or contractor shall be equally liable for the violations of its subcontractor with the exception of violations arising from work performed pursuant to subcontracts that are subject to G.L. c.149, Section 44F. Any contractor or subcontractor that has been determined by the City or by any court or agency to have violated any of the obligations set forth in this Section 4.7 shall be barred from performing any work on any future projects for six months for a first violation, three years for a second violation and permanently for a third violation.

4.8 Regulation of Construction Noise: (Worcester Revised Ordinances, Chapter 8, Section 34) This paragraph 4.8 shall apply to anyone operating powered construction equipment delivering construction equipment and/or supplies at any construction site or project within the city of Worcester.

- a. It shall be unlawful for any person, firm, corporation, partnership, or other entity to operate powered construction equipment or to build, erect, construct, demolish, alter, repair, excavate or engage in hoisting, grading, site work, including tree and brush removal, dredging or pneumatic hammering, or to deliver construction equipment and/or supplies to the site on any building, road, tower, parking lot, machine, pipe, sewer, sidewalk, or any other construction project (hereafter collectively the "construction project"), except between the hours of 7:00 a.m. and 9:00 p.m. on weekdays and Saturday, except for "emergency work" which is performed in the interest of public safety or welfare and for which a permit has been issued by the commissioner of public works and parks or the commissioner of inspectional services.

It shall be unlawful for any person, firm, corporation, partnership, or other entity to engage in a construction project activity on Sundays or legal holidays without a permit from the police chief issued pursuant to G.L. c. 136, Section 7 or 15 and a permit issued by the commissioner of inspectional services hereunder.

- b. Emergency work permits may be issued in:
 - 1) cases of urgent necessity and for the interests of health, safety and convenience of the public. The commissioner of inspectional services shall whether the reasons given for the urgent necessity are valid and reasonable, and whether the health, safety and convenience of the public will be protected or better served by granting the permit requested and

whether the manner and amount of loss or inconvenience to the party in interest imposes a significant hardship; or,

- 2) cases where, because the location and nature of the work, the noise caused by said work will not be heard by anyone not working on the project. The commissioner of inspectional services shall consider whether supplying machinery and/or materials to the construction project site will cause unreasonable noise along the routes to the construction project site, and whether such activity will impact residential neighborhoods, and shall not grant any emergency work permit unless unreasonable noise in residential areas will be prevented.
- c. Emergency work permits may be issued to the general contractor on a blanket basis that applies to all of the contractors working on the job, or may be issued to specific contractors on the construction project, at the discretion of the Commissioner. Emergency work permits may be issued for not more than one week at a time, and may be renewed for additional one week periods at the discretion of the Commissioner.
- d. Prior to issuing or reissuing said emergency work permit, the commissioner of inspectional services shall review the work being conducted and all attendant circumstances, and shall prescribe whatever limitations possible to minimize the generation of noise, and to minimize the impact of noise on the neighbors to the construction project.
- e. Emergency repair work performed by the Department of Public Works and/or any public utility is exempt from this section.
- f. The fee for each such Emergency work permits issued under this section shall be set in accordance with Chapter 2, § 24 of the City of Worcester Revised Ordinances of 2008.
- g. On any project for the construction, reconstruction, installation, demolition, maintenance or repair of any building, or public work, to be funded in whole or in part by city funds, or funds which, in accordance with a federal or state grant, program, or otherwise, the city expends or administers, or any such project to which the city is a signatory to the contract therefor, the provisions of this section shall apply and the same shall be referred in every invitation to bid for such project and, the following paragraphs shall be contained in every resulting contract therefrom:

“It shall be a material breach of this contract if the contractor and each subcontractor shall not at all times adhere to the provisions of § 34 of chapter eight of the Revised Ordinances of the city, by limiting their on-site,

noise producing construction and related work to the hours specified by the Ordinance.

A waiver from the above requirements may, in certain circumstances, be granted in accordance with subsections (b), (c) and (d) of § 34 of chapter eight of the Revised Ordinances of the city.”

- h. The commissioner of inspectional services shall have the authority to adopt any rules and regulations he or she deems necessary to implement this section.
- i. Nothing in this section shall be deemed to prevent an individual from performing work on his or her own property, so long as the work is being done by the owner of the property or by direct relative(s) of the owner, and said work is not being done for profit.
- j. This section may be enforced by the commissioner of inspectional services, the building commissioner, the chief of police or their subordinates.
- k. Any violation of this section by any person, firm, corporation, partnership, or other entity, shall be individually punished with a fine of \$100.00. Each day upon which a violation of this section occurs shall be considered a separate violation. Employers shall be deemed the violator for violations committed by their employees.

4.9 Regulation of Excessive and Unreasonable Noise: (Worcester Revised Ordinances, Chapter 9, Section 1A(e)(9) This paragraph 4.9 shall apply to anyone operating powered construction equipment delivering construction equipment and/or supplies at any construction site or project within the city of Worcester.

- a. No person shall operate any powered construction equipment or build, erect, construct, demolish, alter, repair, excavate or engage in hoisting, grading, site work, including tree and brush removal, dredging or pneumatic hammering, or deliver construction equipment and/or supplies to the site on any building, road, tower, parking lot, machine, pipe, sewer, sidewalk, or any other construction project, except between the hours of 7:00 a.m. and 9:00 p.m. on weekdays and Saturday, and between the hours of 9:00 a.m. and 7:00 p.m. on Sundays, except for work performed by a public service or municipal utility department or “emergency work” performed with the express written permission of the commissioner of inspectional services or the commissioner of public works and parks. Emergency work shall be limited to such work that is clearly essential to respond to a sudden and unexpected threat to public health or public safety. Emergency work permission may be granted to a general or sub-contractor on a blanket basis governing all persons working on a specified portion of a particular job. Emergency work permission may be granted for not more than one week at a

time, and may be renewed for additional one week periods at the discretion of the commissioner who granted the initial permission.

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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CITY OF WORCESTER
FORM FOR GENERAL BID

BIDDER'S NAME _____

This bid must be accompanied by a deposit in the form of cash, or bid bond, or a certified check, treasurer's check, or cashier's check, payable to the City of Worcester (hereinafter referred to as the "Owner", or the "Awarding Authority") in the amount of five (5) percent of the value of the bid. No other form of bid security will be accepted.

By submitting this bid the undersigned represents to the Owner that it has examined and understands the Advertisement for Bids, Instructions to Bidders, contract forms, Conditions of the Contract (General and Supplementary), Drawings, Specifications and all other Contract Documents and has examined the site, as defined therein, and that this bid is made with distinct reference and relation to all said Contract Documents; but the undersigned declares that in regard to the conditions affecting the work to be done and the labor and materials needed, this bid is based solely on its own investigation and research and not in reliance upon any drawings, surveys, measurements, dimensions, calculations, estimates, or other tests or representations of any employee, officer, agent or consultant of the Owner. By submitting this bid, the undersigned agrees that it shall be subject to the jurisdiction of the courts of the Commonwealth of Massachusetts with respect to any actions arising out of or related to this bid or any contract that may be entered into based upon this bid, and that any such actions commenced by the undersigned shall be commenced in the courts of the Commonwealth of Massachusetts.

A bidder wishing to amend this bid after transmittal to the Owner may do so only by withdrawing this bid and resubmitting another bid prior to the time for opening bids.

To the Awarding Authority: The City of Worcester, Massachusetts

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

- A. The undersigned proposes to furnish all labor and materials required for the **WORCESTER FIRE STATION #2 SOUTH DIVISION BUILDING RENOVATION, 180 SOUTHBRIDGE ST., WORCESTER, MA 01608**, in accordance with the accompanying Drawings, Specifications and Addenda, prepared by Mount Vernon Group Architects, Inc., 178 Albion St., Suite 240, Wakefield, MA 01880, Department of Public Facilities, 50 Officer Manny Familia Drive, Worcester, MA 01605, for the contract price specified below, subject to additions or deductions according to the terms of the Plans and Specifications.
- B. This Bid includes Addenda numbered _____.
- C. The Proposed Contract Price is (Total of Items 1 and 2):
_____ Dollars (\$_____)
- D. The undersigned agrees that, if he is selected as General Contractor, he will within five (5) days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the Awarding Authority, execute a contract in accordance with the terms of this bid and furnish a performance bond and also a labor and materials or payment bond, each of a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the Awarding Authority and each in the sum of the contract price, the premiums for which are to be paid by the General Contractor and are included in the contract price.
- E. The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that he will comply fully with all laws and regulations applicable to awards made subject to Section 44A of Chapter 149 of the Massachusetts General Laws.
- F. The undersigned further certifies under penalties of perjury that this bid is in all respects bona-fide, fair and made without collusion or fraud with any other person. As used herein the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalties of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of Section Twenty-nine F of Chapter Twenty-nine, or any other applicable debarment provisions of any other Chapter of the Massachusetts General Laws or any rule or regulation promulgated there under.
- G. The undersigned hereby certifies that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that they will comply fully with all laws and regulations applicable to awards made subject to M.G.L. c.149 sec.44A-J.

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

_____	_____
Date	Print Name of Bidder
_____	By _____
Social Security Number or Federal Identification Number	Name of Person Signing Bid and Title
_____	_____
Telephone Number	Business Street Address
_____	_____
Fax Number	City, State and ZIP Code

The Bidder shall fill in the following information about its business organization.

1. If the Bidder is a Corporation, indicate the state of incorporation.

President:	State of Incorporation:
Treasurer:	Secretary:
If a Foreign Corporation: (incorporated or organized under laws other than laws of the Commonwealth of Massachusetts)	Is the Corporation registered with the Secretary of State of Massachusetts? Yes _____ No _____
If the Bidder is selected for the work referred to above, it is required under Massachusetts General Laws, Chapter 30, Section 39L to furnish to the Awarding Authority a certificate of the Secretary of State stating that the Corporation has complied with Massachusetts General Laws, Chapter 181, Sections 3 and 5 and the date of such compliance.	

2. If the Bidder is a Partnership, give full names and addresses of all partners:

Name of Partner:	Residence Address:
Name of Partner:	Residence Address:
Name of Partner:	Residence Address:

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

3. If the Bidder is an Individual, give residential address if different from business address:

Name:	Residence Address:
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4. If the Bidder is an Individual doing business under a Firm name:

Name of Firm:	Business Address:
Name of Individual:	Residence Address:

Other form of business organization:

H. The Bidder will give below the name and address of the Surety Company who will sign the bonds.

Name:	Address:
-------	----------

END OF SECTION

c. 149 Projects

OWNER-CONTRACTOR AGREEMENT

THIS AGREEMENT made on _____ 20____, at Worcester, in the County of Worcester, Commonwealth of Massachusetts by and between_____, (hereinafter called the Contractor) and the City of Worcester, a municipal corporation within said County of Worcester (hereinafter called the City).

W I T N E S S E T H:

That the Contractor, in consideration of the payments hereinafter mentioned and of the fulfillment of the agreements herein mutually entered into, agrees with the City as follows:

SCOPE OF WORK:

(1) The Contractor shall, pursuant to the terms of this Agreement, provide all the supplies, materials and equipment, and perform all the labor, services and supervision necessary and proper to undertake and complete the _____, including Alternate(s)#_____ at _____ (hereinafter called the "Project") in the City of Worcester, Massachusetts, and to accomplish any and all work incidental thereto.

BONDS:

(2) The Contractor shall obtain and deposit with the City the following bond(s) in the amount of:

PERFORMANCE BOND: _____ Dollars and no cents

(\$_____.00)

PAYMENT BOND: _____ Dollars and no cents

(\$_____.00)

with sureties satisfactory to the Contracting Officer to (a) guarantee the faithful performance by the Contractor of all its obligations under this Agreement and (b) constitute the security required by Massachusetts General Laws Chapter 149, Section 29, and Chapter 30, Section 39A, as amended, for the payment by the Contractor and its subcontractors for all labor performed or furnished and for all materials used or employed in connection with this Agreement.

CONTRACTING OFFICER:

(3) (a) Wherever used in this Agreement the term "Contracting Officer" shall mean the City official so designated below, or the individual duly appointed by him/her for the performance of any of his/her functions or responsibilities under this Agreement. The work under this Agreement shall be carried out under the direction and subject to the approval and acceptance of K Russel Adams., City of Worcester, Department of Public Facilities (hereinafter called the Contracting Officer).

(b) Anything to the contrary in the preceding paragraph notwithstanding, the City's contract compliance officer is and shall be a designee of the Contracting Officer for all notices, demands, sanctions and other communications relative to such officer's administration, monitoring and enforcement of the City's Minority/Women Enterprise Program and the Responsible Employer Ordinance. Each and every communication from the contract compliance officer directly to the Contractor shall be validly delivered notwithstanding any other contrary provision of this Agreement or other Contract Documents.

INCORPORATED DOCUMENTS:

(4) The performance of this Agreement is subject to the provisions of the following documents, all of which are attached hereto and intended to be an integral part of this Agreement (hereinafter periodically and collectively referred to as "the Contract Documents").

- (a) Information to Bidders
- (b) Bid Proposal, dated _____, 20____.
- (c) Specifications and Related Drawings

The Contract Documents are to be read collectively and complementary to one another; any requirement under one shall be as binding as if required by all. In the event of any conflict or inconsistency between the provisions of this Agreement and any of the other Contract Documents, the provisions of this Agreement shall prevail. In the event of any conflict or inconsistency between this Agreement, the other Contract Documents and any applicable state law, the applicable statutory provisions shall prevail. The Contract Documents set forth the entire legal relationship and requirements of the parties, as well as the technical requirements of the Project, and as such constitute the Contract, as hereinafter referred to.

TIME FOR PERFORMANCE:

(5) (a) Time is of the essence for this Agreement. The Work of this Agreement shall be substantially completed August 1, 2023. Final Completion of the work of this agreement of the Work of this agreement shall be no later than 60 days after the date of substantial completion. Replacement of the domestic hot water heaters with associated work shall be the priority effort with the replacement of the boiler and circulating pumps with associated work following. The intent is to have the water heaters replaced as soon as possible.

Final completion of the Work of this Agreement shall be no later than 60 days after the date of substantial completion. The Date of Substantial Completion shall remain the same, as stated above, regardless of any alternate(s) chosen to be included in the Contract by the Owner.

(b) Except as otherwise expressly provided, none of the following shall constitute a waiver of the General Bidders or its surety's obligations to pay liquidated damages or any portion thereof:

- (i) Acceptance of any portion of the Work or payment to the Contractor or its Surety therefor;
- (ii) Completion of a portion of the Work or the use or occupancy thereof by the City or others; or
- (iii) The City's requiring or allowing the Contractor or its Surety to complete the Work.

PRICE:

(6) The City will pay the Contractor for all materials delivered or furnished and for all the work performed pursuant to Article (1) hereof a sum of money as follows:

_____ Dollars and no cents (\$_____.00)

PAYMENT:

(7) Payment to the Contractor shall be made by the City in accordance with General Laws Chapter 30, Section 39K, as amended, which is included in the Supplementary General Conditions to the Contract.

(a) The payment shall be in full for furnishing all materials, supplies, labor, services, supervision, tools and equipment and the use thereof as embraced under the Agreement, and except as may be provided under Article (10)(d), shall also constitute the payment for all loss or damage to the Contractor arising out of the nature of the work or from the action of the elements or from any unforeseen difficulties or obstructions which may arise or be encountered during the execution of the work until its final approval by the Contracting Officer, and for all risks to the Contractor of every description connected with the execution of the work or infringement of patents, trade marks, or copyrights and for completing the work in an acceptable manner.

(b) The payment of any periodic estimate or of any retained percentage shall in no way constitute an acceptance of the work or in no way prejudice or affect the obligation of the Contractor at his own cost or expense to repair, correct, renew, or replace any defects or imperfections in the construction as well as all damages due or attributable to such defects, nor shall any such payment for any current estimate or of any retained percentages prejudice or affect the rights of the City to hold the Contractor liable for breach of contract or to avail itself of the remedies under Article (15), hereof.

(c) If at any time there shall be evidence of any lien or other claim for which, if established, the City may become liable, directly or indirectly, and which is chargeable to the Contractor, the City may retain out of any payment then due or thereafter to become due, an amount sufficient to completely indemnify it against any such claim. If there prove to be any such claims after all the payments are made, the Contractor shall refund to the City all moneys that the City pays in discharging such claim in consequence of the Contractor's default.

(d) The Contractor, and each subcontractor, at every tier, to the Contractor, represents, warrants and certifies that it has complied with all laws of the Commonwealth of Massachusetts relating to taxes and all Ordinances and Orders of the City of Worcester relating to taxes, fees and charges, or is lawfully contesting the validity of the same. The Contractor, and each subcontractor, at every tier, further represents, warrants and certifies that it will remain in such compliance during the term of this Agreement, including any amendments or extensions hereto. Breach of any of these provisions shall be deemed a material breach which shall entitle the City to immediately terminate this Agreement and take any other action authorized by law to collect any amounts due the City.

PAYMENT OF SUBCONTRACTORS:

(8) Payment to subcontractors shall be made in accordance with General Laws Chapter 30, Section 39F, as amended, which is included in the Supplementary General Conditions.

NOTICE:

(9) Wherever in this Agreement the City is to give or receive a notice, the Contracting Officer as defined in Article (3) shall be the City's Agent for such purpose.

PERFORMANCE:

(10) (a) The Contractor shall give his personal attention constantly to the faithful execution of the work and shall keep the same under his personal control. He shall not assign by power of attorney, or otherwise, the work or any part thereof without the previous written consent of the Contracting Officer. He shall not either legally or equitably assign any of the moneys payable under this Agreement or any claim thereto unless by and with like consent on the part of the Contracting Officer and the City Treasurer. He shall be responsible for all the acts and omissions of his employees and of all persons directly or indirectly employed by him in connection with the execution of this work.

(b) The Contractor shall provide sufficient and proper facilities at all times for the inspection of the work by the City. He shall, after receiving written notice that certain work or construction is improper, unsafe or defective or that such construction in any way fails to conform to the Contract Documents, forthwith remove such unsafe or defective construction and reconstruct the same in a manner satisfactory to the Contracting Officer. Upon failure of the Contractor to remedy the construction after being so notified, the Contracting Officer in accordance with Article 3.4.1 of the General Conditions may cause such defective work to be remedied or replaced and the City may deduct the cost thereof from any moneys due or to become due the Contractor.

(c) The City, acting through the Contracting Officer, or the project Architect, shall have the authority to suspend the work wholly or any part thereof for such period as deemed necessary due to failure of the Contractor to carry out orders given or to perform any provision of the Agreement. Upon receipt of written order from the Contracting Officer or Architect, the Contractor shall immediately suspend the work or such part thereof in accordance with the order. No work shall be suspended without the written permission of the Contracting Officer or Architect. The work shall be resumed when conditions so warrant or deficiencies have been corrected and the condition of the Contract satisfied as ordered or approved in writing by the Contracting Officer or Architect. No allowance of any kind will be made for suspension of work by order of the Contracting Officer or Architect pursuant to this paragraph.

(d) Any request for an adjustment in the contract price by the Contractor or the City, due to differing subsurface or latent physical conditions, shall be governed by the provisions of General Laws Chapter 30, section 39N, as amended, which is included in the Supplementary General Conditions.

(e) The Contractor agrees that it shall have no claim for damages of any kind on account of any delay in commencement of the work. Post commencement, the Contractor shall have no claim for damages of any kind on account of any delay or suspension of any portion of the work except as hereinafter provided. Adjustments, if any, in the contract price due to a suspension, delay, interruption or failure to act by the City shall be governed by the provisions of General Laws Chapter 30, section 39(O), as amended, which is included in the Supplementary General Conditions. Provided, however, the provisions of this paragraph shall not apply to any suspension pursuant to Section (10)(c), or for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this Agreement provides for an equitable adjustment of the contract price, or time, under any other provision. Provided, further, that no adjustment shall be made if the performance of the Contractor would have been prevented by other causes, even if the work had not been so suspended, delayed or interrupted by the City. Provided, further, that a subcontractor shall have the same rights against the Contractor for payment for an increase in the cost of his performance as the provisions of this paragraph gives the Contractor against the City, but nothing herein shall in any way change, modify or alter any other rights which the Contractor and subcontractor may have against each other.

(f) The City may award other contracts for additional work. The Contractor shall cooperate fully with other contractors and carefully fit his own work to that of other contracts as may be directed by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor.

(g) The Contractor shall comply with all the laws, state and federal, applicable to the work and construction provided for herein. This Agreement is made subject to all laws, state and federal; and if any clause hereof does not conform to such law, then such clause shall be void and the law operative shall be inserted in lieu thereof. Any violation by the Contractor of state or federal laws relating to the employment of labor upon the work or the construction contemplated by this Agreement shall be a sufficient cause for the City to cancel the Agreement without in any way being

liable in damages therefor. Should the City cancel the Agreement because of the failure on the part of the Contractor to observe the state or federal laws, or the rules and regulations relating to employment of labor upon the work herein contemplated, then upon cancellation the City reserves all rights and benefits herein or by law provided against the Contractor for the breach of the conditions of this Agreement.

(h) It shall be a material breach of this Agreement if the Contractor and each subcontractor shall not at all times adhere to the provision of § 1A(e)(9) of chapter nine of the Revised Ordinances of the city by limiting their on-site, noise producing construction and related work to the hours specified by said ordinance.

(i) When the use of explosives is necessary for the execution of the work, the Contractor shall take the utmost care not to endanger life and property. Whenever directed, the number and size of the charges shall be reduced. All explosives shall be stored in a secure manner. All such storage places shall be marked clearly "DANGEROUS-EXPLOSIVES", and shall be in the care of competent watchmen at all times. The method of storage and handling explosives and highly inflammable materials shall conform to all the state laws and regulations, as well as any local requirements.

(j) Upon the completion of the work the Contractor shall, at his own expense, remove all equipment, temporary Contractor's buildings and sheds, fencing, rubbish and waste material in and about the area that has been worked and he shall leave the premises and the work performed all in a neat and proper condition.

(k) Before commencing the work the Contractor shall, if required, submit a schedule of operations for approval of the Contracting Officer or Architect. The schedule shall show the methods and order of operations that the Contractor proposes to use. The approval of the schedule by the Contracting Officer or Architect shall not be construed as relieving the Contractor from any responsibility.

(l) Should the Contractor be obstructed or delayed in the execution of the work as a result of damage which may be caused by lightning, earthquake, rain, storm, or cyclone, then the time fixed for completion may be extended for a period equivalent to the time lost by reason of any of the foregoing causes. No such extension shall be made unless a claim therefor is presented in writing to the Contracting Officer within forty-eight (48) hours of the occurrence of such delay. The Contractor shall have no claim against the City for damages on account of such delay. The duration of the extension itself must be certified to by the Contracting Officer or Architect.

ADDITIONAL WORK:

(11) (a) The Contractor agrees to perform any work related to the subject matter of the Contract, but not within its original scope, upon written order of the Contracting Officer or Architect, the payment for such extra work to be made in accordance with whichever of the following methods the Contracting Officer elects: (i) a price agreed upon between the parties and stipulated in the order for the extra work; or (ii) a price based on the unit prices of the contract; or (iii) a price determined to be the reasonable cost of the extra work as computed by the Contracting Officer in accordance with paragraph (b) below.

(b) In computing reasonable cost for the purposes of (iii) above, the Contracting Officer shall include the reasonable cost to the Contractor,

(i) of the cost of prevailing rates for direct labor, material, and use of equipment;

(ii) plus the cost of worker's compensation insurance, liability insurance, federal Social Security insurance, and Massachusetts unemployment compensation insurance or, as an alternative, the Contractor may elect to use a flat twenty-five percent (25%) of the total labor rate in (a);

(iii) plus ten percent (10%) of the total labor rate in (a) for overhead, superintendence and profit, which will be paid to the Contractor for Item 1 work, which is the work of the Contractor and all its non-filed subcontractors. On Item 2 work, which is the work of filed subcontractors, this ten percent (10%) will be allowed only to the filed subcontractor and is not applicable to any Paragraph E sub-subcontractors. The Contractor or the filed subcontractor, as the case may be, shall agree upon the distribution of the ten percent (10%) to their respective subcontractors as a matter of contract therewith;

(iv) for work performed by a filed subcontractor, the Contractor shall accept an additional five percent (5%) of the filed subcontractor's price (less the 10% mark-up), as full compensation for processing forms and assuming full responsibility for the faithful performance of such work by the filed subcontractor(s);

(v) plus actual direct premium costs of payment and performance bonds required of the Contractor and filed subcontractors, provided there will be an appropriate credit for premiums for a credit change order; and

(vi) if the extra work requires the use of heavy equipment, cranes and hoisting equipment, machinery, and special tools not on site and not originally required to be used upon the work, then the cost of transportation to and from the work site, not exceeding 100 miles, shall be included. The cost of extra work shall not include any cost or rental of small tools, buildings, or any portion of the time of Contractor's management or office personnel, or any allowance for use of capital.

(c) The Contracting Officer or Architect may make alterations in the line, grade, plan, form, dimensions, or materials of the subject matter of the Contract, or any part thereof, either before or after commencement of construction. Where such alterations increase the quantity or standard of the work to be done, payment for such increase shall be made in the same way that payment is made for extra work under (a) and (b) above. Where such alterations diminish the quantity or standard of the work to be done, an adjustment shall be made to the benefit of the City based upon the unit prices where used or, where unit prices are not used, as the Contracting Officer shall determine.

EMPLOYMENT:

(12) (a) The Contractor shall employ competent workers and if notified by the Contracting Officer, in writing, that any person engaged upon the work is incompetent, unfaithful, disorderly or otherwise unsatisfactory, then such worker shall be discharged from the work.

(b) In the performance of this Agreement, the Contractor shall comply with the provisions of Worcester Revised Ordinances Chapter 2, Section 35 as amended, which are included in the Supplemental General Conditions to the Contract.

(c) The parties shall comply with the provisions of section 179A of Chapter 149 of the Gen. Laws (Ter. Ed.). Notwithstanding any provisions to the contrary contained in the General or Supplemental Conditions to the Contract, in the employment of persons including mechanics, teamsters, chauffeurs and laborers, under this Contract, preference shall be given:

- | | |
|---------|--|
| First: | To citizens of the Commonwealth who are residents of the City of Worcester and who have served in the Armed Forces of the United States in time of war and have been honorably discharged therefrom or released from active duty therein, and who are qualified to perform the work to which the employment relates. |
| Second: | To citizens of the Commonwealth who are residents of the City of Worcester and are qualified to perform the work to which the employment relates. |
| Third: | To citizens of the Commonwealth who have served in the Armed Forces of the United States in time of war and have been honorably discharged therefrom or released from active duty therein and who are qualified to perform the work to which the employment relates. |
| Fourth: | To citizens of the Commonwealth generally. |
| Fifth: | To citizens of the United States. |

The foregoing provisions shall not apply to those persons employed in a supervisory capacity. In so far as practicable preference is to be given Worcester Truckers in hauling materials.

(d) No laborer, worker, mechanic, foreman, or inspector working within the Commonwealth of Massachusetts in the employ of the Contractor, sub-contractors, or other persons doing or contracting to do the whole or part of the work contemplated by this Agreement, shall be required or permitted to work more than eight (8) hours in any one (1) calendar day; or more than forty-eight (48) hours in one (1) week, or more than six (6) days in any one (1) week in full compliance with provisions of G.L. c. 149, s. 34, except in cases of emergency.

(e) Every employee in the work covered by the Contract shall lodge, board and trade where and with whom he elects and neither the Contractor nor his agents or employees shall directly or indirectly require as a condition of employment therein that an employee shall lodge, board or trade at a particular place or with a particular person.

(f) The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements of the Department of Public Health, local health officials or of other appropriate authorities. The maintenance of all sanitary facilities shall be subject to the laws of the Commonwealth and to the rules and regulations of the State Board of Health and of the Commissioner of Public Health for the City of Worcester.

(g) The Contractor shall, before commencing the work, provide by insurance for the payment of compensation and the furnishing of other benefits under Chapter 152 of the General Laws to all persons employed under the Agreement, and he shall continue such insurance in force and effect during the term hereof. The City may require the Contractor to deliver certificates of insurance as sufficient proof of compliance with the foregoing. Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of the Agreement and shall entitle the City to terminate the Agreement without in any way being liable in damages therefor.

(h) The Contractor shall keep a true and accurate register of all mechanics, teamsters, chauffeurs and laborers employed upon the work contemplated by this Contract, showing the name, address and occupational classification of each such employee, the hours worked by and the wages paid to each such employee, and shall furnish the Massachusetts Department of Labor and Industries, upon its request, a true statement thereof.

(i) Minimum wage rates under the provisions of General Laws chapter 149, section 27, as amended, have been determined by the Commissioner of Labor and Industries for the Commonwealth, and the Contractor shall in the payment of wages be bound by them during the life of the Agreement. The applicable schedule of minimum wage rates, as so determined, are incorporated elsewhere within the Contract Documents.

TERMINATION:

(13) (a) If the Contractor shall be adjudged as bankrupt, or if he shall make a general assignment for the benefit of his creditors, or if a receiver of his property shall be appointed, or if the work to be done under the Agreement shall be abandoned, or if the Agreement or any part of shall be sublet without the previous written consent of the Contracting Officer, or if the Contract or any claim hereunder shall be assigned by the Contractor otherwise than as herein specified, or if at any time the Contracting Officer shall be of the opinion that the work, or any part thereof, is unnecessarily or unreasonably delayed, or that the Contractor has violated any of the provisions of the Agreement, the Contracting Officer, for and in behalf of the City, may notify the Contractor to discontinue all work, or any part thereof; and thereupon the Contractor shall discontinue such work or such part thereof as the Contracting Officer may designate, remove his equipment, tools, supplies and materials as the Contracting Officer directs, and the City may thereupon, by contract or otherwise, as it may determine, complete the work, or such part thereof, and charge the entire expense of so completing the work or any part thereof to the Contractor.

(b) If the Contracting Officer or Architect shall certify by written notice to the Contractor that the rate of progress is not satisfactory, the City may, instead of notifying the Contractor to discontinue all of the work or any part thereof, notify him from time to time to increase the force, equipment and plant, or any of them, employed on the whole or any part of the work, stating the amount of increase required. Unless the Contractor shall, within seven (7) work days after such notice, increase his force, equipment and plant to the extent required therein, and maintain and employ the same from day to day until the completion of the work or such part thereof or until the conditions as to the rate of progress shall, in the opinion of the Contracting Officer or Architect, be fulfilled, the City may employ and direct the labors of such additional force, equipment and plant as may, in the opinion of the Contracting Officer or Architect, be necessary to ensure the completion of the work or such part thereof within the time specified or at the earliest possible date thereafter, and charge the expense thereof to the Contractor. Neither the notice from the Contracting Officer or Architect to the Contractor to increase his force, equipment or plant nor the employment of additional force, equipment or plant by the City shall be held to prevent a subsequent notice to the Contractor from the City to discontinue the work under the provisions of the preceding portion of this Article.

(c) All expenses charged under this Article shall be deducted by the City out of moneys then due or to become due the Contractor under this Agreement, or any part hereof. In such accounting the City shall not be obligated to obtain the lowest figures for the work of completing the contract or any part thereof, or for insuring its proper completion, and all sums actually paid by the City shall be charged to the Contractor. If the expense so charged is greater than the sum which would have been payable under the Agreement, if the same had been completed by the Contractor, then the Contractor shall pay the amount of the excess to the City upon completion of the work and without further demand being made therefor.

(d) The Contractor shall not be relieved of liability to the City by virtue of any termination of this Agreement and any claim for damages against the Contractor relating to the Contractor's performance hereunder shall survive any termination hereunder.

GUARANTEES:

(14) (a) The Contractor guarantees the work under this Contract and the materials furnished by him for use in connection therewith to be free from defects or flaws for one (1) year after the completion of the work, unless a greater period of time is prescribe by law, or by terms of any special guarantee required under any other provisions of the Contract Documents. It is expressly understood, however, that this guarantee provision shall not absolve the Contractor from any liability to the City arising out of a failure to substantially comply with the terms of the Agreement.

(b) If at any time within said guaranty period, any part of the work constructed under the terms of this Agreement shall, in the opinion of the Contracting Officer or Architect, require repairing due to defective work or materials furnished by the Contractor, he may notify the Contractor in writing to make the required repairs. If the Contractor shall neglect to start such repairs within ten (10) work days of the date of giving him notice thereof and to complete the same to the satisfaction of the Contracting Officer or Architect with reasonable dispatch, then the latter may employ other persons to make such repairs. The City shall charge the expense thereof to the Contractor and may use any moneys still retained to pay for the same, and if such sum is insufficient, the Contractor shall be obligated to pay the balance thereof.

INDEMNIFICATION:

(15) (a) The Contractor shall indemnify and save harmless the City of Worcester and all of its officers, agents and employees against all suits, claims or liability of every name, nature, and description arising out of or in consequence of the acts or omissions of the Contractor in the performance of the work covered by the Agreement and/or his failure to comply with the terms and conditions hereof, and will at his own cost and expense defend any and all such suits and actions.

(b) The Contractor shall bear all losses resulting from the use or storage of explosives and highly inflammable materials, and shall save the City harmless from all claims for bodily injuries or death to any person and from all claims for property damage or destruction arising out of the use or storage of explosives and highly inflammable materials.

(c) The Contractor further covenants to hold and save the City, its officers, servants and employees harmless from and against all and every demand or demands, of any nature or kind for or on account of the use of any patented invention, article or appliance included in the materials and equipment agreed to be furnished, supplied or used under this Agreement.

INSURANCE:

(16) (a) The Contractor shall carry public liability insurance with an insurance company satisfactory to the City so as to save the City harmless from any and all claims for damages arising out of bodily injury to, or death of, any person or persons and for all claims for damages arising out of injury to, or destruction of, property caused by accidents resulting from the use of implements, equipment or labor used in the performance of the Agreement or from any neglect, default omission or want of proper care or misconduct on the part of the Contractor or of any one in his employ during

the execution of the work. Such insurance shall include coverage for blasting and explosion, if explosives are to be used.

(b) The Contractor shall carry any other types of insurance as may be required elsewhere in the Contract Documents. All insurance policies required in the Contract Documents shall be provided by companies satisfactory to the City.

(c) Prior to starting work under this Agreement, the Contractor shall deposit, with the City's Law Department, certificates from the insurers to the effect that the insurance policies required in the above paragraphs have been issued to the Contractor. The certificates must be on a form satisfactory to the Law Department.

(d) Unless greater amounts of insurance coverage are required elsewhere in the Contract Documents, the amounts of such public liability insurance shall not be less than the minimum amounts set forth below:

- (i) Liability for bodily injury, including accidental death, \$250,000.00 for any one person and, subject to the same limit for each person, \$500,000.00 on account of one accident.
- (ii) Liability for property damage, \$100,000.00 on account of any one accident and \$300,000.00 on account of all accidents.
- (iii) Workers' compensation/employers' liability – MA statutory requirements.

(e) Unless greater amounts of insurance coverage are required elsewhere in the Contract Documents, the Contractor shall also carry bodily injury and property damage insurance in amounts not less than those set forth above, covering the operation of all motor vehicles owned by the Contractor and engaged in this work.

(f) No cancellation of any insurance whether by the insurer or by the insured shall be effective unless written notice thereof is given to the City at least fifteen (15) days prior to the intended effective date thereof, which date has been expressed in the notice. Prior to the effective date of any such cancellation the Contractor shall take out new insurance to cover the policies so cancelled. The Insurance Companies shall remain liable, however, until new and satisfactory insurance policies have been delivered to, and accepted by, the City.

CONFLICT OF INTEREST:

(17) (a) The Contractor warrants that he has complied with all provisions of law regarding the award of this Contract and that he, or his employees, agents, officers, directors or trustees have not offered or attempted to offer anything of any value to any employee of the City in connection herewith.

(b) The Contractor further warrants that no elected official or employee of the City of Worcester, including unpaid members of City boards and commissions, serves as an officer, director, trustee or employee of Contractor, and that no elected officials or employees of the City of Worcester have or will have a direct or indirect financial interest in this Agreement. The foregoing shall not apply, however, if the Contractor qualifies for an exemption and complies with the applicable disclosure provision(s) under G. L. c. 268A.

(c) Violation of this Article shall be a material breach of this Agreement and shall be grounds for immediate termination hereof by the City without regard to any enforcement activities undertaken or completed by any enforcement agency. Termination of this Agreement pursuant to this Article shall not waive any claims for damages the City may have against the Contractor resulting from the Contractor's violation of the terms of this Article.

SEVERABILITY:

(18) If any provision of this Agreement is held invalid by any court or body of competent jurisdiction, the remainder of this Contract shall remain in full force and effect.

HEADINGS:

(19) The section headings in this Agreement are for convenience and reference only and in no way define or limit the scope or content of this Agreement or in any way affect its provisions.

AMENDMENTS:

(20) This Agreement may be amended or modified only by written instrument duly executed by the parties.

ENTIRE AGREEMENT:

(21) This Agreement contains the entire understanding of the parties and supercedes all prior agreements, representations, proposals and undertakings of the parties.

IN WITNESS WHEREOF the Contractor has hereunto set his hand and seal and the City has caused its corporate seal to be hereto affixed and this Agreement to be executed in its name and behalf by a duly authorized officer thereof the day and year first above written.

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

CITY OF WORCESTER

RECOMMENDED:

CONTRACTOR

Julie A. Lynch, Chief
Department of Public Facilities

BY: _____(SEAL)

APPROVED AS TO LEGAL FORM:

CERTIFICATION OF FUNDING

I certify that an appropriation of funds in the amount of this Agreement is contained in account number _____.

Robert V. Stearns
City Auditor

APPROVED:

Eric D. Batista
City Manager

PAYMENT BOND

KNOW ALL BY THESE PRESENTS, that _____, a _____ corporation duly established by law and having a usual place of business at _____, as PRINCIPAL, and _____, a corporation organized under the laws of the State or Commonwealth of _____, and duly authorized and admitted, under the provisions of Chapter 175 of the Massachusetts General Laws, as amended, to transact the business of a fidelity and surety company in Massachusetts, as SURETY, are held and firmly bound unto the City of Worcester, a municipal corporation within the Commonwealth of Massachusetts, in the sum of _____ Dollars and no cents (\$_____.00) lawful money of the United States of America, to be paid to the City of Worcester, its successors and assigns, to the payment of which, well and truly to be made, the PRINCIPAL and the SURETY bind themselves, their respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said PRINCIPAL has entered into an Agreement of even date herewith with the City of Worcester, said Agreement being for the _____ at _____ in the City of Worcester, Massachusetts;

NOW THEREFORE, the condition of this obligation is such that if the PRINCIPAL shall pay for all labor performed or furnished and for all materials used or employed or any appliance and equipment used or employed or rented or hired out in the execution of said Agreement and in any and all duly authorized modifications, alterations, extensions of time, changes or additions to said Agreement that may hereafter be made, notice to the SURETY of such modifications, alterations, extensions of time, changes or additions being hereby waived, the foregoing to include any other purposes or items set out in, and to be subject to, the provisions of Massachusetts General Laws, Chapter 149, Section 29 and Chapter 30, Section 39A, as amended, then this obligation shall become null and void; otherwise it shall remain in full force and virtue.

IN TESTIMONY WHEREOF, the PRINCIPAL has hereunto caused its name and seal to be affixed, and the SURETY has caused its corporate seal to be hereunto affixed by a duly authorized officer thereof and this instrument to be executed and delivered in its name and behalf by its attorney-in-fact, duly authorized by its by-laws and votes, powers of attorney, and letters of appointment and authorization, certificated copies of which documents are annexed to this bond and may be introduced in evidence as if a part hereof.

(PRINCIPAL) _____ (SEAL)

By: _____

(SURETY) _____ (SEAL)

Attorney-in-Fact

PERFORMANCE BOND

KNOW ALL BY THESE PRESENTS, that _____, a _____ corporation duly established by law and having a usual place of business at _____ as PRINCIPAL, and _____, a corporation organized under the laws of the State or Commonwealth of _____, and duly authorized and admitted, under the provisions of Chapter 175 of the Massachusetts General Laws, as amended, to transact the business of a fidelity and surety company in Massachusetts, as SURETY, are held and firmly bound unto the City of Worcester, a municipal corporation within said Commonwealth of Massachusetts, in the sum of \$ _____ Dollars and no cents (\$ _____ .00) lawful money of the United States of America, to be paid to said City of Worcester, its successors and assigns, to the payment of which, well and truly to be made, the PRINCIPAL and the SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said PRINCIPAL has entered into an Agreement of even date herewith with the City of Worcester, said Agreement being for the _____, inclusive, at _____ in the City of Worcester, Massachusetts;

NOW THEREFORE, the condition of this obligation is such that if the said PRINCIPAL shall well and faithfully perform all the terms and conditions of said Agreement on its part to be kept and performed as therein stipulated, including guarantee and maintenance provisions therein, and shall pay for all materials furnished and for all labor performed in the execution of said Agreement, and shall indemnify and save harmless the said City of Worcester as therein stipulated, then this obligation shall be of no effect; otherwise it shall remain in full force and virtue.

And the said SURETY, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said Agreement, or to the work to be performed thereunder, or to the specifications accompanying the same, shall in any way effect its obligation on this bond; and it does hereby waive notice of any change, extension of time, alterations or additions to the terms of said Agreement, or to the work, or to the specifications.

In the event that the Agreement is abandoned by the Contractor, or is terminated by the City of Worcester, under the provisions thereof, said SURETY hereby further agrees that it shall, if requested in writing by the City of Worcester, take such action as is necessary to complete said Agreement.

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

IN TESTIMONY WHEREOF, the PRINCIPAL has hereunto caused its name and seal to be affixed, and the SURETY has caused its corporate seal to be hereunto affixed by a duly authorized officer thereof and this instrument to be executed and delivered in its name and behalf by its attorney-in-fact, duly authorized by its by-laws and votes, powers of attorney, and letters of appointment and authorization, certificated copies of which documents are annexed to this bond and may be introduced in evidence as if a part hereof.

(PRINCIPAL) _____ (SEAL)

By: _____

(SURETY) _____ (SEAL)

Attorney-in-Fact

STATE LAW NOW MANDATES THAT TO DO BUSINESS WITH THE CITY OF WORCESTER the Massachusetts Revenue Enforcement and Protection Program of 1983 requires that the following be supplied:

DATE: _____

Pursuant to Mass. G.L. c. 62C, Section 49A, I Certify under the Penalties of Perjury That I, To My Best Knowledge and Belief, Have Filed All Massachusetts State Tax Returns and Paid ALL Massachusetts State and City Taxes Required under Law.

Company Name _____

Street & No. _____

Signature of Individual
or
Corporate Officer
(if applicable)

City or Town _____ Tel No. _____

STATE _____ Zip Code _____

SOCIAL SECURITY NUMBER
OR
FEDERAL IDENTIFICATION NUMBER

CERTIFICATE OF VOTE OF AUTHORIZATION

Date _____

I hereby certify that at a meeting of the Board of Directors of: _____

duly called and held on the _____ day of _____, 20____, at which time it was voted that

_____ (name), _____ (title) be and hereby is authorized to execute and

deliver for and in behalf of the corporation, a contract with the City of Worcester for

_____ (the "Project") in the City of Worcester and, as Principal to execute a

Performance Bond and Labor and Materials Bond in connection therewith, which Contract and

Bonds were presented to and made a part of the records of said meeting.

I further certify that _____ is the duly qualified and acting _____

of the Corporation and that said vote has not been repealed, rescinded or amended.

A true copy of the record,

ATTEST

Clerk of the Corporation

(Corporate Seal)

Sworn to and subscribed to me this ____ day of _____, 20____.

Notary Public
My Commission Expires:

Certificate of Acknowledgement of Contractor if a Corporation

JUNE 8, 2023

for AGREEMENT

State of _____)

ss

County of _____)

On this ____ day of _____, 20____, before me personally came _____ to me known, who being by me duly sworn, did depose and say as follows:

That he/she resides at _____
and is the _____ (title) of _____, the
corporation described in and which executed the foregoing instrument; that he/she knows the
corporate seal of said corporation; that the seal affixed to the foregoing instrument is such corporate
seal and it was so affixed by order of the Board of Directors of said corporation; and that by the like
order he/she signed thereto his/her name and official designation.

Notary Public (Seal)

My Commission Expires: _____

JUNE 8, 2023

Certificate of Acknowledgment of Contractor if a Corporation

FOR CONTRACT BONDS

State of _____)

ss

County of _____)

On this ____ day of _____, 20____, before me personally came _____ to me known, who being by me duly sworn, did depose and say as follows:

That he/she resides at _____
and is the _____ (title) of _____, the corporation described in and which executed the foregoing instrument; that he/she knows the corporate seal of said corporation; that the seal affixed to the foregoing instrument is such corporate seal and it was so affixed by order of the Board of Directors of said corporation; and that by the like order he/she signed thereto his/her name and official designation.

Notary Public (Seal)

My Commission Expires: _____

END OF SECTION

SECTION 00 80 00

PREVAILING WAGE RATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections are hereby made a part of this Section.

1.2 SUMMARY

- A. This Section specifies the List of Jobs; Classifications; Determination of Rate of Wages; Schedule: as established under Statutory reference: M.G.L. Chapter 149, Section 26 and 27. These requirements apply to every contract or subcontract performing work on this public works project.
- B. Related Sections: Sections which contain requirements that relate to this Section include, but are not limited to the following:
 - 1. Section 00 15 00
 - 2. Section 00 95 00
- C. The aforesaid rates of wages in the schedule of wage rates shall include payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans as indicated in Supplementary Conditions section 00300, and such payments shall be considered as payments to persons under this section performing work as herein provided. Any employer engaged in the construction of such work who does not make payments to a health and welfare plan, a pension plan and supplementary unemployment benefit plan, where such payments are included in said rates of wages, shall pay the amount of said payments directly to each employee engaged in said construction.
- D. Every Contractor and Sub-Contractor at any and all tiers shall complete the "WEEKLY PAYROLL REPORT FORM" and submit a copy to the Contract Compliance Office (indicated below) for each week **consecutively**, after the start of that trades work.
- E. "WEEKLY PAYROLL REPORTS" shall be required to be submitted **consecutively**, for each week from the start of work until the completion of his work, regardless of whether work was actually being performed on or off-site.
 - 1. When work is not performed; indicate on the form the corresponding week ending dates and post "NO WORK PERFORMED" conspicuously on the front of said form.
 - 2. Weekly reports shall be required until the contractor executes and furnishes to the Department of Labor and Workforce Development/Division of Occupational Safety the final "STATEMENT OF COMPLIANCE" bound herein.

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

F. SUBMIT TO:

Purchasing Department
455 Main Street
Worcester, MA 01605
purchasing@worcesterma.gov
Tel 508-799-1220

1.3 SAMPLE FORMS FOLLOW THIS PAGE.

- A. Final form and format shall be as approved by the Contract Compliance Office.

JUNE 8, 2023

**WEEKLY PAYROLL RECORDS REPORT
& STATEMENT OF COMPLIANCE**

In accordance with Massachusetts General Law c. 149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit, on a weekly basis, a copy of their weekly payroll records to the awarding authority. For every week in which an apprentice is employed, a photocopy of the apprentice's identification card must be attached to the payroll report. Once collected, the awarding authority is also required to preserve those reports for three years.

In addition, each such contractor, subcontractor, or public body shall furnish to the awarding authority directly, within fifteen days after completion of its portion of the work, a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

_____, 200_____

I, _____,
(Name of signatory party) (Title)

do hereby state that I pay or supervise the payment of the persons employed by

_____ on the _____
(Contractor, subcontractor or public body) (Building or project)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.

Signature _____

Title _____

JUNE 8, 2023

Company Name:

Journal of Management Inquiry 22(1) 3-16

☐ Prime Contractor

Project Name:

[illegible]☐ Subcontractor

According to Axtell,

List Prime Contractor:

Work Week Ending:

Employer Signature: _____

[illegible]

Print Name & Title:

100

☐ Final Report[illegible]

NOTE: Every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority.

THE MASSACHUSETTS PREVAILING WAGE LAW
(MGL. c149, §§26-27H)

AN IMPORTANT GUIDE FOR
CONTRACTORS
DOING PUBLIC WORKS
PROJECTS
IN
MASSACHUSETTS

PREVAILING WAGE SCHEDULES

Every contractor should obtain a schedule of prevailing wage rates for every public works project from the Awarding Authority (city, town, county, district, state agency or authority). It is the awarding authority's responsibility to ensure that a copy of the wage schedule is provided to all contractors from whom estimates or bids are solicited for all projects. The Department of Labor and Industries (DLI) will not issue wage schedules directly to contractors or employees.

Once a wage schedule has been issued for a project by DLI, it will remain in effect for the entire project. Appeals of wage determinations or classifications of employment may be made to the DLI commissioner.

A copy of the wage schedule is required to be posted at the work site.

A wage schedule issued for a project may not be used on any other project. If, by chance, an Awarding Authority fails to provide you with a wage schedule to use when figuring your bid, do not use one you may have from another project.

In this case, you should contact DLI immediately and urge the awarding authority to contact DLI to correct the oversight.

The failure of an Awarding Authority to provide a wage schedule does not excuse a contractor from paying the prevailing rate.

BIDDING

The Attorney General's Division of Fair Labor & Business Practices enforces the prevailing wage law. All bids must reflect prevailing wage rates. Contractors may be required by an Awarding Authority to "demonstrate ... how (they) could complete the project and comply with Mass. Gen. Laws." The Division issued an "Advisory" discussing these and other points. For a copy, please contact the Attorney General's Office.

PAYING EMPLOYEES

Prevailing wages must be paid to all employees on public works projects regardless of whether they are employed by the general contractor, a filed sub-bidder or any sub-contractor. The prevailing wage applies equally to unionized and non-unionized workers.

All employees who perform work on a public works project must be paid hourly according to the wage schedule issued for the particular project.

The wage schedule issued for each project is in effect for the duration of that project. All wage increases listed on the schedule must be paid on the specified dates.

Employers are limited in the deductions that can be made from the hourly rate (represented as the "total rate" on the wage schedules). Only contributions to the following plans may be deducted:

1. Health Plan
2. Pension
3. Supplementary Unemployment

All contributions must be made to bona fide plans.

If an employer contributes to any, or all, of the above plans, it may deduct the hourly amount contributed from the "total rate." If the employer does not contribute to any of the benefit plans listed above, then the employee's hourly rate of pay will be the "total rate" from the wage schedule.

All other deductions, including and not limited to the following," from the wage schedule.

All other deductions, including and not limited to the following, may not be subtracted from the employee's hourly wage rate:

1. Vacation Time
2. Sick Time
3. Training Funds
4. Charitable Contributions
5. Worker's Compensation
6. Unemployment Insurance
7. Uniforms

Overtime, which must be paid to all employees who work more than 40 hours per week, shall be at least time-and-one-half the base rate ("total rate" less benefits, if any).

Any "separate check" given to an employee as the "benefit portion" of the prevailing wage may not be treated differently than the check for "base wages." All "separate checks" are considered wages and subject to state and federal taxes, unemployment insurance, and worker's compensation requirements.

PAYROLL RECORDS

Employers are required to submit weekly-certified payroll reports to the Awarding Authority and keep them on file for three (3) years. A reporting form is sent along with each wage schedule that may be used. Each report must contain at least: the employee's name, address, occupational classification, hours worked and wages paid. Do not submit weekly payroll reports to DLI.

After each contractor completes its portion of the public works project, the contractor must submit a Statement of Compliance to DLI. A Statement of Compliance form is also sent along with each wage schedule issued.

APPRENTICES

If your company employs apprentices, they must be registered with the Division of Apprentice Training. All persons not registered with DAT must be paid the "total rate" listed on the wage schedule. An apprentice sheet showing percentages based on the apprentice steps is included with all wage schedules.

PENALTIES

Failure to pay the prevailing wage subjects the contractor to potential civil and criminal liability.

Wage schedules are issued by:

MA Dept. of Labor & Industries
100 Cambridge St., 11th Fl.
Boston, MA 02202
(617) 727-3492

Enforcement is carried out by:

Office of the Attorney General,
Fair Labor & Business Practices Div.
100 Cambridge St., 11th Fl.
Boston, MA 02202
(617) 727-3477

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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No General Bidder or Filed Sub-bidder will be eligible for a contract award unless the following certification has been completed and submitted to the Awarding Authority with its bid.

**CITY OF WORCESTER
FORM OF
TAX PAYMENT CERTIFICATE**

STATE LAW NOW MANDATES THAT TO DO BUSINESS WITH THE CITY OF WORCESTER the Massachusetts Revenue Enforcement and Protection Program of 1983 requires that the following be supplied with your Bid:

Date: _____

Pursuant to M.G.L. Chapter 62C, Section 49A, I certify under the Penalties of Perjury That I, To My Best Knowledge and Belief, Have Filed ALL Massachusetts State Tax Returns and Paid ALL Massachusetts State and City Taxes Required under Law.

Company Name: _____

Street and Number: _____

City or Town: _____

State: _____ Zip Code: _____

Telephone Number: _____

Social Security Number or Federal Identification Number: _____

Is Company Certified by State Office of Minority and Women Business Assistance (SOMWBA)?

Yes _____ Date of Certification: _____

No _____

Failure to complete this form may result in rejection of Bid and/or removal from City Bid Lists.

BIDDER'S Authorized Signature

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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IMPORTANT NOTICE TO BIDDERS

**** RESPONSIBLE EMPLOYER ORDINANCE**

and

MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION

BIDDERS MUST COMPLETE FORMS EOO-101 AND REO-101,
WHICH ARE PART OF THE BID SUBMISSION

GENERAL BIDDERS, PROPOSERS, TRADE CONTRACTORS, FILED SUBCONTRACTORS, AND NON-FILED SUBCONTRACTORS, AT EVERY TIER, MUST PROVIDE EVIDENCE OF COMPLIANCE WITH THE CITY OF WORCESTER'S RESPONSIBLE EMPLOYER ORDINANCE ("REO") (See, Supplementary General Conditions, Section 4.7).

PLEASE SEE THE FOLLOWING PAGES FOR FURTHER REO REQUIREMENTS.

Direct any questions about these forms and procedures to:

Contract Compliance Officer
City Hall – Room 201
455 Main Street
Worcester, MA 01608
(508) 799-1174
purchasing@worcesterma.gov

** This requirement applies to general bids over \$100,000 and all subcontractors at every tier exclusive of any pricing threshold.

MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION
BIDDERS INFORMATION ON PROCEDURES AND FORMS

FORM E00-D/102

To make all contractors aware of their obligation to follow certain procedures and file appropriate reports pertaining to those procedures, the following sets for the City's the Minority/Women Business Enterprise and Worker Utilization requirements and the Responsible Employer Ordinance. Also included is the Affidavit of Acknowledgement and Certification of Compliance, Form E00-101. This form is to be completed and filed as part of your bid.

The following documents are included in this bid:

1. **AFFIDAVIT OF ACKNOWLEDGEMENT AND CERTIFICATION OF COMPLIANCE, E00-101**

General Contractors, Trade Contractors, Filed Subcontractors and Non-Filed Subcontractors shall complete and submit this form as part of their bid on all City construction projects. Each additional subcontractor shall complete this form and submit it to the general contractor who shall forward it to the Contract Compliance Office, **PRIOR** to the subcontractor's beginning work on the project.

2. **SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY ANTI-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM E00-D/3**

The Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action requirements establish the goals and procedures for the utilization of minority and women owned businesses and people of color and women workers on City construction projects.

3. **SUCCESSFUL BIDDER'S OBLIGATION TO PROCEDURES AND FORMS, E00-D/103**

At page __, the list of procedures and forms that will be provided to the successful bidder for use prior to beginning work and at various times throughout the life of the project.

4. **AFFIDAVIT OF ACKNOWLEDGEMENT AND CERTIFICATION OF COMPLIANCE, E00-101**

General Contractors, Trade Contractors, Filed Subcontractors and Non-Filed Subcontractors complete and submit this form as part of their bid on all City construction projects. Each additional subcontractor shall complete this form and submit it to the general contractor who shall forward it to the Contract Compliance Office, **PRIOR** to the subcontractor's beginning work on the project.

5. **SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY ANTI-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM E00-D/3**

The agreement between the City of Worcester and the Massachusetts Commission Against Discrimination establishing the goals and procedures for the utilization of minority and women owned businesses and minority and women workers on City Construction projects.

6. SUCCESSFUL BIDDER'S OBLIGATION TO PROCEDURES AND FORMS, E00-D/103

This is a listing of the procedures and forms that will be provided to the successful bidder for use prior to beginning work and at various times throughout the life of the project.

CITY OF WORCESTER
MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION
PROGRAM
AFFIDAVIT OF ACKNOWLEDGEMENT and CERTIFICATE OF COMPLIANCE
FORM EOO-101

TO ALL CONTRACTORS:

The Bidder or Proposer and all Trade Contractors and Subcontractors under the Bidder or Proposer must complete and submit this form as part of their bid.

I. THE MINORITY AND WOMEN BUSINESS AND UTILIZATION PROGRAMS

During the performance of any contract with the City, all General Contractors, Trade Contractors, Filed Subcontractors, and Subcontractors are bound by the obligations of the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program. All contractors and subcontractors (if subcontracting any portion of the work) are obligated to make a good faith effort to engage 10% minority and 15% women owned businesses. Further, each contractor shall make a good faith effort to maintain a workforce that is 38% minority and 10% women.

The undersigned hereby certifies that he/she is familiar with the provisions of the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Programs and agrees to adhere to the provisions therein.

II. This contractor IS ☐ or IS NOT ☐ certified by the Supplier Diversity Office of the Commonwealth of Massachusetts to be a minority or women owned and operated business; and

III. WILL ☐ or WILL NOT ☐ subcontract any portion of this contract.

Project Name: _____ Bid Number: _____

Authorized Signature: _____ Business Name: _____

Printed Name: _____ Title: _____

Address: _____ Date: _____

FORM EOO-D/3

THE CITY OF WORCESTER

SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY ANTI-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM

I. AGREEMENT

During the performance of this contract, the contractor or subcontractor (herein collectively referred to in this Form EOO-D/3 as the “Contractor”), for himself/herself, his/her assignees, and successors in interest, agree as follows:

1. In conjunction with the performance of work under this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religious creed, national origin, age, sex, or handicap. The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising; layoff; termination, rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship. The Contractor shall post hereafter in a conspicuous place, available to employees and applicants for employment, notices to be provided by the Commission setting forth the provisions of the Fair Employment Practices Law of the Commonwealth (G.L. Chapter 151 B).
2. In connection with the performance of work under this contract, the Contractor shall undertake in good faith affirmative action measures designed to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, age, sex, or handicap, and to eliminate and remedy any effects of such discrimination in the past. Such affirmative action shall entail positive and aggressive measures to ensure equal opportunity in the areas of apprenticeship training programs. This affirmative action shall include all action required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, age, sex, or handicap. The purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future City public construction projects.

II. OBLIGATION

1. As part of the obligation of remedial action under the foregoing section, the Contractor shall maintain goals on this project no less than thirty eight percent (38%) minority employee and ten percent (10%) women employee hours of the total work hours in each job category including but not limited to, bricklayers, carpenters, cement masons, electricians, iron workers, operating engineers, and those “classes of work” enumerated in G.L. c. 149, Sec. 44F.
2. In the hiring of minority and women journeymen, apprentices, trainees and advanced trainees, the Contractor shall rely on referrals from a multi-employer affirmative action program approved by the City, traditional referral methods used by the construction

industry, and referrals from agencies, not more than three (3) in number at any one time, designated by the City.

III. REPORTS

1. Contractor shall prepare projected manning tables on a quarterly basis, **Quarterly Projected Workforce Table, E00-105**. These shall be broken down into projections by week, for workers required in each trade. Copies shall be furnished to the City one week in advance of the commencement of the period covered, and at such time as there is a need to be updated during the period.
2. The Contractor shall prepare records of employment referral orders, shall be made available to the City on request.
3. The Contractor shall prepare the **Certified Payroll Report on a weekly basis**, which lists the hours worked in each trade by each employee identified as minority, non-minority, male and female. Copies of these shall be provided to the City at the end of each week.

IV. SUBCONTRACTING WORK

If the Contractor shall use any Subcontractor on any work performed under this contract, affirmative action shall be taken to negotiate with qualified minority and women contractors. This affirmative action shall cover both pre-bid and post-bid periods.

V. EMPLOYMENT

In the employment of journeymen, apprentices, trainees, and advanced trainees, the Contractor shall give preference, first to citizens of the Commonwealth who have served in the armed forces of the United States in time of war and have been honorably discharged there from or released from active duty therein, and who are qualified to perform the work to which the employment relates, and, secondly, to make reasonable efforts to employ citizens of the Commonwealth generally, and, if such cannot be obtained in sufficient numbers, then to citizens of the United States.

VI. RIGHT OF ACCESS

A designee of the City shall have the right of access to the construction site.

VII. COMPLIANCE WITH REQUIREMENTS

The Contractor shall comply with the provisions of Executive Order No. 452, as amended and of Chapter 151B as amended, of the Massachusetts General Laws.

VIII. NON-DISCRIMINATION

The Contractor, in the performance of all work after the award, and prior to completion of the contract work, will not discriminate on the grounds of race, color, religious creed, national origin, age, sex, or handicap in employment practices, in the selection or retention of other contractors or in the procurement of materials and rentals of equipment.

IX. SOLICITATIONS FOR SUBCONTRACTORS, AND FOR THE PROCUREMENT OF MATERIALS AND EQUIPMENT

The Contractor shall, in writing, notify each entity to which it solicits (either by competitive bidding or negotiation, as applicable) for work under a subcontract or for materials or supplies of the Contractor's obligation relative to non-discrimination and affirmative action.

X. CONTRACTOR'S CERTIFICATION

Contractors bidding as General Contractors or Filed Sub-contractors shall certify that they will comply with the City's workforce goals and business enterprise goals and specific affirmative action steps contained in this Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program by signing and submitting with the bid the **Affidavit of Acknowledgement and Certification of Compliance, Form E00-101.**

If any Contractor subcontracts any portion of the work, the Contractor is required to obtain from each Subcontractor, regardless of tier, an Affidavit of Acknowledgement and Certification of Compliance, Form E00-101 stating that it will comply with the minority and women subcontracting and manpower ratios and specific affirmative action steps contained in this Supplemental Equal

Employment Opportunity Anti-Discrimination and Affirmative Action Program by signing this form and submitting it to the Contractor for submission to the awarding authority not later than five working days following the opening of the bids.

XI. COMPLIANCE – INFORMATION, REPORTS

The Contractor will provide all information and reports required by the City on instructions issued and will permit access to its facilities and any books, records, accounts and other sources of information which may be determined by the City to affect the employment of personnel and the City's supplementary affirmative action contract requirements. Where information required is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the City and shall set forth what efforts have been made to obtain the information.

XII. SEVERABILITY

The provisions of this Section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decisions of such court shall not affect or impair any of the remaining provisions.

XIII. WAIVER

The City reserves the right to waive any stipulation in the M/WBE Program when deemed necessary or appropriate for the general good of the City and its programs.

DEFINITIONS

Contractor - Except where otherwise specifically stated the term "Contractor" shall mean any General Contractor, Prime Contractor, and/or HVAC Contractor. These titles shall be considered synonymous within the Project Manual.

City - is the City of Worcester, Massachusetts

M/WBE – is A Minority and Women Business Enterprise as certified by the State Office of Minority and Women Business Assistance to be 51% or more minority or women owned and operated.

Person of Color/People of Color – shall mean individuals who are not classified as non-Hispanic/Latino white. This definition shall also apply to the terms of “Worker of Color” and “Workers of Color.”

**CITY OF WORCESTER
INITIAL STATEMENT AND CERTIFICATION OF COMPLIANCE
WITH THE RESPONSIBLE EMPLOYER ORDINANCE**

FORM REO 101 - PAGE 1 OF 2

PROJECT:

CONTRACTOR:

ALL BIDDERS, PROPOSERS AND ALL SUBCONTRACTORS AND TRADE CONTRACTORS, INCLUDING SUBCONTRACTORS NOT SUBJECT TO G.L. c. 149, § 44F, UNDER THE BIDDER FOR PROJECTS SUBJECT TO G.L. c. 149, § 44A(2), AND PROPOSERS FOR PROJECTS SUBJECT TO G.L. c. 149A, SHALL AS A CONDITION TO SUBMITTING A BID OR A PROPOSAL, OR SUBCONTRACTING, OR IN ANY EVENT PRIOR TO ENTERING INTO A SUBCONTRACTOR AT ANY TIER, VERIFY UNDER OATH COMPLIANCE WITH THE FOLLOWING OBLIGATIONS AND FURTHER SHALL CERTIFY SUCH COMPLIANCE ON A WEEKLY BASIS FOR THE DURATION OF THE PROJECT:

- 1) That the applicable Prevailing Wage Rates shall be paid to all employees and the Weekly Payroll Report Form and Statement of Compliance shall be submitted to the Contract Compliance Office on a weekly basis for the entire duration of the project;
- 2) The contractor and subcontractors shall furnish and maintain appropriate industrial accident insurance coverage, for the duration of the project, for all their respective employees employed on the project in accordance with G.L. c. 152;
- 3) That the contractor and subcontractors shall properly classify employees on the project as employees rather than independent contractors and treat them accordingly for purposes of workers' compensation insurance coverage, unemployment taxes, social security taxes and income tax withholding. (G.L. c.149, §148B);
- 4) That at the time employees begin work at the worksite, each employee will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration;
- 5) That the contractor and subcontractor is in compliance with the health and hospitalization requirements of the Massachusetts Health Care Reform law established by Chapter 58 of the Acts of 2006, as amended, and regulations promulgated pursuant to that statute by the Commonwealth Health Insurance Connector Authority;
- 6) That the contractor and subcontractor, for the duration of the applicable contractor's and subcontractor's work on the project, shall ensure that each of its employees

entering or leaving the project individually completes the appropriate entries in a daily sign-in/sign-out log to be maintained by the contractor;

- 7) That the contractor is not debarred or otherwise prevented from bidding for or performing work on a public project in the Commonwealth of Massachusetts or in the city of Worcester

THE UNDERSIGNED ACKNOWLEDGES HE/SHE HAS READ THE ABOVE
OBLIGATIONS AND CERTIFIES THE CONTRACTOR'S COMPLIANCE WITH THEM.

Signed as a True Statement under Oath:

(Bidder)

(Signature)

Date: _____

(Print Name and Corporate Title)

(Seal)

RESPONSIBLE EMPLOYER ORDINANCE
and
MINORITY/WOMEN BUSINESS ENTERPRISE AND WORKER UTILIZATION

=====

FORM E00-D/103

SUCCESSFUL BIDDER'S OBLIGATION
TO COMPLY WITH PROCEDURES AND FORMS

Successful bidders (may also be referred to as “contractor” on this Form E00-D/103) on City construction projects will receive a package of procedures and forms to be used at specific times throughout the life of the project.

The following is a list of the documents that will be sent to successful bidders when this office is notified that a contract has been, or is about to be, executed. If the successful bidder does not receive this package of procedures and forms, it shall be responsible to promptly contact the Purchasing Division and request said package be provided.

I. BUILDING TRADES – CONTACT LIST, E00-D/6

When a contractor cannot fulfill the worker utilization percentages, the contractor may contact the appropriate building trades locals to request assistance in locating and engaging qualified workers.

II. AFFIDAVIT OF ACKNOWLEDGEMENT and CERTIFICATION OF COMPLIANCE, (FOR SUBCONTRACTORS), E00-101

If any portion of a project is to be subcontracted at any tier, each additional subcontractor shall complete this form and send it to the Contract Compliance Officer within two business days of contract execution and PRIOR to beginning work on the project.

III. TABLE OF PROJECTED SUBCONTRACTORS, E00-103

The contractor shall report the use of subcontractors at any tier to the Contract Compliance Officer on this form prior to the subcontractor beginning work on the project.

IV. SUBCONTRACTOR'S CERTIFICATE OF INTENT TO PARTICIPATE, E00-104

Each non-filed subcontractor engaged to work a project shall complete and forward this form to the Contract Compliance Officer prior to beginning work on the project.

V. QUARTERLY PROJECTED WORKFORCE TABLE, E00-105

Each contractor and subcontractor, regardless of tier, shall complete and forward this form to the Contract Compliance Officer prior to beginning work and again for each additional three month period throughout the life of the project.

VII. INITIAL STATEMENT and CERTIFICATION OF COMPLIANCE WITH THE

RESPONSIBLE EMPLOYER ORDINANCE, REO-101 (Pages 1 & 2)

General contractors, trade contractors, and subcontractors shall complete and submit this form as part of their bid on all City construction projects subject to the provisions of G.L. c. 149 and c. 149A.

The REO requirements are applicable under G.L. c. 149 to contracts of \$150,000 or more. Under G.L. c. 149A the requirements are applicable only to contracts \$5,000,000.00 or more. here is no minimum threshold for subcontractors. Therefore all subcontractors, i.e., trade contractors, and subcontractors at every tier must comply with the requirements of the REO.

The general contractor shall forward all trade contractor's and subcontractor's (at any tier) REO-101 and REO 103 Forms and REO documentation to the Contract Compliance Officer for approval, PRIOR to said subcontractor's beginning work.

VIII. WEEKLY STATEMENT AND CERTIFICATION OF COMPLIANCE WITH THE RESPONSIBLE EMPLOYER ORDINANCE, REO-102

At the end of each week of work, ALL contractors, trade contractors, and subcontractors, regardless of tier, subject to the provisions of G.L. c. 149 and c. 149A, shall complete and submit this form along with their certified payroll reports to the Contract Compliance Officer.

IX. WEEKLY CERTIFIED PAYROLL REPORT and WEEKLY WORKFORCE UTILIZATION REPORT.

At the end of each week of work, all contractors and subcontractors, regardless of tier, shall complete and submit these forms to the Contract Compliance Officer.

The Contract Compliance Office will also accept computer generated payroll reports. However, if the computer payroll does not reflect the prevailing wage, the Contractor must provide a breakdown of the benefits paid to each employee which when added to the base wage equals the prevailing wage.

CITY OF WORCESTER
RESPONSIBLE EMPLOYER ORDINANCE REQUIREMENTS

FORM REO 103 PAGE 1 OF 1

PROJECT:

CONTRACTOR:

POST CONTRACT AWARD SUBMISSIONS

THE GENERAL CONTRACTOR, CONSTRUCTION MANAGER AT RISK, TRADE CONTRACTORS AND SUBCONTRACTORS, INCLUDING SUBCONTRACTORS THAT ARE NOT SUBJECT TO G.L. c. 149, §44F, AND THE GENERAL CONTRACTOR FOR PROJECTS SUBJECT TO G.L. c. 149, §44A(2) AND THE CONSTRUCTION MANAGER AT RISK FOR PROJECTS SUBJECT TO G.L. c. 149A, SHALL SUBMIT THE FOLLOWING INFORMATION AS OUTLINED BELOW FOR THE DURATION OF THE PROJECT:

1. PRIOR TO EACH EMPLOYEE BEGINNING WORK AT THE WORKSITE, IT SHALL SUBMIT DOCUMENTATION EVIDENCING THE EMPLOYEE'S SUCCESSFUL COMPLETION OF A COURSE IN CONSTRUCTION SAFETY AND HEALTH THAT IS APPROVED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. A QUALIFYING PROGRAM MUST BE A MINIMUM OF TEN HOURS IN DURATION.

2. ON A DAILY BASIS, SUBMIT DAILY SIGN-IN/SIGN-OUT LOGS COMPLETED BY EACH INDIVIDUAL EMPLOYEE ENTERING OR LEAVING THE WORKSITE. THE LOG SHALL INCLUDE THE FOLLOWING: THE LOCATION OF THE PROJECT; CURRENT DATE; PRINTED EMPLOYEE NAME; SIGNED EMPLOYEE NAME; AND THE TIME OF EACH ENTRY OR EXIT. THE LOG SHALL ALSO INCLUDE A PROMINENT NOTICE THAT EMPLOYEES ARE ENTITLED UNDER STATE LAW TO RECEIVE THE PREVAILING WAGE RATE FOR THEIR WORK ON THE PROJECT.

END OF SECTION 009500

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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SECTION 01 01 00

SUMMARY OF WORK

PART 1 – GENERAL

1.01. CONTRACT DOCUMENTS

- A. The Contract Documents include the Drawings as enumerated on the Title Drawing, the general provisions of Contract, including General and Supplemental Conditions, and the provisions of this Project Manual and Addenda represent and describe the work and requirements of the Project.

1.02. GENERAL REQUIREMENTS

- A. Attention is directed to the general and supplementary conditions and Division 1 including all sub-divisions therein attached in this document and drawings, which are made a part of this section.

1.03. SUBSTANTIAL COMPLETION

- A. The Date of Substantial Completion shall be September 15, 2023.
- B. The Contractor shall obtain a Certificate of Occupancy on or before the Date of Substantial Completion.

1.04. PROJECT DESCRIPTION

- A. The project scope generally consists of removing the existing overhead garage door, enlarging the existing overhead door opening, re-piping old water heater, reconnect power to relocated existing door opener, and provide a new electric cabinet heater.

1.05. RELATED WORK UNDER OTHER CONTRACTS

- A. Work by other contractors, which will be under separate contract, may take place during the work of this contract adjacent to and within the work areas of this site.
- B. Cooperate fully with other contractors so that work under those contracts may be carried out smoothly, without interfering with or delaying work under this contract.

1.06. QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies; perform demolition work in accordance with applicable rules, regulations, codes, and ordinances of local, state, and federal authorities.
- B. Obtain and pay for necessary building permits, licenses and certificates and give notices as required during the performance of the Work.
- C. Provide 4 copies of shop drawings and literature for Architects review and approval for the items referenced in the specifications.
- D. Provide schedule and work plan within one week of the contract signing.

- E. Attend weekly meetings (or as scheduled) with the Architect and Owner's Representative as scheduled.
- F. Provide all Closeout documents including final acceptance, warranties, guaranties, and bonds.

1.07. RELATED WORK UNDER OTHER CONTRACTS

- A. Work by other contractors, which will be under separate contract, may take place during the work of this contract adjacent to and within the work areas of this site. This work, under another contract, shall be coordinated between the different General Contractors. The security system will be installed by the Owner under separate Contract and the general Contractor shall work with the Owners vendor to coordinate their work with the General contractor's work.
- B. Cooperate fully with separate contractors so that work under those contracts may be carried out smoothly, without interfering with or delaying the work under this contract.

1.08. WORK SEQUENCE SCHEDULING AND COORDINATION

- A. The Work shall be sequenced, scheduled, and coordinated to achieve the Date of Substantial Completion.
 - 1. All deliveries must be scheduled at a minimum of 48 hours in advance with the Architect and Owner.
 - 2. All existing utility tie-ins must be scheduled and coordinated at a minimum of 72 hours in advance with the Architect and Owner.
- B. The General Contractor and each Sub-Contractor shall establish and increase or decrease as appropriate the workforce, days of work, number of shifts, work hours, materials, tools, and equipment needed to maintain and achieve the Date of Substantial Completion.
- C. The General Contractor and each Sub-Contractor shall increase the workforce, days of work, number of shifts, work hours, materials, tools, and equipment needed to maintain the Date of Substantial Completion as necessary to accommodate any additional work authorized by Construction Change Directives and Change Orders modifications.
- D. General Contractor will be responsible for the proper conduct of the work to ensure that all trades work together, and in harmony, to achieve substantial and final completion as specified.

1.09. WORK HOURS

- A. Normal working hours are to be Monday through Friday from 7:00 AM to 3:30 PM, except Legal Holidays. Any working hours outside of these times shall be considered "Extended Hours" and treated as described below.
- B. Extended work hours shall require prior scheduling and coordination with the Architect and Owner at a minimum of 48 hours in advance. Extended work hours on Sundays and Legal Holidays may also require a permit from the Police Department.
 - 1. Upon permission from the Architect and Owner, and prior to the start of any extended work, pay for all fees and obtain through the City of Worcester Fire Department a work permit for all Sundays and Legal Holidays.

- C. The Contractor shall pay any overtime required for the City's Clerk of Works/Owner's Representative to be on site for any work performed outside of normal working hours as defined above. No work shall take place outside of normal working hours without prior approval and the City's Clerk of Works/Owner's Representative on site.
- D. Any project related activities may not interfere with the enjoyment and use of abutting areas within the building or adjacent properties during any extended work hours.

1.10. CONTRACTOR USE OF THE PREMISES

- A. The General Contractor shall have use of the site from date of contract to the Date of Substantial Completion as described above in the Work Hours paragraph.
- B. Construction vehicle access and deliveries to the project shall be made during working hours.
- C. All contractor personnel shall enter and exit the construction area through Access Driveway.
- D. Do not close or obstruct the parking lot, driveways, or sidewalks without the proper permit. Conduct operations with minimum traffic interference.
- E. The General Contractor shall also be responsible for returning the public areas adjacent to each work area to their original state prior to the start of work in that area.
- F. The use of internal combustion engine driven power equipment is prohibited within the building. Alternate power sources, i.e., generators and compressors, may be placed outside the building to provide power to equipment. Placement of any alternate power sources shall be subject to prior Architect and Owner approval.
- G. There will be no washing of any vehicles at the project site. The contractor shall make necessary provisions to accommodate this work off site.
- H. All cleaning and washing of tools and/or equipment shall be performed in areas designated only by the Architect. This will be strictly enforced.

1.11. CONTRACTOR USE OF CITY STREETS

- A. The General Contractor's personnel, and all other personnel employed on the project, shall limit their parking on the site to within the areas designated for construction parking and as permitted by the General Contractor. Additionally, Contractor personnel may park as legally allowed within City Limits. Parking on street sidewalks is prohibited.
- B. Driveway entrances, walks, and yards to abutting properties shall be always kept unobstructed.

1.12. WORK CONDITIONS

- A. Neither the General Contractor, nor Sub-Contractors at any level, nor their employees shall bring illegal substances or alcoholic beverages on the premises.
- B. Vulgar, abusive, obscene language or behavior will not be tolerated.
- C. The Contractor's personnel engaging in the above shall be removed from the jobsite.
- D. Radios or any type of "music" broadcasting systems are not allowed.
- E. This site is smoke-free; therefore, smoking is prohibited within the site limits.

1.13. PROJECT MANAGER, SUPERINTENDENTS, FIELD ENGINEER, AND FOREMAN

- A. The General Contractor shall provide a qualified General Superintendent, who shall be present, full time, on site daily during all work in progress until the Date of Substantial Completion, and for such additional time thereafter as the Architect may determine. Only under extenuating circumstances, with the approval of the Architect and Owner, will the Contractor be allowed to substitute for the General Superintendent prior to the date of Final Completion.
- B. The General Superintendent shall supervise and direct the activities of other superintendents and foremen on site. He shall not perform the work of foremen, tradesmen, or home office staff.
- C. Each filed sub-bidder and each subcontractor shall provide a Lead Foreman, responsible to be on site full time during the workday.
- D. Each foreman, in addition to his regular duties shall be responsible for establishing, maintaining, and providing record drawings, which are required to be updated prior to submitting the current period's draft Application for Payment.
- E. The General Superintendent and Lead Foreman shall not be discharged or changed without prior written consent of the Architect, which will not be unreasonably withheld. The Architect will require that all as-built information be updated and current prior to granting consent.

1.14. DAILY REPORTS AND WEEKLY OUTLINE SCHEDULE

- A. The General Superintendent shall provide a "Daily Report" to the Clerk of Works containing the following:
 - 1. Name and manpower of each Contractor filed Sub-Contractor, and Sub Contractor.
 - 2. Equipment used.
 - 3. Delivery of products received on site.
 - 4. Weather conditions at start, and end of each day and any significant changes or events during the day.
 - 5. Significant problems, hazards or accidental injury occurring during each shift.
 - 6. Summary of progress made each day.
- B. A photocopy may be made of the same "Daily Report," containing the information above, that is used by the General Superintendent. The General Superintendent may obscure confidential portions of his "Daily Report" if desired. Reports are due the following day.
- C. The Superintendent shall provide the Clerk of Works a written "Weekly (look ahead) Outline Schedule" of work activities planned at the beginning of each week, for that week. The "Weekly Outline Schedule" may be a simple listing of each trade's activities delineating areas where work is to be scheduled. Note any significant milestones.

1.15. CERTIFICATE OF SUBSTANTIAL COMPLETION

- A. The Architect shall issue a Certificate of Substantial Completion for the work when and if all the following conditions have been met:
 - 1. The work is sufficiently complete to allow the Owner beneficial use of the premises. The work remaining to be done is not a danger to the proposed occupants and is of a minor nature.
 - 2. The work is sufficiently complete that the Architect may make affidavits to the Building Official as required by Controlled Construction provisions of the Building Code.

3. The mechanical and electrical systems are fully operational. Required inspections and tests have been successfully completed, and the Owner has been provided instructions regarding operation and maintenance of mechanical and electrical systems in the building.
4. The Contractor has made notifications required to pay cost of final billing for utilities and termination of property insurance.
5. The Owner has made notifications required to assume the future cost of utilities and provide property insurance.
6. The Building Official has issued a Certificate of Occupancy without restrictions or conditions relating to the contractor's work.

1.16. CITY OF WORCESTER ORDINANCES, LICENSES, PERMITS, AND FEES

- A. All Contractors shall comply with City Ordinances which may affect the work of this contract, and which have not been previously covered in the Contract Documents. Requirements and fees listed are those in effect as of this writing and each Contractor shall be responsible for verifying the requirements and fee cost as currently in effect and throughout the duration of this project. This includes, but is not limited to, the following:

1. Worcester Police Department:
 - a. Police Details
Hourly rate for one-half day or full day.
 - b. Permits for Sunday and Holiday work.
Fee Required.
2. Department of Public Works, Permits Division
 - a. Street Opening Permit Bond
\$ 5,000.00
 - b. Barricade Placement by DPW
1st \$85 per day
Each additional \$ 40 per day
 - c. Drainlayers License
New \$ 200.00
Annual Renewal \$ 100.00
 - d. Drain Permit
\$ 180.00
 - e. Main Inspection
\$ 2.90 per Foot
 - f. Assessment
To be Determined
 - g. Plan Review
\$ 100.00
 - h. Street Obstruction
\$ 150.00 each
 - i. Street Obstruction (Blanket Permit)
\$ 1,000.00 per year

- j. Street Opening
 - Pavement older than 5 years \$ 156.00
 - Pavement 5 years old or less \$ 300.00
 - k. Driveway Opening
 - Permit \$ 156.00
 - l. Wastewater Discharge
 - Permit \$ 250.00
 - Inspection \$ 400.00
 - Sewer uses \$ 6.29/CCF
 - m. Water meter, etc. Contact the Water Department at 508-799-1492.
 - n. Traffic and Parking. Contact Department at 508-799-1468.
 - 3. Worcester Fire Department
 - a. Fire and Smoke Alarm
 - b. Automatic Sprinkler and Standpipes
 - c. Contact Worcester Fire Department at 508-799-1826.
 - 4. Department of Inspectional Services
 - a. Building Permit
 - Based on total contract price
 - \$11/\$1,000 up to the first million dollars.
 - \$8.00 per each \$1,000.00 over \$1,000,000.
 - Orders of Building Official under Chapter 1, 780 CMR.
 - Ticket violation under Chapter 33, 780 CMR.
 - b. Trash Control
 - Ticket for Violations
 - c. Environmental Control
 - Air, Water, Noise Pollution - Ticket for Violations
 - Conservation Commission Enforcement Officer
- 1.17. UTILITY COMPANY BACKCHARGES
- A. The Electric back charge from N-GRID or Verizon Communications are not known at this time, the Electrical Contractor shall file for all N-Grid and Verizon permits and submit all data and documents as required and shall pay the required permit and inspection fees. The actual cost of the N-Grid back charge shall be paid by the City directly. All related inspection costs or other fees shall be paid as part of the Contract.

PART 2 – PRODUCTS NOT USED

PART 3 – EXECUTION NOT USED

END OF SECTION

SECTION 01 04 50

CUTTING AND PATCHING

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawing and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for cutting and patching work not specified elsewhere.
- B. Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
 - 1. Requirements of this Section apply to all Sections of the Specifications, including mechanical and electrical installations.
- C. Any finished new work required to be cut out due to lack of coordination and scheduling, will be repaired by the trade causing cutting and patching to be done. This work will be done at no additional cost to the Owner.

1.03 SUBMITTALS

- A. Cutting and Patching Proposal: Where approval of procedures for cutting and patching is required before proceeding, submit a proposal describing procedures seven (7) days in advance of the time cutting and patching will be performed and request approval to proceed. Include the following information, as applicable, in the proposal:
- B. Describe the extent of cutting and patching required. Show how it will be performed and indicate why it cannot be avoided.
 - 1. Describe anticipated results in terms of changes to existing construction; include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
 - 2. List products to be used and firms or entities that will perform Work.
 - 3. Indicate dates when cutting and patching will be performed.
 - 4. List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.
 - 5. Where cutting and patching involves adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with the original structure.
 - 6. Approval by the Architect to proceed with cutting and patching does not waive the Architect's right to later require complete removal and replacement of unsatisfactory work.

1.04 QUALITY ASSURANCE

- A. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.
 - 1. Obtain approval of the cutting and patching proposal before cutting and patching the following structural elements:
 - a. Foundation construction.
 - b. Bearing walls.
 - c. Structural concrete.
 - d. Lintels.
 - e. Structural decking.
 - f. Miscellaneous structural metals.
 - g. Piping, ductwork, and equipment.
- B. Operational and Safety Limitations: Do not cut and patch operating elements or safety related components in a manner that would result in reducing their capacity to perform as intended, or result in increased maintenance, or decreased operational life or safety.
 - 1. Obtain approval of the cutting and patching proposal before cutting and patching the following operating elements or safety related systems:
 - a. Primary operational systems and equipment.
 - b. Air or smoke barriers.
 - c. Water, moisture, or vapor barriers.
 - d. Membranes and flashing.
 - e. Control systems.
 - f. Communication systems.
- C. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.
 - 1. If possible, retain the original installer or fabricator to cut and patch the following categories of exposed Work, or if it is not possible to engage the original installer or fabricator, engage another recognized experienced and specialized firm:
 - a. Acoustical ceilings.
 - b. Carpeting.
 - c. Vinyl flooring.

1.05 WARRANTY

- A. Existing Warranties: Replace, patch, and repair material and surfaces cut or damaged by methods and with material in such a manner so as not to void any existing warranties.

PART 2 – PRODUCTS NOT USED

PART 3 – EXECUTION NOT USED

END OF SECTION

SECTION 01 20 00

PROJECT MEETINGS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawing and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to, the following:
 - 1. Pre-Construction Conference.
 - 2. Pre-Installation Conference.
 - 3. Bi-Weekly Progress Meetings.
 - 4. Coordination Meetings.
 - 5. Project Closeout Conference.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section 01 29 00 “Applications for Payment” for procedures on submitting requisitions.
 - 2. Division 1 Section 01 31 00 “Project Coordination” for procedures for coordinating project meetings with other construction activities.
 - 3. Division 1 Section 01 33 00 “Submittal Procedures” for submitting the Contractor's Construction Schedule.
 - 4. Division 1 Section 01 77 00 “Project Closeout” for procedures and issues surrounding Project Completion.

1.03 PRE-CONSTRUCTION CONFERENCE

- A. Schedule a pre-construction conference before starting construction, immediately after execution of the Agreement. The conference is to be held at the Project Site, or other agreed upon location, at a time convenient to both the Owner and Architect. Conduct the meeting to review responsibilities and personnel assignments. Submit agenda to Architect and Owner three (3) days prior to meeting date.
- B. Attendees: Authorized representatives of the Owner, Architect, and their consultants; the Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Discuss items of significance that could affect progress, including the following:
 - 1. Introduction to All Project Members.
 - 2. Distribution of Contract Documents.
 - 3. Procedures Outlined for Contract Compliance Issues.
 - 4. Tentative Construction Schedule; Making Notes of Critical Dates.

5. Critical Work Sequencing.
 6. Pre-Installation Conferences.
 7. Work Hours.
 8. Use of the Premises.
 9. Deliveries.
 10. Security Procedures.
 11. Parking and Site Access Issues.
 12. Office, Work, and Storage Areas.
 13. Housekeeping & Cleaning of Construction Areas.
 14. Safety Procedures.
 15. First Aid.
 16. Procedures for Creating Monthly Cash Flow/Schedule.
 17. Procedures for processing Draft Application for Payment Periodic Submittals Certification Statement.
 18. Procedures for processing Applications for Payment.
 19. Procedures for RFI's, SI's, RFP's, COP's, CCD's, CO's, etc...
 20. Procedures for Keeping Logs on RFI's, SI's, RFP's, COP's, CCD's, CO's, etc...
 21. Project Coordination Procedures & Drawings.
 22. Project Meetings & Meeting Minutes.
 23. Unit Prices.
 24. Procedures for Submittals.
 25. Quality Control, Inspections, and Testing.
 26. Temporary Facilities.
 27. Preparation of Project Closeout Documents.
- D. The Contractor shall record and promptly distribute minutes of this meeting to all project members (in attendance or not), including the Architect and Owner, and as additionally directed by the Architect.
1. Meeting Minutes shall be in a standard type-written format to remain consistent for every project meeting and include, but not limited to, the following items:
 - a. Detailed notes from all discussions of project business items in chronological order.
 - b. Updated Project Contractor, Subcontractor, Vendor List.
 - c. Updated Construction Schedule.
- 1.04 PRE-INSTALLATION CONFERENCES
- A. Conduct a pre-installation conference at the Project Site before each construction activity that requires coordination with other constructions.
- B. Attendees: The Installer and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise the Architect of scheduled meeting dates.
1. Review the progress of other construction activities and preparations for the activity under consideration at each pre-installation conference, including requirements for the following:
 - a. Contract Documents.
 - b. Options.
 - c. Related Change Orders.

- d. Purchases.
 - e. Deliveries.
 - f. Shop Drawings, Product Data, and quality-control samples.
 - g. Review of mockups or finish samples.
 - h. Possible conflicts.
 - i. Compatibility problems.
 - j. Time schedules.
 - k. Weather limitations.
 - l. Manufacturer's recommendations.
 - m. Warranty requirements.
 - n. Compatibility of materials.
 - o. Acceptability of substrates.
 - p. Temporary facilities.
 - q. Existing Occupancies.
 - r. Space and access limitations.
 - s. Governing regulations.
 - t. Safety.
 - u. Inspecting and testing requirements.
 - v. Required performance results.
 - w. Recording requirements.
 - x. Protection.
- 2. The Contractor shall record significant discussions and agreements and disagreements of each conference, and the approved schedule. The Contractor shall promptly distribute the record of the meeting to everyone concerned, including the Owner and the Architect.
 - 3. Do not proceed with the installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the conference at the earliest feasible date.

1.05 PROGRESS MEETINGS

- A. Conduct progress meetings at the Project Site weekly. Notify the Owner and the Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request. General Contractor to record minutes of all meetings.
- B. Attendees: In addition to representatives of the Owner and the Architect, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
 - 1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

2. Review the present and future needs of each entity present, including the following:
 - a. Interface Requirements.
 - b. Time & Project Progress.
 - c. Work Hours.
 - d. Updated Weekly Look-Ahead Schedule.
 - e. Critical Work Sequencing.
 - f. Off-Site Fabrication Problems.
 - g. Updated Pre-Installation Conference Schedule.
 - h. Deliveries.
 - i. Use of the Premises.
 - j. Security Procedures.
 - k. Parking Issues & Snow Removal.
 - l. Office, Work, and Storage Areas.
 - m. Housekeeping & Cleaning of Construction Areas.
 - n. Safety Procedures.
 - o. First Aid.
 - p. Draft Application for Payment Periodic Submittals Certification Statement (At Appropriately Timed Meeting Each Month).
 - q. Updated Submittal, RFI, SI, RFP, COP, CCD, and CO Logs.
 - r. New Submittals, RFI's, SI's, RFP's, COP's, CCD's, CO's, etc...
 - s. Any Project Coordination Issues or Drawings.
 - t. Quality Control, Inspections, and Testing.
 - u. Temporary Facilities.
 - v. Preparation of Project Closeout Documents.
3. The Contractor shall record and promptly distribute minutes of this meeting to all project members (in attendance or not), including the Architect and Owner, and as additionally directed by the Architect.
 - a. Meeting Minutes shall be in a standard type-written format to remain consistent for every project meeting and include, but not limited to, the following items:
 - 1) Detailed notes from all discussions of project business items in chronological order.
 - 2) Updated Project Contractor, Subcontractor, Vendor List.
 - 3) Updated Construction Schedule.
 - 4) Updated Weekly Look-Ahead Schedule.
 - 5) Updated Submittal, RFI, SI, RFP, COP, CCD, and CO Logs.

1.06 COORDINATION MEETINGS

- A. Conduct coordination meetings with all trades convenient for all parties involved. In addition, conduct coordination meetings when requested by the Architect or Clerk of Works.

1.07 TIME OF PROGRESS AND COORDINATION MEETINGS

- A. Conduct both meetings weekly on a day agreeable to all parties, at a designated location at the site, or other agreed upon location.

1.07 PROJECT CLOSEOUT CONFERENCE

- A. The Project Close-Out Conference shall be conducted at a time convenient for all parties involved prior to Substantial Completion. Refer to Section 01700 – Project Closeout for additional information for requirements.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

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SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawing and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
- B. References Standards and Definitions: Refer to Section 014200 "Reference" for applicability of industry standards to products specified.
 - 1. Requirements for submitting the Contractor's Construction Schedule and the Submittal Schedule are included under Section 013300 "Submittal Procedures".
 - 2. Procedural requirements governing the Contractor's selection of products and product options are included under Section 016000 "Product Requirements".

1.03 DEFINITIONS

- A. Definitions used in this Article do not change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract are considered to requests for substitutions. The following are not considered to be requests for substitutions:
 - 1. Specified options of products and construction methods included in the Contract Documents.
 - 2. The Contractor's determination of, and compliance with, governing regulations and orders issued by governing authorities.

1.04 SUBMITTALS

- A. Substitution Request Submittal: Requests for substitution will be considered if received within two (2) days after commencement of the Work. Requests received more than two (2) days after commencement of the Work may be considered or rejected at the discretion of the Architect.
 - 1. Submit three (3) copies of each request for substitution for consideration. Submit requests in the form and according to procedures required for Change-Order Proposals.
 - 2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
 - 3. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
 - a. Product Data, including Drawings and descriptions of products and fabrication and installation procedures.

- b. Samples, where applicable or requested.
 - c. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
 - d. Cost information, including a proposal of the net change, if any in the Contract Sum.
 - e. The Contractor's certification that the proposed substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.
4. Architect's Action: Within five (5) days of receipt of a request for substitution the Architect will request additional information or documentation for evaluation necessary for the evaluation of the request. Within five (5) days of receipt of the request, or of receipt of additional information or documentation, whichever is later, the Architect will notify the Contractor of acceptance or rejection of the substitution. If a decision on use of a proposed substitute cannot be made or obtained within the time allocated, use the product specified by name. Acceptance will be in the form of a Change Order when a change in the Contract Sum or Contract Time is required; or in the form of the Architect's Supplementary Instructions when no change to the Contract Sum or Time is required.

1.05 WORK CONDITIONS / SEQUENCE

- A. If sub-contractors find that conditions are not appropriate for them to begin the work of their trade or if they are directed to perform their work out of sequence by the General Contractor or if the General Contractor directs sub-contractors to start and continue regardless of job conditions, the sub-contractor shall so notify the Architect in writing by certified mail immediately.

PART 2 – PRODUCTS

2.01 SUBSTITUTIONS

- A. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples that relate to construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.
- B. Conditions: The Architect will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Architect. If the following conditions are not satisfied, the Architect will return the requests without action except to record non-compliance with these requirements.
 - 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents.
 - 3. The request is timely, fully documented, and properly submitted.
 - 4. The request is directly related to an "or-equal" clause or similar language in the Contract Documents.
 - 5. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
 - 6. The specified product or method of construction cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.

7. The specified product or method of construction cannot be coordinated with other materials and where the Contractor certifies that the proposed substitution can be coordinated.
8. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.

PART 3 – EXECUTION (Not Used)

END OF SECTION

WORCESTER FIRE STATION #2
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Mount Vernon Group Architects, Inc., Project No. 02023.04

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SECTION 01 26 00

CONTRACT MODIFICATION PROCEDURES

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawing and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections: The following sections contain requirements that relate to this Section:
 - 1. Division 1 Section 012900 "Payment Procedures" for administrative procedures governing applications for payment.
 - 2. Division 1 Section 013300 "Submittal Procedures" for requirements for the Contractor's Construction Schedule.
 - 3. Division 1 Section 012500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after award of the Contract.

1.03 MINOR CHANGES IN THE WORK

- A. Supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Architect on the City's Form of Supplemental Instructions.

1.04 REQUEST FOR PROPOSAL

- A. Owner initiated Request for Proposal: Proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time will be issued by the Architect, with a detailed description of the proposed change and supplemental or revised Drawings and Specifications, if necessary.
 - 1. Proposal requests issued by the Architect are for information only. Do not consider them an instruction either to stop work in progress, or to execute the proposed change.

1.05 PROPOSED CHANGE ORDER

- A. Proposed Change Order: Using the form at the end of this section submit your proposal for the adjustment to the Contract Sum or Contract Time in response to a Request for Proposal or for Contractor initiated request for a change with Proposed Change Order.
 - 1. Unless otherwise indicated in the Request For Proposal, within twenty (20) days of receipt of the proposal request, submit to the Architect for the Owner's review an estimate of cost necessary to execute the proposed change.
 - a. Include a list of quantities of products to be purchased and unit costs, along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.

- b. Indicate delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include a statement indicating the effect the proposed change in the Work will have on the Contract Time.
 - B. Contractor initiated request for change with Proposed Change Order: When latent or other unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.
 - 1. Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
 - a. Include a list of quantities of products to be purchased and unit costs along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
 - b. Indicate delivery charges, equipment rental, and amounts of trade discounts.
 - c. Comply with requirements in Section 01631 "Product Substitutions" if the proposed change in the Work requires the substitution of one product or system for a product or system specified.
- 1.06 ALLOWANCES
 - A. Allowance Adjustment: Base each Change Order Proposal Request for an allowance cost adjustment solely on the difference between the actual purchase amount and the allowance, multiplied by the final measurement of work-in-place, with reasonable allowances, where applicable, for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in the purchase amount only were indicated as part of the allowance.
 - 2. When requested, prepare explanations and documentation to substantiate the margins claimed.
 - 3. The Owner reserves the right to establish the actual quantity of work-in-place by independent quantity survey, measure, or count.
 - B. Submit claims for increased costs because of a change in scope described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit, within twenty (20) days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Claims submitted later than twenty (20) days will be rejected.
 - 1. The Change Order cost amount shall not include the Contractor's indirect expense except when it is clearly demonstrated that either the nature or scope of work required was changed from that which could have been foreseen from information in Contract Documents.
 - 2. No change to the Contractor's indirect expense is permitted for selection of higher or lower priced materials or systems of the same scope and nature as originally indicated.

1.07 CONSTRUCTION CHANGE DIRECTIVE

- A. A Construction Change Directive shall be issued for all work involving a change in contract cost or time. The Construction Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. The Construction Change Directive will contain a complete description of the change in the Work and designate the method to be followed to determine change in the Contract Sum or Contract Time or is for a lump sum amount approved by the Architect.
- B. Documentation: Maintain detailed records on a time, and material basis of work required by the Construction Change Directive, if so, directed by the Architect.
 - 1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.08 CHANGE ORDER PROCEDURES

- A. Upon the Owner's approval of a Change Order Proposal Request, the Architect will issue a Change Order for signatures of the Owner and Contractor.

1.09 OVERHEAD AND PROFIT

- A. Overhead and Profit will be as noted elsewhere in these specifications.
 - 1. Labor rates shall not exceed those shown in the contract specifications as set forth by the Department of Labor and Industries.
- B. In reviewing Change Orders, the Architect will exercise his right to request a complete breakdown from the contractor showing exact costs for labor and material, as well as delivery slips and invoices from suppliers and other subcontractors.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

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SECTION 012900

PAYMENT PROCEDURES

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.
- B. Related Sections: Sections which contain requirements that relate to this Section include, but are not limited to the following:
 - 1. Section 013300 – Submittal Procedures

1.02. SUMMARY

- A. This Section specifies administrative and procedural requirements governing the Progress Schedule, Schedule of Values, and Contractor's Applications for Payment.
 - 1. Coordinate the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, List of Subcontracts, and Submittal Schedule.
- B. The Contractor's Construction Schedule and Submittal Schedule are included in Section 013300 "Submittals".

1.03. PROGRESS SCHEDULE

- A. Prepare the Progress Schedule in accordance with Article 8, Paragraphs 8.2.3 and 8.2.4 of the General Conditions for approval by the Architect.
 - 1. The Progress Schedule shall conform to the requirements in Section 013300, paragraph 1.4, Contractor's Progress Schedule, and the sample bound in the paragraph.

1.04. SCHEDULE OF VALUES

- A. Coordinate preparation of the Schedule of Values with preparation of the Progress Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
 - a. Contractor's Progress Schedule.
 - b. Application for Payment forms.
 - c. List of products.
 - d. Schedule of allowances, if any.
 - e. Schedule of alternates, if any.
 - f. Schedule of unit prices, if any.
 - g. List of products.
 - h. List of principal suppliers and fabricators.
 - i. Schedule of submittals.
 - 2. Submit the Schedule of Values to the Architect as soon as possible, but no later than seven (7) days before the date scheduled for submittal of the initial Application for Payment.

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- B. Format and Content: Use the Project Manual Table of Contents as a guide to establish the format for the Schedule of Values. Provide at least one (1) line item for each Specification Section. Coordinate with the Architect for exact breakdown of major categories of work including, but not limited to major equipment and project closeout submittals.
1. Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of the Architect.
 - c. Project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 2. Arrange the Schedule of Values in a tabular form with separate columns to indicate the following for each item listed:
 - a. Generic name.
 - b. Related Specification Section.
 - c. Description of Work.
 - d. Name of subcontractor.
 - e. Name of manufacturer or fabricator.
 - f. Name of supplier.
 - g. Change Orders (numbers) that have affected value.
 - h. Dollar value to nearest dollar.
 - i. Percentage of Contract Sum to the nearest percent, adjusted to total 100 percent.
 3. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Breakdown shall be done by sequence. Coordinate with the Project Manual Table of Contents. Break principal subcontract amounts down into several line items, including but not limited to major equipment and project closeout submittals.
 4. Do not round amount off to the nearest whole dollar; carry all amounts out to the two (2) decimal places and the totals shall equal the Contract Sum.
 5. For each part of the Work where an Application for Payment may include materials or equipment, purchased, or fabricated and stored, but not yet installed, provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
 6. Margins of Cost: Show line items for indirect costs, and margins on actual costs, only to the extent that such items will be listed individually in Applications for Payment. Each item in the Schedule of Values and Applications for Payment shall be complete, including its total cost and proportionate share of general overhead and profit margin for each item.
 - a. Temporary facilities, project closeout submittals, and other major cost items that are not direct cost of actual work-in-place shall be shown as separate line items in the Schedule of Values or distributed as general overhead expense, at the Contractor's option.
 7. Schedule Updating: Update and resubmit the Schedule of Values prior to the next Application for Payment when Change Orders or Construction Change Directives result in a change to the Contract Sum.

1.05. APPLICATIONS FOR PAYMENT

- A. Draft Application Preparation: Submit three (3) **draft** copies of the (current) Application for Payment at the weekly project meeting for Architect's review seven (7) days in advance of the "Payment Application Time" as indicated in the Agreement.
 - 1. Draft Application for Payment transmittal shall include a fully executed Draft Cover Sheet or **Periodic Submittal Certification Statement** on Contractor letterhead (bound at the end of this section hereafter) certifying that the following Periodic Submittals are current for the appropriate period:
 - a. Originals of All Waivers of Mechanics Lien & Corresponding Logs Covering Status of All Waivers
 - b. Certified payrolls
 - c. Contract Compliance Submittals
 - d. Insurance and transfer title certificates for any material stored off site.
 - e. Updated as-built drawings of record reflecting Work for the current Application period.
- B. Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.
 - 1. The initial Application for Payment, the Application for Payment at time of Substantial Completion, and the final Application for Payment involve additional requirements.
- C. Payment Application Times: Each progress payment date is as indicated in the Agreement. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.
- D. Payment Application Cover Sheet Form: Complete the enclosed **Application and Certification for Payment Cover Sheet** on Contractor letterhead (bound at the end of this Section hereafter) and transmit with each Payment Application Form submittal.
- E. Payment Application Forms: Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment. **No exceptions will be made.**
- F. Application Preparation: Complete every entry on the form, including notarization and execution by a person authorized to sign legal documents on behalf of the Contractor. The Architect will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions have been made.
 - 2. Include only amounts of approved and fully executed Change Orders. Obtain approval from the Architect prior to inclusion into the Application.
 - 3. Each Application for Payment **must** be accompanied by an updated Progress Schedule. The format to which is subject to the Architect's approval.
- G. Payment for materials and/or equipment stored off site shall be considered upon the Owner's approved submission by the Contractor bill(s) of sale or such other documentation or procedures satisfactory to the Owner to establish the Owner's clear and legal title to such materials and/or equipment or otherwise provided to protect the Owner's interest. This shall include applicable insurance and transportation to the project site for those materials and/or equipment suitably stored off site under consideration for payment.

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1. Any Contractor making an application for payment pursuant to Section 00200 – General Conditions, paragraph 9.3.2, shall provide the following written documentation to the Architect through the General Contractor as delineated below and as otherwise maybe reasonably requested by the Owner:
 - a. Bill of Material, Purchase Order, or Invoice Number.
 - b. Product Description Listing.
 - c. Serial Numbers (If Applicable)
 - d. Materials and/or Equipment (wares) shall be segregated from all other stock or equipment and clearly labeled and/or marked as City of Worcester Property.
 - e. Wares shall always be available for inspection and in any event within twenty-four (24) hours after receiving prior notice from the Owner/Architect.
 - f. Provide written directions from the project site to the location of the stored wares.
 - g. Name of contact person at the storage site and applicable telephone numbers.
 - h. Method and mode of transportation from offsite storage location to the job site.
- H. Retainage: In accordance with the Supplemental General Conditions, the Awarding Authority (Owner) shall deduct a retainage not exceeding five (5) percent of the approved amount of the periodic payment. The aforesaid five (5) percent retainage deduction by the Owner is the only retainage authorized hereunder. The contractor shall not deduct any amounts from payments received on behalf of subcontractors, except those deductions specifically authorized by M.G.L. Chapter 30, Section 39(1)(a).
 1. Upon the initial and any subsequent Application for Payment; requesting or reflecting a “Release of Retainage” provide a Summary cover sheet indicating the derivation arithmetically, by each line item, of the total released to date and the of the current total retainage sum.
- I. Transmittal: Upon receipt of the required periodic submittals enumerated above and upon approval of the "Draft Application", submit six (6) fully executed and notarized original copies with Cover Sheet of the current Application for Payment to the Architect by means ensuring receipt within twenty-four (24) hours. One (1) copy shall be complete, including waivers of lien and similar attachments.
 1. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Architect.
 2. With each requisition, after the first requisition, submit one (1) copy of up-dated as-built drawings for all underground and concealed work, showing locations, depths, or elevations.
- J. Waivers of Mechanics Lien: With each Application for Payment, submit waivers of mechanics lien from every entity who may lawfully be entitled to file a mechanics lien arising out of the Contract, and related to the Work covered by the payment.
 1. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item.
 2. When an application shows completion of an item, submit final or full waivers.
 3. The Owner reserves the right to designate which entities involved in the Work must submit waivers.

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4. Waiver Delays: Submit each Application for Payment with the Contractor's waiver of mechanics lien for the period of construction covered by the previously paid application.
 - a. Submit final Application for Payment with, or preceded by, final waivers from every entity involved with performance of Work covered by the application that could lawfully be entitled to a lien.
 5. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to Owner.
- K. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following:
1. List of subcontractors; at all tiers.
 2. List of principal suppliers and fabricators.
 3. Approved Schedule of Values.
 4. Approved Contractor's Progress Schedule see Section 01300, Paragraph 1.4.
 5. Contractor's Construction Schedule (preliminary if not final).
 6. Schedule of principal products.
 7. Submittal Schedule (preliminary, if not final).
 8. List of Contractor's staff assignments.
 9. List of Contractor's principal consultants.
 10. Copies of building permits.
 11. Copies of authorizations, permits and licenses from governing authorities for performance of the Work.
 12. Initial progress report.
 13. Report on pre-construction meeting.
 14. Schedule of Pre-installation meetings.
 15. Certificates of insurance and insurance policies.
 16. Performance and payment bonds.
 17. Data needed to acquire Owner's insurance.
 18. Initial settlement survey and damage report, if required.
 19. List of Contractor's personnel names and titles assigned on the project and emergency telephone numbers.
- L. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit Application for Payment.
1. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
 2. Administrative actions and Submittals that shall precede or coincide with this application include:
 - a. Occupancy permits and similar approvals.
 - b. Warranties (guarantees) and maintenance agreements.
 - c. Test/adjust/balance records.
 - d. Maintenance instructions.
 - e. Meter readings.
 - f. Start-up performance reports.
 - g. Changeover information related to Owner's occupancy, use, operation, and maintenance.
 - h. Final cleaning.
 - i. Application for reduction of retainage, and consent of surety

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- j. Advice on shifting insurance coverage.
 - k. Final progress photographs.
 - l. List of incomplete work, recognized as exceptions to Architect's Certificate of Substantial Completion.
- M. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final payment Application for Payment include the following:
- 1. Completion of Project closeout requirements.
 - 2. Completion of items specified for completion after Substantial Completion
 - 3. Assurance that unsettled claims will be settled.
 - 4. Assurance that incomplete Work and Work not accepted will be completed without undue delay.
 - 5. Transmittal of required Project construction records to the Owner.
 - 6. Certified property survey.
 - 7. Proof that taxes, fees, and similar obligations have been paid.
 - 8. Removal of temporary facilities and services.
 - 9. Removal of surplus materials, rubbish, and similar elements.
 - 10. Change of door locks to Owner's access.
 - 11. Order of Conditions Certificate of Compliance, if applicable.

PART 2 – PRODUCTS NOT USED

PART 3 – EXECUTION NOT USED

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CONTRACTOR LETTER HEAD

APPLICATION AND CERTIFICATION FOR PAYMENT COVER SHEET

PROJECT: _____ APPLICATION NO: _____

For
Period

Ending: _____ AMOUNT CERTIFIED: \$ _____

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents; and the current Payment shown herein is now due.

The Contractor further certifies that the entire amount of all previous Payments received for labor performed and materials furnished have been promptly paid to all Subcontractors whose work was certified for payment on previous applications, less, where applicable, only an amount specified in any court proceeding barring such payment and/or an amount claimed due from the Subcontractor by the Contractor as expressly authorized by M.G. L. Chapter 30, Section 39F (1) (a). No other amounts have been deducted or retained from such payments by the contractor.

Contractor: _____ **STATE OF:** _____

Signed by: _____ **COUNTY OF:** _____

Date: _____ Subscribed and sworn to before me on this
_____ Day of _____ 20__.

Notary public: _____
My Commission Expires: _____

APPROVED FOR PAYMENT:

Signed: _____
By: James Bedard, Facilities Director

Signed: _____
By: Robert Sherman., Architect

Date: _____

Date: _____

Signed: _____
By: _____

Signed: _____
By: _____

Date: _____

Date: _____

CONTRACTOR LETTER HEAD

DRAFT APPLICATION FOR PAYMENT
PERIODIC SUBMITTAL CERTIFICATION STATEMENT

Project Name: _____ Draft Application Date: _____

Draft Application No. _____ (Requisition No.)

For Period:
Starting _____
Through Period
Ending _____

(Name of Contractor) _____,

certifies that the "Draft Application for Payment" as herein submitted with all of the following Periodic Submittals fully and completely executed and current for the appropriate time period(s) as required.

FURNISH THE FOLLOWING PERIODIC SUBMITTALS AND PROVIDE ALL REQUIRED INFORMATION FOR THE APPROPRIATE TIME PERIOD(S) AS REQUESTED. PLEASE SUBMIT ON SEPARATE SHEETS:

- I. **Original Waivers of Mechanic Lien:** List every entity who may be lawfully entitled to file a lien resulting out of this Contract, including but not limited to; contractors/subcontractors, at all tiers, vendors, and suppliers. Submit current originals of all Waivers covering all WORK completed through the period ending thirty (30) days prior to this periods "Application" date and as further required in I above.
- II. **Certified Payrolls:** All payroll reports have been submitted as required by the Contract Compliance Office.
- III. **Contract Compliance Reports:** All contract compliance reports have been submitted as required by the Contract Compliance Office.
- IV. **Insurance & Title Transfer Certificates** for material stored off site, if applicable.
- V. **Updated As-Built Drawings:** Record drawings have been submitted reflecting the work completed up to the time of Application.

This Draft Application for Payment Certification Statement and corresponding Periodic Submittals (attached) shall be reviewed by the Awarding Authority for completeness. Any deficiency, discrepancies or missing items shall cause this Draft Application for Payment to be returned to the Contractor with no action taken.

I, _____ hereby certify, that the Periodic
(Name of contractor)

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Submittals indicated herein have been reviewed by the undersigned and are complete and current as required under provisions of this Contract.

(Name of Authorized Person)

(Date)

(Title)

END OF SECTION

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SECTION 013100

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02. SUMMARY

- A. This Section specifies administrative and supervisory requirements necessary for project coordination including, but not limited to the following:
 - 1. Coordination and cutting, drilling, and patching.
 - 2. General installation provisions.
 - 3. Administrative and supervisory personnel.
 - 4. Cleaning and protection.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Project meetings, coordination meetings, and pre-installation conferences are included in Section "Project Meetings."
 - 2. Requirements for preparing and submitting the Contractor's Construction Schedule are included in Section "Submittals."

1.03. COORDINATION

- A. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of the specifications that depend on each other for proper installation, connection, and operation.
 - 1. Where installation of one part of the Work depends on installation of other components, either before or after its own installation, schedule construction operations in the sequence required to obtain the best results.
 - 2. Where availability of space is limited coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
 - 3. Make provisions to accommodate items scheduled for later installation.
 - 4. The General Contractor shall as part of his work provide for all cutting, patching, and drilling, not specified to be the work of others.
- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
 - 1. Prepare similar memoranda for the Owner and separate contractors where coordination of their work is required.

- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of schedules.
 - 2. Installation and removal of temporary facilities.
 - 3. Delivery and processing of submittals.
 - 4. Progress meetings.
 - 5. Project closeout activities.
 - 6. Coordinate with temp chiller supplier to coincide with General Contractor's crane equipment being onsite and all Work relating to offloading from chiller delivery truck.
 - D. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.
- 1.04. SUBMITTALS
- A. Coordination Drawings: Prepare coordination Drawings where careful coordination is needed for installation of products and materials fabricated by separate entities. Prepare coordination drawings where limited space availability necessitates maximum utilization of space for efficient installation of different components.
 - 1. Show the relationship of components shown on separate Shop Drawings.
 - 2. Indicate required installation sequences.
 - 3. Comply with requirements contained in Section 01300 – Submittals.
 - 4. Format to be as directed by the Architect.
 - 5. Provide site staging and lift plan.
 - B. Staff Names: Within fifteen (15) days of commencement of construction operations, submit a list of the Contractor's principal staff assignments, including the superintendent and other personnel in attendance at the Project Site. Identify individuals and their duties and responsibilities. List their addresses and telephone numbers. Provide twenty-four (24) hour Emergency telephone numbers listed separately.
 - 1. Post copies of the list in the Project meeting room, the temporary field office, and each temporary telephone.
 - 2. The Contractor shall provide a copy of the list, and updates as its changes, to the Worcester Police Department and other City Departments as directed by the Architect.

PART 2 – PRODUCTS NOT USED

PART 3 - EXECUTION

3.01 GENERAL INSTALLATION PROVISIONS

- A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.

- B. Manufacturer's Instructions: Comply with manufacturer's written instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than the requirements contained in Contract Documents.
- C. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
- D. Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.
- E. Visual Effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed Work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.
- F. Re-check measurements and dimensions, before starting each installation.
- G. Install each component during weather conditions that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
- H. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
- I. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the application indicated. Refer questionable mounting height decision to the Architect for final decision.

3.02 CLEANING AND PROTECTION

- A. During handling and installation clean and protect construction in progress and adjoining materials in place. Apply protective covering where required and as necessary to assure protection from damage or deterioration.
- B. Clean and maintain all completed construction as frequently as necessary through the remainder of the construction period.
- C. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in-progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
 - 1. Excessive vibration.
 - 2. Excessive static or dynamic loading.
 - 3. Excessive internal or external pressures.
 - 4. Excessively high or low temperatures.
 - 5. Thermal shock.
 - 6. Excessively high or low humidity.
 - 7. Air contamination or pollution.
 - 8. Air borne debris/dust or construction particulates.
 - 9. Water or ice.
 - 10. Solvents.
 - 11. Chemicals.
 - 12. Light.
 - 13. Puncture.
 - 14. Abrasion.

15. Heavy traffic.
16. Soiling, staining, and corrosion.
17. Bacteria.
18. Rodent and insect infestation.
19. Combustion.
20. Electrical current.
21. High-speed operation.
22. Improper lubrication.
23. Unusual wear or other misuse.
24. Contact between incompatible materials.
25. Destructive testing.
26. Misalignment.
27. Excessive weathering.
28. Unprotected storage.
29. Improper shipping or handling.
30. Theft.
31. Vandalism.

END OF SECTION

SECTION 013300
SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.
 - 1. The submittals enumerated below shall require review and/or approval by the Architect.

1.02. SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including:
 - 1. Contractor's Progress Schedule.
 - 2. Major delivery schedule.
 - 3. Existing utility tie-in's schedule.
 - 4. Submittal schedule.
 - 5. Pre-Installation Conference Schedule (By Specification Section).
 - 6. Daily construction reports.
 - 7. Shop drawings.
 - 8. Product data.
 - 9. Samples.
 - 10. Coordination Drawings.
 - 11. Quality assurance submittals.
 - 12. Submittal of three (3) sets of plans and specifications, complete with all addendums posted to the City of Worcester Building Department to obtain a building permit.
- B. Administrative Submittals: Refer to other Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
 - 1. Product Substitution.
 - 2. Periodic Submittals.
 - 3. Permits.
 - 4. Applications for Payment.
 - 5. Performance and payment bonds.
 - 6. Insurance Certificates.
 - 7. List of Project Contractors, Subcontractors, Vendors, etc.
 - 8. List of Personnel and Emergency Telephone Numbers.
 - 9. City Ordinance Program Forms.
- C. The Schedule of Values submittal is included in Section 01027 "Applications for Payment".
- D. "Project Closeout", Section 01700, specifies requirements for submittal of Project Record Documents and warranties at project closeout.

1.03. SUBMITTAL PROCEDURES/SHOP DRAWINGS

- A. Submittal procedures shall be electronic for all submittals for approval and distribution unless otherwise noted. Provide to the owner one copy of all approved submittals in an organized manner with a submittal log. All color samples must be distributed as hard copies, and also electronically filed in order to track. Electronic files shall be clean, clear and readable. Plan files to be PDF and/or AutoCAD and be to scale as appropriate. Contractor to transmit and update each submittal and process electronically, maintain a log that is distributed and updated weekly. All e-mails to clearly identify the submittal number and shall include the log, Or the contactor to maintain a web-based system used for submittals, and the construction process.
- B. Distribution: Distribution of submittals shall be distributed as follows unless otherwise noted:
 - 1. Architect.
 - 2. Clerk of Works.
 - 3. Owner – electronic and paper copy.
 - 4. A minimum of Three (3) copies for the Contractor as necessary for distribution to subcontractors, suppliers, installers, manufacturers, fabricators, and any other applicable parties.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
- D. Processing: All Contractors are directed to the timeliness and critical importance of expediting the submittal process. Any lead times, which may impact sequencing, should be prioritized to meet the project schedule. Architect must be notified if any delays arise that will impact lead times.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
 - 3. To avoid the need to delay installation as a result of the time required to process submittals and to allow sufficient time for submittal review, all contractors' submittals shall be submitted for processing and have received final Architect's approval within 45 days from the date of Contract.
 - a. Allow ample time for initial review to achieve efficient construction sequencing. Allow additional time if the Architect must delay processing to permit coordination with subsequent submittals.
 - b. If an intermediate submittal is necessary, process the same as the initial submittal.
 - c. Allow ample time for reprocessing each submittal to achieve efficient construction sequencing.
 - d. No extension of Contract Time will be authorized because of the contractor's failure to transmit submittals to the Architect for processing sufficiently in advance of the scheduled Work.
- E. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

4. Provide a space approximately 4 by 5 inches on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
 5. Include the following information on the label for processing and recording action taken.
 - a. Project name.
 - b. Date.
 - c. Name and address of the Architect.
 - d. Name and address of the Contractor.
 - e. Name and address of the subcontractor.
 - f. Name and address of the supplier.
 - g. Name of the manufacturer.
 - h. Number and title of appropriate Specification Section.
 - i. Drawing number and detail references, as appropriate.
 - F. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the Architect using a transmittal form. The Architect will not accept submittals received from sources other than the Contractor.
 - G. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
- 1.04. CONTRACTOR'S PROGRESS SCHEDULE
- A. Bar (Gantt) Chart Schedule: Meeting the requirements of Section 00200 Paragraphs 4.10, 4.10.1, 8.2.3 through 8.2.9. Prepare a fully developed, horizontal bar type of chart titled: "Progress Schedule". A sample is attached at the end of this section, some requirements specified here are not shown in the sample.
 - B. Time, the horizontal (x) axis in this schedule shall show the start of on-site work through the Date of Substantial Completion, show the time for completion of punch list items, and show the time for general warranty and completion of commissioning.
 - C. Provide a separate time bar for each line in the approved "Schedule of Values" with the incremental value of work in place for each month. Work Completed (in place) must be 99% of contract value to achieve Substantial Completion. Provide a continuous vertical line to identify the first working day of each month.
 - D. At the bottom of the progress schedule provide:
 1. A first line showing the total value of the work planned to be completed (in place) for each month,
 2. A second line showing the cumulative total value of the work planned to be completed (in place) to date,
 3. A third line showing the actual total value of the work certified as completed (in place) on the Application and Certificate for Payment for the month, and
 4. A fourth line showing the actual total cumulative value of the work certified as completed (in place) on the Application and Certificate for payment to date.
 5. Refer to Division 1 Section 01027 "Applications for Payment" for cost reporting and payment procedures.

- E. Distribution: Following approval of the initial submittal, print and distribute copies to the Architect, Owner, subcontractors, and other parties required to provide actual work in place and conform to schedule.
- F. Revisions: Revisions to values and or time shown in the Progress Schedule may only be made to reflect a Change Order and in accordance with Section 00200 Paragraph 8.2.7. When revisions are made, distribute to the same parties and post at the jobsite. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- G. Progress Schedule Updating: Revise the schedule after each meeting, where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

Progress Schedule (as required by Article 8, Paragraphs 8.2.3 & 8.2.4 of the General Conditions)										
(Project Name)		(Architect)		(Date)		(Approved by Architect)				
(City of Worcester Dept. or Facility)		(Construction Manager)		(Revision Date)						
(Project Address)		(Contractor)		(Revised Through)						
Section Number	Section or Filled Sub-bid Section	Mar-98	Apr-98	May-98	Jun-98	Jul-98	Oct-98	Nov-98	Dec-98	Totals
		1	2	3	4	5	6	7	8	
01000	General Requirements	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$32,000
02000	Sitework	\$10,000	\$10,000						\$10,000	\$30,000
03000	Concrete		\$4,000	\$12,000			\$8,000			\$24,000
04000	Masonry			\$8,000	\$10,000	\$12,000				\$30,000
05000	Metals			\$20,000						\$20,000
05500	Metal Fabrications							\$7,000		\$7,000
06000	Wood & Plastics								\$4,000	\$4,000
07100	Waterproofing & Caulking				\$3,000					\$3,000
07600	Roofing & Flashing					\$12,000				\$12,000
08000	Doors & Windows						\$4,000			\$4,000
08520	Alum. Windows							\$8,000		\$8,000
08800	Glass & Glazing								\$1,000	\$1,000
09250	Gypsum Drywall						\$6,000	\$5,000		\$11,000
09310	Ceramic Tile							\$2,000		\$2,000
09511	Acoustical Ceilings							\$1,000	\$1,000	\$2,000
09650	Resilient Flooring								\$3,000	\$3,000
09900	Painting								\$2,000	\$2,000
10000	Specialties								\$14,000	\$14,000
14204	Hydraulic Elevators						\$8,000	\$8,000	\$8,000	\$24,000
15400	Plumbing			\$1,000	\$2,000			\$3,000	\$5,000	\$11,000
15600	HVAC					\$4,000	\$5,000		\$4,000	\$13,000
16000	Electrical			\$1,000	\$3,000			\$4,000	\$4,000	\$12,000
	Total Planned to be Completed This Month	\$14,000	\$18,000	\$46,000	\$22,000	\$32,000	\$35,000	\$42,000	\$60,000	
	Total planned to be Completed To Date	\$14,000	\$32,000	\$78,000	\$100,000	\$132,000	\$167,000	\$209,000	\$269,000	\$269,000
	Actual Total Completed This Month	\$11,000	\$22,000	\$38,000						
	Actual Total Completed To Date	\$11,000	\$33,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$470,000

1.05. SUBMITTAL SCHEDULE

- A. After development and acceptance of the Contractor's Progress Schedule, prepare a complete Submittal Schedule and promptly submit the schedule to the Architect.

- B. Distribution: Following response to the initial submittal, print and distribute copies to the Architect, Owner, subcontractors, and other parties required to comply with submittal dates.
- C. Submittal Schedule Updating: Revise the Submittal Schedule after each meeting or activity where revisions have been recognized or made. Issue the updated project schedule concurrently with each Application for Payment.

1.06. DAILY CONSTRUCTION REPORTS

- A. Prepare a daily construction report recording the following information concerning events at the site, and submit copies to the Architect and Clerk of Works at weekly intervals:
 - 1. List of subcontractors at the site.
 - 2. Count of personnel at the site.
 - 3. Accidents and unusual events.
 - 4. Meetings and significant decisions.
 - 5. Stoppages, delays, shortages, and losses.
 - 6. Emergency procedures.
 - 7. Services connected, disconnected.
 - 8. Equipment or system tests and startups.
 - 9. General daily work tasks and progress.

1.07. SHOP DRAWINGS

- A. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples that relate to construction activities not complying with the Contract Documents **do not** constitute an acceptable or valid request for substitution, nor do they constitute approval.
- B. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
- C. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates, and similar Drawings. Include the following information:
 - 1. Dimensions.
 - 2. Identification of products and materials included by sheet and detail number.
 - 3. Compliance with specified standards.
 - 4. Notation of coordination requirements.
 - 5. Notation of dimensions established by field measurement.

1.08. PRODUCT DATA

- A. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples that relate to construction activities not complying with the Contract Documents **do not** constitute an acceptable or valid request for substitution, nor do they constitute approval.
- B. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.

1. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings".
 2. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations.
 - b. Compliance with trade association standards.
 - c. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurement.
 - f. Notation of coordination requirements.
 - C. Do not submit Product Data until compliance with the requirements of the Contract Documents has been confirmed.
 - D. Unless non-compliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
 - E. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 1. Do not proceed with installation until a copy of Product Data is in the Installer's possession.
 2. Do not permit use of unmarked copies of Product Data in connection with construction.
- 1.09. SAMPLES
- A. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples that relate to construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.
 - B. Mount or display samples in the manner to facilitate review of qualities indicated. Prepare samples to match the Architect's sample. Include the following:
 1. Specification Section number and reference.
 2. Generic description of the sample.
 3. Sample source.
 4. Product name or name of the manufacturer.
 5. Compliance with recognized standards.
 6. Availability and delivery time.
 - C. Submit samples for review of size, kind, color, pattern, and texture. Submit samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - D. Preliminary Submittals: Submit a full set of choices where samples are submitted for selection of color, pattern, texture, or similar characteristics from a range of standard choices.
 1. Preliminary submittals will be reviewed and returned with the Architect's mark, indicating selection and other action.
 - E. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation, and similar characteristics, submit three (3) sets. One (1) set will be returned marked with the action taken.

2. Maintain sets of samples, as returned, at the Project Site, for quality comparisons throughout the course of construction.
- F. Unless non-compliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
 1. Sample sets may be used to obtain final acceptance of the construction associated with each set.
- 1.10. QUALITY ASSURANCE SUBMITTALS
 - A. Submit quality-control submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports, and other quality-control submittals as required under other Sections of the Specifications.
 - B. Certifications: Where other Sections of the Specifications require certification that a product, material, or installation complies with specified requirements; submit a notarized certification from the manufacturer certifying compliance with specified requirements.
 1. Signature: Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.
- 1.11. ARCHITECT'S ACTION
 - A. Except for submittals of record or information, where action and return is required or requested, the Architect will review each submittal, mark to indicate action taken, and return as noted in Paragraph 1.3A.
 - B. Compliance with specified characteristics is the Contractor's responsibility.
 - C. Action Stamp: The Architect will stamp each submittal with a uniform, self-explanatory action stamp. The Architect will mark the stamp appropriately to indicate the action taken:
 - D. Final Unrestricted Release: When submittals are marked "Approved", the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend on that compliance.
 1. Final-But-Restricted Release: When submittals are marked "Approved as Noted", that Work covered by the submittal may proceed provided it complies with markings or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
 2. Returned for Resubmittal: When submittal is marked "Approved as Noted - Revise and Resubmit" or "Not Approved, Revise and Resubmit", do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the markings and resubmit without delay. Repeat if necessary to obtain different action mark.
 - E. The Contractor shall not use or permit to be used submittals marked "Approved as Noted - Revise and Resubmit" or "Not Approved, Revise and Resubmit" at the Project Site or elsewhere where Work is in progress.
 - F. Other Action: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned marked "Action Not Required".

1.12. DRAWINGS TO BUILDING DEPARTMENT

- A. The Contractor shall submit three (3) sets of fully addendum plans and specifications to the City of Worcester Building Department upon application for the building permit.
 - 1. Submit drawings to architect prior to permit application for "wet stamping" of architect and engineers professional seal to the drawings. Allow up to three (3) days for this process.
 - 2. Any reduction in addenda plan must be legible.

PART 2 - PRODUCTS NOT USED

PART 3 - EXECUTION NOT USED

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02. SUMMARY

- A. This Section includes administrative and procedural requirements for Quality-Control Services.
- B. Quality-Control Services include inspections, tests, and related actions, including reports performed by Contractor, by independent agencies, and by governing authorities. They do not include contract enforcement activities performed by Architect.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
 - 1. Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified inspections, tests, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.03. RESPONSIBILITIES

- A. Contractor Responsibilities: The Contractor shall provide inspections, tests, and other similar Quality-Control Services specified in individual Specification Sections and as required by governing authorities. Costs for these services are included in the Contract Sum.
 - 1. The Contractor shall employ and pay a qualified independent testing agency to perform specified Quality-Control Services.
 - 2. Where the Owner has engaged an independent testing agency for testing and inspecting part of the Work, and the Contractor is also required to engage a testing entity for the same or related part or element of the Work, the Contractor shall not employ the entity engaged by the Owner, unless agreed to in writing by the Owner.
 - 3. Re-testing: The Contractor is responsible for retesting where results of inspections, tests, or other quality-control services prove unsatisfactory and indicate noncompliance with Contract Document requirements, regardless of whether the original test was Contractor's responsibility.

- a. The cost of re-testing construction, revised or replaced by the Contractor, is the Contractor's responsibility where required tests performed on original construction.
 4. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests, and similar services, and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include, but are not limited to, the following:
 - a. Provide access to the Work and furnish incidental labor, facilities, and equipment necessary to facilitate inspections and tests.
 - b. Take adequate quantities of representative samples of materials that require testing or assist the agency in taking samples.
 - c. Provide facilities for storage and curing of test samples.
 - d. Provide security and protection of samples and test equipment at the Project Site.
 - B. Owner Responsibilities: The Owner will engage and pay for the services of an independent testing agency to perform inspections, tests or other Quality-Control Services specified to be performed by independent testing agencies and not specified as the responsibility of the Contractor and/or are provided for by another identified entity. Costs for these services are not included in the Contract Sum.
 1. The Owner shall employ and pay for the services of a qualified independent testing agency, testing laboratory or other qualified entity to perform Quality-Control Services, which are the Owner's responsibility.
 - C. Duties of the Testing Agency: The independent agency engaged to perform inspections, sampling, and testing of materials and construction specified in individual Sections shall cooperate with the Architect and the Contractor in performance of the agency's duties. The testing agency shall provide qualified personnel to perform required inspections and tests.
 1. The agency shall notify the Architect and the Contractor promptly of irregularities or deficiencies observed in the Work during the performance of its services.
 2. The agency is not authorized to release, revoke, alter, or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.
 3. The agency shall not perform any duties of the Contractor.
 - D. Coordination: Coordinate the sequence of activities to accommodate required services with a minimum of delay. Coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
 1. The Contractor is responsible for scheduling times for inspections, tests, taking samples, and similar activities.
- 1.04. SUBMITTALS
- A. Unless the Contractor is responsible for this service, the independent testing agency shall submit a certified written report, in duplicate, of each inspection, test, or similar service to the Architect. If the Contractor is responsible for the service, submit a certified written report, in duplicate, of each inspection, test, or similar service through the Contractor.
 1. Submit additional copies of each written report directly to the governing authority, when the authority so directs.

2. Report Data: Written reports of each inspection, test, or similar service include, but are not limited to, the following:
 - a. Date of issue.
 - b. Project title and number.
 - c. Name, address, and telephone number of testing agency.
 - d. Dates and locations of samples and tests or inspections.
 - e. Names of individuals making the inspection or test.
 - f. Designation of the Work and test method.
 - g. Identification of product and Specification Section.
 - h. Complete inspection or test data.
 - i. Test results and an interpretation of test results.
 - j. Ambient conditions at the time of sample taking and testing.
 - k. Comments or professional opinion on whether inspected or tested Work complies with Contract Document requirements.
 - l. Name and signature of laboratory inspector.
 - m. Recommendations on retesting.

1.05. QUALITY ASSURANCE

- A. Qualifications for Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories, that are prequalified as complying with the American Council of Independent Laboratories' "Recommended Requirements for Independent Laboratory Qualification" and that specialize in the types of inspections and tests to be performed.
 1. Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the State of Massachusetts.

1.06. WORK CONDITIONS / SEQUENCE

- A. If sub-contractors find that conditions are not appropriate for them to begin the work of their trade or if they are directed to perform their work out of sequence by the General Contractor or if the General Contractor directs sub-contractors to start and continue regardless of job conditions, the sub-contractor shall so notify the Architect in writing by certified mail immediately.

PART 2 – PRODUCTS NOT USED

PART 3 - EXECUTION

3.01 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample taking and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities and protect repaired construction.

- C. Repair and protection is Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing, or similar services.

END OF SECTION

SECTION 014200

REFERENCES

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.

1.02. DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. Indicated: The term indicated refers to graphic representations, notes, or schedules on the Drawings, or other Paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as shown, noted, scheduled, and specified are used to help the reader locate the reference. There is no limitation on location.
- C. Directed: Terms such as directed, requested, authorized, selected, approved, required, and permitted mean directed by the Architect, requested by the Architect, and similar phrases.
- D. Approved: The term approved, when used in conjunction with the Architect's action on the Contractor's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in the Conditions of the Contract.
- E. Regulations: The term regulations include laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. Furnish: The term furnish means supply and delivery to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations to the location within the project where the product will finally be installed.
- G. Install: The term install describes operations at the Project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. Provide: The term provide means to furnish and install, complete and ready for the intended use.
- I. Installer: An Installer is the Contractor, or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged in performing.
 - 1. The term experienced, when used with the term Installer, means having a minimum of five (5) previous projects similar in size and scope to this Project, being familiar with the special requirements indicated, and having complied with requirements of the authority having jurisdiction.

2. Trades: Using terms such as carpentry is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as carpenter. It also does not imply that the requirements specified apply exclusively to tradespersons of the corresponding generic name.
 3. Assigning Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no choice or option. However, the ultimate responsibility for fulfilling Contract requirements remains with the Contractor.
 - a. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade union jurisdictional settlements and similar conventions.
 - J. Project site is the space available to the Contractor for performing construction activities either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is located.
 - K. Testing Agencies: A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project site or elsewhere, and to report on and, if required, to interpret the results of those inspections or tests.
- 1.03. SPECIFICATION FORMAT AND CONTENT EXPLANATION
- A. Specification Format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 16 Division format and MASTERFORMAT numbering system.
 - B. Specification Content: This Specification uses certain conventions regarding the style of language and the intended meaning of certain terms, words, and phrases when used in situations or circumstances. These conventions are explained as follows:
 1. Abbreviated Language: Language used in Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words that are implied, but not stated, shall be interpolated, as the sense requires. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.
 2. Imperative and streamlined language is used generally in the Specifications. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the Text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor, or by others when so noted.
 - a. The words "shall be" are implied wherever a colon (:) is used within a sentence or phrase.
- 1.04. INDUSTRY STANDARDS
- A. Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
 - B. Publication Dates: Comply with the standards in effect as of the date of the Contract Documents.

- C. **Conflicting Requirements:** Where compliance with two (2) or more standards is specified and where the standards may establish different or conflicting requirements for minimum quantities or quality levels, refer requirements that are different but apparently equal and other uncertainties to the Architect for a decision before proceeding.
1. **Minimum Quantity or Quality Levels:** The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of the requirements. Refer uncertainties to the Architect for a decision before proceeding.
- D. **Copies of Standards:** Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source.
- E. **Abbreviations and Names:** Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards generating organization, authority having jurisdiction, or other entity applicable to the context of the Text provision. Refer to the "Encyclopedia of Associations", published by Gale Research Co., available in most libraries.
- F. **Abbreviations and Names:** Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations, as referenced in Contract Documents, are defined to mean the associated names. Names and addresses are subject to change and are believed, but not ensured, to be accurate and up to date as of the date of Contract Documents.

AA	Aluminum Association 900 19th St., NW, Suite 300 Washington, DC 20006	(202) 862-5100
AABC	Associated Air Balance Council 1518 K St., NW Washington, DC 20005	(202) 737-0202
AAMA	American Architectural Manufacturers Association 1540 E. Dundee Road, Suite 310 Palatine, IL 60067	(708) 202-1350
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol St., Suite 225 Washington, DC 20001	(202) 624-5800
AATCC	American Association of Textile Chemists and Colorists P.O. Box 12215 Research Triangle Park, NC	(919) 549-8141

ACI	American Concrete Institute P.O. Box 19150 Detroit, MI 48219	(313) 532-2600
ACIL	American Council of Independent Laboratories 1629 K St., NW Washington, DC 20006	(202) 887-5872
ACPA	American Concrete Pipe Association 8300 Boone Blvd., Suite 400 Vienna, VA 22182	(703) 821-1990
ADC	Air Diffusion Council One Illinois Center, Suite 200 111 East Wacker Drive Chicago, IL 60601-4298	(312) 616-0800
AFBMA	Anti-Friction Bearing Manufacturers Association 1101 Connecticut Ave., NW, Suite 700 Washington, DC 20036	(202) 429-5155
AGA	American Gas Association 1515 Wilson Blvd. Arlington, VA 22209	(703) 841-8400
AHA	American Hardboard Association 520 North Hicks Road Palatine, IL 60067	(708) 934-8800
AHAM	Association of Home Appliance Manufacturers 20 North Wacker Drive Chicago, IL 60606	(312) 984-5800
AI	Asphalt Institute Research Park Drive P.O. Box 14052 Lexington, KY 40512-4052	(606) 288-4960
AIA	American Institute of Architects 1735 New York Ave., NW Washington, DC 20006	(202) 626-7300
A.I.A.	American Insurance Association 1130 Connecticut Ave., NW, Suite 1000 Washington, DC 20036	(202) 828-7100
AIHA	American Industrial Hygiene Association P.O. Box 8390 345 White Pond Drive Akron, OH 44320	(216) 873-2442
AISC	American Institute of Steel Construction One East Wacker Drive, Suite 3100 Chicago, IL 60601-2001	(312) 670-2400

AITC	American Institute of Timber Construction 11818 SE Mill Plain Blvd., Suite 415 Vancouver, WA 98684	(206) 254-9132
ALI	Associated Laboratories, Inc. 500 South Vermont Street Palatine, IL 60067	(708) 358-7400
ALSC	American Lumber Standards Committee P.O. Box 210 Germantown, MD 20875	(301) 972-1700
AMCA	Air Movement and Control Association 30 W. University Drive Arlington Heights, IL 60004-1893	(708) 394-0150
ANSI	American National Standards Institute 11 West 42nd Street, 13th Floor New York, NY 10036	(212) 642-4900
AOAC	Association of Official Analytical Chemists 2200 Wilson Blvd., Suite 400 Arlington, VA 22201-3301	(703) 522-3032
AOSA	Association of Official Seed Analysts c/o Larry J. Prentice 268 Plant Science 1ANR-UNL, Box 19281 Lincoln, NE 68583-0911	(402) 472-8649
APA	American Plywood Association P.O. Box 11700 Tacoma, WA 98411	(206) 565-6600
API	American Petroleum Institute 1220 L St., NW Washington, DC 20005	(202) 682-8000
ARI	Air Conditioning and Refrigeration Institute 1501 Wilson Blvd., 6th Floor Arlington, VA 22209	(703) 524-8800
ARMA	Asphalt Roofing Manufacturers Association 6288 Montrose Rd. Rockville, MD 20852	(301) 231-9050
ASA	Acoustical Society of America 500 Sunnyside Blvd. Woodbury, NY 11797	(516) 349-7800
ASC	Adhesive and Sealant Council 1627 K Street, NW, Suite 1000 Washington, DC 20006-1707	(202) 452-1500

ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers 1791 Tullie Circle, NE Atlanta, GA 30329	(404) 636-8400
ASME	American Society of Mechanical Engineers 345 East 47th St. New York, NY 10017	(212) 705-7722
ASPE	American Society of Plumbing Engineers 3617 Thousand Oaks Blvd., Suite 210 Westlake, CA 91362	(805) 495-7120
ASSE	American Society of Sanitary Engineering P.O. Box 40362 Bay Village, OH 44140	(216) 835-3040
ASTM	American Society for Testing and Materials 1916 Race St. Philadelphia, PA 19103-1187	(215) 977-9679
ATIS	Alliance for Telecommunications Industry Solutions 1200 G Street, NW, Suite 500 Washington, DC 20005	(202) 628-6380
AWCMA	American Window Covering Manufacturers Association 355 Lexington Avenue New York, NY 10017	(212) 661-4261
AWI	Architectural Woodwork Institute P.O. Box 1550 13924 Braddock Rd., Suite 100 Centreville, VA 22020	(703) 222-1100
AWPA	American Wood Preservers' Association 4128-1/2 California Ave. SW, No. 171 Seattle, WA 98116	(206) 937-5338
AWPB	American Wood Preservers Bureau 4 E. Washington Street Newnan, GA 30263	(404) 254-9877
AWS	American Welding Society 550 LeJeune Road, NW P.O. Box 351040 Miami, FL 33135	(305) 443-9353
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235	(303) 794-7711

BHMA	Builders' Hardware Manufacturers Association 355 Lexington Ave., 17th Floor New York, NY 10017	(212) 661-4261
BIA	Brick Institute of America 11490 Commerce Park Drive Reston, VA 22091	(703) 620-0010
BIFMA	Business and Institutional Furniture Manufacturers Assoc. 2335 Burton Street, SE Grand Rapids, MI 49506	(616) 243-1681
CAGI	Compressed Air and Gas Institute c/o John H. Addington Thomas Associates, Inc. 1300 Sumner Avenue Cleveland, OH 44115-2851	(216) 241-7333
CAUS	Color Association of the United States 409 West 44th Street New York, NY 10036	(212) 582-6884
CBM	Certified Ballast Manufacturers Association Hanna Building, No. 772 1422 Euclid Avenue Cleveland, OH 44115-2851	(216) 241-0711
CCC	Carpet Cushion Council P.O. Box 546 Riverside, CT 06878	(203) 637-1312
CDA	Copper Development Association 2 Greenwich Office Park, Box 1840 Greenwich, CT 06836	(203) 625-8210
CFFA	Chemical Fabrics & Film Association, Inc. c/o Thomas Associates, Inc. 1300 Sumner Avenue Cleveland, OH 44115-2851	(216) 241-7333
CGA	Compressed Gas Association 1725 Jefferson Davis Highway, Suite 1004 Arlington, VA 22202-4100	(703) 979-0900
CISCA	Ceiling and Interior Systems Construction Association 5700 Old Orchard Road, 1st Floor Skokie, IL 60077	(708) 965-2776
CISPI	Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, TN 37421	(615) 892-0137

CRI	Carpet and Rug Institute P.O. Box 2048 Dalton, GA 30722	(404) 278-3176
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumburg, IL 60173	(708) 517-1200
DHI	Door and Hardware Institute 14170 New Brook Drive Chantilly, VA 22022	(703) 222-2010
DIPRA	Ductile Iron Pipe Research Association 245 Riverchase Parkway East, Suite O Birmingham, AL 35244	(205) 988-9870
DLPA	Decorative Laminate Products Association 600 South Federal Street, Suite 400 Chicago, IL 60605	(312) 922-6222
ECSA	Exchange Carriers Standards Association 5430 Grosvenor Lane, Suite 200 Bethesda, MD 20814	(301) 564-4505
EIA	Electronic Industries Association 2001 Pennsylvania Avenue, NW Washington, DC 20006-1813	(202) 457-4900
EIMA	Exterior Insulation Manufacturers Association 2759 State Road 580, Suite 112 Clearwater, FL 34621	(813) 726-6477
EJMA	Expansion Joint Manufacturers Association 25 North Broadway Tarrytown, NY 10591	(914) 332-0040
ETL	ETL Testing Laboratories, Inc. P.O. Box 2040 Route 11, Industrial Park Cortland, NY 13045	(607) 753-6711
FCI	Fluid Controls Institute P.O. Box 9036 Morristown, NJ 07960	(201) 829-0990
FCIB	Floor Covering Installation Board 310 Holiday Avenue Dalton, GA 30720	(706) 226-5488
FGMA	Flat Glass Marketing Association White Lakes Professional Building 3310 Southwest Harrison Topeka, KS 66611-2279	(913) 266-7013

FM	Factory Mutual Research Organization 1151 Boston-Providence Turnpike P.O. Box 9102 Norwood, MA 02062	(617) 762-4300
GA	Gypsum Association 810 First Street, NE, Suite 510 Washington, DC 20002	(202) 289-5440
HEI	Heat Exchange Institute c/o John H. Addington Thomas Associates, Inc. 1300 Sumner Avenue Cleveland, OH 44115-2851	(216) 241-7333
HI	Hydronics Institute P.O. Box 218 35 Russo Place Berkeley Heights, NJ 07922	(908) 464-8200
H.I.	Hydraulic Institute 30200 Detroit Road Cleveland, OH 44145-1967	(216) 899-0010
HMA	Hardwood Manufacturers Assoc. 400 Penn Center Blvd. Pittsburgh, PA 15235	(412) 829-0770
HPMA	Hardwood Plywood Manufacturers Assoc. 1825 Michael Farraday Drive P.O. Box 2789 Reston, VA 22090-2789	(703) 435-2900
IBD	Institute of Business Designers 341 Merchandise Mart Chicago, IL 60654	(312) 647-1950
ICEA	Insulated Cable Engineers Association, Inc. P.O. Box 440 South Yarmouth, MA 02664	(508) 394-4424
IEC	International Electrotechnical Commission (Available from ANSI) 1430 Broadway New York, NY 10018	(212) 354-3300
IEEE	Institute of Electrical and Electronic Engineers 345 East 47th Street New York, NY 10017	(212) 705-7900
IESNA	Illuminating Engineering Society of North America 345 East 47th Street New York, NY 10017	(212) 705-7926

IGCC	Insulating Glass Certification Council c/o ETL Testing Laboratories, Inc. P.O. Box 2040 Route 11, Industrial Park Cortland, NY 13045	(607) 753-6711
IMSA	International Municipal Signal Association 165 East Union Street P.O. Box 539 Newark, NY 14513	(315) 331-2182
IRI	Industrial Risk Insurers 85 Woodland Street Hartford, CT 06102	(203) 520-7300
ISA	Instrument Society of America P.O. Box 12277 67 Alexander Drive Research Triangle Park, NC 27709	(919) 549-8411
KCMA	Kitchen Cabinet Manufacturers Association 1899 Preston White Drive Reston, VA 22091-4326	(703) 264-1690
LIA	Lead Industries Association, Inc. 295 Madison Avenue New York, NY 10017	(212) 578-4750
LPI	Lightning Protection Institute 3365 North Arlington Heights Road, Suite J Arlington Heights, IL 60004	(708) 255-3003
MCAA	Mechanical Contractors Association of America 1385 Piccard Drive Rockville, MD 20850-4329	(301) 869-5800
ML/SFA	Metal Lath/Steel Framing Association (A Division of the National Association of Architectural Metal Manufacturers) 600 South Federal Street, Suite 400 Chicago, IL 60605	(312) 922-6222
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry 127 Park Street, NE Vienna, VA 22180	(703) 281-6613
NAAMM	National Association of Architectural Metal Manufacturers 600 South Federal Street, Suite 400 Chicago, IL 60605	(312) 922-6222

NAIMA	North American Insulation Manufacturers Association 44 Canal Center Plaza, Suite 310 Alexandria, VA 22314	(703) 684-0084
NBHA	National Builders Hardware Association (Now DHI)	
NCMA	National Concrete Masonry Association P.O. Box 781 Herndon, VA 22070-0781	(703) 435-4900
NCRPM	National Council on Radiation Protection and Measurements 7910 Woodmont Avenue, Suite 800 Bethesda, MD 20814	(301) 657-2652
NCSPA	National Corrugated Steel Pipe Association 2011 Eye Street, NW Washington, DC 20006	(202) 223-2217
NEC	National Electrical Code (from NFPA)	
NECA	National Electrical Contractors Association 7315 Wisconsin Avenue Bethesda, MD 20814	(301) 657-3110
NEMA	National Electrical Manufacturers Association 2101 L Street, NW, Suite 300 Washington, DC 20037	(202) 457-8400
NETA	International Electrical Testing Association P.O. Box 687 Morrison, CO 80465	(303) 467-0526
NFPA	National Fire Protection Association One Batterymarch Park P.O. Box 9101 Quincy, MA 02269-9101	(617) 770-3000 (800) 344-3555
N.F.P.A.	National Forest Products Association 1250 Connecticut Avenue, NW, Suite 200 Washington, DC 20036	(202) 463-2700
NHLA	National Hardwood Lumber Association P.O. Box 34518 Memphis, TN 38184-0518	(901) 377-1818
NKCA	National Kitchen Cabinet Association (Now KCMA)	
NLGA	National Lumber Grades Authority 1055 West Hastings Street, Suite 260 Vancouver, British Columbia Canada V6E 2E9	(604) 687-2171

NOFMA	National Oak Flooring Manufacturers Association P.O. Box 3009 Memphis, TN 38173-0009	(901) 526-5016
NPA	National Particleboard Association 18928 Premiere Court Gaithersburg, MD 20879	(301) 670-0604
NPCA	National Paint and Coatings Association 1500 Rhode Island Avenue, NW Washington, DC 20005	(202) 462-6272
NRCA	National Roofing Contractors Association 10255 West Higgins Road, Suite 600 Rosemont, IL 60018-5607	(708) 299-9070
NSF	National Sanitation Foundation 3475 Plymouth Road P.O. Box 1468 Ann Arbor, MI 48106	(313) 769-8010
NWMA	National Woodwork Manufacturers Association (Now NWWDA)	
NWWDA	National Wood Window and Door Association 1400 East Touhy Avenue, #G54 Des Plaines, IL 60018	(708) 299-5200
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077	(708) 966-6200
PCI	Precast/Prestressed Concrete Institute 175 West Jackson Blvd. Chicago, IL 60604	(312) 786-0300
PDI	Plumbing and Drainage Institute c/o Sol Baker 1106 West 77th Street, South Drive Indianapolis, IN 46260	(317) 251-6970
PEI	Porcelain Enamel Institute 1101 Connecticut Avenue, NW, Suite 700 Washington, DC 20036	(202) 857-1134
RFCI	Resilient Floor Covering Institute 966 Hungerford Drive, Suite 12-B Rockville, MD 20805	(301) 340-8580
RIS	Redwood Inspection Service 405 Enfrente Drive, Suite 200 Novato, CA 94949	(415) 382-0662

RMA	Rubber Manufacturers Association 1400 K Street, NW Washington DC 20005	(202) 682-4800
SDI	Steel Deck Institute P.O. Box 9506 Canton, OH 44711	(216) 493-7886
S.D.I.	Steel Door Institute 30200 Detroit Road Cleveland, OH 44145	(216) 889-0010
SGCC	Safety Glazing Certification Council c/o ETL Testing Laboratories Route 11, Industrial Park Cortland, NY 13045	(607) 753-6711
SHLMA	Southern Hardwood Lumber Manufacturers Association (Now HMA)	
SIGMA	Sealed Insulating Glass Manufacturers Association 401 North Michigan Avenue Chicago, IL 60611	(312) 644-6610
SMA	Screen Manufacturers Association 3950 Lake Shore Drive, Suite 502-A Chicago, IL 60613-3431	(312) 525-2644
SMACNA	Sheet Metal and Air Conditioning Contractors National Association 4201 Lafayette Center Drive Chantilly, VA 22021	(703) 803-2980
SPIB	Southern Pine Inspection Bureau 4709 Scenic Highway Pensacola, FL 32504	(904) 434-2611
SPRI	Single Ply Roofing Institute 20 Walnut Street Wellesley Hills, MA 02189	(617) 237-7879
SSPC	Steel Structures Painting Council 4400 Fifth Avenue Pittsburgh, PA 15213-2683	(412) 268-3327
SSPMA	Sump and Sewage Pump Manufacturers Association P.O. Box 298 Winnetka, IL 60093	(708) 835-8911
SWI	Steel Window Institute c/o Thomas Associates, Inc. 1300 Sumner Ave, Cleveland, OH 44115-2851	(216) 241-7333

SWPA	Submersible Wastewater Pump Association 600 South Federal Street, Suite 400 Chicago, IL 60605	(312) 922-6222
TIMA	Thermal Insulation Manufacturers Association 29 Bank Street Stamford, CT 06901 (Standards now issued by NAIMA)	(203) 324-7533
TPI	Truss Plate Institute 583 D'Onofrio Drive, Suite 200 Madison, WI 53719	(608) 833-5900
UFAC	Upholstered Furniture Action Council Box 2436 High Point, NC 27261	(919) 885-5065
UL	Underwriters Laboratories, Inc. 333 Pfingsten Road Northbrook, IL 60062	(708) 272-8800
USP	U.S. Pharmacopoeial Convention 12601 Twinbrook Parkway Rockville, MD 20852	(301) 881-0666
WCLIB	West Coast Lumber Inspection Bureau P.O. Box 23145 Portland, OR 97223	(503) 639-0651
WCMA	Wallcovering Manufacturers Association 355 Lexington Avenue, 17th Floor New York, NY 10017 (WCMA has moved from this location, perhaps to the Chicago area. Address and telephone number not confirmed.)	(212) 661-4261
WIC	Woodwork Institute of California P.O. Box 11428 Fresno, CA 93773-1428	(209) 233-9035
WRI	Wire Reinforcement Institute 1101 Connecticut Avenue NW, Suite 700 Washington, DC 20036-4303	(202) 429-5125
WSC	Water Systems Council 600 South Federal Street, Suite 400 Chicago, IL 60605	(312) 922-6222
WSFI	Wood and Synthetic Flooring Institute 4415 West Harrison Street, Suite 242-C Hillside, IL 60162	(708) 449-2933

WLPDIA	Western Lath, Plaster, Drywall Industries Association (Formerly California Lath & Plaster Association) 8635 Navajo Road San Diego, CA 92119	(619) 466-9070
WWPA	Western Wood Products Association Yeon Building 522 SW 5th Avenue Portland, OR 97204-2122	(503) 224-3930
W.W.P.A.	Woven Wire Products Association 2515 North Nordica Avenue Chicago, IL 60635	(312) 637-1359

- G. Federal Government Agencies: Names and titles of federal government standard or Specification-producing agencies are often abbreviated. The following acronyms or abbreviations referenced in the Contract Documents indicate names of standard or Specification-producing agencies of the federal government. Names and addresses are subject to change but are believed to be, but are not assured to be, accurate and up to date as of the date of the Contract Documents.

CE	Corps of Engineers (U.S. Department of the Army) Chief of Engineers – Referral Washington, DC 20314	(202) 272-0660
CFR	Code of Federal Regulations (Available from the Government Printing Office) North Capitol Street between G and H Streets, NW Washington, DC 20402 (Material is usually first published in the "Federal Register")	(202) 783-3238
CPSC	Consumer Product Safety Commission 5401 Westbard Avenue Bethesda, MD 20207	(301) 492-6580 (800) 638-2772
CS	Commercial Standard (U.S. Department of Commerce) Washington, DC 20230	(202) 482-2000
DOC	U.S. Department of Commerce 14th Street and Constitution Avenue, NW Washington, DC 20230	(202) 482-2000
DOT	Department of Transportation 400 Seventh Street, SW Washington, DC 20590	(202) 366-4000
EPA	Environmental Protection Agency 401 M Street, SW Washington, DC 20460	(202) 382-2090

FAA	Federal Aviation Administration (U.S. Department of Transportation) 800 Independence Avenue, SW Washington, DC 20590	(202) 366-4000
FCC	Federal Communications Commission 1919 M Street, NW Washington, DC 20554	(202) 632-7000
FHA	Federal Housing Administration (U.S. Department of Housing and Urban Development) Director, Manufactured Housing and Construction Standards Division 451 Seventh Street, SW, Room 9158 Washington, DC 20201	(202) 755-5210
FS	Federal Specification (from GSA) Specifications Unit (WFSIS) 7th and D Streets, SW Washington, DC 20407	(202) 708-9205
GSA	General Services Administration F and 18th Streets, NW Washington, DC 20405	(202) 708-5082
MIL	Military Standardization Documents (U.S. Department of Defense) Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120	
NIST	National Institute of Standards and Technology (U.S. Department of Commerce) Gaithersburg, MD 20899	(301) 975-2000
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor) N3647 200 Constitution Avenue, NW Washington, DC 20210	(202) 219-8148
PS	Product Standard of NBS (U.S. Department of Commerce) Washington, DC 20230	(202) 482-2000
REA	Rural Electrification Administration (U.S. Department of Agriculture) 14th Street and Independence Avenue, SW Washington, DC 20250	(202) 447-2791
USDA	U.S. Department of Agriculture 14th Street and Independence Avenue, SW Washington, DC 20250	(202) 447-2791

USPS	U.S. Postal Service	
	475 L'Enfant Plaza, SW	
	Washington, DC 20260-0010	(202) 268-2000

1.05. GOVERNING REGULATIONS AND AUTHORITIES

- A. Copies of Regulations: Obtain copies of governing regulations and retain them at the Project site to be available for reference by parties who have a reasonable need, if requested by the Architect.

1.06. SUBMITTALS

- A. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence, and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work.

PART 2 – PRODUCTS NOT USED

PART 3 – EXECUTION NOT USED

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02. SUMMARY

- A. This Section specifies requirements for temporary services and facilities, including utilities, construction and support facilities, security, and protection.
- B. Temporary utilities required include, but are not limited to:
 - 1. Temporary power and lighting as specified in Division 260000.
 - 2. Temporary heat & winter conditions.
- C. Temporary construction and support facilities required include, but are not limited to:
 - 1. Waste disposal services.
 - 2. Temporary yard and storage on and off-site.
 - 3. Construction aids and miscellaneous services and facilities.
 - 4. Sweeping compound.
 - 5. Emergency portable generators of size required if permanent power is temporarily unavailable.
 - 6. Water service and distribution if water supply to adjacent occupied spaces is temporarily unavailable.
 - 7. Parking
- D. Security and protection facilities required include, but are not limited to:
 - 1. Temporary weather protection, enclosures, and covers.
 - 2. Temporary fire protection and fire watch if required by Worcester Fire Department.
 - 3. Barricades, warning signs, lights.
 - 4. Temporary partitions between occupied areas and construction areas, STC 48 or better.
- E. Where a distinction is made in this specification section between temporary services to be provided by a General Contractor and those to be provided by a Subcontractor, the purpose is only to clarify which costs are to be included by the applicable parties for inclusion in the applicable bids and contracts that would follow. These distinctions have no bearing upon the Contract between the Owner and General Contractor and do not limit in any way the General Contractor's responsibility to provide all such temporary services without additional cost to the Owner. For the sake of clarity in this specification section, the term General Contractor has been used for the person called the Contractor in other specification sections, when the intent is that that person shall provide a service directly at his own expense rather than at the expense of one of the Subcontractors from whom the Owner has taken filed sub-bids.

- F. The temporary services described in this specification section may not be adequate to provide for all of the needs of the General Contractor or all Subcontractors but are intended only to provide a basis for obtaining filed sub-bids. The General Contractor or any Subcontractor requiring additional temporary services for the proper execution of his work or because of climatic conditions shall arrange for and obtain such services at his own expense without further compensation by the Owner.
- G. The Contractor shall be responsible for restoring all landscaped areas affected by the work of this project to their original "like-new" state that existed prior to work commencing. This restoration work shall include, but not be limited to, planting beds with mulch, trees, shrubs, and lawn areas. Great care should be taken during the work not to damage nor destroy any landscaping impacted by this work. Any landscaping disturbed, damaged, or destroyed shall be restored, repaired, or replaced in-kind at no cost to the Owner.

1.03. SUBMITTALS

- A. Schedule: Submit a schedule indicating implementation and termination of each temporary utility within fifteen (15) days of the date established for Commencement of the Work.

1.04. QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:
 - 1. Commonwealth of Massachusetts State Building Code requirements; 6th Edition.
 - 2. Federal, State and City Health and safety regulations.
 - 3. Utility company regulations.
 - 4. Police, Fire Department and Rescue Squad rules.
 - 5. Environmental protection regulations.
- B. Standards: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:
 - 1. NFPA Code 241.
 - 2. NFPA 70.
 - 3. ANSI A10.
 - 4. NECA NJG-6.
- C. Electric Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with NFPA 70.
- D. Inspections: Arrange for authorities having jurisdiction to inspect and test temporary utilities prior to use. Obtain required certifications and permits.

1.05. PROJECT CONDITIONS

- A. Temporary Utilities: At the earliest feasible time, when acceptable to the Owner, change from use of temporary service to use of permanent service.

- B. Conditions of Use: Maintain temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload temporary facilities, or permit them to interfere with progress. Do not allow hazardous, dangerous, unsanitary conditions, or public nuisances to develop or persist on the site.
- C. Always maintain the continuity of all utility services across all Phases of the Construction Project, unless otherwise directed by the Architect or Owner.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General: Provide new materials suitable for the use intended, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

2.02 TEMPORARY WATER

- A. Definitions:
 - 1. Water Access Point: A point, within the Project area, at which water is available during construction.
- B. Charges: The General Contractor shall pay for all facilities to provide water during construction, while the Owner will supply and pay for water during the construction. The General Contractors shall pay for backflow preventer if utilizing Owners Hydrant for water.
 - 1. The furnishing of water by the Owner shall be conditional upon all contractors being conservative and prudent in its use. In the event of any contractor is repeatedly wasted in the use of water thus provided, the Owner reserves the right to charge the General Contractor for wasteful usage at an equitable rate for the additional portion of water used.
- C. Temporary Water: The General Contractor shall be responsible for all facilities to provide water during construction as defined above and further specified as follows:
 - 1. Except under unusual circumstances, when otherwise specified or approved by the Architect, all water shall be of potable quality.
 - 2. The General Contractor shall provide all necessary piping, valving, hose bibbs, hosing, etc. to provide temporary water during construction from a water access point determined by the Owner's Representative. Any facilities running within the building are required not to leak. Any damage incurred due to leaks shall be repaired at the expense of the General Contractor.
 - 3. The General Contractor shall pay for and be responsible for the protection of Temporary Water, which he installs, from freezing and other damage.

2.03 TEMPORARY HEAT

- A. Definitions:
 - 1. Temporary Heating & Ventilating: The General Contractor shall provide temporary heat and ventilation, as needed, to work areas outside the building to maintain the minimum temperatures described below. The General Contractor shall also provide temporary heat and ventilation, as needed, to work areas inside the building to maintain an indoor temperature of 68 degrees Fahrenheit during the winter months and 75 degrees Fahrenheit during the summer months.

- B. Charges: The General Contractor shall pay for all temporary heat and ventilation as defined above. The General Contractor shall pay for all fuel required for Temporary Heat and Ventilation. The Owner shall pay for all electrical energy use charges.
 - 1. The furnishing of electrical energy by the Owner shall be conditional upon being conservative and prudent in its use. If any contractor is repeatedly wasteful in the use of electrical energy thus provided, the Owner reserves the right to charge the General Contractor at an equitable rate for the additional portion of electrical energy used.
- C. Temporary Heating: Portable heating units shall be of sufficient capacity and number and shall be located so that damage to any part of the project from low temperature will be prevented and that concrete, masonry, and other components requiring curing shall be properly cured.
 - 1. Heaters for temporary heat shall be temporary steam generators, forced air heaters, or other type heaters located outside the building or vented to the outside of the building. Type(s) shall be such as to not damage or stain construction or any part of the existing building. Heaters must be UL approved.
 - 2. At no time will oil-burning "salamander" type heaters be used, nor will non-vented, open flame heaters be used inside the building.
 - 3. Propane-type heaters shall not be used at any time within the area of the building or near stockpiles of combustible materials.
 - 4. Temporary heating shall apply to winter conditions.
- A. Temporary Ventilation: Portable ventilation units shall be of sufficient capacity and number and shall be located so that damage to any part of the project from excess humidity will be prevented and that concrete, masonry, and other components requiring curing shall be properly cured.

2.04 TEMPORARY POWER AND LIGHTING

- A. Definitions:
 - 1. Temporary Electric: The furnishing, installing, maintenance, and removal of all wiring, fusing, switches, outlets, lamps, and accessory electrical devices required to provide lighting and power needed by all construction trades for the duration of construction.
- B. Charges: The General Contractor shall pay for all facilities for Temporary Electric. The Owner shall pay for all use charges for electrical energy.
 - 1. The furnishing of electrical energy by the Owner shall be conditional upon all contractors being conservative and prudent in its use. If any contractor is repeatedly wasteful in the use of electrical energy thus provided, the Owner reserves the right to charge the General Contractor at an equitable rate for the additional portion of energy consumed.
- C. Temporary Electricity: The General Contractor shall pay for and be responsible for Temporary Electric as defined above and further specified as follows:
 - 1. The General Contractor shall provide temporary electricity during construction from an electrical service access point determined by the Owner's Representative.
 - 2. The Temporary Electricity is expected to be used during normal working hours, as defined in Section 01010 – Summary of Work. No additional charge shall be made by the General Contractor for switching the system on and off to meet this time requirement.

3. Responsibility of compliance with local, state, and national codes for installation of the Temporary Electric service shall be borne by the General Contractor.
4. The General Contractor shall be responsible for servicing and maintaining all temporary lighting during the construction.
5. The General Contractor shall be responsible for paying for the following Temporary Electricity. This schedule will not necessarily provide for all the requirements of all contractors. The General Contractor or any Subcontractor having requirements for power, lighting, or service other than those provided herein, shall make the necessary arrangements to obtain such power, lighting, or service at his own expense.
 - a. The General Contractor shall obtain all necessary permits, shall furnish, and install the temporary electrical power and lighting systems, and shall pay for all labor, materials, and equipment required for this work. All such temporary electrical work shall meet the requirements of the Massachusetts Electrical Code and OSHA.
 - b. The Electrical Subcontractor shall furnish and install a feeder, or feeders, of sufficient capacity to provide additional lighting to the work areas, as required, to properly carry out the work. Temporary lighting shall be based on the following requirements:
 - 1) Rooms or spaces under 250 square feet: Two (2) 100-watt lamps.
 - 2) Rooms or spaces over 250 square feet and under 500 square feet: Four (4) 100-watt lamps.
 - 3) Rooms or spaces over 500 square feet and under 1,000 square feet: Two (2) 200-watt lamps.
 - 4) Rooms or spaces over 1,000 square feet: Two (2) 200-watt lamps for every 1,000 square feet or fraction thereof.
 - 5) Sufficient additional wiring outlets and lamps shall be installed to ensure proper lighting in stairwells, corridors, and passage areas.
 - 6) Temporary power, in addition to the lighting requirements, shall be provided throughout the building for electrically operated tools, based on a minimum of 0.50 watts per square foot.
 - 7) Outlets shall be located at convenient points so that extension cords not over 50 feet in length will reach all work requiring light or power.
 - 8) All Electrical Outlets shall be properly configured NEMA polarized outlets to prevent insertion of 110-120 volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light, for connection of power tools and equipment.
 - 9) All Electrical Power Cords shall be grounded extension cords that are "hard-service" type where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress.
 - c. All necessary cables, load centers, switches, and accessories required for the temporary light and power installation shall be provided and installed by the General Contractor.
 - d. The General Contractor shall furnish and install all lamps, both initial and replacement, before the Date of Substantial Completion.
 - e. Temporary light and power requirements herein required are for the use of all trades working at the site.

- f. All Contractors and Subcontractors shall, individually, furnish all extension cords and lamps, sockets, motors, and accessories required for their work.
 - 1) All Electrical Power Cords shall be grounded extension cords that are “hard-service” type where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress.
- g. Any of the Contractors or Subcontractors shall reimburse the General Contractor for any of the following:
 - 1) Any temporary wiring of a special nature, other than that specified above, required for their work.
 - 2) Any temporary wiring of construction offices and buildings used by them.
 - 3) Any temporary wiring for protective night lighting.
- h. The General Contractor shall be responsible for removing all temporary wiring, service equipment, and accessories when and as directed to by the General Contractor.
- i. The provisions of the Massachusetts Electrical Code shall be strictly complied to, with special respect to Article 305 of said code, and the following precautions shall be taken:
 - 1) Open conductors shall be fastened at the ceiling height at minimum of 10 feet intervals. Conductors may not be laid on the floor, and receptacles or fixed equipment circuits shall contain a separate equipment-grounding conductor if run as open wiring. Receptacles shall be of the grounding type. Branch circuits shall also be of the grounding type, unless installed in a complete metallic conductor and receptacles electrically connected to the grounding conductor. Neither bare conductors nor earth returns shall be used for wiring of any temporary circuits. Grounding circuits shall never be interrupted.
 - 2) All 15 and 20 amp receptacle outlets on single phase circuits which are used for construction purposes shall be equipped with ground-fault circuit interrupters, reset button, and pilot lights; as required by Article 210 of the Massachusetts Electrical Code.
 - 3) All outlets shall be properly configured NEMA polarized outlets to prevent insertion of 110-120 volt plugs into higher voltage outlets.

2.05 TEMPORARY SANITARY FACILITIES

- A. The General Contractor shall provide ample toilet facilities with proper enclosures for the use of workmen employed on the work to be as located within the construction areas on site were permitted by the Architect.
 - 1. Provide the Architect with a schedule of maintenance and cleaning. Provide toilet facilities with hand washing sanitizer dispenser, paper towels, and cleaners.
 - 2. Toilet facilities shall be installed and maintained in conformity with the governing laws and building code. They shall be properly lit, ventilated, and kept clean at all times.
 - 3. At no time shall any Contractor Personnel use toilet facilities outside the work areas or in any Owner-occupied parts of the building.

2.06 TEMPORARY WEATHER PROTECTION

A. Definitions:

1. Weather Protection: The furnishing, installing, maintenance, and removal of temporary closures, covers, shields, and any other weather protection devices as required to protect work in place and permit construction to proceed during cold or inclement weather.

B. Weather Protection Standard: The following weather protection standards pursuant to Chapter 597 of the Acts of 1980, modifying Sections 44F and G of Chapter 149 of the General Laws, are hereby incorporated into this specification, and shall be considered supplementary to the temporary heating and temporary enclosure requirements. Under the provisions of Chapter 149, Section 44F(I) and Section 44G, Paragraph D, of the General Laws, General Contractors are required to provide weather protection to allow building construction to be carried on during the months of November through March. These standards do not require enclosures for heat for operations that are not economically feasible to protect in the judgment of the Awarding Authority, including for example, site work, excavation, pile driving, steel erection, erection of certain exterior panels, roofing, and the like.

1. The General Contractor shall provide and install weather protection.
2. Weather protection shall be provided during the months of November through March.
3. The temperature at the working surface shall be at least forty degrees Fahrenheit (40° F). This provision does not supersede any specific greater requirements for the methods of construction or curing of materials.
4. Weather protection materials, equipment, and the installation thereof, shall comply with all safety rules and regulations including the provisions for adequate ventilation and fire protection devices.
5. At completion of work, the General Contractor shall remove temporary weather protection and restore all surfaces to first class condition.
6. The General Contractor may choose, if the Awarding Authority approves, to use the permanent heating system for temporary heat after the building is enclosed and the system has been tested and is ready to operate.
 - a. The General Contractor shall thoroughly clean and restore to first class condition, acceptable to the Awarding Authority, all portions of the permanent heating system that are used for heating during construction.
 - b. Use of the permanent heating system for weather protection shall not affect any heating system guarantee that may be due to the Awarding Authority; such guarantee shall begin to run only when the Awarding Authority accepts the building.
7. Reporting Requirements:
 - a. Within thirty (30) calendar days after the Contract Award the General Contractor shall submit, in writing to the Awarding Authority for approval, its proposed plan for weather protection. Refer to Section 01300 – Submittals for additional information regarding the appropriate procedure in preparing this submittal.
 - b. The General Contractor shall furnish and install accurate Fahrenheit thermometers at places designated by the Awarding Authority to determine whether the required temperature is being maintained.

C. Temporary Covers and Enclosures:

1. Except as otherwise specified herein below, all costs of closing openings in new construction and the exterior of the existing buildings open to the weather, including temporary covers and enclosures, shall be borne by the General Contractor. Enclosures must be built around various portions of the new construction and new exterior openings in the existing building as the work progresses if, and as necessary to totally insure against the intrusion of rain, snow, and other moisture which might damage the new or existing materials or finishes and as necessary to maintain the minimum temperatures specified.
 - a. Where roofs, exterior walls, windows, or other elements of new or existing buildings or structures providing weather protection are to be temporarily opened to the weather, they shall be fully enclosed or covered with securely attached and well-draining enclosures whenever inclement weather is occurring or is threatening, to assure absolute weather protection. All damage to the new or existing buildings or structures, including all materials and finishes thereon, caused by inadequate protection shall be made good by the General Contractor without further cost to the Owner.
2. All such weather tight enclosures shall provide a reasonable open area to permit drying of new wet materials while at the same time making it possible to maintain the required interior temperatures. The General Contractor shall provide sufficient continuous ventilation until the time that the "wet" work of the project has dried sufficiently to receive finished woodwork and other materials subject to moisture damage, at which time the ventilation shall be maintained at approximately the anticipated conditions of final use of the project.
3. The permanent doors and frames shall not be used as temporary enclosures prior to the time of delivery of finished woodwork or acoustical materials. Temporary wood or plywood doors with wood frames and proper hardware to make the doors self-closing shall be provided, instead, at the door openings.
4. As parts of the temporary enclosures, the permanent doors, windows, and fixed glass may be used, provided sufficient ventilation area is available and that extreme care is taken to prevent damage to the same. Where available ventilation area is limited, intake and discharge fans may be used to increase air movement through the construction areas. Before delivery of finished woodwork or other materials subject to moisture damage, the permanent windows, roof accessories, fixed glass, doors, and entrances must be in place. Spark-proof fans shall also be provided to remove toxic or obnoxious fumes from enclosed areas as may be required.
5. Once temporary enclosures are in place, a temperature of at least 55 degrees Fahrenheit shall be maintained within all interior workspaces. From the time of delivery of the first shipment of finished woodwork or other finished materials subject to moisture damage, a temperature of at least 60 degrees Fahrenheit shall be maintained within all interior spaces. Temperatures shall be maintained at this level until the time of substantial completion of the project or occupancy by the Owner, whichever is sooner, and shall not be discontinued until definite arrangements for same have been made by the Owner.

D. Weather Protection by Subcontractors: The General Contractor shall provide at his own expense all Weather Protection as defined above except as follows:

1. Each Subcontractor shall pay for and be responsible for the weather protection of his tools, devices, equipment, appliances, and appurtenances to use in the accomplishment of his work and for weather protection of materials furnished by him until such materials are incorporated as a physical part of the Project.

2. Protection and heating of aggregates and water for concrete and mortars shall be the responsibility and at the expense of the respective Subcontractors furnishing concrete and mortars.
3. Construction Water Facilities, furnished and installed by the General Contractor, shall be protected against freezing by the Contractor at his own expense.
4. Hoses, piping, and accessory devices installed and connected by others to the water facilities furnished by the Contractor shall be protected against freezing by the installer at his own expense.

2.07 TEMPORARY FIRE PROTECTION

- A. The General Contractor shall take all necessary precautions for the prevention of fire during construction. He shall be responsible for ensuring that the area within the contract limits is kept orderly and clean and that combustible rubbish is promptly removed from the site. Combustible materials shall be stored on site in a manner and at locations approved by the Architect. The General Contractor shall comply with all suggestions regarding fire protection made by the Insurance Company with which the Owner maintains his fire insurance.
- B. The General Contractor shall provide and maintain in good working order, under all conditions, readily available to all portions of the site and work, suitable and adequate fire protection equipment, and services. Such facilities shall include, but are not limited to, the furnishing and maintaining in good working order a minimum of two (2) standard, Underwriters' Laboratories labeled, 2-1/2 gallon capacity fire extinguishers per floor.
- C. Smoking shall be prohibited on the premises and signs to this effect shall be posted conspicuously.
- D. Fires shall not be built on the premises.

2.08 TEMPORARY CRANES, LIFTS, DERRICKS, AND HOISTING SERVICES

- A. The General Contractor shall furnish, install, operate, and maintain in safe condition all crane services outside of the building for his own use and for the use of all Subcontractors on the project to properly carry out and complete the work, except as may otherwise be specifically provided for in any of the trade sections of the Specifications.
- B. All crane services shall be provided at no cost to the Subcontractors for their work.
- C. Each Subcontractor shall, however, provide their own lifts, derricks, hoisting services, etc. (excluding crane services outside the building) for their own work outside and inside the building to properly complete their work.
- D. All cranes, lifts, derricks, and hoisting equipment, machinery, and operation shall comply in all respects to the governing laws and codes.

2.09 TEMPORARY STAGING AND SCAFFOLDING

- A. The General Contractor shall furnish, erect, and maintain in safe condition all exterior and interior staging and scaffolding required for his own use.
- B. Each of the Subcontractors shall furnish, erect, and maintain in safe condition all exterior and interior staging and scaffolding for their own use.

- C. All staging and scaffolding shall be enclosed at the ground by a temporary construction fence as defined elsewhere in this Section.
- D. Staging and scaffolding shall comply in all respects to the governing laws and codes.

2.10 TEMPORARY BRACING, SHORING, SHEETING, AND TIE-DOWNS

- A. The General Contractor shall take all precautions to protect the Work against collapse or other damage by earth or construction loads, high winds, snow and rain loads, damage by adverse weather conditions or geological disturbances, or other cause, by temporary bracing shoring, sheeting, guying, lacing, covering, weighting, and other reasonable and prudent means.

2.11 TEMPORARY STAIRS, LADDERS, RAMPS, PLATFORMS, ETC.

- A. The General Contractor shall provide and maintain all necessary temporary stairs, ladders, ramps, platforms, and other temporary construction required for the proper execution of the work, all of which shall comply with requirements of the governing laws and codes and/or as required by local building officials.
- B. As soon as the permanent ladders and hatches are installed, the General Contractor shall provide temporary protective measures acceptable to the Architect to maintain their new condition until substantial completion, so to assure that such items will not be damaged as the remaining work progresses.

2.12 TEMPORARY FENCING, BARRIERS, AND PARTITIONS

- A. Protection: The General Contractor shall be fully responsible for the security of the work areas of the site and for patrolling and protecting the work under construction and his and the Owner's materials stored or otherwise located on the site.
- B. Temporary Barricading: In addition, the General Contractor shall provide other temporary fencing, barricading, and overhead protection of substantial nature to protect workmen, other personnel, and the public against various hazards and attendant nuisances that come about as the work progresses such as, but not necessarily limited to, falling materials, dangerous excavations, dangerous projections, or obstructions, stored or stockpiled materials, etc. Comply fully with recommendations of the Association of General Contractors and provisions of the governing laws and codes.
- C. Note: As part of requirement for overhead protection, include substantial, well-constructed, walkways cover sufficient to assure pedestrian safety, in accordance with recommendations of the Association of General Contractors and provisions of the governing laws and codes.

- D. In addition, the General Contractor shall provide all necessary protective barriers within the existing building as required to assure the safety of persons and property wherever work on this Contract is being carried out. Include substantial, well-constructed, protective barriers at all construction work-limit-lines separating Contract work areas from areas occupied by the Owner. Also include flameproof dust-curtaining and block or filter mechanical return air systems in a safe manner, in cooperation with Mechanical trade, between areas where dust effusive work is being carried out and other interior areas of the new addition and existing building to prevent passage of dirt and dust. Barriers, curtaining, etc., must be self-supporting, and must not depend on building construction for primary structure or anchorage. Locations and quantities of barriers and dust curtaining shall always be subject to Owner's and Architect's approval, but such approval, or lack of inspection or approval, by the Owner or the Architect, shall not be construed as relieving the Contractor of any of his responsibilities under the Contract.

2.13 TEMPORARY STORAGE FACILITIES

- A. Space for storage of materials shall be confined to the construction areas outside the building and as designated and/or approved by the Architect.
- B. Locations where construction equipment may be stored during non-working hours shall be as acceptable to the Owner. Construction equipment shall not present a hazard when stored.

2.14 NOISE, DUST, AND POLLUTION CONTROL

- A. All work performed under the Contract shall conform to the requirements of Chapter III, Section 31C and Section 142D of the General Laws, Commonwealth of Massachusetts and Rules and Regulations adopted thereto by the Commonwealth of Massachusetts, Department of Public Health, and the requirements of local noise, dust, and pollution control laws, ordinances, and regulative agencies applicable to the work.
- B. The General Contractor shall provide temporary partitions to prevent noise, dust, pollution or order from entering occupied spaces. Temporary partitions shall have STC of 50. Submit location plan and type of construction for temporary partitions for approval.
- C. Control of air borne dust or pollution from the site with spray or as otherwise may be necessary to prevent the migration of any dust or pollutants.
- D. Dust Control: Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
1. Do not use water when it may damage existing construction or create hazardous or objectionable conditions, such as ice, flooding, or pollution.
 2. Vacuum equipment shall be equipped with HEPA filters.
 3. Vacuum carpeted areas.
 4. Wet mop floors to eliminate trackable dirt.
 5. Sweeping shall be allowed only with the use of a non-oil based sweeping compound followed by vacuuming any remaining residue.
 6. Wipe down walls and doors of demolition enclosure.
- E. Disposal: Remove and transport debris, in a manner that will prevent spillage on adjacent surfaces and areas, to the construction dumpster(s).

- F. Cleaning: Clean areas adjacent to the work area of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

2.15 WATER CONTROL

- A. The General Contractor shall be responsible for site drainage and snow removal within the limit-of-work lines and shall maintain such drainage and removal during the life of the Contract in a manner approved by the Owner and Architect, and so as not to adversely affect the adjacent areas.
- B. Water from the Work of this Project shall be disposed of in such a manner as not to be a threat to public health nor cause damage to public or private property. It shall not be disposed of over surfaces of roads, walks, and streets, nor be permitted to cause any interference with the normal use of the same.
- C. Removal of snow and ice from within the limit-of-work lines at the site as required to maintain the continual progress of the work, including that required to keep work areas, access roads, and storage areas clear, free, and in use, and as required to prevent damage to existing construction and new work in places.

2.16 CONSTRUCTION CLEANING AND CONSTRUCTION DUMPSTERS

- A. The General Contractor shall provide and pay for temporary dumpster type trash containers outside the building for use by all Subcontractors, and shall have the containers replaced, hauled away, and the contents legally disposed of at sufficient intervals to maintain them at all times in sufficiently empty condition that they are ready to receive trash and debris.
- B. All construction dumpsters shall be in the parking lot within the construction staging area and were permitted by the Owner.
- C. Each Contractor on the project shall be responsible for removing their own trash and debris from the building to the construction dumpster(s).
- D. Waste materials and rubbish, which might otherwise raise dust, shall be sprinkled during handling and loading to minimize this effect. Debris shall be carried out of the structure in containers or dropped in fully enclosed chutes and shall not be passed through, or thrown from, windows or other wall openings, and in no case shall the debris or trash be permitted to drop freely from the openings.
- E. The Work Areas shall be inspected daily and all debris, waste, rubbish, etc. shall be removed and placed in a dumpster.
- F. All waste materials and rubbish shall be disposed of legally, off site.

2.17 TEMPORARY RODENT AND PEST CONTROL

- A. Rodent and Pest Control: Provide rodent control as necessary to prevent infestation of construction and storage areas. Employ methods and use materials, which will not adversely affect conditions at the site or on adjoining properties. Should rodenticides be considered necessary submit copies of proposed program to Owner and Architect. Use of rodenticide shall comply with manufacturer's published instructions and recommendations. Clearly indicate:
 - 1. Area or areas to be treated.
 - 2. Rodenticides to be used.

3. Manufacturer's printed instructions.
4. Pollution preventive measures to be employed.

2.18 WATCHMEN, FLAGMEN, AND POLICE DETAILS

- A. The General Contractor shall provide the services of flagmen, traffic directors, and police details as necessary and as required by authorities having jurisdiction. Please refer to Section 01010 – Summary of Work for additional information regarding the police details and the appropriate pay rates.

2.19 PARKING

- A. Parking will be permitted on site or as directed by the owner.

PART 3 - EXECUTION

3.01 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition, until removal. Protect from damage. If damage occurs, repair it immediately upon discovery. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour per day basis.
- C. Termination and Removal: Unless the Architect requests that it be maintained longer, remove each temporary facility when the need has ended. Clean and renovate permanent facilities that have been used during construction period, including:
 1. Replace air filters and clean inside of ductwork and housings.
 2. Replace worn parts.
 3. Replace lamps.

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.

1.02. SUMMARY

- A. This Section specifies administrative and procedural requirements governing the Contractor's selection of products for use in the Project.
- B. Reference Standards and Definitions: Refer to Section 014200 "References" for the applicability of industry standards to products specified.
- C. The Contractor's Construction Schedule and the Submittal Schedule are specified under Section 013300 "Submittals Procedures".
- D. Administration procedures for handling requests for substitutions made after award of the Contract are specified under Section 012500 "Substitution Procedures".

1.03. DEFINITIONS

- A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties", "systems", "structure", "finishes", "accessories", and similar terms. Such terms are self-explanatory and have well-recognized meanings in the construction industry.
 - 1. "Products" are items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material", "equipment", "system", and terms of similar intent.
 - a. "Named Products" are items identified by the manufacturer's product name, including make or model number or other designation, shown or listed in the manufacturer's published product literature that is current as of the date of the Contract Documents.
 - 2. "Materials" are products substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
 - 3. "Equipment" is a product with operational parts, whether motorized or manually operated, that require service connections, such as wiring or piping.

1.04. SUBMITTALS

- A. Product List: Prepare a schedule in tabular form showing each product listed. Include the manufacturer's name and proprietary product names for each item listed.
 - 1. Coordinate product list with the Contractor's Construction Schedule and the Schedule of Submittals.
 - 2. Form: Prepare product list with information on each item tabulated under the following column headings:

- a. Related Specification Section number.
 - b. Generic name used in Contract Documents.
 - c. Proprietary name, model number, and similar designations.
 - d. Manufacturer's name and address.
 - e. Supplier's name and address.
 - f. Installer's name and address.
 - g. Projected delivery date or time span of delivery period.
 - h. Specific Product "Material Safety Data Sheet" reference.
 3. Submittal: Within twenty (20) days after date of commencement of the Work, submit four (4) copies of an initial product list. Provide a written explanation for omissions of data and for known variations from Contract requirements.
 - a. At the Contractor's option, the initial submittal may be limited to product selections and designations that must be established early in the Contract period.
 4. Architect's Action: The Architect will respond in writing to Contractor. No response constitutes no objection to listed manufacturers or products but does not constitute a waiver of the requirement that products comply with Contract Documents. The Architect's response will include the following:
 - a. A list of unacceptable product selections, containing a brief explanation of reasons for this action.
- 1.05. MATERIAL SAFETY DATA SHEETS MANUAL
- A. Within ten (10) days after submission of Product List Schedule and before materials may be delivered to jobsite, submit one (1) or more 8 ½ x 11 paper size three (3) ring binder with the Product List Schedule and Material Safety Data Sheet for each product. Using the Product List Schedule as table of contents arrange Materials Safety Data Sheets in table of contents order.
 - B. Submit one (1) copy of materials Safety Data Sheet Manual to Clerk of the Works and Architect.
 1. Provide one (1) copy of Material Safety Data Sheets for insertion in Manual for products listed on additional Product List Schedules.
 - C. This requirement is in addition to any obligation the Contractor has to maintain Material Safety Data Sheets at job site or elsewhere.
- 1.06. QUALITY ASSURANCE
- A. Source Limitations: To the fullest extent possible, provide products of the same kind from a single source.
 1. When specified products are available only from sources that do not, or cannot, produce a quantity adequate to complete project requirements in a timely manner, consult with the Architect to determine the most important product qualities before proceeding. Qualities may include attributes, such as visual appearance, strength, durability, or compatibility. When a determination has been made, select products from sources producing products that possess these qualities, to the fullest extent possible.
 - B. Compatibility of Options: When the Contractor is given the option of selecting between two (2) or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.07. PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss, including theft.
 - 1. Schedule delivery to minimize long-term storage at the site.
 - 2. Coordinate delivery with installation time.
 - 3. Deliver products to the site in an undamaged condition in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 - 5. Store products at the site in a manner that will facilitate inspection.
 - 6. Store and maintain products within acceptable environmental ranges and conditions required by manufacturer's instructions.

1.08. WORK CONDITIONS / SEQUENCE

- A. If sub-contractors find that conditions are not appropriate for them to begin the work of their trade or if they are directed to perform their work out of sequence by the General Contractor or if the General Contractor directs sub-contractors to start and continue regardless of job conditions, the sub-contractor shall so notify the Architect in writing by certified mail immediately.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, new at the time of installation.
 - 1. Provide products complete with accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and the intended use and effect.
- B. Product Selection Procedures: Product Selection is governed by the Contract Documents and governing regulations; not by previous project experience. Procedures governing product selection include the following:
 - 1. Where products or manufacturers are specified by name, accompanied by the term "or equal" or "or approved equal", comply with the Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
 - 2. Non-proprietary Specifications: When Specifications list products or manufacturers that are available and may be incorporated in the Work, they do not restrict the Contractor to use of these products only, the Contractor may propose any available product that complies with Contract requirements. Comply with Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
 - 3. Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.

4. Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements and are recommended by the manufacturer for the application indicated. General overall performance of a Product is implied where the product is specified for a specific application.
 - a. Manufacturer's recommendations may be contained in published product literature or by the manufacturer's certification of performance.
5. Compliance with Standards, Codes, and Regulations: Where the Specifications only require compliance with an imposed code, standard, or regulation, select a product that complies with the standards, codes, or regulations specified.
6. Visual Matching: Where Specifications require matching an established Sample, the Architect's decision will be final on whether a proposed product matches satisfactorily.
 - a. Where no product available within the specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents concerning "substitutions" for selection of a matching product in another product category, or for non-compliance with specified requirements.
7. Visual Selection: Where specified product requirements include the phrase "... as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Architect will select the color, pattern, and texture from the product line selected.

PART 3 - EXECUTION

3.01 INSTALLATION OF PRODUCTS

- A. Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work.
 1. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

END OF SECTION

SECTION 01 74 00

WARRANTIES AND BONDS

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made part of this Section.

1.02. SUMMARY

- A. This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
 - 1. Refer to the General Conditions for terms of the Contractor's special warranty on workmanship and materials.
- B. General Closeout requirements and procedures are included in Section 017000 "Project Closeout".
 - 1. Specific requirements for warranties on products and installations specified to be warranted are included in the individual Sections of Divisions 2 through 16.
 - 2. Certifications and other commitments and agreements for continuing services to the Owner are specified elsewhere in the Contract Documents.
- C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- D. Separate Prime Contracts: Each prime contractor is responsible for warranties related to its own contract.

1.03. DEFINITIONS

- A. Standard Product Warranties are pre-printed written warranties published by individual manufacturers for products and are specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

1.04. WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove, and replace construction that has been damaged because of such failure or must be removed and replaced to provide access for correction of warranted construction.

- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation, as determined by the Architect.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with the requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with the requirements of the Contract Documents.
- E. The Owner reserves the right to refuse to accept the Work for the Project where a special warranty, certification or similar commitment on the Work or part of the Work is required, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

1.05. SUBMITTALS

- A. Submit written warranties to the Architect bound in the Project Closeout Manual as described in Section 017700 – Closeout Procedures. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
 - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within ten (10) days of completion of that designated portion of the Work.
- B. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier, or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties, submit a draft to the Architect, for approval prior to final execution.
- C. Prepare a written document utilizing the appropriate form, ready for execution by the Contractor, or by the Contractor and subcontractor, supplier, or manufacturer. Submit a draft to the Architect for approval prior to final execution.
 - 1. Refer to individual Sections of Divisions 2 through 16 for specific content requirements and particular requirements for submitting special warranties.

PART 2 – PRODUCTS NOT USED

PART 3 - EXECUTION

3.01 WARRANTIES

- A. Schedule: Provide warranties on products and installations as specified in the appropriate Sections of the Specification.
 - 1. When products, equipment, or materials fail and/or continue to be a repetitive source of problems, with no satisfactory resolution (e.g., HVAC Equipment) during the warranty period, the Owner reserves the right to extend the period of the initial warranty period. If no satisfactory resolution can be reached during this resolution period, then the Owner reserves the right to demand for the full replacement of the item in question, including all associated work required to execute this replacement at no cost to the Owner.

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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SECTION 017700
CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections are hereby made a part of this Section.

1.02. SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Contractor's monetized punchlist.
 - 3. Project Record Document Submittal.
 - 4. Project Closeout Manual Submittal.
 - 5. Final cleaning.
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 16.

1.03. SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request for which the architect shall review and/or approve.
 - 1. The contractor shall prepare and submit a monetized punchlist. No exceptions will be considered.
 - 2. In the Application for Payment that coincides with, or first allows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete.
 - a. If 100 percent completion cannot be shown, the contractor shall provide his monetized punchlist including, but not limited to, the following:
 - 1) A list of incomplete items.
 - 2) The value of each incomplete item.
 - 3) A Reason each item is not complete.
 - 3. Advise the Owner of pending insurance changeover requirements.
 - 4. Submit application for reduction of retainage.
 - 5. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents, as further described below.
 - 6. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 7. Submit record drawings, maintenance manuals, damage or settlement surveys, and similar final record information, as further described below.

8. Deliver tools, spare parts, extra stock, and similar items.
 9. Make final changeover of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of changeover in security provisions.
 10. Complete startup testing of systems and instruction of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.
 11. Complete final cleanup requirements, including touch-up painting.
 12. Touch-up and otherwise repair and restore, marred, exposed finishes.
- B. Inspection Procedures: On receipt of a request for inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
1. The Architect will repeat inspection when requested and assured that the Work has been substantially completed.
 2. Results of the completed inspection will form the basis of requirements for final acceptance.
- 1.04. FINAL ACCEPTANCE
- A. Preliminary procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted.
 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 3. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed, and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.
 4. Submit consent to surety of final payment.
 5. Submit a final liquidated damages settlement statement.
 6. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Re-inspection Procedure: The Architect will re-inspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Architect.
1. Upon completion of re-inspection, the Architect will prepare a certificate of final acceptance. If the Work is incomplete, the Architect will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
 2. If necessary, the re-inspection will be repeated.

1.05. RECORD DOCUMENTS

- A. General: Maintain a complete set of Record Documents at the site. Do not use Record Documents for construction purposes. Provide access to Record Documents for Architect and Owner's reference. Generally, without limitation, Record Documents shall include the following:
 - 1. Record Drawings: Maintain a clean set of Contract Drawings and shop drawings, updated weekly to show actual installation. Give particular attention to concealed items.
 - 2. Record Project Manual: Maintain a clean Project Manual, including Addenda, Change Orders, Architect Field Orders, and other modifications, updated weekly to show changes in actual work performed. Give particular attention to substitutions, selection of options, and similar information.
 - 3. Record Product Data: Maintain one copy of each approved Product Data submittal, updated weekly to show changes from products delivered, work performed, and from manufacturer's recommended installation instructions.
 - 4. Record Samples: Maintain one copy of each approved Sample submitted.
 - 5. Record Field Test Reports: Maintain one copy of each Field Test Report.
 - 6. Daily Progress Reports: Maintain one copy of each Daily Progress Report.
- B. Maintenance of Documents and Samples: Store documents and samples in Contractor's field office apart from documents used for construction. Provide files and racks for document storage. Provide locked cabinet or secure storage space for storage of samples. File documents and samples in accordance with CSI format. Maintain documents in clean, dry, legible condition and in good order. Do not use Record Documents for construction purposes. Always make documents and samples available for inspection by Architect.
- C. Recording: Label each document "PROJECT RECORD" in neat large, printed letters. Record all information concurrently with the progress of construction. Do not conceal any work until required information is recorded.
- D. Drawings: Legibly update all Drawings to record actual construction, including the following:
 - 1. Field changes of dimension and detail.
 - 2. Changes made by Field Order or Change Order.
 - 3. Details not in original Contract Documents.
- E. Specifications and Addenda: Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment installed.
 - 2. Changes made by Field Order or by Change Order.
- F. Submittal: At Contract Closeout, deliver Record Documents to Architect. Accompany submittal with transmittal letter in duplicate, indicating the date, Project title and number, Contractor's name and address, title and number of Record Document, and signature of Contractor or his authorized representative.

1.06. PROJECT CLOSEOUT MANUAL

- A. General: Prepare and submit Project Closeout Manual as specified in this Section and as approved by the Architect for format. Organize data into suitable sets, bound and indexed using the specification's Table of Contents as a guide. Mark appropriate identification on front and spine of each binder. Include the following types of information:
 - 1. Contact Persons' Names
 - 2. Telephone Numbers
 - 3. Pager or Beeper Numbers
 - 4. Cellular Phone Numbers
 - 5. Description of each warranty item covered.
 - 6. Instructions Describing Protocol for Requesting Warranty Service.
 - 7. Emergency Numbers – 911, Fire, Rescue, Police.
 - 8. Utility Company Contacts.
- B. Instruct Owner's personnel in use and layout of manual.
- C. Format of Data: Prepare data in form of user's guide-type manual for use by Owner's personnel. Format shall be 8-1/2 in. x 11 in., 20-pound minimum, white, typed pages. Text shall be printed or neatly typewritten. Drawings shall be bound with text, with reinforced punched binder tabs. Fold larger drawings to the size of text pages. Provide flyleaf for each separate section. Provide typed descriptions of each product and piece of major equipment. Provide indexed tabs to divide sections. Provide reference in each section to other binders for actual Operating and Maintenance Data. Coordinate Project Closeout Manual with Operating and Maintenance Data.
 - 1. Binders: Provide commercial quality three-ring binders with durable and cleanable plastic covers, with maximum ring size of three (3) inches. Only use one (1) binder for this manual.
 - 2. Binder Cover: Identify each volume with typed or printed title "PROJECT CLOSEOUT MANUAL". List title of Project, identity of separate structure as applicable, and identity of general subject matter covered in the manual.
- D. Submittal of Project Closeout Manual: Submit two copies of preliminary draft of proposed formats and outlines of contents prior to start of Work.
 - 1. The Architect will review draft and return one copy with comments.
 - 2. Submit one copy of complete data in final form 15 days prior to final inspection or acceptance. Copy will be returned after final inspection or acceptance, with comments.
 - 3. Submit three copies of approved data in final form ten days after final inspection or acceptance.

1.07. OPERATING AND MAINTENANCE DATA

- A. General: Prepare and submit Operating and Maintenance Data as specified in this Section and referenced in other pertinent Sections of Specifications. Organize Operating and Maintenance Data into suitable sets, bound and indexed. Mark appropriate identification on front and spine of each binder. Include the following types of information:
 - 1. Emergency instructions.
 - 2. Spare parts list.
 - 3. Copies of warranties.
 - 4. Wiring diagrams.
 - 5. Inspection procedures.

- B. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.
 - C. Preparation of data shall be done by personnel trained and experienced in maintenance and operation of described products.
 - D. Format of Data: Prepare data in form of instructional manual for use by Owner's personnel. Format shall be 8-1/2 in. x 11 in., 20-pound minimum, white, typed pages. Text shall be manufacturer's printed data, or neatly typewritten. Drawings shall be bound with text, with reinforced punched binder tabs. Fold larger drawings to the size of text pages. Provide flyleaf for each separate product or each piece of operating equipment. Provide typed description of product and major component parts of equipment. Provide indexed tabs.
 - 1. Binders: Provide commercial quality three-ring binders with durable and cleanable plastic covers, with maximum ring size of two (2) inches. When multiple binders are used, correlate the data into related consistent groupings.
 - 2. Binder Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List title of Project, identity of separate structure as applicable, and identity of general subject matter covered in the manual.
 - E. Content of Manual: Neatly typewritten table of contents for each volume, arranged in systematic order, indicating Contractor name and address, and a list of each product, indexed to content of the volume. Provide a separate list with each product, name, address, and telephone number of subcontractor or installer, and local source of supply for parts and replacement.
 - 1. Provide in each volume a copy of each warranty, bond, and service contract issued.
 - F. Submittal of Maintenance and Operating Manual: Submit two copies of preliminary draft of proposed formats and outlines of contents prior to start of Work.
 - 1. The Architect will review the draft and return one copy with comments.
 - 2. Submit one copy of complete data in final form 15 days prior to final inspection or acceptance. Copy will be returned after final inspection or acceptance, with comments.
 - 3. Submit three copies of approved data in final form ten days after final inspection or acceptance.
- 1.08. INSTRUCTION OF OWNER'S PERSONNEL
- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in the operation, adjustment and maintenance of products, equipment, and systems.
 - B. Operating and maintenance manual shall constitute the basis of instruction.
 - 1. Review contents of manual with personnel in full detail to explain all aspects of operation and maintenance.
- 1.09. WARRANTIES AND BONDS
- A. General: Assemble warranties, bonds, and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors into the Project Closeout Manual.
 - B. Refer to Section 017400 – Warranties and Bonds for additional requirements.

1.10. FINAL CLEANING

- A. General: General cleaning during construction operations is specified as Work of Section 015000 – Temporary Facilities & Controls.
- B. Employ experienced workers or professional cleaners for Final Cleaning. Clean each surface to the condition expected in a normal building cleaning and maintenance program. Comply with manufacturer's instructions and recommendations.

PART 2 - PRODUCTS

2.01 CLEANING MATERIALS

- A. General: Provide cleaning materials that will not create hazards to health or property and will not damage surfaces or finishes.
- B. Use cleaning materials and methods recommended by the manufacturer of surface to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.01 FINAL CLEANING

- A. Employ skilled workers for final cleaning.
- B. Clean and restore general work areas and adjoining surfaces and other work soiled or damaged during installation; replace work damaged beyond successful restoration. Where performance of subsequent work could result in damage to the complete unit or element, provide protective covering and other provisions to minimize potential for damage.
- C. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- D. Special Cleaning for Windows: New glass installed as part of this project shall be thoroughly cleaned inside and out by professional window cleaners at the conclusion of all other work and prior substantial completion. All damaged, broken, or scratched items shall be replaced without costs to Owner, as described under the appropriate Trade Section(s).
- E. Complete the following cleaning operations prior to requesting inspection for Certification of Substantial Completion:
 - 1. Concrete and masonry shall be cleaned free of all foreign matter. If, in the opinion of the Architect, further cleaning of specific areas is required they shall be scrubbed with water or other cleaning agents. Acid cleaners shall not be used, except as may otherwise specifically be permitted in the trade sections.
 - 2. Metal surfaces, hardware, fixtures, appliances, equipment, and similar items shall be cleaned free of all foreign matter and, if necessary, shall be lightly scrubbed at specific stains with clean water, mild soap, and soft rags, thoroughly rinsed and wiped with clean, soft white rags. Abrasive cleaners shall not be used.
 - 3. Architectural woodwork shall be thoroughly dusted and cleaned of all stains, spots, etc., using methods and cleaning agents, which will not damage the various finishes.

4. Ceramic tile, porcelain, and other surfaces with integral finishes, shall be washed with clean water, mild soap, and soft rags, thoroughly rinsed, and then wiped with clean, soft white rags. Abrasive cleaners shall not be used.
 5. Resilient flooring shall be given final cleaning and buffing.
 6. Carpeting shall be vacuum cleaned and shall have all spots and stains removed.
 7. Painted surfaces shall be cleaned free of all foreign matter, and if necessary, shall be lightly scrubbed at specific stains with clean water, mild soap, and soft rags, thoroughly rinsed, and wiped with clean, soft white rags.
 8. All advertising matter and temporary instructional material shall be removed from exposed surfaces throughout.
 9. Remove labels that are not permanent.
 10. Clean interior and exterior finishes to a clean, dust-free condition. Remove stains, films, and similar foreign substances.
 11. Vacuum and mop hard floor surfaces.
 12. Clean plumbing fixtures to a sanitary condition.
 13. Clean site areas of rubbish, litter, and other foreign substances.
 14. Sweep paved areas broom clean, rake ground surfaces clean.
- F. Before final completion and Owner-occupancy, inspect sight-exposed interior and exterior surfaces and work areas to verify that Work is clean.

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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SECTION 02 41 13

SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02 DESCRIPTION OF WORK

- A. The Work of this Section includes, but is not limited to, labor and materials of the following:
 - 1. Remove existing overhead door, door tracks, and related attachments.
 - 2. Remove existing overhead door opener and salvage for future installation by Owner.
 - 3. Remove existing brick and CMU to enlarge the existing overhead door opening.
 - 4. Cutting of new openings in existing walls as required to complete the Work, in coordination with the Work of Sections 01 51 11 – Cutting and Patching
 - 5. Scheduling and sequencing operations without interrupt utilities serving occupied areas. If interruption is required, obtain written permission from the utility company and the Owner. Provide temporary services as necessary to serve occupied and usable facilities when permanent utilities must be interrupted, or schedule interruption when the least amount of inconvenience will result.

1.03 RELATED WORK SPECIFIED ELSEWHERE

- A. Carefully examine all the Contract Documents for requirements which affect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
 - 1. DIVISION 01 – GENERAL REQUIREMENTS; including all Sections contained therein.
 - 2. Section 04 20 00 – Unit Masonry
 - 3. Section 05 12 00 - Structural Steel
 - 4. Section 23 00 00 - HVAC
 - 5. Section 26 00 00 - Electrical

1.04 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to the Owner, ready for reuse, at a location designated by the Owner. Protect from weather until accepted by Owner.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated. Protect from weather until reinstallation.

- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed, and salvaged, or removed and reinstalled.

1.05 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques, antiques, and other items of interest or value to the Owner that may be encountered during selective demolition remain property of the Owner. Carefully remove each item or object in a manner to prevent damage and deliver promptly to a location acceptable to the Owner.

1.06 SUBMITTALS

- A. Provide submittals in accordance with requirements of Section 01 30 00 of the Contract Documents
- B. Provide qualification data for demolition firms, professional engineers, and refrigerant recovery technicians.
- C. Provide schedule of demolition activities, including but not limited to, the following:
 - 1. Detailed sequence of demolition and removal work, with starting and ending dates for each activity. Schedule shall ensure that the Owner's building and on-site operations are uninterrupted.
 - 2. Interruption of utility services, including dates and duration of interruption.
 - 3. Coordination for shutoff, capping, and continuation of utility services.
 - 4. Means of protection for items to remain.
- D. Provide an inventory list of items that have been removed and salvaged following completion of the Work of this Section.
- E. Provide photographs and videotapes showing existing conditions of adjoining construction and site improvements, prior to commencement of the Work of this Section that may be misconstrued as damage caused by the Work of this Section.

1.07 QUALITY ASSURANCE

- A. Examination of Existing Conditions: The Contractor shall examine the Contract Drawings for demolition and removal requirements and provisions for new work. Verify all existing conditions and dimensions before commencing work. The Contractor shall visit the site and examine the existing conditions as he finds them and shall inform herself/himself of the character, extent and type of demolition and removal work to be performed. Submit any questions regarding the extent and character of the demolition and removal work in the manner and within the time established for receipt of such questions during the bidding period.
- B. Demolition Firm Qualifications: An experienced firm that specializes in demolition work similar in material and extent to that indicated for this Project.
- C. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- D. Standards: Comply with ANSI A10.6 and NFPA 241.

- E. Pre-demolition Conference: Review methods and procedures related to selective demolition including, but not limited to, the following:
 - 1. Inspect and discuss condition of construction to be selectively demolished.
 - 2. Review structural load limitations of existing structure.
 - 3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
 - 5. Review areas where existing construction is to remain and require protection.

1.08 PROJECT CONDITIONS

- A. Owner Occupancy:
 - 1. The existing North Andover Middle School will be occupied during the Work of this Contract. Ensure any impact or disruption to these occupants is kept to a minimum. The General Contractor shall employ all measures necessary to protect the existing buildings and adjacent property from damage caused by the Work of this Contract.

1.09 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

1.10 PRE-INSTALLATION MEETING

- A. The General Contractor shall schedule a pre-installation meeting to establish compliance and expectation of Work, maintain optimum working conditions, and coordinate the Work of this Section with related and adjacent Work. The meeting shall be attended by the General Contractor, Architect, and related Subcontractors.

PART 2 - PRODUCTS

2.01 GENERAL

- A. All Repair materials shall be compatible with existing materials to remain and shall be as approved by the Architect.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.

- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate, and measure the nature and extent of conflict. Promptly submit a written report to Designer.
- E. Engage the services of a professional engineer registered in the Commonwealth of Massachusetts to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.
 - 1. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.
- F. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.
- G. Utility Services:
 - 1. Existing utility services shall be maintained to existing facilities. Provide a minimum three (3) day notice of service shutdown to the Owner.
 - 2. Shutting off all utilities shall be conducted by the Contractor in compliance with requirements of authorities having jurisdiction.
- H. Site Access and Temporary Controls:
 - 1. Existing streets and walk shall remain open all the time. Maintain all existing building access and egress capabilities as required by local authorities having jurisdiction.
 - 2. Provide and maintain temporary protection, including chain link fencing as necessary.
 - 3. Provide and maintain protection around existing trees and plantings located on adjacent property.
- I. Temporary Facilities:
 - 1. Provide and maintain temporary barricades to prevent injury to people.
 - 2. Provide and maintain temporary weather protection as required.
 - 3. Provide and maintain protection of existing finished work to remain.
 - 4. Provide and maintain protection of existing interior furnishings and equipment.
 - 5. Provide and maintain protection of exterior site improvements to remain, including on adjacent property.
- J. Provide and maintain temporary weather-tight enclosure for building exterior as required.
- K. Provide and maintain temporary shoring of existing structural building components to remain, including but not limited to, structural steel, brick masonry walls, and concrete floors and wood roof framing.
- L. Items to be removed and salvaged shall be cleaned, stored, and transported to the Owner's designated storage area.
- M. Items to be removed and reinstalled shall be cleaned, repaired, stored, and reinstalled as required.
- N. Existing items to remain shall be protected against damage during construction.
- O. Cleaning and Disposal: All waste and debris caused by the Work of this Section shall be legally disposed of offsite, daily, at a facility licensed to receive and process building demolition debris.

Burning shall not be permitted. Provide original Bills of Lading to the Owner in accordance with the requirements of the Owner.

3.02 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Comply with requirements for access and protection in accordance with the requirements of Division 01.
 - 2. Always maintain adequate passage to and from all exits. Before any work is done which significantly alters access or egress patterns, consult with the Designer, and obtain approval of code required egress. Under no condition does it block or interfere with the free flow of people at legally required exits, or in any way alter the required condition of such exits.
- B. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
 - 1. Strengthen or add new support when required during the progress of selective demolition.
 - 2. Remove temporary shoring, bracing and structural supports when no longer required.
 - 3. Post warning signs and place barricades as applicable during placement and removal of temporary shoring.
- C. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around demolition area(s).
 - 1. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction. Provide temporary barricades as required to limit access to demolition areas.
 - 2. Protect existing site improvements, appurtenances, and landscaping to remain.
- D. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with demolition operations.

3.03 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.

2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering, and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 4. Do not use cutting torches until the work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
 5. Maintain adequate ventilation when using cutting torches.
 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 9. All waste and debris caused by the Work of this Section shall be removed and legally disposed of daily, in accordance with requirements of Section 01 50 00 - Temporary Facilities and Controls.
- B. Removed and Salvaged Items:
1. Clean salvaged items.
 2. Pack items in crates after cleaning. Identify contents of containers.
 3. Store items in a secure area until delivery to Owner.
 4. Transport items to storage area designated by the Owner.
 5. Protect items from damage during transport and storage.
- C. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 3. Protect items from damage during transport and storage.
 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, support, and miscellaneous materials necessary to make item functional for use indicated.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Designer, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

- E. Items for Re-use and Preservation of Existing Surfaces to Remain:
 - 1. The Contractor shall inspect closely each item specifically designated to be relocated, re-used, or turned over to the Owner prior to its removal, and immediately report damages and defects to the Designer and Owner. The Contractor shall be responsible for any subsequent damage to the same other than latent defects not readily apparent from close inspection and shall bear responsibility for its repair or same replacement as directed by the Designer.
- F. Unless special surface preparation is specified under other Specification Sections, leave existing surfaces that are to remain in a condition suitable to receive new materials and/or finishes.

3.04 PROTECTION OF PUBLIC AND PROPERTY

- A. Provide all measures required by federal, state, and municipal laws, regulations, and ordinances for the protection of surrounding property, the public, and workmen during all demolition and removal operations. Measures are to be taken, but not limited to installation of sidewalks, sheds, barricades, fences, warning lights and signs, trash chutes and temporary lighting.
- B. Protect all walks, roads, streets, curbs, pavements, trees, and plantings, on and off premises, and bear all costs for correcting such damage as directed by the Designer.
- C. Demolition shall be performed in such a manner that will ensure the safety of adjacent property. Protect adjacent property from damage and protect persons occupying adjacent property from injuries which might occur from falling debris or other cause and so as not to cause interference with the use of other portions of the building, of adjacent buildings or the free access and safe passage to and from the same.
- D. Every precaution shall be taken to protect against movement or settlement of the building, of adjacent buildings, sidewalks, roads, streets, curbs, and pavements. Provide and place at the Contractor's own expense, all necessary bracing and shoring in connection with demolition and removal work.
- E. Remove portions of structures with care by using tools and methods that will not transfer heavy shocks to existing and adjacent building structures, both internal and external of the work area.
- F. Provide and maintain in proper condition, suitable fire resistive dust barriers around areas where interior demolition and removal work is in progress. Dust barriers shall prevent dust migration to adjacent areas. Remove dust barriers upon completion of major demolition and removal in the work area.

3.05 DISCOVERY OF HAZARDOUS MATERIALS

- A. If hazardous materials, such as chemicals, asbestos-containing materials, or other hazardous materials are discovered during work, cease work in the affected area only and immediately notify the Designer of such discovery. Do not proceed with work in such areas until instructions are issued by the Designer. Continue working in other areas.
- B. If unmarked containers are discovered during work, cease work in the affected area only and immediately notify the Designer of such discovery. Do not proceed with work in such areas until instructions are issued by the Designer. Take immediate precautions to prohibit endangering the containers' integrity. Continue working in other areas.

3.06 CUTTING

- A. Perform all cutting of existing surfaces in a manner which will ensure a minimal difference between the cut area and new materials when patched. Use extreme care when cutting existing surfaces containing concealed utility lines which are indicated to remain and bear full responsibility for repairing or replacement of all such utilities that are accidentally damaged.
- B. Provide a flush saw cut edge where pavement, curb, and concrete removals abut new construction work or existing surfaces to remain undisturbed.

3.07 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Comply with requirements of Division 1, and the following.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.

3.08 CLEANING

- A. Cleaning adjacent structures and improvements of dust, dirt, and debris caused by the Work of this Section. Premises shall be left in a clean condition and ready to accept alteration work and new construction.

3.09 RUBBISH REMOVAL

- A. The General Contractor shall remove and dispose daily of all waste and debris in accordance with the requirements of Section 01 50 00 – Temporary Facilities and Controls.

END OF SECTION

SECTION 04 20 00

UNIT MASONRY

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, are hereby made a part of this Section.

1.02. DESCRIPTION OF WORK

- A. The Work of this Section shall include, but not be limited to, furnishing and installation of the following:
 - 1. Brick and Concrete Masonry Units (CMU) infill to match existing.

1.03. RELATED WORK SPECIFIED ELSEWHERE

- A. Carefully examine all the Contract Documents for requirements which affect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
 - 1. DIVISION 01 – GENERAL REQUIREMENTS; including all Sections contained therein.
 - 2. Section 02 41 13 - Selective Demolition
 - 3. Section 05 12 00 - Structural Steel
 - 4. Section 23 00 00 - HVAC
 - 5. Section 26 00 00 - Electrical

1.04. SUBMITTALS

- A. Provide submittals in accordance with requirements of Section 01 33 00 – Submittal Procedures and in accordance with requirements of the Contract Documents.
- B. Submit manufacturer's product data for each product indicated.
- C. Provide samples for verification, including but not limited to, the following, or as otherwise requested by the Architect:
 - 1. Replacement brick: To match existing size, texture, and color.
- D. Qualification Data for restoration contractor, including field supervisor.
- E. Restoration Program: Provide detailed description of materials, methods, equipment, and sequence of operations to be used for each phase of restoration work including protection of surrounding materials on building and Project site.
 - 1. If materials and methods other than those indicated are proposed for any phase of restoration work, provide a written description, including evidence of successful use on comparable projects, and a testing program to demonstrate their effectiveness for this Project.

1.05. DELIVERY, STORAGE, AND HANDLING

- A. Deliver other materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.
- B. Store materials on elevated platforms, under cover, and in a dry location. Do not use materials that have become damp.

1.06. PROJECT CONDITIONS

- A. Perform the Work of this Section in accordance with written requirements of the approved manufactures of materials to be utilized to complete the Work of this Section, including hot and cold weather requirements.

1.07. SEQUENCING AND SCHEDULING

- A. Order repair and replacement materials as soon as possible, to avoid delaying completion of the Work.
- B. Perform brick repair and restoration in accordance with written requirements of the approved manufacturer of materials to be utilized to complete the Work of this Section.

1.10. PRE-INSTALLATION MEETING

- A. The General Contractor shall schedule a pre-installation meeting to establish compliance and expectation of Work, maintain optimum working conditions, determine acceptable mock-ups, and coordinate the Work of this Section with related and adjacent Work. The meeting shall be attended by the General Contractor, Architect, and related subcontractors.

PART 2 - PRODUCTS

2.01 CONCRETE MASONRY UNITS (CMU)

- A. Provide CMU to conform with ASTM C90 and to match the size, finish, and texture of existing CMU. Provide CMU to comply with the following properties:
 - 1. Provide units with nominal 8 in. high x 16 in. long face dimensions (7-5/8 in. x 15-5/8 in. actual), unless indicated otherwise. Provide thicknesses indicated, or if not indicated, as necessary to create properly supported, structurally safe walls built within the height to width limitations required by codes and recommended by the National Concrete Masonry Association.
 - 2. Provide special shaped units for lintels, bond beams, corners, jambs, headers, control joints and other conditions. Never expose cores. Provide bullnose units full wall height at all vertical and horizontal corners, and door jambs, where CMU is exposed.
 - 3. Provide normal weight units, except provide units with weight as standard with manufacturer for all units in fire-rated assemblies.

2.02 BRICK

- A. Provide brick to conform with ASTM C 216, Type FBS Grade SW and to match the size, finish, texture, and color of existing brick. Provide brick to comply with the following properties:

1. Grade SW for all Work
2. Color/Finish/Texture: To match existing.
3. Lintel brick shall be solid brick units: Use solid bricks where required so cores shall not be visible after final installation.
4. Minimum Compressive Strength: 9000 psi
5. Maximum saturation coefficient: 0.78

2.03 REINFORCING, TIES AND ANCHORS

- A. Horizontal joint reinforcing and masonry to masonry ties shall be truss type, welded wire units fabricated from 9-gauge, ASTM A 82 cold-drawn galvanized steel wire with deformed side wires and smooth cross wires spaced 16 in. O.C. Provide prefabricated corners and tees.
- B. Exterior brick masonry veneer wall anchors and tie systems that comply with ACI 530.1/ASCE 6/TMS 602 and 780 CMR 13, as follows:
 1. Provide one-piece self-drilling screw, zinc barrel, shall fully penetrate masonry or steel stud back-up. No. 304 Pos-I-Tie, as manufactured by Heckmann, or equal by Hohmann & Barnard, Inc., and Tru Supply Company, with tapcon screw for anchors to masonry backup, and self-drilling screw for anchors to metal stud backup.
 2. No. 75 Pos-I-Tie, 5 in. one-piece self-drilling screw, zinc barrel, shall fully penetrate masonry or steel stud back-up.
 3. Masonry ties shall be 3/16 in. diameter, stainless steel, by length required, to provide a minimum of 2 inches embedment in mortar. Provide ties as follows or otherwise required to complete the Work:
 - a. No. 304 Pos-I-Tie® triangle wire tie, as manufactured by Heckmann, or equal by Hohmann & Bernard and Masonpro.
 - b. No. 304 Pos-I-Tie® single wire tie, as manufactured by Heckmann, or equal by Hohmann & Bernard and Masonpro.
 - c. Masonry Veneer Seismic Ties: Continuous wire in mortar joint, anchored to Pos-I-Tie® Triangle Tie with welded No. 370 Seismic clip, as manufactured by Heckmann, or equal by Hohmann & Bernard or Masonpro.
 - d. Where details or installation conditions require, provide ties fabricated of shape and size to suit conditions and provide adequate anchorage.
 4. Provide one-piece, flexible stainless steel helical ties for pinning existing brick to existing wall, TorkFix as manufactured by HeliFix or equal by Hohmann & Barnard or Heckman. The helical ties shall comply with the following properties:
 - a. Material: Austenitic stainless-steel Grade 304
 - b. Diameter: 11/64 in.
 - c. Length: Façade thickness + cavity width backup penetration of 1-1/2 in.
 - d. Hole Diameter: 7/16 in.
 - e. Hole Depth: Length of helical tie + 2-1/2 in.

- C. Provide minimum 22 gauges, hot dip galvanized steel dovetail slots No. 305, and hot dip galvanized flexible dovetail brick tie No. 315, as manufactured by Hohmann & Bernard, or equal by Heckmann Building Products, Inc. and Masonpro. Dovetail brick ties shall be provided at all locations of masonry veneer over concrete. Provide temporary, removable filler to keep dovetail slots clear and free from concrete, mortar, or grout. Finish shall be hot dip galvanized after fabrication in accordance with ASTM A 153.
- D. Furnish weld-on ties for masonry anchors for installation under the Work of Section 05 12 00 – Structural Steel Framing, as follows, or as otherwise required to provide anchorage in accordance with requirements of the Contract Documents.
 - 1. Masonry perpendicular to column flange: 12 gauge, 1-1/4 in. wide, No. 353 as manufactured by Hohmann & Bernard, or equal by Heckmann Building Products, Inc. and Masonpro.
 - 2. Masonry parallel to column flange: 12 gauge, 1-1/2 in. wide, No. 354 as manufactured by Hohmann & Bernard, or equal by Heckmann Building Products, Inc. and Masonpro.
 - 3. Masonry perpendicular to column web: 1/4 in. diameter by 8 in. long, No. 359, and 3/16 in. diameter by 12 in. long, No. 301W, both as manufactured by Hohmann & Bernard, or equal by Heckmann Building Products, Inc. and Masonpro.
- E. Provide joint stabilization anchors to connect masonry to other materials and to allow in-plane movement while resisting out-of-plane movement and to maintain alignment of expansion joints and control joints while allowing movement within the plane of the wall. Provide joint stabilization anchors with two, 8-gauge steel wires enclosed in a 1/32 in. sheet metal sleeve separated at the center by a plastic sleeve, D/A 2200 as manufactured by Dur-O-Wal or equal by Heckmann Building Products, Inc. and Masonpro. Provide mill galvanized units for interior partitions and stainless-steel units for exterior wall applications.
- F. Provide miscellaneous hot-dip galvanized steel straps, bars, rods, and similar items, fabricated from not less than 16-gauge sheet steel or 3/16 in. diameter steel wire, to provide a complete installation in accordance with requirements of the Contract Documents.
- G. Provide structural break away anchors for lateral bracing of CMU fire walls as called for on the Drawings. Structural ties shall be minimum 1/8 in. rolled strip zinc alloy, Type 70 X as manufactured by Heckmann Building Products Inc. or equal by Hohmann & Barnard, Inc. and Masonpro. The melting point of the zinc strips shall be below 800 degrees Fahrenheit.
- H. Provide vertical reinforcing steel bars in accordance with requirements of Section 04 21 11 - Reinforced Unit Masonry.
- I. Provide hot-dipped galvanized, ASTM A153, class B2, 1.5 oz./ft.2 zinc coating on all ties, reinforcing, anchors and similar items which extend into an exterior wall assembly, except items of stainless steel. Semi-exposed areas shall be considered exterior.
- J. Provide reinforcing, ties, and anchors for all Work of this Section, including but not limited to, concrete masonry, clay brick veneer, and cast stone utilizing the appropriate type for each condition, including stainless steel for cast stone, in accordance with requirements of this Section, Section 04 21 11 – Reinforced Unit Masonry, and Cast Stone Institute Technical Manual.
 - 1. All ties for use at cast stone masonry shall be designed by the approved cast stone manufacturer.

2.04 MORTAR AND GROUT MIXES

- A. Provide pre-packaged mortar cement consisting of a controlled blend of Portland cement and Type S hydrated lime, Blue Circle Eaglebond or equal by Cemex and Lehigh Hanson. Mortar cement shall comply with requirements of ASTM C150, Type II, and shall be free from water soluble salts and alkalis. Provide mortar complying with ASTM C270 property specifications. When mixing use known volume measures; do not batch by shovel. Mortar aggregate shall be well graded, complying with ASTM C 144.
 - 1. Provide type N mortar for masonry above grade and interior and exterior Work, except as indicated otherwise and below.
 - 2. Provide type S mortar for reinforced and load bearing masonry, and elsewhere as indicated.
- B. Mortar pigment shall be natural and synthetic oxides of iron and chrome, compounded for use in mortar. Use only pigments with proven record of satisfactory performance as manufactured by Davis Colors or equal by Solomon Colors and Stoopan & Meeus. Mortar colors shall be selected by the Architect from the approved manufacturer's complete selection of standard and premium colors.
 - 1. Provide mortar color to match existing.
 - 2. Provide a minimum of three cement colors as necessary to provide mortar color as selected by the Architect from the approved manufacturer's complete selection of standard colors.
- C. Provide grout complying with requirements of ASTM C 476 and with consistency appropriate to conditions so that grout shall completely fill all spaces intended to receive grout. Grout aggregate shall comply with requirements of ASTM C 404
- D. Do not use admixtures or antifreeze agents. Do not use masonry cement. Do not use calcium chloride or any compounds or mortar ingredients containing chlorides.
- E. Lime shall be hydrated, Type S, complying with ASTM C 207.
- F. Mortar to be used in the architectural CMU, used the same integral water repellent that is used by the manufacturer of the CMU.
- G. Water shall be clean and potable.

PART 3 - EXECUTION

3.01 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from stone restoration work.
 - 1. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of restoration and cleaning work.
- B. Prevent mortar from staining face of surrounding masonry and other surfaces.
 - 1. Cover sills, ledges, and projections to protect from mortar droppings.
 - 2. Keep wall area wet below rebuilding and pointing work to discourage mortar from adhering.
 - 3. Immediately remove mortar in contact with exposed masonry and other surfaces.
 - 4. Clean mortar splatters from scaffolding at end of each day.

3.02 MIXING PROCEDURE FOR MORTAR

- A. Measure material by volume or equivalent weight. In measuring by volume, use a container to measure ingredients. Do not measure by shovel.
- B. Rebuilding/Setting Mortar
 - 1. Mix ingredients in a clean mechanical mixer for a minimum of 3 minutes, maximum of 5, with the minimum amount of water to produce a workable consistency.
 - 2. Mortar that has stiffened because of evaporation of water from the mortar may be retempered only once, and only during the first hour of placement to restore the required consistency. Use mortar within 2 1/2 hours of its initial mixing; tempering is permitted only once and during the first hour only. Limit amount of mortar batched at one time to stay within these requirements.
- C. Pointing Mortar
 - 1. Add sufficient water to dry mix to produce a damp mix that will retain its shape when pressed into a ball by hand. Mix from 3 to 7 min. in a mechanical mixer.
 - 2. Let mortar stand for not less than 1 hour nor more than 1 1/2 hours for prehydration. Add sufficient water to bring mortar to proper consistency for tuck-pointing, somewhat drier than mortar used for laying units.
 - 3. Use mortar within 2 1/2 hours of its initial mixing; tempering is permitted only once after bringing mortar to proper consistency. Limit amount of mortar batched at one time to stay within these requirements.
- D. For prepackaged masonry repair mortar, mix with water or manufacturer's polymer in proportions defined by manufacturer to provide the required consistency.

3.03 REPLACING MASONRY UNITS

- A. The Contractor is responsible for performing Work in a safe manner. Provide temporary shoring or other supports as required to prevent displacement of existing masonry that is to remain. Perform the removal Work with such care as may be required to prevent failure of the masonry or damage to adjoining masonry that is to remain. Follow method of operation and/or bracing scheme required to be provided in Article 1.04 titled "Submittals".
- B. Remove the deteriorated and damaged masonry units to their full depth, including the surrounding joint mortar. Wet masonry to reduce dust. Install helical masonry ties at perimeter of replacement prior to removal as indicated in details on the Drawings. Wherever possible without damaging masonry, use a rotary power masonry saw for cutting Work. Masonry saw shall have a vacuum attachment to reduce dust. For SHPO designated/landmark buildings, removal of perimeter brick in the area designated for removal shall be done by first cutting the joint utilizing methods specified in Art. 3.04,B.,2. Leave square corners at adjoining masonry that is to remain. Clean joints and cavities by flushing with water or compressed air.

- C. Dampen contact surfaces slightly before application of mortar, making sure there is no free water. Install matching masonry units with Type N mortar. Install units to match and align with existing masonry. Maintain bonding and coursing pattern of existing masonry. Use presoaked wood wedges where necessary to properly set the units and maintain uniform matching joints. Backpack and fill joints full of mortar. Finish joints to match existing adjoining joints as described in Art. 3.04- Repointing Joints. Fill open joints in backup. In solid masonry construction, ensure that entire collar joint is filled between the backup and the face masonry. Collar joint is likely to vary substantially, up to 3" in locations.
- D. Install accessories as indicated on Drawings. In cavity wall construction provide mortar mesh directly on flashing, such as at base of wall, and at relieving angles and lintels, with flashing extending at least 6" above top of mortar mesh.
- E. Area Face Brick Replacement
 - 1. Single wythes of brick shall be replaced in 4 foot lengths maximum unless indicated otherwise by the "methods of operation" submitted by the Contractor's Engineer as required to be submitted in the Article 1.04 titled "Submittals".
 - 2. Install reinforcement every 16" each way and secure it to backup masonry as indicated on Drawings.
- F. Replacement by Brick Stitching
 - 1. Remove and replace existing brick to their full depth with new face brick, one brick each on both sides of crack in masonry. Also, remove and replace all existing pushed-out, missing, split or otherwise defective face bricks to match the adjoining existing good sound masonry. If the existing masonry work has a solid masonry common-bond pattern, existing sound header bricks shall remain. However, any cracked, defective or loose header brick shall be replaced. All new brick work shall be toothed into existing good work. At horizontal and diagonal cracks, the replacement of bricks shall be done in 4-foot lengths maximum unless indicated otherwise by the "methods of operation" submitted by the Contractor's Engineer as required to be submitted in Article 1.04 titled "Submittals". Existing mortar bed for replaced brick shall be thoroughly removed and the back parged with a coat of new mortar to fill the collar joint.

3.04 FINAL CLEANING

- A. After repairs have completely cured and hardened, thoroughly clean exposed stone surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, spray applied at low pressure.
 - 1. Do not use metal scrapers or brushes, or acidic or alkaline cleaners.

3.05 RUBBISH REMOVAL

- A. The General Contractor shall remove and dispose daily of all waste and debris in accordance with the requirements of Section 01 50 00 – Temporary Facilities and Controls.

END OF SECTION

WORCESTER FIRE STATION #2
SOUTH DIVISION BUILDING RENOVATION
180 SOUTHBRIDGE ST., WORCESTER, MA 01608
Mount Vernon Group Architects, Inc., Project No. 02023.04

JUNE 8, 2023

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SECTION 05 12 00

STRUCTURAL STEEL

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Provide all labor, materials, equipment, services and accessories necessary to furnish and install the work of this Section, complete and functional, as indicated in the Contract Documents and as specified herein. Steel sections indicated on the Architectural Drawings but not indicated on the Structural Drawings shall be made part of Section Metal Fabrications.
- B. The work of this Section consists of furnishing and erecting all structural steel work as shown on the Drawings and as specified herein or both. Structural steel work is that work defined in AISC "Code of Standard Practice" plus the steel work listed below and shown on the Structural Drawings, which includes, but is not limited to, the following:
 - 1. Shear plates / bearing plates - if attached to new / existing structural steel columns or beams.
 - 2. Fasteners and connecting materials for framing structural steel to structural steel (i.e., shop and field bolted and/or welded connections of columns, base plates, tubes, beams, hangers, etc.)
 - 3. Selection of bolted/welded structural connections, as indicated on the Drawings, in accordance with AISC.
 - 4. Columns, beams, girders, purlins, girts, posts, channels, angles, plates, frames, anchors, rods, hangers, etc.
 - 5. Galvanizing of all exposed exterior elements, unless otherwise noted, and any other steel indicated on the drawings.
 - 6. Temporary connections, shoring and bracing of existing structure, as required.
 - 7. Stiffener plates, where indicated.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Carefully examine all the Contract Documents for requirements which affect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
 - 1. DIVISION 01 – GENERAL REQUIREMENTS; including all Sections contained therein.

1.3 REFERENCE SPECIFICATIONS

- A. "Code of Standard Practice for Steel Buildings and Bridges," and "Specifications for Structural Steel Buildings, Allowable Stress Design and Plastic Design", Seismic Provisions for Structural Steel Buildings", by the American Institute of Steel Construction, latest edition.
- B. "Code for Welding in Building Construction" by the American Welding Society".
- C. ASTM listed standards by the American Society for Testing and Materials.
- D. In case of conflict between the Reference Specification and the Project Specification, the Project Specification shall govern. In case of conflict between Reference Specifications, the more stringent shall govern.
- E. When compliance with any Specification is specified herein for materials (or a product, manufactured or fabricated), the Contractor, if requested shall furnish an affidavit from the manufacturer (or fabricator) certifying that the materials (or product) delivered to the job meets the requirements specified. However, such certification shall not relieve the Contractor from the responsibility of complying with any added requirements specified herein.

1.4 SUBMITTALS

- A. Submit complete Shop Drawings in accordance with the provisions of Section 013000 – SUBMITTAL.
 - 1. No variance from design sizes and details will be permitted on submitted Shop Drawings, but requests for modification of connections of details to better suit their shop practice, or for any other reasons, will be considered by the Architect.
 - 2. Fabrication of any material or performing of any work prior to the final review of the Shop Drawings will be entirely at the risk of the Contractor.
 - 3. Shop Drawings shall include all information necessary for fabrication of the component parts of the structure. They shall indicate size and weight of members - type and location of shop and field connections, the type, size and extent of all welds, and the welding sequence when required. The welding symbols used on the Shop Drawings shall be as adopted by the American Welding Society.
 - 4. Review of Shop Drawings shall be for size and arrangement of principle and auxiliary members and strength of representative connections based on sample checks. Any errors in dimensions shown on Shop Drawings shall be the responsibility of the Contractor.
 - 5. Prior to the submission of structural steel shop drawings, all dimensions pertaining to existing conditions (particularly the dimension between existing columns where new or repositioned steel beam will be placed) shall be field-verified by the contractor.

1.5 TESTING AND INSPECTION

- A. All materials and workmanship under this Section shall be subject to inspection in the mill, shop or field by qualified inspectors paid directly by the Owner. Structural Tests and Inspections shall be in accordance with Chapter 17 of the International Building Code.

- B. However, such inspection, wherever conducted, shall not relieve Contractor of his responsibility to furnish materials and workmanship in accordance with Contract requirements, nor shall inspector's acceptance of materials or workmanship prevent later rejection of same by the Owner or Architect if defects are discovered.
 - C. Inspection of welding work shall consist of non-destructive spot testing done by magnetic, magnetic particle or ultrasonic method, whichever is most effective for joint to be tested.
 - D. Inspection of bolting work shall be in accordance with "Specification for Structural Joints Using ASTM A325 or A490 Bolts" by the American Institute of Steel Construction.
 - E. The Contractor shall give proper notice to inspection agencies approved by the Architect and shall allow access and full facilities as required for this inspection.
 - F. Regardless of any testing done, the Contractor is responsible for completing the structural steel work in complete compliance with these Specifications.
 - G. The Contractor must set up a quality control program in the shop and in the field to ensure compliance with the Specifications.
 - H. Report in writing to the Architect the results of the Contractor's inspection.
 - I. When the Contractor is satisfied that the work has been satisfactorily completed, notify the Architect, who will make arrangements with the independent testing engineer retained and paid by the Owner to verify that the work complies with these Specifications.
- 1.6 STORAGE AND HANDLING
- A. Care and protection shall be given to all structural steel during handling and storage. If items are to be stored prior to installation, they shall not be placed in contact with the ground and they shall be protected from the elements and kept dry.
 - B. Do not store materials on the structure in a manner that may cause distortion or damage to supporting structural elements.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Unless otherwise noted, structural steel wide flanged shapes shall conform to ASTM A992, Grade 50. Unless otherwise noted, steel channels, plates, and angles shall be in accordance with the requirements of ASTM A36.
- B. Bolts, nuts and washers shall comply with the requirements of ASTM, F3125, A325 or A490 Bolts. Bolts shall be A325N with washer. Connections shall be bearing type with shear planes through threads.

- C. Weld and joint details shall comply with the requirements of the "Code for Welding in Building Construction" by the American Welding Society.

2.2 FABRICATION

- A. All structural steel shall be fabricated in accordance with Reference Specifications, approved Shop Drawings, and as hereinafter specified.
- B. The selection of members and connections for any portions of the structure not indicated on the Drawings shall be completed by the fabricator. Connections shall be capable of supporting the maximum reactions given in typical detail noted on the drawings for the specific beam size.
- C. All shop connections shall be welded or bolted.
- D. All field connections shall be bolted unless otherwise indicated on the Drawings.
- E. Unless otherwise noted, diameter of holes in bolted parts shall be 1/16" greater than the nominal diameter of the bolt. No unfair holes will be accepted, and enlargement of holes shall not be accomplished by burning. Burrs resulting from drilling or punching shall be ground to the surface of the material. Shearing and punching shall be done cleanly so as not to deform or mar adjacent surfaces.
- F. Provide holes and connections as required for site assembly of steel work. Holes shall be drilled or punched and reamed in the shop. Show sizes and locations of all such holes on the Shop Drawings.
- G. Corrective work for structural steel members or assemblages having fabrication errors, or which exceed permissible tolerances shall be corrected only if permitted by the Architect. All corrective work shall be in accordance with AISC and AWS requirements. When requested by the Architect or testing agency, the Contractor shall submit to the Architect, for approval, drawings showing details of proposed corrective work and shall receive reviewed drawings prior to performing the corrective work. All corrective work shall be solely at Contractor's expense.
- H. All structural steel members shall have assigned positions and an identification mark or symbol, plainly indicated thereon near one end. Marks shall agree with those given on the shop drawings and erection drawings relating to or calling for the member.

2.3 PROTECTIVE COATINGS

- A. All structural steel surfaces including connections shall receive a power tool cleaning in accordance with SSPC-SP3, "Power Tool Cleaning", except galvanized members shall receive SSPC-SP6, "Commercial Blast Cleaning".
- B. All new structural steel shall be shop-primed, unless noted otherwise to be galvanized.

- B. Refer to Architectural Drawings for exposed steel elements requiring finish painting.
- C. Hot Dip Galvanizing: Items exposed to the exterior or indicated on the drawings shall be hot-dipped galvanized after fabrication. A galvanizing bath shall be a combination nickel-zinc mixture. Prior to galvanizing, the steel shall be immersed in a pre flux solution of zinc ammonium chloride. The use of the wet kettle process shall be prohibited. Galvanize all ferrous fasteners, clips, sleeves, anchors and accessories in contact with galvanized items.
 - 1. Galvanizing shall comply with ASTM A123, A153 or A386 as applicable.
 - 2. Items to be galvanized shall be galvanized after fabrication. Where the size of assembly is too large for complete unit galvanizing, these assemblies shall be galvanized prior to fabrication, in as large sections as practical and then only with the written approval of the Architect.
 - 3. Where galvanizing prior to completing fabrication cannot be avoided, joints shall be welded after fabrication, ground smooth and finished with four (4) full coats of California Products Corp. WW Totrust, Sealube ZRC, Zirp by Duncan or equal.
- D. Shop Coating of Hot Dip Galvanized Steel:
 - 1. Shop priming of galvanized steel: Where hot dip galvanized steel is to be primed prior to receiving a shop or field applied topcoat, it shall be primed by the galvanizer within twelve hours of galvanizing. The primer shall be a polyamide epoxy applied to a minimum D.F.T. of 2.5 mils and force cured in a facility capable of maintaining 130 degrees F.
 - 2. Shop painting of galvanized steel: Where hot dip galvanized steel is to receive a factory applied topcoat, it shall first be primed as stated above and shall then be coated by the galvanizer in a dedicated coating facility. The factory-applied topcoat shall be an aliphatic polyurethane applied to a D.F.T. of 2-4 mils and force cured in a facility capable of maintaining 130 degrees F. The galvanizer shall assume sole source responsibility for the coating system.

PART 3 - EXECUTION

3.1 ERECTION

- A. All structural steel shall be anchored and erected in accordance with Reference Specifications, approved Shop Drawings, and as hereinafter specified.
- B. All work shall be accurately set to established lines and elevations and rigidly fastened in place with suitable attachments to the construction of the building. Errors in shop fabrication or deformation resulting from handling and transportation shall be reported immediately to the Architect, and approval of the method of erection shall be obtained. Approved corrections shall be made at no additional cost to the Owner.
- C. Temporary bracing, guying, and support shall be provided to keep the structure safe and aligned at all times during construction, and to prevent danger to persons and property. Check all temporary loads and stay within safe capacity of all building components. All work shall be in conformance with AISC, "Code of Standard Practice", Latest Edition.

- D. Except as otherwise indicated, all field connections shall be bolted in accordance with the AISC "Specifications for Structural Joints using ASTM A325 Bolts". Except as otherwise indicated, bolts shall be bearing type and need only be tightened to the snug tight condition as defined in Section 8.c of the bolt specification.
- E. Do not cut or alter any member in the field without Architect's written review for each specific condition.
- F. All welding shall be in accordance with Referenced Specifications and shall be done only by experienced welders who have, within one (1) year previously, been qualified by tests as prescribed in AWS "Standard Qualifications Procedure" for the type of work required.
- G. Galvanized elements shall be touched up (brush only) with 4 mils minimum of a zinc-rich paint at areas scarred by bolting or welding.

3.2 HOISTING OF STEEL

- A. All hoisting and rigging of structural steel members required for this project shall be provided, furnished, and installed in safe conditions. All crane work must include an approved lift plan. Coordinate all crane activity and schedules with the Owner.

END OF SECTION

SECTION 23 00 00

HVAC

PART I - GENERAL

1.01 RELATED DOCUMENTS & GENERAL

- A. All of the Contract Documents, including General and Supplementary Conditions and Division 1 General Requirements, apply to the work of this section. Where paragraphs of this Section conflict, the more stringent requirements shall govern.
- B. All work shall comply with all federal, state and local codes and any other authorities having jurisdiction.

1.02 SUMMARY

- A. Provide all materials, labor and equipment required to perform the work of this section, as shown on the Contract Drawings and as specified herein, to include:
 - 1. Disconnect, demolish and remove one (1) existing hot water convactor as well as selective demolition of piping, controls, etc... made abandoned or otherwise modified by this project.
 - 2. Electric cabinet unit heater.
 - 3. Re-pipe existing unit heater.
 - 4. Miscellaneous steel, supports, hangers, etc., as shown, and as required.
 - 5. Piping and all related hydronic accessories.
 - 6. Thermal insulation for piping.
 - 7. Automatic temperature controls.
 - 8. Testing and balancing.
 - 9. All rigging and hoisting of equipment as required.
- B. Related Work Specified Under Other Divisions
 - 1. Division 26 00 00 - Power Circuiting
- C. This contractor is responsible for coring and sleeving all holes required of his work.
- D. All penetrations of the fire rated structure (walls, ceiling, floors, etc..) shall be firestopped. All penetrations of the structure whether fire rated or not shall be sealed to minimize sound transmission between spaces.
- E. The work of this section is shown on drawings M-1 and M-2.

1.03 SUBMITTALS

- A. Product data: within 30 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:

1. Coordinated shop drawings, showing proposed layout of equipment, piping, ducts, registers, grilles, controls, control drawings and other components of the system. Ductwork shop drawings shall be done at 1/4"=1'-0".
2. Manufacturers catalog cuts, Samples and other items needed to fully demonstrate the quality of the proposed materials and equipment. In addition to the submittals formerly mention herein submit equipment specification sheets and dimensional data on all equipment including but not limited to the following:
 - Hydronic Piping, Valves & Accessories
 - Electric cabinet unit heater
 - Automatic Temperature Controls

B. Record Drawings

1. Contractor shall provide complete set of as-built on a USB flash drive containing drawings in both ACAD and PDF format.

C. Testing and Balancing Reports:

1. Submit an electronic copy of a certified testing and balancing report to the Architect for review and approval. Include all air flow and temperature readings as outlined herein.

D. Operating Instructions:

1. Written instructions are not required as the controls are simple in nature. However, training on the new systems is required.

1.04 INSTRUCTION OF OWNER'S PERSONNEL

- A. Although controls are simple in nature, after completion of all work and all tests and at such time as designated by the owner, provide the necessary skilled personnel to operate the entire installation for a period of two (2) hours.
- B. During the operating period, fully instruct the owner's representative in the complete operation, adjustment and maintenance of the entire installation.
- C. It shall be the HVAC subcontractors responsibility to coordinate the training, factory start-ups and instruction outlined in division 23 00 00 and the Testing and Balancing requirements. Factory start-up by authorized representatives are required for all equipment.

1.05 PERMITS, FEES, RULES AND REGULATIONS

- A. Refer to Bidding and Contracting Requirements, including Document - GENERAL CONDITIONS and Documents - SUPPLEMENTARY CONDITIONS, for requirements all of which shall be included as part of this Specification.

- B. Give the proper Authorities all requisite notices or information relating to the work under this Section. Obtain and pay for all fees, licenses, permits and certificates. Comply with the rules and regulations of all Local, State and Federal Authorities having jurisdiction, the Codes, Standards, recommended practices and manuals of the National Fire Protection Association, I.S.O., and the Public Utilities Companies serving the building.

1.06 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. The Contractor's superintendent shall conduct all coordination between the Contractor, the Architect, the Engineers, etc., and shall fully represent the Contractor's position in his absence. All decisions by the superintendent shall become the responsibility of the Contractor and binding to the Contract. The Contractor shall be responsible for the drawings, and that which is written or implied in the specifications.
- C. Without additional cost to the Owner, provide such other labor and materials as are required to complete the work of this Section in accordance with the requirements of governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.
- D. Before submitting the final proposal examine the site of the proposed work to determine existing conditions that may effect the work, as this section will be help responsible for any assumption in regard thereto.
- E. All equipment, ductwork, piping and materials utilized for this project must be protected from exposure to weather until installed. Interior equipment and materials shall not be installed unless the area in which they are being installed is adequately weather tight.
- F. To assure uniformity and compatibility of piping components in grooved end piping systems, all grooved products utilized shall be supplied be a single manufacturer. Grooving tools shall be supplied by the same manufacturer as the grooved components.

1.07 GUARANTEE

- A. The Contractor shall guarantee every component part of each system for a minimum of one year, parts and labor included.

PART 2 - PRODUCTS

2.01 PIPE & FITTINGS

- A. All pipes shall be new, free from scale or rust, of the material and weight specified under the various services. Each length of pipe shall be properly marked at the mill or proper identification with name or symbol of manufacturer.
- B. All steel piping, except where otherwise rated, shall be standard or extra strong weight, in conformance with ASTM A-53 Grade A seamless, as manufactured by National Tube Division, Republic Steel Corp., or approved equal.
- C. All copper tubing shall be of weight as required for service specified, with conformance with ASTM B-88 for types "L" and "K" tubing, as manufactured by Chase, Anaconda, revere or approved equal. Tubing and fittings shall be thoroughly cleaned with sand cloth and treated with an approved non-corrosive flux before solder is applied.
- D. Generally, unless otherwise specified, joints in steel piping 2-1/2" and under shall be screwed, and all sizes 3" and over shall be welded, flanged or mechanical connected using approved connectors as manufactured by Victaulic or approved equal. F-I-T type fittings shall not be allowed.
- E. Screwed Piping
 - 1. All connections to apparatus with screwed piping shall be made with 250 pound brass or bronze seat unions.
 - 2. All screwed nipples shall be scheduled 80 nipples.
- F. Grooved mechanical joint pipe, fittings and couplings shall be allowed as an acceptable substitution for welded, threaded or flanged pipe fittings except as otherwise not allowed by applicable codes. Product shall be as manufactured by Victaulic Company of America, Grinnell Mechanical Products, Anvil International Gruvlok or an Engineer approved equal. Fittings shall comply with ASTM A536 with grooves or shoulders to accept grooved end couplings. Mechanical couplings shall consist of ductile iron housing, synthetic rubber gasket of a central cavity pressure-responsive design, nuts, bolts, locking pin, locking toggle, or lugs to secure grooved pipe and fittings.
 - 1. Rigid type: Housings (12" and smaller) shall be cast with offsetting, angle-pattern bolt pads or tongue and groove design to provide system rigidity and support and hanging in accordance with ASME B31.1 and B31.9..Only designs that require metal-to-metal pad contact permitted. Designs that permit spaces or gaps at bolt pads or require a torque as a primary means of ensuring joint rigidity per written manufacturer's instructions are not permitted. Victaulic Style 107H, Style 07 or W07 or Gruvlok Style 7401, Style 7402, Style 7400.
 - 2. Flexible Type: Use in locations where vibration attenuation and stress relief are required. Victaulic Style 177, 77 and W77 or Anvil International Gruvlok Style 7001.. Three (3) flexible couplings may be used in lieu of each flexible connector at major equipment in accordance with published guidelines.
 - 3. Flange Adapters: Ductile iron housing, flat face, for use with grooved end pipe and fittings, for mating directly with ANSI Class 125, 150, and 300 flanges. Victaulic Style 741, W741 or 743 or Anvil International Gruvlok Style 7012, 7013 or 7788.
- G. Copper Hydronic Pipe Mechanical Fittings by Viega ProPress or approved equal by Elkhart or Nibco: Bronze or copper shall conform to the material requirements of ASME B16.18 or ASME B16.22, and the performance requirements of IAPMO PS117, and ICC LC1002. ProPress fittings 1/2-inch thru 4-inch

for use with ASTM B88 copper tube type K or L and ½-inch up to include 1-1/4-inch annealed copper tube. ProPress fittings shall have an EPDM sealing element and Smart Connect (SC) feature. 2-1/2-inch thru 4-inch shall have a 420 stainless steel grip ring, PBT separator ring, EPDM sealing element and Smart Connect (SC) feature. Sealing elements shall be verified for the intended use

ProPress bronze, or copper fittings: Pipe ends shall be cut on a right angle (square) to the pipe. Pipe ends shall be reamed and chamfered, all grease, oil or dirt shall be removed from the pipe end with a clean rag. Visually examine the fitting sealing element to insure there is no damage, and it is properly seated into the fitting. Insert pipe fully into the fitting. Make a mark with a felt tip pen on the pipe at the face of the fitting. Always examine the tube to insure it is fully inserted into the fitting prior to pressing the joint. ProPress fittings ½-inch thru 4-inch shall be joined using Ridgid ProPress Tools. 2-1/2-inch thru 4-inch ProPress copper fittings shall utilize Ridgid ProPress XLC Rings, and 2-1/2-inch thru 4-inch bronze ProPress fittings shall utilize Ridgid ProPress XL Rings. ProPress fittings shall be installed according to the most current edition of the Viega installation guidelines. Sealing elements shall be verified for the intended use. Installers shall attend a Viega ProPress installation training class.

After ProPress fittings have been installed a "step test" shall be followed. Utilizing air, water, or dry nitrogen, pressurize the system not to exceed 85 psi. Walk the system and check for leaks. If you do not locate any leaks proceed to pressurize the system to the recommended pressures, not to exceed 600 psi. Should you locate a leaking joint that has not been pressed, relieve the pressure from the system, ensure the tube is fully inserted into the fitting and press the fitting. Resume test procedure, after the necessary repairs have been made. This test shall be in addition to the required hydrostatic tests specified elsewhere within the specification.

- H. Steel Hydronic Pipe Mechanical Fittings by Viega MegaPress or approved equal via welded, threaded or grooved piping system method: ½-inch through 2-inch shall conform to ASME B31.1, ASME B31.3, or ASME B31.9 MegaPress fittings with zinc and nickel coating for use with IPS carbon steel pipe conforming to ASTM A53, ASTM A106, ASTM A135, or ASTM A795. MegaPress fittings shall have an EPDM sealing element, 420 stainless steel grip ring, separator ring, and an un-pressed fitting leak identification feature. Sealing elements shall be verified for the intended use. Installation must be in accordance to manufacturer's instructions and specifications

Mega Press Systems: Pipe ends shall be cut on a right angle (square) to the pipe. Pipe ends shall be reamed chamfered and all paint, laqaur, grease, oil or dirt shall be removed from the pipe end with an abrasive cloth or Viega pipe end prep tool. Visually examine the fitting sealing element to insure there is no damage, and it is properly seated into the fitting. Insert pipe fully into the fitting. Make a mark with a felt tip pen on the pipe at the face of the fitting. Always examine the pipe to insure it is fully inserted into the fitting prior to pressing the joint. MegaPress fittings hall be joined using Ridgid MegaPress Tools. MegaPress fittings shall be installed according to the most current edition of the Viega installation guidelines. Sealing elements shall be verified for the intended use. Installers shall attend a Viega MegaPress installation training class."

2.02 STEEL PIPE: HEATING SUPPLY AND RETURN (HWS&R)

- A. Pipe: Black, Schedule 40 conforming to ANSI B125.2 or B125.1. Pipe to be used for welding shall be furnished with beveled ends.

B. Fittings:

1. 2 in. and smaller, screwed, 125 lb. cast iron conforming to ANSI B16.4.
2. 2-1/2 in. and larger, screwed, 150 lb. malleable iron conforming to ANSI B16.3 or grooved.
3. For welded pipe, all sizes, standard weight black steel welding pattern conforming to ANSI B16.5, B16.9, and B16.25.

C. Joints: Screwed joints shall be made up with Teflon pipe thread tape, Teflon liquid, or other approved non-hardening joint compound applied to male thread only. Welded joints shall be made by oxyacetylene or electric arc process and comply with latest ASA "Code for Pressure Piping" requirements.

D. Any pipe 1-1/4 in. and larger may be welded or use grooved joints, no pipe larger than 3 in. shall be screwed.

E. Coil connections are to be made so the coil can be removed without cutting pipe.

2.03 HEATING WATER SUPPLY AND RETURN and CONDENSATE (HWS&R)

A. Copper Tube Pipe: Type L, hard drawn, conforming to ANSI H23.1.

B. Fittings: Wrought copper solder pattern conforming to ANSI B16.22.

C. Joints: Made with 95-5 tin-antimony solder using non-corrosive flux. The HVAC Subcontractor, at his option, may use Viega ProPress or approved equal by Elkhart or Nibco or Victaulic CTS grooved copper system for 2" and larger or the Anvil International Gruitlok CTS grooved copper system for 2" and larger.

D. The HVAC Subcontractor has the option to use copper pipe on heating supply and return and heating water supply and return for 2.5" diameter piping or less.

2.04 VALVES

A. All valves shall be of a design which the manufacturer lists for service and shall be of the materials allowed by the latest edition of the ASME Code for pressure piping for the pressure and temperature contemplated, unless higher grade or quality is specified herein. All valves shall be of the same manufacturer except for special applications. Valves shall be as manufactured by Apollo, Watts or Jenkins.

B. The system shall be supplied with valves in all branch lines control valves, heating surfaces and at all apparatus; so located, arranged and operated as to give complete shut-off as shown on the plans.

C. All valves 2" in diameter and smaller shall be bronze with bronze bodies. Valves 2-1/2" in diameter and over shall have iron bodies with bronze trim (except where otherwise noted).

- D. Ball valves shall be full port bronze body, bronze or stainless steel ball and stem, Teflon seats and seals, threaded ends, 400 psig cold W.O.G. by Apollo, Watts or Jenkins.
- E. All bronze and iron valves shall be furnished with Teflon impregnated packing.
- F. Provide valves of the type as shown on the drawings as specified herein and as scheduled:

<u>Service</u>	<u>Valve Type</u>	<u>Rating</u>	<u>Remarks</u>
Water	Ball	400 W.O.G.	2-1/2" and less
Drain Valves	Ball	200 W.O.G.	Hose end & cap

2.05 PIPE HANGERS AND SUPPORTS

- A. Provide necessary structural members, hangers, and supports of approved design to keep piping in proper alignment and prevent transmission of injurious thrusts and vibrations. All hangers and supports shall be capable of screw adjustment after piping is erected. Hangers in contact with copper or brass pipe shall be copper plated steel.
- B. Pipe hangers shall be the clevis type, except where otherwise noted.
- C. Spacing of pipe hangers shall not exceed eight (8) feet. Additional hangers shall be provided at each pump, control valve, expansion tank, air separator, heat exchanger and all other accessories as required to adequately support the piping system.
- D. 12 gauge galvanized steel, minimum 12" long insulation shields shall be provided at all hangers supporting insulated piping. High density pipe insulation shall be provided at pipe hangers to prevent crushing of insulation or damage to vapor barrier.

2.06 SPECIALTIES

- A. Swing Check – Bronze body, 125 W.S.P., 200 W.O.G.
- B. Strainers – Strainers shall be iron body 'Y' type with stainless steel strainers, 250 psig steam and 400 W.O.G. Provide ball valve with hose bib for blow down similar to Watts # B-6000-CC.
- C. Dielectric unions – Provide where joining to dissimilar metals, Watts series #3000 or approved equal.
- D. Air Vents – Provide automatic air vents at all high points within the system and at all heating terminals and where shown on the plans. Air vents shall be Sparco model #FV 147A. Drain shall not be concealed so as to observe any failures of air vents. Minimum vent line size is 3/8".
- E. Balancing Valves – Provide calibrated balancing valves at each unit heater where shown on the drawings and as specified herein, Taco model #ACUF circuit setters. Contractor shall furnish to the Owner a Differential Gauge meter Taco model #789 with durable carrying case and hose connections.

2.07 UNIONS

- A. Unions shall be of the same class and material as the pipe and fittings of the system in which they are installed. In black steel piping systems, they shall be 200 lbs. black malleable iron with brass ground joint equal to Dart Figures 0832, 0834, 0835, 0836, or 0838. In copper and brass piping, they shall be 125 lb. bronze or brass with ground joint.
- B. Dielectric unions shall be provided between ferrous and non-ferrous piping to prevent galvanic corrosion. The dielectric unions shall meet the requirements for tensile strength of pipe fittings in accordance with Federal Specification WW-U-531 and shall be suitable for temperatures and pressures encountered. The ends shall be threaded, flanged, brazed, or soldered to match adjacent piping. The metal parts of the union shall be separated so that the electrical current is below 1 percent of the galvanic current which would exist with metal to metal contact.

2.08 INSULATION**A. General**

- 1. Provide materials complying with NFPA Bulletin 90-A, as determined by UL method NFPA 225-ASTM E 84, and complying with the governing code, with flame spread rating under 25 and smoke developed rating under 50.
- 2. Where vapor barriers are used, provide intact and continuous throughout.
- 3. Acceptable manufacturers:
 - Owes/Corning Fiberglass
 - Manville
 - Certainteed

B. Piping Insulation

- 1. All new and existing disturbed hot water piping (supply and return) shall be insulated with 2" thick pipe insulation. Hot water piping insulation shall be equivalent to Owens Corning Fiberglas™ SSL II with paper free polymer all service jacket.
- 2. Provide Zeston or equal polymer fittings at all elbows and fittings.
- 3. Seal all joints and seams vapor tight. For piping 2" or greater in size provide pipe cradles at all hangers. Provide 14 gauge 18" insulation shields at every hanger. Vapor barrier must be maintained continuously on all piping.

2.09 SYSTEM WATER TREATMENT

- A. All new piping and systems shall be thoroughly flush with clear water. Drain water, clean all strainers and then refill the entire hot water system with clear water, purge entire system of any trapped air and treat water to neutralize PH and include a corrosion inhibitor. If system has propylene glycol bring system back to level of no less 30% of corrosion inhibited propylene glycol. Coordinate with city's current chemical treatment vendor and program.

2.10 ELECTRIC CABINET HEATER

- A. Electric heaters shall be factory assembled for surface mount field installation. Enclosures shall be 16-gauge steel with corrosion resistant finish; custom color selection shall be by Architect. Cabinet and unit heaters shall be Berko, Qmark, Electromode or equal.
- B. Coils shall be single terminal, long life electrical fin tube with helical coiled fins. Fan shall be either squirrel cage type or propeller. Provide automatic reset thermal overload protector, fan speed switch and disconnect switch. Provide low voltage remote thermostat package having integral step-down transformer for 24-volt control.

2.11 ELECTRICAL WORK

- A. The Heating, Ventilating and Air Conditioning Contractor shall provide all wiring for the Automatic Temperature Controls, boilers (interlock and control loop power) etc.. except as otherwise specified herein.
- B. The HVAC contractor shall hire a licensed electrician to perform all control related wiring as required by code. Minimum gauge of all control wiring is 18 AWG. In addition, coordinate with project electrician and pay all costs associated with providing for power circuits necessary to support the automatic temperature controls.
- C. The Electrical Contractor shall install and do all power wiring for all motor starters and unmounted motors, furnished to him at the job site by other trades.
- D. For all low voltage motors, temperature control wiring and motor control wiring, including wiring for interlocking, shall be provided by the Section providing the motors, including the installation of all control devices.
- E. Furnish all starters and all other motor control devices for motor driven equipment required for the work. It shall be the HVAC contractors responsibility to furnish motor starters for all the HVAC equipment of the NEMA class required, NEMA 1 for indoor starters, NEMA #3R for outdoor starters. The Electrical Contractor shall provide all code required disconnect switches for all motors, except where otherwise noted. The setting of all motors required for mechanical equipment shall be included as part of the mechanical work.
- F. Equipment which includes a number of correlated electrical control devices mounted in a single enclosure or on a common base with equipment, shall be supplied for installation completely wired as a unit with terminal boxes and ample leads ready for external wiring.
- G. All electrical items called for as part of the mechanical work shall conform to NEMA Standards, to the requirements of the National Fire Protection Association and to the requirements of any local electrical code authority having jurisdiction, any field modifications required to ensure such conformance shall be included as part of the mechanical work.

2.12 ELECTRIC MOTORS

- A. This Contractor shall provide all electric motors necessary for driving all motor driven equipment required to be furnished under this section of the Specifications.
- B. All motors shall be designed for 1 phase, 60 cycle alternating current operation with 115 volts across the motor terminals (unless otherwise scheduled or mandated by site power supply), except that, unless otherwise specified herein, all motors 1/3 HP and smaller shall be designed for single phase, 60 cycle alternating current at 120 volts across the terminals.
- C. The speed, horsepower, type and other essential data for each motor, if not given under paragraphs describing the various motor driven apparatus, or in schedules on the drawings shall be submitted to the Engineer for his review. All two speed motors shall be single winding type.
- D. Contractor shall furnish premium efficient motors eligible for rebate by the local electric utility, when applicable.

2.13 AUTOMATIC TEMPERATURE CONTROLS

- A. Furnish and install all control components necessary to obtain a fully functional control system as described herein. The contractor is responsible for providing all controls, relays, etc. necessary to accomplish the Sequence of Operations and performance specified whether or not the items are specifically identified herein. All controls operating equipment and systems configured to run off emergency power must be wired to the emergency power circuit.
- B. All control wiring shall be minimum 18 AWG (or different gauge as required by control vendor) insulated copper run in Wire-Mold or equivalent product colored to match the surface it is attached to.
- C. General
 - 1. The automatic temperature control system shall include, but not be limited to, the following components:
 - Thermostats
 - Aquastats
 - End devices such as sensors and valves.
 - Control transformers and relays.
 - 2. The failure of any single component shall not interrupt the control strategies of other operational devices.

D. AUXILIARY CONTROL DEVICES

- 1. Provide a 24-volt low voltage thermostat for the new electric cabinet unit heater wired to the heaters transformer and relay.
- 2. Provide a strap-on aquastat by Honeywell or equal with SPDT switch configured to close on a temperature rise and adjustable between 100°F and 180°F.

E. SEQUENCE OF OPERATION - ELECTRIC CABINET UNIT HEATERS

1. For Electric Cabinet Heaters: Wall thermostat shall enable and disable heaters to maintain space temperature setpoint initially set for 68°F.

F. SEQUENCE OF OPERATION – EXISTING HOT WATER UNIT HEATER

1. Space mounted thermostat shall enable and disable associated heating pump and if the pipe mounted aquastat senses a hot water temperature in excess of 120°F the heater fan shall operate to maintain space temperature setpoint initially set for 62°F.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of heating, ventilating and air conditioning system will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

- A. Install equipment ductwork, piping and controls where shown with recognized industry standards and practices, to ensure that installation complies with requirements and serves intended purposes.
- B. Coordinate with other work as necessary to interface installation of piping and equipment with other components of systems.
- D. Installation of Piping:
 1. HVAC Subcontractor shall examine location where the piping is to be installed and determine space conditions. Provide and erect in a workmanlike manner, according to the best practices of the trade, all piping shown on the Drawings or required to complete the installation intended by these Specifications.
 2. All drain piping from condensate drain pans shall be properly trapped in accordance with the static pressures involved. Condensate drain piping sizes shall be not less than 3/4 inch.
 3. Provide fire safing to seal all floor and wall (where fire rated) openings around piping.
 4. Provide pressure test for all new piping systems. Test pipe with clear water (propylene glycol mix if freezing could occur) at 1.5 times the system design pressure but no less than 50 psi unless a more stringent or lengthy test is required by the local AHJ or under other Divisions. Any products or materials not rated for this pressure or the relief pressure must be isolated from the test. Provide a temporary 100 psi relief device on the tested system(s) to avoid damage due to thermal expansion during the test. Record ambient and system water pressure and temperature at start and end of test and report to Engineer. Inspect piping for leaks and if any are found repair and repeat test.

5. All systems shall be thoroughly flushed with clear water and then filled with clear water. Clean all strainers and then refill the hot water system with clean water and chemically treat as specified. Provide a report to Owner, Architect and Commissioning Agent within one week of completion of flushing and cleaning. Bleed new and existing systems of all air introduced as part of this project.
 6. Grooved Joints: Assemble joints with coupling and gasket, lubricant, and bolts. Cut or roll grooves in ends of pipe based on pipe and coupling manufacturer's written instructions for pipe wall thickness. Use grooved-end fittings and rigid or flexible, where required, grooved-end-pipe couplings. All grooved system components shall be of same manufacturer. The gasket style and elastomeric material (grade) shall be verified as suitable for the intended service as specified. Gaskets shall be molded and produced by the grooved coupling manufacturer. Grooved end shall be clean and free from indentations, projections, and roll marks in the area from pipe end to groove.
 7. This contractor is responsible for coring of all holes related to his/her work.
- E. Installation of Equipment:
1. Contractor shall examine location where equipment is to be installed and determine space conditions and notify Architect, in writing, of conditions detrimental to proper and timely completion of work.
 2. Install equipment where shown in accordance with manufacturer's written instructions.

3.03 FIELD QUALITY CONTROL

- A. Upon completion of installation of the automatic temperature control system and after motors have been energized with normal power source, test system to demonstrate compliance with requirements. When possible, field correct malfunctioning controls then retest to demonstrate compliance. Replace controls which cannot be satisfactorily corrected. Refer to Section - Test and Balancing.

3.04 SERVICE

- A. After completion of the control system installation, the controls contractor shall regulate and adjust all thermostats, control valves, damper motors, etc., and place in complete operating condition, subject to the approval of the Owner. Complete instructions shall be given to the operating personnel. There shall be one day of instruction given on the operation of the entire system.

3.05 TESTING, ADJUSTING AND BALANCING

- A. All piping and equipment shall be tested. Test shall be performed in the presence of and to the satisfaction of the Owner and such other parties as may have legal jurisdiction.
- B. In no case shall piping, equipment or accessories be subjected to pressure exceeding their ratings.
- C. All defective work shall be promptly repaired or replaced and the tests shall be repeated until the particular system and component parts thereof receive the approval of the Architect.

- D. All new and existing systems shall be filled and purged of air and all systems shall be made fully operational at the completion of the work.
- F. Water System Procedures:
Adjustments:
 - 1. Adjust all balancing valves to provide the required fluid flow rate and pressure drop to, or through, each components.
 - 2. The existing garage unit heater shall be balanced to 6 GPM.
- G. Heating System Procedures:
 - 1. Adjust heating systems to provide required quantity to, or through, each component.
 - 2. Measure quantities and pressures with calibrated meters.
 - 3. Use venturi tubes, orifices, or other metering fittings and pressure gauges to measure flow rates and to balance systems.
- H. Certified Reports:
 - 1. For the reports required to be submitted under Article 1.3 of this Section, provide certification by an independent balancing and testing contractor who is versed in the field of air balancing and who is not affiliated with any firm involved in the design or construction phases of this work.
 - 2. Identify in the reports each item not complying with the Contract requirements, or obvious mis-operation or design deficiencies of equipment or controls.

3.06 PAINTING

- A. Equipment installed under this Section shall have shop coat of factory applied non-lead paint, unless otherwise specified. Touch-up any scratches with matching paint. Hangers and supports shall have one coat of non-lead primer.

3.07 MECHANICAL DEMOLITION

- A. All existing mechanical equipment, piping, ductwork, valves, hangers, supports, and fittings indicated on the Drawings to be removed, or as otherwise required to complete the Work of this Contract, shall be removed under the Work of this Section.
- B. All existing utility connections to existing mechanical equipment to be removed shall be disconnected, capped, and made safe in accordance with requirements of the Contract Documents and local authorities having jurisdiction. All plugs and caps to be installed shall be of like material as the pipe being capped or plugged. Disconnection and capping of all utility connections shall be performed by the respective utility subcontractor for Mechanical carried by the General Contractor in Section - Form For General Bid.

END OF SECTION 23 00 00

SECTION 26 00 00

ELECTRICAL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. All of the Contract Documents, including General and Supplementary Conditions and Division 1, General Requirements, are hereby made a part of the work of this Section. Where paragraphs of this Section conflict with Division 1, the more stringent requirements shall govern.
- B. All work shall comply with all federal, state and local codes and any other authorities having jurisdiction including any special requirements of the Owner or Architect.

1.02 SCOPE

- A. All labor, supervision, materials, tools, equipment, supplies, transportation and services for a complete and operational electrical system as specified shall be provided.
- B. All materials and equipment are to be installed in accordance with all standards of the National Electrical Code, OSHA and all local codes and ordinances.
- C. Work under this Section shall include, in general but not limited to:
 - 1. Disconnect and reconnect to the existing overhead door controller ceiling unit heater. Reconnect to the new location as noted on the electrical plans.
 - 2. New branch circuit power to the new electric cabinet heater ECH-1 located on the second floor.
 - 3. Power wiring
 - 4. Any other system hereinafter called for or shown on the drawings.

1.03 EXAMINATION OF SITE

- A. Before submitting a Bid, the Contractor must visit the job site to determine the conditions under which the work is to be done.

1.04 DRAWINGS AND SPECIFICATIONS

- A. Drawings and specifications are complementary to each other. Any labor and material which is called for by either, whether or not by both, or which is necessary for the successful operation of all systems shall be furnished and installed. Discrepancies should be brought immediately to the attention of the Engineer.
- B. All plans and specifications for this project should be examined to determine the scope and

character of the work, the building design and function and the required coordination with the General Contractor and other Trades before and during construction.

- C. Any questions regarding the plans and specifications shall be addressed in writing to the Architect five days before Bids close; otherwise, after the closing of the Bids, the Architect's interpretation of the meaning and intent of the plans and specifications shall be final.

1.05 INSURANCE

- A. Insurance is to conform to the provisions and requirements as set forth in the General Conditions.

1.06 CHANGES AND REVISIONS

- A. Costs for changes and/or revisions shall be submitted to the General Contractor with breakdown of charges and credits clearly itemized.
- B. Work shall not be executed until approval has been received in writing from the Architect.

1.07 WORKMANSHIP

- A. All materials shall be new and shall conform with the standards of UL, Inc., in every case where such a standard has been established for the particular type of material in question. All work shall be executed in a workmanlike manner and a competent Foreman shall be provided for the entire project.
- B. After wires are pulled in and equipment are installed, the Electrical Contractor shall make tests for performance, grounds, etc., and shall immediately remedy any defects. Equipment for tests shall be provided by the Electrical Contractor.
- C. The work under this Contract must be so performed that the progress of the entire project, including work of all Trades, shall not cause delays or interference. Materials and apparatus shall be installed as fast as the condition of the building will permit.
- D. It will be the responsibility of the Electrical Foreman to instruct the Owner in the function, operation and maintenance of all electrical systems and equipment. This is to be done on completion of the installation, before leaving the job site and to the satisfaction of the Owner and Engineer.

1.8 MANUFACTURER'S NAMES AND TRADE NAMES

- A. Throughout the specification, types of materials may be specified by manufacturer's name and catalogue number in order to establish standards of quality and performance and not to limit competition.

1.9 MATERIAL STORAGE AND OFFICE SPACE

- A. This Contractor shall maintain at his own expense, where directed on the premises, suitable, neat, covered storage for material; and office space where drawings and specifications shall be kept for record purposes.
- B. Equipment or material damaged during the construction period shall be replaced at the Electrical Contractor's expense.

1.10 GUARANTEE

- A. All materials and labor incorporated in the work are to be guaranteed against defects for a period of one year from date of acceptance. The Electrical Contractor shall correct such defects that occur within the guarantee period to the satisfaction of the Engineer, without cost to the Owner.
- B. The Electrical Contractor shall not be responsible for failures through normal usage nor for those caused by neglect or abuse on the part of the Owner or his employees.

1.11 WORK BY OTHERS

- A. The following work is not included in this Section and shall be performed by the General Contractor under the direction of the Electrical Contractor.
 - 1. Major cutting, patching and fireproofing
 - 2. Painting of electrical equipment having prime coat only.
 - 3. Access panels required for concealed electrical items.

1.12 CUTTING AND PATCHING

- A. This Contractor as part of his work and without extra charge shall do all fitting and cutting for all conduit sizes, as required for the complete installation of electrical work.
- B. All patching of holes drilled shall be done by the Electrical Contractor.

1.13 PERMITS

- A. The Electrical Contractor shall obtain all permits for electrical and fire alarm.

1.14 RECORD DRAWINGS

- B. A set of record drawings shall be maintained at the job site for reference by the Engineer. Weekly, the Electrical Foreman shall note changes and review the drawings periodically with the Engineer. Record Drawings shall reflect all changes from the Contract Drawings whether by Change Order or by field conditions. Changes, including feeders, lighting, power, panel

schedules and other schedules shall be recorded on the drawings.

PART 2 - PRODUCTS

2.01 SCOPE

- A. The scope of the work under this Section consists of the installation of all materials to be furnished under this Section and all work incidental thereto.

2.02 WIRING SYSTEM

- A. Joints in all wiring shall be made with approved solderless connectors of the self-insulating type with an insulation equal to that of the conductors being joined. They shall be Minnesota Mining & Manufacturing Co., type "Y", "R" or "B" Scotchlok, T&B, Twist-on-Piggy or T&B one-piece, pressure type self-insulated wire joint.
- B. In making splices, connectors shall be brought up securely upon the conductors so that no bare wire is exposed and will not loosen due to cycling or vibration.
- C. Wiring and wiremold exposed in finished areas shall be installed in a neat and workmanlike manner, parallel to building walls. Prior to installation of wiremold, the Electrical Contractor shall consult with the Architect.
- D. All branch circuitry shall be run in EMT within exposed areas.

2.03 WIRE

- A. Cable shall be in accordance with the latest requirements of the Insulated Power Cable Engineers Association.
- B. Conductors in conduit shall be copper type THW, THHN or XHHW, 600 volt rated 75 degrees C for dry locations and 90 degrees C for wet locations - Anaconda, Collyer or equal.
- C. All wire #8 and larger shall be stranded and no wire less than #12 shall be used unless otherwise specified.
- D. All wiring shall be #12 gauge type THW or THHN copper for power wiring and lighting and 105 degrees UL approved fire alarm cable unless otherwise noted. MC cable with green ground may be used when conforming to code requirements.
- E. The covering of wires and cables designed to meet the above specifications shall have distinctive markings as required by the latest standards of UL, Inc., so that they may be readily identifiable in the field.

2.04 OUTLET BOXES

- A. Outlet boxes shall be Raco, Steel City, Appleton or equal, galvanized, of a type best adaptable to their respective use, and in general, 4" square or octagon.
- B. Boxes in plaster areas shall be equipped with plaster rings or trim.

2.05 PULL AND JUNCTION BOXES

- A. All pull and junction boxes shall conform to the requirements of the National Electrical Code. They shall be galvanized code gauge steel construction with removable cover plates secured by 1/4" brass machine screws. All junction boxes shall be supported to the building structure.

2.06 SYSTEM OF LIGHT AND POWER

- A. The building distribution is 120/240V, single phase, three wire, 60 cycle.

2.07 GROUNDING

- A. The entire electrical system shall be well grounded in accordance with the National Board of Fire Underwriters, OSHA, State and local requirements.
- B. No ground wire shall be spliced. Cadweld copper taps shall be used. Ground clamps shall be non-corrosive, cast brass or bronze.

2.08 CIRCUIT BREAKERS

- A. Circuit breakers shall match the existing manufacturer currently installed within the building. Match the existing AIC rating on the circuit breakers.

2.09 PANELS

- A. Panels are existing circuit breaker type 120/240 volt, single phase, three wire.

PART 3 - EXECUTION

3.01 INSPECTION AND COORDINATION

- A. The Electrical Contractor shall inspect all surfaces and areas that will receive his material and the job conditions as they exist and report all conditions that may adversely affect his work. Notify Architect and General Contractor of all unsuitable conditions.
- B. Coordinate work with construction schedule and job progress.

- C. The Electrical Contractor shall confer with the General Contractor and other Trades to coordinate his work and to properly locate systems to avoid conflict and interference.
- D. Any interference with the work of the other Trades or with architectural or structural details shall be brought to the attention of the Engineer for a decision before installation. Contractors failure to so coordinate his work will not relieve him of the responsibility to correct his work to suit building conditions.

3.02 INSTALLATION

- A. Installation shall be by skilled workmen using proper equipment.
- B. Commencement of work shall be deemed as acceptance of existing conditions by the installer.
- C. Entire application shall be in strict accordance with the manufacturer's recommendations the National Electrical Code.
- D. After wires are pulled in and all equipment installed, the Electrical Contractor shall make tests for performance, grounds, etc., and shall immediately remedy defects. Equipment for tests and all costs shall be by the Electrical Contractor.
- E. The work under this Contract must be so performed that the progress of the entire project, including work of all Trades, shall not cause delays or interference. Materials and apparatus shall be installed as fast as the condition of the building will permit.

3.03 RACEWAYS AND FITTINGS

- A. All conduit shall be kept at least 6" away from adjacent heating piping. Conduit shall not be placed in contact with any copper piping or other copper work on the project.
- B. Conduit shall not be installed through beams without special permission.
- C. All conduits shall be concealed in the existing walls. It shall be the responsibility of the Electrical Contractor demolish the ceilings, where necessary, to conceal wires. It shall also be the responsibility of the Electrical Contractor to dispose all debris from site.

3.04 WIRE

- A. Cable shall be THHN conductors. No wiring less than #12 AWG shall be used; MC cable shall be #12 with green ground. All cable shall be copper.

3.05 GROUNDING SYSTEM

- A. Electrical Contractor shall install a green ground wire for all Greenfield connections, either power or lighting.

- B. Ground fault protection shall be installed according to Codes.

3.06 OUTLET BOXES

- A. Ceiling boxes shall be supported to carry the weight of the fixtures to be hung.

3.07 INSTRUCTIONS TO OWNER

- A. It shall be the responsibility of the Electrical Foreman to instruct the Owner in the function, operation and maintenance of all electrical systems and equipment.

3.08 CLEANUP

- A. At completion of work included under this Section, clean, remove and cart away from premises all rubbish and accumulated materials and leave the work in a satisfactory condition.
- B. NOTE: Stains and/or damage to the finish of the building caused by faulty workmanship and/or improper handling of materials in regard to installation shall be cleaned or removed and replaced.
- C. Panels and the like shall be cleaned and left in a neat manner and where required shall be painted if any finish material has been removed.

END OF SECTION