

**Invitation to Bid for  
Chelsea High School Envelope Repairs**  
For the City of Chelsea, MA

Contract # 2016-136

February 2016

IFB Contact:

City of Chelsea, MA  
Dylan Cook  
Chief Procurement Officer  
City Hall  
500 Broadway, Room 206  
Chelsea, MA 02150

Telephone Number:

617-466-4224

Fax Number:

617-466-4225

E-Mail:

[dcook@chelseama.gov](mailto:dcook@chelseama.gov)

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### **Section 4 Scope of Services - Chelsea High School Envelope Repairs**

#### **MANDATORY SUBMITTALS:**

BIDDER INFORMATION FORM (To be first page of Bid)  
CERTIFICATE OF NON-COLLUSION  
STATEMENT OF CORPORATE AUTHORITY  
BID PRICING FORM  
REFERENCE FORM  
OSHA COMPLIANCE CERTIFICATION

#### **IFB ATTACHMENTS:**

SAMPLE CITY OF CHELSEA CONTRACT FOR  
SERVICES OVER \$10,000

MASSACHUSETTS PREVAILING WAGE RATES

CITY OF CHELSEA  
MASSACHUSETTS  
NOTICE TO BIDDERS

**Chelsea High School Envelope Repair**  
299 EVERETT AVE.  
CHELSEA, MASSACHUSETTS

The City of Chelsea, Chelsea, Massachusetts invites sealed proposals from Contractors to repair water penetrations through existing building enclosure of Chelsea High School

A. In general, the work-- Per design drawings provided along with this summary of work-- shall consist of but NOT BE LIMITED to the following narrative:

- Install properly new flashing and related components to deter water penetration behind existing brick veneer walls at select locations around existing skylight over cafeteria.
- Re-caulk ALL existing joints at said skylight
- Provide New caulking at metal wall panels enclosing mechanical penthouses (2)
- Seal all weather penetration points at the two said mechanical penthouses

**The estimated cost of the work is \$ 36,000.00.**

Plans, specifications and other Contract Documents may be obtained at the Purchasing Office, City of Chelsea, City Hall, Room 206, 500 Broadway, Chelsea, MA, **after 11:00 AM., E.D.T., February 11, 2016.** Copies of the documents for the project may be obtained by email for the purposes of bidding from the City of Chelsea.

Sealed general bids for this project will be accepted from eligible bidders at the City of Chelsea, Purchasing Office, **ATTN:** Chief Procurement Officer, City Hall – Room 206, 500 Broadway, Chelsea, MA 02150 until **10:00 AM, E.D.T February 26, 2016** at which place and time they shall be publicly opened, read aloud and recorded for presentation by the Awarding Authority.

A pre-bid conference will be held for all interested parties on-site at the High School, 299 Everett Avenue, Chelsea, MA on **February 18, 2016 at 8:00 AM, E.D.T.** Attendance at this pre-bid conference is recommended for parties submitting a bid.

Each bid shall be accompanied by a bid deposit in the form of a bid bond, or cash, or a certified check on, or a treasurers or cashier's check issued by a responsible bank or trust company, payable to the City of Chelsea in the amount of five percent (**5%**) of value of the bid. Bid deposits will be dealt with as provided in Massachusetts General Laws, Chapter 149, Section 44B.

To be given consideration, all general bids must be accompanied by a copy of the Bidder's Certificate of Eligibility (DCAM&M Form) and an Update Statement (DCAM&M Form).

The certification category of work is: General Contractor certification.

Bids shall be made on the basis of the Minimum Wage Rates as determined by the Commissioner of Labor and Industries, Pursuant to the Provisions of Chapter 149, Sections 26 to 2W inclusive of Massachusetts General Laws, a copy of which is attached to and is made a part of the Contract.

Bidders' selection procedures and contract award shall be in conformity with applicable statutes of the Commonwealth of Massachusetts.

Performance, and Labor and Materials Payment Bonds in the full amount of the contract price will be required from the successful bidder.

The Awarding Authority reserves the right to reject any or all general bids, if it be in the public interest to do so, and 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 such sub-bids were received and that the prices are not reasonable for acceptance without further competition.

City of  
Chelsea

Dylan Cook  
Chief Procurement Officer

## **Section 1 PROCUREMENT SCOPE**

### **1.1 Authority**

Invitation to Bid Procedures and award of the Contract shall be in accordance with Massachusetts General Law, Chapter 149, plus all applicable Federal, State and Local laws and regulations.

### **1.2 Withdraw, Modify, And Amend Bids**

Bidders who wish to withdraw, modify or amend their bid must do so in writing utilizing electronic mail to the City of Chelsea Chief Procurement Officer at [dcook@chelseama.gov](mailto:dcook@chelseama.gov) or via fax at 617-466-4225, no later than the time and date set forth herein for the receipt of the Bid for **Chelsea High School Envelope Repair**. All such withdrawals, modifications or amendments must so state in the subject line of the email correspondence. Any withdrawal, modification or amendment arriving after the date and time set forth for accepting bids will not be considered. After the opening of the bids, a bidder may not change any provision of the bid in a manner prejudicial to the interests of the City of Chelsea or fair competition. Minor informalities will be waived at the discretion of the City of Chelsea.

### **1.3 Bid Bond**

Each bid must be accompanied by a certified check: of the bidder or a bid bond duly executed by the bidder as principal and having as surety thereon a surety company approved by the City, in the amount of 5% of the bid, payable to the "City of Chelsea" and must be filed with the original bid.

### **1.4 Payment & Performance Bonds**

The successful bidder is required to furnish performance bonds and payment bonds in the contract amount and with surety satisfaction to the City, in an award form this Invitation for Bids. The Bidder must pay all costs. The Performance Bond shall be in the sum of **100%** of the contract price. The Payment Bond shall be in the sum of **100%** of the contract price. The bonds shall be provided by the successful bidder to the City within five business days of the contract award.

### **1.5 Familiarity With Requirements**

Bidders are to thoroughly familiarize themselves with the requirements of this Invitation for Bids. Ignorance of the requirements will not relieve the bidder from any obligations or liabilities of any contract(s) issued as a result of this Invitation for Bids.

## **1.6 Independent Party**

Under this Invitation for Bids, the successful bidder declares itself to be at all times acting and performing as an independent party and nothing in this request for bid or any subsequent contract(s) is intended to constitute a partnership or joint venture between the bidder and the City of Chelsea.

## **1.7 Conflict of Interest**

No officer or employee of the City of Chelsea shall participate in any decision relating to any contract which would affect their financial or personal interest or the interest of any corporation, partnership, sole proprietorship or association in which they are directly or indirectly interested.

## **1.8 Political Activity Prohibited**

None of the services to be provided by any bidder shall be used for any partisan political activity or to further the election of any candidate for public office.

## **1.9 Assignment by Contractor**

The successful bidder or contractor shall not assign in whole or in part or otherwise transfer any interest in any contract without the written consent of the City of Chelsea, provided however, that the present and prospective claims for money due owing to the Contractor from the City of Chelsea or any other Buyer may be assigned to a bank or trust company or to a financial institution insured by the Federal Deposit Insurance Corporation (FDIC) without such consent so long as notice of such assignment is promptly furnished to the City of Chelsea. Any complete or partial assignment of the contractor's or successful bidder's interest in any such contract shall require the assignee, at the City of Chelsea's discretion, to supply such further information as the City of Chelsea deems necessary to comply with the City of Chelsea rules and regulations governing contracts for services. Any such assignment, in whole or in part, shall also be expressly made subject to all defenses, set-offs or counter claims which would have been made available to the City of Chelsea against the successful bidder in the absence of such assignment.

## **1.10 Subcontracting**

None of the services to be provided by the contractor pursuant to any contract shall be subcontracted or delegated in whole or in part to any other organization, association, individual, corporation, partnership, or any other such entity without the prior written approval of the City of Chelsea. All intended subcontracts must be in writing. All intended subcontracts shall be provisions, which are functionally identical to and consistent with the language of this Invitation for Bids.

## **1.11 Choice of Law**

Any contracts awarded as a result of this Invitation for Bids shall be construed under the laws of the Commonwealth of Massachusetts. The successful bidder and agents thereof agree to bring any federal or state legal proceedings arising from any such contract in which the City of Chelsea is a party in a court of competent jurisdiction within the Commonwealth of Massachusetts. This section shall not be construed to limit any rights any party may have to intervene in any action in any court or wherever pending in which the other is a party.

#### **1.12 Notices**

Unless otherwise specified, any notice hereunder shall be in writing and shall be deemed delivered when sent via electronic mail (e-mail), given in person to either party or deposited in the U.S. Mail, postage prepaid and addressed to the persons indicated in any contract or as specified by any amendment hereto.

#### **1.13 Severable Sections Do Not Affect Entire Contract**

If any provision of the Invitation for Bids or any subsequent contract is declared or found to be illegal, unenforceable or void, then both parties shall be relieved of all obligations under the provision. The remainder of the Invitation for Bids and any subsequent contract shall remain in full force and effect and enforceable to the fullest extent provided by law.

#### **1.14 Liquidated Damages for Failure to Enter Into Contract**

The successful Responder, upon its failure or refusal to execute and deliver the Contract, Bond and Certificates of Insurance required within ten days after receipt of notice of the acceptance of the bid, shall forfeit to the City of Chelsea, as liquidated damages for such failure or refusal, the security deposited with its bid, provided that the amount forfeited shall not exceed the difference between its bid price and the bid price of the next lowest responsive and responsible Responder. In case of death, disability, bona fide clerical or mechanical error of a substantial nature or similar unforeseen circumstances affecting the Responder, its bid deposit shall be returned.

#### **1.15 Liquidated Damages for Failure to Perform Under Terms of the Contract**

Should the successful Responder fail to commence or diligently perform according to the terms of the contract, the successful Responder agrees to pay to the City of Chelsea, as liquidated damages, Two Hundred Fifty Dollars (\$250.00) per calendar day that the successful Responder fails to commence or diligently perform the work in accordance with the contract documents and/or is in violation of the contract. Liquidated damages assessed under this provision shall be deducted from any payment(s) due to the successful Responder.

#### **1.16 Contract Performance**

The failure of any party to insist in any one or more situations, upon performance of any of the terms or provisions of any part of this Invitation for Bids or resulting contract shall not be considered as a waiver or relinquishment of the right of either party to future performance of any

such term or provision, and the rights and obligations of the parties to such future performance shall continue in full force and effect.

### **1.17 Prevailing/Minimum Wages**

Prevailing/Minimum Wage Rates as determined by the Commissioner of the Division of Occupational Safety of the Executive Office of Labor and Workforce Development under the provisions of Massachusetts General Laws Chapter 149, Section 26 to 27D, as amended, apply to this project. It is the responsibility of the Bidder, before the bid opening, to request, if necessary, any additional information on Prevailing/Minimum Wage Rates for those trades' people who may be employed for the proposed work under this contract.

### **1.18 Funding & Fiscal Year Appropriation**

Appropriations for expenditures by the City of Chelsea and authorizations to spend for a particular purpose are ordinarily made on a fiscal year basis. The fiscal year for the City of Chelsea, MA begins on July 1<sup>st</sup> and ends June 30<sup>th</sup> of the following year. The obligations of the City of Chelsea under any contract resulting from this Invitation for Bids for any subsequent fiscal year following the fiscal year in which the initial contract is awarded is subject to the appropriations to the City of Chelsea of funds sufficient to discharge its obligations, which accrue in such subsequent fiscal year, and to the authorization to spend such funds for the purposes of this Invitation for Bids. In the absence of such appropriation or authorization, any contract resulting from this Invitation for Bids shall be terminated immediately without liability for damages, penalties or other charges arising from early termination. Expenditures for contracted services, which will extend beyond a single fiscal year shall not exceed in any fiscal year the amount appropriated and authorized for the said fiscal year.

### **1.19 Procurement Calendar**

The City of Chelsea invites bids that will result in a contract. The IFB schedule of events for this solicitation, subject to amendment by the City of Chelsea is:

<b>EVENT</b>	<b>DATE</b>
IFB Released	2/11/2016
<b><u>Optional Pre-Bid (On-site 299 Everett Ave.)</u></b>	<b><u>2/18/2016 at 8:00am</u></b>
Deadline for Written Inquiries	2/22/2016
Response to Written Inquiries	2/23/2016
Due Date for Responses	2/26/2016 at 10:00am

### **1.20 Duration of Contract**

The term of this contract will commence upon signature of agreement and end no later than December 31, 2016.

**End of Section**

## **Section 2 General Bid Information**

### **2.1 Required IFB Sections**

The Responder must provide, in its bid, a reply to the particular specifications included in the Invitation for Bids.

### **2.2 Minority or Woman Business Enterprise Participation**

In accordance with the Minority Business Enterprise Plan for the City of Chelsea, all qualified Minority-Owned Business Enterprises (MBE) or Woman-Owned Business Enterprises (WBE) are strongly encouraged to submit bids in response to this Invitation for Bids. For the purpose of this IFB, the term MBE or WBE shall mean a vendor who is certified as a minority business enterprise by the State Office of Minority and Women-Owned Business Assistance (SOMWBA), and who is certified at the time the vendor's bid is submitted.

All minority owned businesses are encouraged to apply for SOMWBA certification. For further information on SOMWBA qualifications or access to SOMWBA vendor lists, contact the Supplier Diversity Office, Commonwealth of Massachusetts Operational Services Division at 617-720-3300.

### **2.3 The Contract Award**

Based upon the bids received, the contract will be awarded to the lowest responsive and eligible Bidder.

### **2.4 ADA, Regulatory, Compliance and Standards**

Responders are expected to provide services and commodities that are in compliance with Section 504 of the Federal Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Telecommunications Act of 1996, and all successor federal and related legislation throughout the term of any contract resulting from this solicitation.

### **2.5 Indemnification**

Any successor in exchange for entering into an agreement or contract resulting from this Invitation for Bids shall indemnify and hold harmless the City of Chelsea and all persons acting for or on behalf of either of them from all suits and claims against them, or either of them, arising from or occasioned by the use of any service, material, equipment or apparatus, or any part thereof, which infringes or is alleged to infringe on any patent rights. In case such service, material, equipment or apparatus, or any part thereof in any suit is held to constitute infringement, the successful Responder, within a reasonable time, will at its expense, and as the City of Chelsea may elect, replace such material, equipment or apparatus with non-infringing material, equipment or apparatus or remove the material, equipment or apparatus and refund the amounts paid therefore. Said indemnification includes reasonable attorney's fees related thereto.

Furthermore, any successful Responder in exchange for entering into any agreement or contract resulting from this Invitation for Bids agrees to indemnify and hold harmless, release and forever discharge the City of Chelsea as well as their officers, agents and employees as well as their successors and assigns from any and all manner of actions, suits, claims, demands, judgments, damages and liability in law and in equity which may arise or result from performance under this contract. This includes any discrimination, labor or employment claims against the successful Responder and the City of Chelsea and any and all manners of legal action brought against the successful Responder and /or the City of Chelsea. Said indemnification includes reasonable attorney's fees related thereto.

## **2.6 Federal, State and Local Laws**

The successful Responder will comply with all applicable Federal, State and Local laws and regulations.

## **2.7 Tax Exempt**

Purchases made by municipalities and government are exempt from Federal Excise Taxes and Massachusetts Sales Taxes and bid prices must show the exclusion of such taxes. Tax exemption certificates will be furnished as required.

## **2.8 Insurance**

The successful Responder in addition to any insurance required by State or Local Law, shall maintain in force during the term of any contract(s) issued as a result of this Invitation for Bids, the following insurance issued by an insurance company licensed to do business in the Commonwealth of Massachusetts. Failure to provide or maintain such insurance shall be grounds to reject a bid or execute a contract.

- a. Public Commercial Liability coverage in the amount of \$500,000.00 per occurrence and \$1,000,000.00 aggregate. Automobile Liability Insurance coverage in the amount of \$500,000.00 per person, \$1,000,000.00 per occurrence. Property damage Insurance in the amount of \$250,000.00.
- b. Worker's Compensation Insurance in the amounts required by Massachusetts Law.
- c. Evidence of such insurance must name the City of Chelsea as the named insured as well as the successful Responder.
- d. An Insurance Certificate giving evidence of the insurance must be delivered to the City of Chelsea within 10 days by the successful Responder receiving the award of this Invitation for Bids.

## **2.9 Confidentiality**

The successful Responder will comply with all provisions of Executive Order No. 11246 of September 24, 1975 and the successful Responder acknowledges that in performance of any contract resulting from the Invitation for Bids it may require or have access to “personal data” and become a “holder” of personal data as defined by M.G. L. c. 66A. The successful Responder shall comply with all laws and regulations relating to confidentiality and privacy, including but not limited to any rules and regulations of the City of Chelsea. The successful Responder shall at all times recognize the City of Chelsea’s ownership of personal data and the exclusive right and jurisdiction of the City, and “data subjects” (as defined in chapter 66A) to control the use of personal data. The successful Responder shall immediately notify the City of Chelsea both orally and in writing if any personal data in its possession is subpoenaed, improperly used, copied or removed by anyone except an authorized representative of the City of Chelsea. The successful Responder shall cooperate with the City of Chelsea in taking all steps it deems advisable to enjoin, misuse, regain possession and/or otherwise protect the City of Chelsea’s rights and data subject’s privacy. The successful Responder shall allow access to any personal data held in their possession solely to those employees of the City of Chelsea who require such information in the performance of their occupational responsibilities. All personal data held by the successful Responder shall be delivered to the City of Chelsea within 14 calendar days after termination of any contract resulting from this Invitation for Bids. The successful Responder agrees to take reasonable steps to insure the physical security of such data under its control, including but not limited to fire protection, protection against smoke and water damage, alarm system, locked removal of manually held data, passwords, access logs, badges or other methods reasonably expected to prevent loss or unauthorized access to electronically or mechanically held data, limited terminal access, access to electronically or mechanically held data, limited terminal access, access to input documents and design provisions to limit use of personal data. The successful Responder agrees that it will inform each of its employees having any involvement with their personal data or confidentiality. The City of Chelsea shall have access at all times to any data maintained pursuant to any contract resulting from this Invitation for Bids, without the consent of the data subject. The successful Responder shall use personal data, and material derived from such data, only as necessary for the performance of the subject contract. Failure of the successful Responder to comply with the requirements of this section may be grounds for terminating any contract resulting from this Invitation for Bids.

## **2.10 Force Majeure**

Neither the City of Chelsea nor the successful Responder shall be liable to the other, nor deemed to be in breach of any contract resulting from this Invitation for Bids for failure or delay in rendering performance rising out of causes factually beyond its control and without its fault or negligence. Such causes may include, but are not limited to, Acts of God or the public enemy, wars, fires, flood, epidemics, quarantine restrictions, strikes, unforeseen freight embargos or unusually severe weather. Dates of times of performance shall be extended to the extent of delays excused by this section, provided that the party whose performance is affected notifies the other party promptly of the existence and nature of such a delay. It is agreed that since the performance dates of the subject contract are of the essence and important to the implementation of essential City of Chelsea work, continued failure to perform for periods aggregating 45 or

more calendar days, even for causes beyond the control of the successful Responder, shall afford the City of Chelsea the right to terminate any contract resulting from this Invitation for Bids without assessment of termination costs or penalties.

## 2.11 Equal Opportunity

During the performance of this contract, the successful Responder agrees as follows:

- a. The successful Responder will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin, sexual orientation, which shall not include persons whose sexual orientation involves minor children as the sex object, genetic information or ancestry. The successful Responder will take affirmative action to ensure that applicants are employed and that the employees are treated during employment without regard to their race, religion, color, sex, nation origin or sexual orientation, which shall not include persons whose sexual orientation involves minor children as the sex object, genetic information or ancestry.
- b. The successful Responder will comply with all provisions of Executive Order No. 11246 of September 24, 1975 and all of the rules, regulations and relevant orders of the Secretary of Labor.

## 2.12 Termination

The Responders for this Invitation for Bids should note that the City of Chelsea reserves the right to terminate any contract resulting from this Invitation for Bids in whole or in part, by written notice:

- **Without cause:** Either party may terminate the subject contract by giving written notice to the other party at least 60 calendar days prior to the normal contractual effective date of termination as stated or such other period as is mutually agreed upon in advance by the parties
- **For cause:** If, in the opinion of the City of Chelsea, the successful Responder fails to fulfill its obligations, the City of Chelsea may terminate any contract resulting from this Invitation for Bids by giving 30 days written notice to the successful Responder at any time. The subject contract shall be terminated immediately in the event of fraud or program abuse.
- **Emergency:** The City of Chelsea may terminate or suspend any contract resulting from this Invitation for Bids up to 60 calendar days by providing written notice to the successful Responder, stating the grounds for the City of Chelsea's action, in the form of U.S. Mail, hand-carried letter, or other appropriate written means, if the City of Chelsea determines that immediate action is necessary to protect City, State and/or Federal funds or property, or to protect persons from injury. Such termination or suspension shall be effective upon receipt of notice of either suspension or termination by the successful Responder. In the case of a suspension under this paragraph, the notice of suspension shall be accompanied by instructions from the City of Chelsea specifying requisite actions by the successful Responder to remove the suspension, proposed timetable for meeting those requirements and a description by the City of Chelsea of allowable

activities and costs, if any, during the suspension period. Failure by the successful Responder to remedy the stated deficiencies according to the timetable prescribed by the City of Chelsea shall be cause for immediate termination.

- **Elimination or Reduction of Funding:** In the event of a reduction of funding for any reason, the City of Chelsea may terminate any contract resulting from this Invitation for Bids by providing notice of termination in a reasonable time. The City of Chelsea may provide a conditional notice of termination with a proposed amendment to the subject contract. Any such notice shall provide that the subject contract will terminate automatically 30 calendar days after the date of the conditional notice of termination unless the successful Responder submits to the City of Chelsea a properly signed copy of the amendment, or such modification form of amendment as may be agreeable to the City of Chelsea, within 20 calendar days after the date of the conditional notice of termination, or such other time as it is otherwise specified in the conditional notice.
- **Office's Remedies:** Upon Termination for Cause or for Emergencies: Notwithstanding the terms contained in this section, in the event of termination, the successful Responder shall not be relieved of liability to the City of Chelsea by virtue of any breach of any contract resulting from this Invitation for Bids by the successful Responder. In the event of termination pursuant to this section, the City of Chelsea may withhold any payments to the successful Responder for the purpose of set-off until such time as the exact amount of damages due to the City of Chelsea from the successful Responder is determined. In addition to and notwithstanding the above, the successful Responder covenants and agrees that in the event of termination of any contract resulting from this Invitation for Bids the successful Responder shall pay to the City of Chelsea as damages: (a) such sum as, at the time of termination, the City of Chelsea reasonably determines that is, shall require to compensate a subsequent contractor to complete the delivery of service, and (b) the sum, reasonably determined by the City of Chelsea, which will compensate the City of Chelsea for all the direct and indirect costs resulting from delay in the delivery of services upon the successful Responder's default. The successful Responder further covenants and agrees with the City of Chelsea that the successful Responder shall pay all of the City of Chelsea's costs and expenses (including attorney's fees) incurred or paid in obtaining and enforcing any court order favorable to the City of Chelsea for any obligation of the successful Responder under any contract resulting from this Invitation for Bids.

### **2.13 Obligation in the Event of Termination**

Upon termination of any contract resulting from this Invitation for Bids, all documents finished or unfinished, data, studies and reports prepared by the successful Responder pursuant to the subject contract shall become the property of the City of Chelsea. Copies of finished and unfinished documents, data, studies and reports generated as a necessary part of performing the subject contract shall be delivered to the City of Chelsea upon reasonable request and shall be retained by the successful Responder for future use. The City of Chelsea shall promptly pay the successful Responder for all services performed and for all costs and un-cancelable commitments reasonably incurred in performance of the subject contract to the effective date of termination, provided the successful Responder is not in default of the terms of the subject contract and submits to the City of Chelsea properly completed invoices with supporting documentation covering such services no later than 45 days after the effective date of termination, and that the successful Responder make every reasonable effort to minimize or recover costs incurred.

### **2.14 Ownership of Furnishings & Equipment**

Unless otherwise provided by law or a federal grant award, title to all furnishings and equipment provided by the City of Chelsea or that the awarded Responder provides under the terms of this Invitation for Bids and paid for with public funds, shall vest in and be retained by the City of Chelsea. Upon completion of performance of the awarded Responder's contract, the awarded Responder shall return such furnishings and equipment in its possession in the same condition as at the commencement of any contract resulting from this Invitation for Bids, normal wear and tear excepted.

### **2.15 Anti-Boycott Warranty**

During the term of any contract resulting from this Invitation for Bids, neither the successful Responder nor any "affiliated company" as hereafter described, shall participate in or cooperate with an international boycott, as defined in section 999(b) (3) and (4) of the Internal revenue Code of 1954, as amended by the Tax Reform Act of 1986, or engage on conduct declared to be unlawful by sections 2 and 4 of Chapter 151E of The Massachusetts General Laws. As used herein, an "affiliated company" shall be any business entity or which at least 51% of the ownership interests are directly or indirectly owned by the successful responder or by a person or persons or business entity or entities which directly own at least 51% of the ownership interest of the successful Responder.

### **2.16 Tied Bids**

In the event that there is a tie bid between two (2) responsive and responsible bidders, the award of the contract will be determined by a coin toss. The bidder's whose submission was received earliest shall be assigned "Heads" in the coin toss. In the event that there is a tie bid with three (3) or more responsive and responsible bidders, the award shall be made by a draw by lot limited to those bidders. The coin toss/draw by lot shall be scheduled within two (2) business days from when it was determined by the Town to be a tie bid. The bidders involved shall be given an

opportunity to attend. The coin toss/drawing shall be witnessed by at least three (3) Town officials. The tie breaker event shall be held at Chelsea City Hall during regular business hours.

### **2.17 Unexpected Closures or Delays**

If, at the time of the scheduled bid submission deadline, the designated location for delivery of the bid is closed due to uncontrolled events such as fire, snow, ice, wind, building evacuation or other, the deadline will be postponed until 11:00 a.m. on the next normal business day. Bids will be accepted at the same location until that date and time.

**End of Section**

## **Section 3 Responder's Bid Information**

### **3.1 Bidder Communications**

Responders are prohibited from communicating directly with any employee of the Purchasing Department and any other member of the City of Chelsea except as specified in this Invitation for Bids, and no other individual City of Chelsea employee or representative is authorized to provide any information or respond to any question or inquiry concerning this Invitation for Bids. Responders may contact the person identified on the cover sheet of this Invitation for Bids in the event this Invitation for Bids is incomplete.

### **3.2 Reasonable Accommodation**

Responders with disabilities or hardships that seek reasonable accommodation, which may include the receipt of the Invitation for Bids information in an alternative format, must communicate such requests in writing, via electronic mail (e-mail) to the contact person. Requests for accommodation will be addressed on a case by case basis. A Responder requesting accommodation must submit a written statement, via e-mail which describes the responder's disability and the requested accommodation to the contact person for the Invitation for Bids. The City of Chelsea reserves the right to reject unreasonable request.

### **3.3 Public Records**

All bids and information submitted in response to this Invitation for Bids are subject to the Massachusetts Public Record Law, M.G.L., Chapter 66, Section 10, and to Chapter 4, Section 2, and Subsection 26. Any statements in the Responder's bid inconsistent with these statutes will be disregarded.

### **3.4 Brand Name or Equal**

Unless otherwise specified in this Invitation for Bids, any reference to a particular trademark, trade name, patent, design, type, specification, producer or supplier is not intended to restrict this Invitation for Bids to any manufacturer or proprietor or to constitute an endorsement of any good or service, and the City of Chelsea must consider clearly identified offers if substantially equivalent goods and services submitted in response to such reference.

### **3.5 Publicity**

Any Responder awarded a contract under this Invitation for Bids is prohibited from selling or distributing any information collected or derived from the contract, including lists of participating or eligible departments, employee names, telephone numbers, e-mail addresses, addresses or any other reports or information except as specifically authorized under this contract.

### **3.6 Costs**

Costs for services that are not specifically identified in the Responder's response and identified as part of a contract, will not be compensated under any contract awarded pursuant to this Invitation for Bids.

The City of Chelsea will not be responsible for any costs or expenses incurred by responders responding to this Invitation for Bids.

### **3.7 Required Contract Attachments**

All Responders are required to complete, sign and return at minimum the following documents:

- 1.) **Bid Information**- to be included as cover page of bid
- 2.) **Certificate of Non-Collusion**- Signature required
- 3.) **Statement of Corporate Authority ( If Responder is a Corporation)** - If the Responder is a Corporation, a vote of the Corporation approving participation in this Invitation for Bids process must be signed by the corporate officers with the Corporate Seal Affixed and attached to the original Invitation for Bids.

If the Responder is a Corporation, the names and addresses of the corporate Officers and the state and date of incorporation must be included. The Responder must state if the Corporation is publicly held or privately held. If the Corporation is publicly held, the exchange on which it is traded and the symbol under which it is traded is required.

**Sole Proprietorship ( If Responder is a Sole Proprietorship)**- If the Responder is a Sole Proprietorship, a partnership or any other legal business entity, the names and addresses of the officers must be included, the parent state of business and the numbers of years this entity has been in business. In short, a complete business profile must be included in the bid.

- 4.) **Bid Pricing Form** - Signature required
- 5.) **Reference Form**- To include three current contract references, at least one of which is a government agency that can be contacted during the IFB process. Two of the references must be customers for which the Responder is or has provided services similar to those outlined in the Scope of Services of the IFB. Include customer name, contact person, his/her title, address and telephone number.

**Do not** use the names of relatives or City Employees as references. Do not use any previous City contracts as a source of project reference information. You may use previous City contracts as a record of your experience only

- 6.) **OSHA Compliance Certification** - Signature required

### **3.8 Submitted Responses**

The City of Chelsea shall be under no obligation to return any responses or materials submitted by the Responder in response to this Invitation for Bids. All materials submitted by Responders become the property of the City of Chelsea and will not be returned to the Responder. The City of Chelsea has the right to use any ideas, concepts or configurations that are presented in the Responder's bid whether or not the bid is selected for contract award.

### **3.9 Clarification of Response**

The City of Chelsea is not required to seek clarification of responses; therefore, the responder should be as clear as possible in all of its responses to this Invitation for Bids.

### **3.10 Evaluation and Award of Contract**

All pricing must remain constant for the entire term of the contract, as well as any possible extension offered. Bids will be evaluated and awarded based upon the lowest, responsive and eligible bid.

### **3.11 Rejection of Responder's Bid**

A Responder's bid may be rejected by the City of Chelsea if the Responder's bid:

- Fails to adhere to one or more of the requirements
- Fails to submit its bid to the required address on or before the Invitation for Bid responses due date
- Fails to submit a bid in accordance to the format and instructions specified or to supply the minimum information requested in this Invitation for Bids.
- Fails to meet unconditionally or is unable to demonstrate competence to meet the requirements of this Invitation for Bids.
- Misrepresents its equipment, systems or services or provides demonstrably false information in its response or fails to provide material information.
- Violates the restrictions on contacts with the City of Chelsea employees and representatives
- Refuses, is unable to, or fails to provide clarification requested by the City of Chelsea in a reasonable time frame.

### **3.12 Invitation for Bids Cancellation**

The City of Chelsea retains the right to cancel this Invitation for Bids, or any portion thereof, at any time prior to the execution and approval of a contract. If this Invitation for Bids is cancelled, all responses received to this Invitation for Bids will be rejected. All expenses related to the preparation of responses to this Invitation for Bids remain the responsibility of the Responder.

### **3.13 No Guarantee of Purchase**

The City of Chelsea makes no guarantee that any purchase shall take place from any contract resulting from this Invitation for Bids nor does the City of Chelsea guarantee any minimum quantity of purchases from any contract resulting from this Invitation for Bids. Any estimated or past procurement volumes referenced in this Invitation for Bids are included only for the convenience of the Responders, and not to be relied upon as any indication of future purchases.

The Responder may not place, as a condition for providing the cost levels proposed, any minimum purchase requirements.

### **3.14 Prime Contractors and Subcontractors**

Prior approval of the eligible entity is required for any subcontracted service of the contract. Contractors are responsible for the satisfactory performance and adequate oversight of its subcontractors. Subcontractors are required to meet the same state and federal financial program and reporting requirements and are held to the same reimbursable cost standards as the successful Responder.

The City of Chelsea requires a single point of contact for any contract resulting from this Invitation for Bids. Subcontractors may be used, but the successful Responder, as prime contractors, shall be responsible for meeting all of the terms of any contract resulting from this Invitation for Bids and must accept full responsibility for any subcontractor's performance.

Responders must provide a list of subcontractors, a description of each subcontractor's responsibility in regards to this contract and signed letters of agreement between the Responder as the prime contractor, and its subcontractor(s) identifying their responsibilities and their relationship to the prime contractor. The prime contractor must notify each individual account (eligible entity) in writing; the name of their subcontractor both initially and when a subcontractor is changed. If a subcontractor has filed for Chapter 11 Bankruptcy or Chapter 7 Bankruptcy, the prime contractor also must notify the City of Chelsea. The notification must be written and must be within one week of the events noted above.

### **3.15 Written Inquiries**

Responders may submit written inquiries concerning any part or attachment of this Invitation for Bids. Written inquiries regarding issues outside of the scope of this Invitation for Bids will not be considered.

All inquiries must be submitted by the required date and time, to the contact listed on the cover page of this Invitation for Bids.

All written inquiries must be submitted via electronic mail (email) only. No other manner of submission will be accepted.

Any change to this submission date and/or time will be made by a notice sent electronically to all Responders. The Responder is responsible for confirming receipt of written inquiries with Dylan Cook, Chief Procurement Officer, and City of Chelsea at [dcook@chelseama.gov](mailto:dcook@chelseama.gov).

The City of Chelsea will provide written responses via electronic mail (e-mail) to all written inquiries received by the required due date. Responses will not identify the inquiry by Responder.

### **3.16 Instructions for Submission of IFB Responses**

Each Invitation for Bid Response must be sealed, labeled and submitted to the address listed on the cover page of this document.

Paper Submission- the Responder must submit one (1) original response to the Invitation for Bids marked "ORIGINAL" The Envelope must be clearly marked "**Chelsea High School Envelope Repair**".

### **3.17 Deadline for Submission**

All responses to this Invitation for Bids are due at the address listed on the cover page and no later than the date and time listed in the Procurement Calendar.

**End of Section**

**Section 4 Scope of Services – Chelsea High School Envelope Repair**

## SECTION 010000 - GENERAL REQUIREMENTS

### PART 1 - GENERAL

- I. General Requirements for this project shall be the Latest Edition of AIA document A-102, "THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION."
- II. All Work Shall be done in complete accordance with the latest edition of all State and Local Building Codes and other pertinent ordinances.
- III. General Contractor shall work with Chelsea Schools Facilities manager in establishing project schedule, which shall include but not limited to procurement schedule, mobilization start date, demolition duration, construction start and end date, date of substantial completion. The General Contractor may be asked to stop work during the course of the project due to unforeseen circumstances. The General Contractor shall recognize this as a pending condition of the contract.
- IV. The School building has one centralized dumpster location, and is heavily used during normal operational hours of school. The General Contractor is responsible for all logistics of supplying a separate dumpster for the purpose of eliminating construction debris from the school.
- V. School Schedule - General Contractor shall work with Chelsea Schools Facilities manager and any and all staff related to School Operation to determine the best time for performing construction work
- VI. Heavy machinery – Any and All proposal for use of heavy machinery and equipment pertaining to performance of contract shall be reviewed by Jacobs and Chelsea School Department. The proposal shall include enough detail for analyzing health and safety issues, and any other logistical issues such as but not limited to: city traffic, pedestrian pathways, structural capacity of bearing surface, potential impedance of normal building function, and any other permits necessary for operation.
- VII. Chelsea police - General Contractor shall contact the Chelsea Police Department as required to perform contract and obtain any and all permits from the police department.
- VIII. Project involves roof top work. Contractors shall comply with all OSHA regulations for safety of workers on rooftop. Any and all necessary measures shall be in place during performance of work.

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- IX. Contractor shall provide to Chelsea School Department Project close out documents such as but not limited to: O and M Manual, Training, product Warranty information, As-builts. Etc.
- X. Responsible for any damage to existing building occurred as result of work – General Contractor and any and all related subcontractors to this project shall be responsible for any and all damages to the existing building fabric caused by any and all activities related to performance of this contract.
- XI. General Contractor is required to schedule and meet with Project architect **before, during and after construction** to allow the architect to observe all phases of construction. The purpose of this required observance by the architect is to ensure that all building enclosure repair work complies with drawings and specifications.
- XII. There are three Roof access points for the project: The skylight shall be accessed through the roof access stair located within the custodians' office. The mechanical penthouses are accessed through the stair towers as indicated in plan. The contractor shall perform work such that existing roof assembly is not damaged.
- XIII. Abbreviations – General Contractor shall consult with the Project Architect for definition of abbrevitions.
- XIV. Submittals and Request for Information (rfi's) – The General Contractor shall submit a project schedule of value as well as product details of each specified product as part of construction. These shall be supplied to project architect as "submittals," for review and approval for purchase. Any questions arising out of project shall be sent to project architect in form of a writing or Request for Information (rfi's).
- 1) Shop Drawings shall be provided for all materials where specified herein and shall be submitted for approval
  - 2) SHOP DRAWING SHALL BE PROVIDED FOR ALL MATERIALS WHERE SPECIFIED HEREIN AND SHALL BE SUBMITTED FOR APPROVAL BY THE ARCHITECT BEFORE FABRICATION AND/OR CONSTRUCTION CAN BEGIN. FOUR (4) COPIES OF ALL SHOP DRAWINGS SHALL BE PROVIDED FOR REVIEW. ELECTRONIC TRANSMISSIONS OF SHOP DRAWINGS WILL BE ACCEPTABLE.
  - 3) ALL MATERIALS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL MANUFACTURES RECOMMENDATIONS.
  - 4) CONSULT JACOBS FOR ALTERNATE DESCRIPTIONS.

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PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 010000

## SECTION 011000 - SUMMARY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions, and MGL Chapter 149, and all applicable building codes apply to this Section.
- B. The latest revision or version of codes and standards referenced within the Contract Specification Section shall be used.

#### 1.2 PROJECT INFORMATION

- A. Project Identification:
  1. Project Location: 299 Everett Ave., Chelsea Massachusetts, 02150.
  2. Owner: Chelsea Public Schools, 500 Broadway, Chelsea, MA 02150.
- B. Engineer Identification: The Contract Documents were prepared for the Project by Jacobs Project Management Company, 343 Congress Street, Boston, Massachusetts, 02210.
- C. Construction Manager: Construction Manager for this Project and shall be Project's Constructor. The terms "Construction Manager" and "Contractor" are synonymous.
- D. Project Coordinator: **Mr. Joseph Cooney**, Director of Facilities Management, Chelsea Public Schools, or his appointee for the Project Coordinator.

#### 1.3 WORK COVERED BY CONTRACT DOCUMENTS

In general, the work-- per design drawings provided along with this summary of work--shall consist of but NOT BE LIMITED to the following narrative:

- Install properly new flashing and related components to deter water penetration behind existing brick veneer walls at select locations around existing skylight over cafeteria.
- Re-caulk ALL existing joints at said skylight
- Provide New caulking at metal wall panels enclosing mechanical penthouses (2)
- Seal all weather penetration points at the two said mechanical penthouses
- Inspect ALL existing brick masonry work prior to bid, and include in final bid price allowance and or budget to reconstitute exterior masonry construction to both original design intent as well as additional features and components for remediation against future water penetration or any other damages.

#### 1.4 WORK SEQUENCE AND SCHEDULE

- A. The Construction Schedule shall be based on the work being completed by Dec. 31, 2016, or other date as agreed to by the Director of Facilities Management for the Chelsea School Department.
- B. Contractor shall submit a schedule for each Phase of the Work indicating scheduled completion of work and identifying these intermediate milestones:
  - a. Start of Project Construction.
  - b. Delivery of Submittals.
  - c. Delivery of major equipment.
  - d. Completion of new installations.
  - e. Testing and commissioning.
  - f. Project Completion/Closeout.
- C. The construction schedule shall reflect these milestone dates:
  - a. Construction site staging.
  - b. Equipment delivery schedule.
  - c. Start of demolition and construction activity.
  - d. Completion of new installation.
  - e. ~~Completion of all related HVAC / Electrical / Fire Protection / Finish work.~~
  - f. Inspection by City Building Inspector.
  - g. Project Completion/Closeout.

#### 1.5 USE OF PREMISES/PERMITS/FEES

- A. General: Contractor will have limited use of premises for construction operations during construction period.
- B. Specific areas for staging and storage of construction materials will be identified by the Project Coordinator. Storage of materials shall be in contractor furnished locked containers. No additional charges will be accepted for lost or stolen material and tools.
- C. Contractor is advised that school MAY BE in session and work will be accomplished during normal school activities unless otherwise advised. No disruption, interruption, or any other contractor activity, including lifting and rigging operations, will adversely affect school operations. Contractor shall provide security for his tools, consumables, and to the various work areas during the period of construction.
- D. Contractor is advised that the school is located in a residential/commercial section of the city and vehicular access may at times become congested and/or difficult. The movement of any specialty equipment may require movement in off-peak hours and the use of premium labor. Scheduled completion of the various phases of the work may also require premium time. Contractor shall schedule this work accordingly.
- E. Contractor shall be responsible for providing dumpster for the project, and shall NOT rely on the school's dumpster. Any cost for dumping debris from the project shall be the sole responsibility of the contractor.

- F. Contractor is also advised the work present some challenges for accessing the High School during normal business hours. All damages and repairs to existing facilities, as a result of lifting, rigging and related construction activities, shall be repaired to the Owners satisfaction, and shall be the responsibility of the Contractor.
- F. Contractor shall obtain all permits and pay all fees to facilitate movement of any lift equipment and related lifting activities, including, but not limited to, City of Chelsea Police Department Traffic Details.

## 1.6 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications per each trade found on within the bid set of drawings
  - 1. Section Identification: The Specifications are included as part of the Contract Documents. Each discipline of building design provided specifications; however, the information may be incomplete due to need for contractor to verify existing condition or get approval for purchase and or installation. Contractor shall verify all field condition prior to demolition/construction.
  - 2. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
  - 3. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
  - 4. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
    - a. The words “shall,” “shall be,” or “shall comply with,” depending on the context, are implied where a colon (:) is used within a sentence or phrase.

## 1.7 SUBMITTALS

- A. Five (5) copies of each submittal, as required by these specifications, shall be delivered for review by the Engineer / Architect. All submittals shall conform to the format as specified herein. Electronic copies are acceptable.
- B. Submittals shall be in a bound format, with a title page indicating the Project Identification, submittal title and specification reference.
- C. Submittals shall be made to expedite material and equipment delivery. No claim for delay will be entertained due to drawing submittal review.

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- D. Payment will be made on a monthly basis predicated on Engineers / Architects and Owners representative review of the work and timely receipt of Shop drawings. Delays in receipt of shop drawings will be cause for delays in payment for work completed. Contractor is advised that his work will be accomplished "At Risk" without Engineer approved shop drawings.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
2. Demolition and removal of selected site elements.
3. Salvage of existing items to be reused or recycled.

#### 1.2 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: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner.
- C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

#### 1.3 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Chelsea High School

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For refrigerant recovery technician.
- B. Predemolition Photographs or Video: Submit before Work begins.
- C. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

1.6 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.

1.7 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. Hazardous materials will be removed by Owner before start of the Work.
  - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Hazardous Materials: Hazardous materials are present in buildings and structures to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
  - 1. Hazardous material remediation is specified elsewhere in the Contract Documents.
  - 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
- F. Storage or sale of removed items or materials on-site is not permitted.
- G. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.8 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.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. 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 Architect.
- D. **Perform and or Engage a professional engineer to perform** an engineering survey of 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 building demolition operations.

### ~~3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS~~

- ~~A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.~~
- ~~B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.~~
  - ~~1. **Building manager** will arrange to shut off indicated services/systems when requested by Contractor.~~
  - ~~2. Arrange to shut off indicated utilities with utility companies.~~
  - ~~3. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.~~
  - ~~4. Disconnect, demolish, and remove fire suppression systems, plumbing, and HVAC systems, equipment, and components indicated to be removed.~~

- a. ~~Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.~~
  - b. ~~Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.~~
  - c. ~~Equipment to Be Removed: Disconnect and cap services and remove equipment.~~
  - d. ~~Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.~~
  - e. ~~Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.~~
  - f. ~~Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.~~
  - g. ~~Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material.~~
- C. ~~Refrigerant: Remove refrigerant from mechanical equipment to be selectively demolished according to 40 CFR 82 and regulations of authorities having jurisdiction.~~

### 3.3 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.
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- C. 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.

### 3.4 SELECTIVE DEMOLITION, GENERAL

- 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. 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.
  - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 3. Do not use cutting torches until 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.

4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- B. Reuse of Building Elements: Project has been designed to result in end-of-Project rates for reuse of building elements as follows. Do not demolish building elements beyond what is indicated on Drawings without Architect's approval.
1. Building Structure and Shell: Reuse 100% of existing brick unless otherwise directed by architect and or facilities manager.
- C. Removed and Salvaged Items:
1. Clean salvaged items.
  2. Pack or crate items after cleaning. Identify contents of containers.
  3. Store items in a secure area until delivery to Owner.
  4. Transport items to Owner's storage area designated by Owner.
  5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
  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, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, 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.

### 3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be **recycled**, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site **and legally dispose of them in an EPA-approved landfill**.
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.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.6 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 040120.63 - BRICK MASONRY REPAIR

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes repairing brick masonry, including replacing units.

1.2 UNIT PRICES

- A. Work of this Section is affected by unit prices specified in Section 012200 "Unit Prices."

1.3 DEFINITIONS

- A. Rebuilding (Setting) Mortar: Mortar used to set and anchor masonry in a structure, distinct from pointing mortar installed after masonry is set in place.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Chelsea High School

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings:
  - 1. Include plans, elevations, sections, and locations of replacement masonry units on the structure.
  - 2. Show provisions for expansion joints or other sealant joints.
- C. Samples: For each exposed product and for each color and texture specified.

1.6 INFORMATIONAL SUBMITTALS

- A. Quality-control program.

1.7 QUALITY ASSURANCE

- A. Brick Masonry Repair Specialist Qualifications: Engage an experienced brick masonry repair firm to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service

performance. Experience in only installing masonry is insufficient experience for masonry repair work.

- B. Quality-Control Program: Prepare a written quality-control program for this Project to systematically demonstrate the ability of personnel to properly follow methods and use materials and tools without damaging masonry. Include provisions for supervising performance and preventing damage.
- C. Mockups: Prepare mockups of brick masonry repair to demonstrate aesthetic effects and to set quality standards for materials and execution and for fabrication and installation.
  - 1. Masonry Repair: Prepare sample areas for each type of masonry repair work performed. If not otherwise indicated, size each mockup not smaller than two adjacent whole units or approximately 48 inches (1200 mm) in least dimension. Construct sample areas in locations in existing walls where directed by Architect unless otherwise indicated. Demonstrate quality of materials, workmanship, and blending with existing work.

## PART 2 - PRODUCTS

### 2.1 MASONRY MATERIALS

- A. Face Brick: As required to complete brick masonry repair work.
  - 1. Brick Matching Existing: Units with colors, color variation within units, surface texture, size, and shape that match existing brickwork.
    - a. Physical Properties: According to ASTM C 67
    - b. For existing brickwork that exhibits a range of colors or color variation within units, provide brick that proportionally matches that range and variation rather than brick that matches an individual color within that range.
  - 2. Special Shapes:
    - a. Provide molded, 100 percent solid shapes for applications where core holes or "frogs" could be exposed to view or weather when in final position and where shapes produced by sawing would result in sawed surfaces being exposed to view.
    - b. Provide specially ground units, shaped to match patterns, for arches and where indicated.
    - c. Mechanical chopping or breaking brick, or bonding pieces of brick together by adhesive, are unacceptable procedures for fabricating special shapes.
- B. Building Brick: ASTM C 62, Grade SW where in contact with earth or Grade SW, MW, or NW for concealed backup; and of same vertical dimension as face brick, for masonry work concealed from view.

## 2.2 MORTAR MATERIALS

- A. Portland Cement: ASTM C 150/C 150M, Type I or Type II, except Type III may be used for cold-weather construction; white **or gray, or both** where required for color matching of mortar.
  - 1. Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Masonry Cement: ASTM C 91/C 91M.
- D. Mortar Cement: ASTM C 1329/C 1329M.
- E. Mortar Sand: ASTM C 144.
  - 1. Exposed Mortar: Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.
  - 2. Colored Mortar: Natural sand or ground marble, granite, or other sound stone of color necessary to produce required mortar color.
- F. Mortar Pigments: ASTM C 979/C 979M, compounded for use in mortar mixes, and having a record of satisfactory performance in masonry mortars.
  - 1. **Products:** Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
    - a. Davis Colors, Inc.; True Tone Mortar Colors.
    - b. Lanxess Corporation; Bayferrox Iron Oxide Pigments.
    - c. Solomon Colors, Inc.; SGS Mortar Colors.
- G. Water: Potable.

## 2.3 MANUFACTURED REPAIR MATERIALS

- A. Brick Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching brick masonry.

## 2.4 ACCESSORY MATERIALS

- A. Setting Buttons and Shims: Resilient plastic, nonstaining to masonry, sized to suit joint thicknesses and bed depths of masonry units, less the required depth of pointing materials unless removed before pointing.
- B. Other Products: Select materials and methods of use based on the following, subject to approval of a mockup:
  - 1. Previous effectiveness in performing the work involved.
  - 2. Minimal possibility of damaging exposed surfaces.

3. Consistency of each application.
4. Uniformity of the resulting overall appearance.
5. Do not use products or tools that could leave residue on surfaces.

## 2.5 MORTAR MIXES

- A. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.
- B. Colored Mortar: Produce mortar of color required by using specified ingredients. Do not alter specified proportions without Architect's approval.
  1. Mortar Pigments: Where mortar pigments are indicated, do not add pigment exceeding 10 percent by weight of the cementitious or binder materials, except for carbon black which is limited to 2 percent.
- C. Do not use admixtures in mortar unless otherwise indicated.

## PART 3 - EXECUTION

### 3.1 PROTECTION

- A. Remove all existing building components adjacent to masonry and store during masonry repair. Reinstall when repairs are complete.
  1. Provide temporary rain drainage during work to direct water away from building.

### 3.2 BRICK REMOVAL AND REPLACEMENT

- A. At locations indicated, remove bricks that are damaged, spalled, or deteriorated **or are to be reused**. Carefully remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.
- B. Support and protect remaining masonry that surrounds removal area.
- C. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.
- D. Notify Architect of unforeseen detrimental conditions including voids, cracks, bulges, and loose units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.
- E. Remove in an undamaged condition as many whole bricks as possible.

1. Remove mortar, loose particles, and soil from brick by cleaning with hand chisels, brushes, and water.
  2. Remove sealants by cutting close to brick with utility knife and cleaning with solvents.
- F. Clean masonry surrounding removal areas by removing mortar, dust, and loose particles in preparation for brick replacement.
- G. Replace removed damaged brick with other removed brick in good condition, where possible, matching existing brick. Do not use broken units unless they can be cut to usable size.
- H. Install replacement brick into bonding and coursing pattern of existing brick. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
1. Maintain joint width for replacement units to match existing joints.
  2. Use setting buttons or shims to set units accurately spaced with uniform joints.
- I. Lay replacement brick with rebuilding (setting) mortar and with completely filled bed, head, and collar joints. Butter ends with enough mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min. (30 g/194 sq. cm per min.) Use wetting methods that ensure that units are nearly saturated but surface is dry when laid.
1. Tool exposed mortar joints in repaired areas to match joints of surrounding existing brickwork.
  2. Rake out mortar used for laying brick before mortar sets according to Section 040120.64 "Brick Masonry Repointing." Point at same time as repointing of surrounding area.
  3. When mortar is hard enough to support units, remove shims and other devices interfering with pointing of joints.
- J. Curing: Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.
1. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.

### 3.3 MASONRY UNIT PATCHING

#### A. Patching Bricks:

1. Remove loose material from masonry surface. Carefully remove additional material so patch does not have feathered edges but has square or slightly undercut edges on area to be patched and is at least 1/4 inch (6 mm) thick, but not less than recommended in writing by patching compound manufacturer.
2. Mask adjacent mortar joint or rake out for repointing if patch extends to edge of masonry unit.
3. Mix patching compound in individual batches to match each unit being patched. Combine one or more colors of patching compound, as needed, to produce exact match.
4. Rinse surface to be patched and leave damp, but without standing water.

5. Brush-coat surfaces with slurry coat of patching compound according to manufacturer's written instructions.
6. Place patching compound in layers as recommended in writing by patching compound manufacturer, but not less than 1/4 inch (6 mm) or more than 2 inches (50 mm) thick. Roughen surface of each layer to provide a key for next layer.
7. Trowel, scrape, or carve surface of patch to match texture and surrounding surface plane or contour of masonry unit. Shape and finish surface before or after curing, as determined by testing, to best match existing masonry unit.
8. Keep each layer damp for 72 hours or until patching compound has set.

#### 3.4 FINAL CLEANING

- A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, applied by low pressure spray.
  1. Do not use metal scrapers or brushes.
  2. Do not use acidic or alkaline cleaners.

END OF SECTION 040120.63

## SECTION 040523 – MASONRY ACCESORIES

### PART 1 GENERAL

#### 1.1 RELATED SECTIONS

- a) Section 01 33 00 - Submittal Procedures.
- b) Section 01 74 21 – Construction/Demolition Waste Management and Disposal.
- c) Section 04 05 00- Common Work Results for Masonry.
- d) Section 04 05 19 - Masonry Anchorage and Reinforcing.

#### 1.2 REFERENCES

- .1 American Society for Testing and Materials, (ASTM).
  - a) ASTM D2240, Standard Test Method for Rubber Property - Durometer Hardness.
- .2 Canadian Standards Association (CSA)
  - a) CSA-A371, Masonry Construction for Buildings.

#### 1.3 SUBMITTALS

- .1 Product Data:
  - a) Submit manufacturer's printed product literature, specifications and data including product characteristics, performance criteria, and limitations.
  - b) Submit two copies of WHMIS MSDS - Material Safety Data. Indicate VOC's for joint fillers and lap adhesives.
- .2 Manufacturer's Instructions:
  - a) Submit manufacturer's installation instructions.

#### 1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle masonry accessories in accordance with, Section 01 61 00 - Common Product Requirements supplemented as follows:
  - a) Keep fillers and adhesives dry, protected against dampness, and freezing.
  - b) Store packaged materials off ground and in accordance with manufacturer's written instructions.

PART 2 PRODUCTS

2.1 MATERIALS

- .1 Control joint filler: purpose-made elastomer 70 durometer hardness to ASTM D2240 of size and shape indicated. Use VOC products to limits listed in Section 01 35 21 - LEED® Requirements.
- .2 Lap adhesive: recommended by masonry flashing manufacturer. Use VOC products to limits listed in Section 01 35 21 - LEED® Requirements.
- .3 Weep hole vents: purpose-made PVC.
- .4 Cavity Wall Flashing:
  - a) Self adhering SBS rubberized asphalt compound integrally laminated to cross-laminated polyethylene film, minimum thickness 1.0 mm.
  - b) Primer: as per manufacturer's recommendation.
- .5 Trash mortar diverters: shaped and sized to suit cavity spaces.
- .6 MASONRY DRAINAGE MAT (BASIS OF DESIGN) A. Manufacturer and Type: CavClear Masonry Mat as manufactured by Archovations, Inc., PO Box 241, Hudson, WI 54016, (888) 436-2620. 1. Description: Full-height Air Space Maintenance and Cavity Drainage Mat. The masonry drainage mat shall be specifically designed for masonry cavities to prevent mortar from making contact with the backup and ensure water management. The masonry mat shall be fluid conducting, non-absorbent, mold and mildew resistant polymer mesh consisting of 100% recycled plastic with binder. Masonry drainage mat is to be a non-woven textile product in random pattern and have voids no greater than 1/4" in diameter. Masonry mat is to be designed for substantially continuous installation behind the full-height of all masonry. 2. Masonry Drainage Mat Thickness: Select masonry mat thickness of [1/2] [3/4] [1] [1-1/4] [1-3/4] inches to allow no more than 3/8 inch tolerance between the masonry mat and masonry wythe

PART 3 EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 INSTALLATION

- .1 Install continuous control joint fillers in control joints at locations indicated on drawings.
- .2 Lap adhesive: apply adhesive to flashing lap joints.

MASONRY ACCESSORIES

- .3 Reglets: install reglets at locations indicated on drawings.
- .4 Install weep hole vents in vertical joints immediately over flashings, in exterior wythes of cavity wall and masonry veneer wall construction, at maximum horizontal spacing of 600 mm on centre.
- .5 Trash mortar diverters: install purpose made diverters in cavities where indicated and as directed, size and shape to suit purpose and function.

### 3.3 CONSTRUCTION

- .1 Build in flashings in masonry in accordance with CSA-A371 as follows:
  - .1 Install flashings under exterior masonry bearing on foundation walls, slabs, shelf angles, and steel angles over openings. Install flashings under weep hole courses and as indicated.
  - .2 In cavity walls and veneered walls, carry flashings from front edge of masonry, under outer wythe, then up backing not less than 300 mm, and as follows:
    - a) For masonry backing embed flashing 25 mm in joint.
    - b) For concrete backing, insert flashing into reglets.
    - c) For wood frame backing, staple flashing to walls behind sheathing paper.
    - d) For gypsum board backing, bond to wall using manufacturer's recommended adhesive.
  - .3 Lap joints 150 mm and seal with adhesive.
- .2 Form flashing (end dams) at lintels, sills and wall ends to prevent water from travelling horizontally past flashing ends.

### 3.4 CLEANING

- .1 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION 040523

## SECTION 072500 - WEATHER BARRIERS

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Building paper.
2. Building wrap.
3. Flexible flashing.

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Evaluation Reports: For **water-resistive barrier and flexible flashing**, from ICC-ES.

### PART 2 - PRODUCTS

#### 2.1 WATER-RESISTIVE BARRIER

- A. Building Paper: ASTM D 226, Type 1 (No. 15 asphalt-saturated organic felt), unperforated.
- B. Building Paper: Water-vapor-permeable, asphalt-saturated kraft building paper that complies with ICC-ES AC38, Grade D; **except with water-resistance rating not less than 1 hour.**
- C. Building Wrap: ASTM E 1677, Type I air barrier; with flame-spread and smoke-developed indexes of less than 25 and 450, respectively, when tested according to ASTM E 84; UV stabilized; and acceptable to authorities having jurisdiction.
1. Products: Subject to compliance with requirements, **available products that may be incorporated into the Work include, but are not limited to, the following:**
- a. Dow Chemical Company (The); Styrofoam Weathermate Plus Brand Housewrap.
  - b. DuPont (E. I. du Pont de Nemours and Company); Tyvek.
  - c. Ludlow Coated Products; [Air Stop Housewrap] [Barricade Building Wrap] [EnergyWrap Housewrap] [R-Wrap Protective House Wrap].
  - d. Pactiv, Inc.; GreenGuard.
  - e. Raven Industries Inc.; Fortress Pro Weather Protective Barrier.
  - f. Reemay, Inc.; Typar HouseWrap.

2. Water-Vapor Permeance: Not less than **50** g through 1 sq. m of surface in 24 hours per ASTM E 96/E 96M, Desiccant Method (Procedure A).

- D. Building-Wrap Tape: Pressure-sensitive plastic tape recommended by building-wrap manufacturer for sealing joints and penetrations in building wrap.

## 2.2 MISCELLANEOUS MATERIALS

- A. Flexible Flashing: Self-adhesive butyl rubber or rubberized-asphalt compound, bonded to a high-density polyethylene film, aluminum foil, spunbonded polyolefin, or flexible stainless steel to produce an overall thickness of not less than 0.025 inch (0.6 mm).

1. Products: Subject to compliance with requirements, **provide one of the following**:

- a. York Manufacturing, Inc.; York 304 SS
- b. STS Coatings, Inc.; Gorilla Flash SS peel & stick butyl
- c. Illinois Products, Inc.; IPCO Self-Adhesive Stainless Steel
- d. TK Products, Inc.; TK Self-Adhering Stainless Steel TWF
- e. Products in first four subparagraphs below are butyl rubber products.
- f. DuPont (E. I. du Pont de Nemours and Company); DuPont Flashing Tape.
- g. Grace Construction Products, a unit of W. R. Grace & Co. - Conn.; Vycor Butyl Self Adhered Flashing.
- h. Protecto Wrap Company; BT-25 XL.
- i. Raven Industries Inc.; Fortress Flashshield.
- j. Advanced Building Products Inc.; Wind-o-wrap.
- k. Carlisle Coatings & Waterproofing; CCW-705-TWF Thru-Wall Flashing.
- l. Fiberweb, Clark Hammerbeam Corp.; Aquaflash 500.

## PART 3 - EXECUTION

### 1. WATER-RESISTIVE BARRIER INSTALLATION

- a. Cover sheathing with water-resistive barrier as follows:
  - i. Cut back barrier 1/2 inch (13 mm) on each side of the break in supporting members at expansion- or control-joint locations.

- ii. Apply barrier to cover vertical flashing with a minimum 4-inch (100-mm) overlap unless otherwise indicated.
- b. Building Paper: Apply horizontally with a 2-inch (50-mm) overlap and a 6-inch (150-mm) end lap; fasten to sheathing with galvanized staples or roofing nails.
- c. Building Wrap: Comply with manufacturer's written instructions.
  - i. Seal seams, edges, fasteners, and penetrations with tape.
  - ii. Extend into jambs of openings and seal corners with tape.

## 2. FLEXIBLE FLASHING INSTALLATION

- a. Apply flexible flashing where indicated to comply with manufacturer's written instructions.
  - i. Lap seams and junctures with other materials at least 4 inches (100 mm) except that at flashing flanges of other construction, laps need not exceed flange width.
  - ii. Lap flashing over water-resistive barrier at bottom and sides of openings.
  - iii. Lap water-resistive barrier over flashing at heads of openings.

END OF SECTION 072500

SECTION 076500 - FLEXIBLE FLASHING SELF-ADHERING STAINLESS STEEL

PART 1 - GENERAL

1.01 SUMMARY

A. Flexible stainless steel self-adhering flashing..

EDIT RELATED SECTIONS TO INCLUDE ONLY SECTIONS IN

B. Related sections:

1. 04 05 23 Masonry Accessories (weep holes and drainage mesh).
2. 04 21 13 Brick Masonry
3. ~~04 22 00 Concrete Unit Masonry~~
4. ~~04 22 23 Architectural Concrete Unit Masonry~~
5. ~~04 42 00 Exterior Stone Cladding.~~
6. ~~04 72 00 Cast Stone Masonry.~~
7. ~~05 40 00 Cold Formed Metal Framing.~~
8. ~~06 10 00 Rough Carpentry.~~
9. 07 25 00 Weather Barriers
10. 07 60 00 Flashing and Sheet Metal. (to be determined on site, to be issued per request)
11. 07 65 00 Flexible Flashing.

1.02 REFERENCES

A. Standards of the following as referenced:

1. ASTM
2. Brick Industry Association (BIA)
3. Recycled content & Recyclability

B. Industry standards:

1. BIA *Technical Notes on Brick Construction No. 7, Water Penetration Resistance- Design and Detailing*, August 2005.
2. BIA *Technical Notes on Brick Construction No. 28B, Brick Veneer/Steel Stud Walls*, August 2005.

1.03 DEFINITIONS

A. Terms:

1. Cavity wall flashing: Same as flexible flashing.
2. Foundation sill flashing: Same as flexible flashing.
3. Flexible flashing: Water-proof material typically used in cavity wall construction to contain and assist in the proper water drainage that may penetrate wall system veneer. Other materials may be required to constitute the system.
4. Head and sill flashing: Same as flexible flashing.
5. Through-wall flashing:
  - a. Generally considered the same as flexible flashing.
  - b. Rare definition referred to full width cap flashing under copings or wall caps.

1.04 SUBMITTALS

- A. Product data: Indicate material type, composition, thickness, and installation procedures.
- B. Samples: 3" by 5" flashing material.
- C. Product Quality & Environmental submittals:
  - 1. Certificates:
    - a. Indicate materials supplied or installed are asbestos free.
    - b. Indicate recycled content: 60% total recycled material; based on 60% Post Industrial Recycled Content.
  - 2. Performance Attributes
    - a. Tensile strength, >90,000 psi minimum
    - b. Puncture Resistance, >2,500 pounds average
    - c. When tested as manufactured, product resists growth of mold pursuant to test method ASTM-D3273.
    - d. Certify the use of domestic manufactured stainless steel for flashing.

#### 1.05 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Manufacturer: Provide flashing materials by single manufacturer with not less than twenty five years of experience in manufacturing flexible flashing products.
  - 2. Flashing materials must be able to withstand 400° F temperature without changing the long term performance of the flashing.

<p>NOTE: ALL MANUFACTURERS OF AIR BARRIER, INSULATION AND FLASHING PRODUCTS SHOULD PROVIDE YOU MUTUAL LETTERS OF COMPATIBILITY FOR THESE PRODUCTS IN COMBINATION WITH EACH OTHER.</p>
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### PART 2 - PRODUCTS

#### 2.01 MANUFACTURED UNITS

- A. Flexible flashing:
  - 1. Products of manufacturers listed below meeting indicated standards and specified manufacturer's product data characteristics, except as modified below, are acceptable for use, subject to compliance with specified requirements.
    - a. Product standard of quality:
      - a. York Manufacturing, Inc.; York 304 SS
      - b. STS Coatings, Inc.; Gorilla Flash SS peel & stick butyl
      - c. Illinois Products, Inc.; IPCO Self-Adhesive Stainless Steel
      - d. TK Products, Inc.; TK Self-Adhering Stainless Steel TWF
      - e. Other products that meet the criteria in section 1.04 to 1.06.
  - 2. Characteristics:
    - a. Type: Stainless steel core with one stainless steel face with a butyl block co-polymer adhesive.
    - b. Stainless steel type: 304, ASTM A240.
    - b. Adhesive: block co-polymer
    - d. Size: Manufacturer's standard width rolls.
- B. Accessories:
  - 1. Polyether sealant:

- 1) York Manufacturing, Inc.; UniverSeal US-100
- 2) STS Coatings; GreatSeal LT-100
- 3) Prosoco, Inc.; R-Guard Joint Seam Sealer
2. Splice Tape:
  - 1) York Manufacturing, Inc.; York 304 SS
  - 2) Illinois Products, Inc.; IPCO Self Adhering Stainless Steel Flashing
3. Corner and End Dams: form the stainless steel flashing in the field or use 26 gauge stainless steel pre-manufactured corners.
4. Mortar deflection: polyester strands that will not degrade and will keep weep vents from clogging with mortar.
  - 1) York Manufacturing; Weep-Armor
  - 2) Or approved comparable product
5. Termination bar: rigid PVC or stainless steel termination bar with sealant catch lip
  - 1) York Manufacturing; T-96 termination bar
  - 2) York Manufacturing; SS Term Bar

### PART 3 - EXECUTION

#### 3.01 INSTALLATION

##### A. General:

1. Install where indicated, specified, or required in accord with flashing manufacturer's written instructions and as follows.
2. Extend flashing 6" minimum beyond opening. Fold flashing ends at end of openings or horizontal flashing terminations to form end dam or use pre-manufactured units made of 26 gauge stainless steel.
3. Flashing width: Width required starting flush with outside face of exterior wythe, extending through cavity, rising height required to extend above lintel steel at least 2".
4. Splice end joints by overlapping them a minimum of 2" and seal with a compatible sealant or metal splice tape.
5. Masonry back up:
  - a. Surface apply after dampproofing installation specified in Damp proofing/Air Barrier Section in accord with manufacturer's installation instructions.
  - b. Fasten to masonry back-up surface at top by embedding in layer of sealant or use a non-corrosive termination bar and fasten it to the backer wall at the top edge of the flashing and seal the top edge with compatible sealant or use a termination clamp, which is embedded in the block back up wall.
6. Concrete back up:
  - a. Surface apply after damp proofing/air barrier installation specified in damp proofing Section in accord with manufacturer's installation instructions.
  - b. Fasten to concrete surface at top by embedding in layer of sealant or use a non-corrosive termination bar and fasten it to the backer wall at the top edge of the flashing and seal the top edge with a compatible sealant.
7. Stud back up with sheathing:
  - a. Fasten to stud back-up at top by embedding in layer of sealant or use a non-corrosive termination bar and fasten it to the backer wall at the top edge of the flashing and seal the top edge with a compatible sealant.
8. Leave ready for certified compatible building felt or air barrier installation lapping flashing top installed in another Section.
9. Fold ends of flashing at end of opening to form dam; seal with polyether sealant or use purchased manufacturers preformed end dams.
10. Inside and outside corners: Make in industry accepted manner using corner and

- splice material or purchase manufactured corners from manufacturer.
12. Use stainless steel or copper drip edge any location that the underside of the flashing will be exposed and/or deemed necessary by the design professional or AHJ on the project.
  11. Cover flashing within a few days of installation to protect it from damage from the different trades, the environment and falling debris. If flashing is left unprotected and it is punctured, torn, or has loose scrim you should contact the manufacturer for repair instructions.

### 3.02 SCHEDULES

#### A. Locations:

1. Exterior door heads.
2. Window heads and sills.
3. Storefront heads.
4. Horizontal control joints.
5. Changes in veneer materials, vertically.
6. Other wall openings.
7. Other locations indicated.

END OF SECTION 076500

## SECTION 079200 - JOINT SEALANTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

1. Silicone joint sealants.
2. Nonstaining silicone joint sealants.
3. Urethane joint sealants.
4. Immersible joint sealants. (To be Determined per field conditions)
5. Silyl-terminated polyether joint sealants. (To be Determined per field conditions)
6. Mildew-resistant joint sealants. (To be Determined per field conditions)
7. Polysulfide joint sealants. (To be Determined per field conditions)
8. Butyl joint sealants.
9. Latex joint sealants.

- B. Related Requirements:

- 1. General Contractor shall determine per best practice, appropriate type of sealant to be applied on site.**

#### 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Chelsea High School.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product.

- B. LEED Submittals:

1. Product Data for Credit IEQ 4.1: For sealants and sealant primers used inside the weatherproofing system, documentation including printed statement of VOC content.
2. Laboratory Test Reports for Credit IEQ 4.1: For sealants and sealant primers used inside the weatherproofing system, documentation indicating that products comply with the testing and product requirements of the California Department of Public Health's (formerly, the California Department of Health Services') "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

- C. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- D. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- (13-mm-) wide joints formed between two 6-inch- (150-mm-) long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- E. Joint-Sealant Schedule: Include the following information:
  - 1. Joint-sealant application, joint location, and designation.
  - 2. Joint-sealant manufacturer and product name.
  - 3. Joint-sealant formulation.
  - 4. Joint-sealant color.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Product Test Reports: For each kind of joint sealant, for tests performed by manufacturer and witnessed by a qualified testing agency.**
- C. Preconstruction Laboratory Test Schedule: Include the following information for each joint sealant and substrate material to be tested:
  - 1. Joint-sealant location and designation.
  - 2. Manufacturer and product name.
  - 3. Type of substrate material.
  - 4. Proposed test.
  - 5. Number of samples required.
- D. Preconstruction Laboratory Test Reports: From sealant manufacturer, indicating the following:
  - 1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility and adhesion with joint sealants.
  - 2. Interpretation of test results and written recommendations for primers and substrate preparation are needed for adhesion.
- E. Preconstruction Field-Adhesion-Test Reports: Indicate which sealants and joint preparation methods resulted in optimum adhesion to joint substrates based on testing specified in "Preconstruction Testing" Article.
- F. Field-Adhesion-Test Reports: For each sealant application tested.
- G. Sample Warranties: For special warranties.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.
- B. Product Testing: Test joint sealants using a qualified testing agency.
  - 1. Testing Agency Qualifications: Qualified according to ASTM C 1021 to conduct the testing indicated.
- C. Mockups: Install sealant in mockups of assemblies specified in other Sections that are indicated to receive joint sealants specified in this Section. Use materials and installation methods specified in this Section.

## 1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Laboratory Testing: Submit to joint-sealant manufacturers, for testing indicated below, samples of materials that will contact or affect joint sealants.
  - 1. Adhesion Testing: Use ASTM C 794 to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
  - 2. Compatibility Testing: Use ASTM C 1087 to determine sealant compatibility when in contact with glazing and gasket materials.
  - 3. Stain Testing: Use ASTM C 1248 to determine stain potential of sealant when in contact with masonry substrates.
  - 4. Submit manufacturer's recommended number of pieces of each type of material, including joint substrates, joint-sealant backings, and miscellaneous materials.
  - 5. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
  - 6. For materials failing tests, obtain joint-sealant manufacturer's written instructions for corrective measures, including use of specially formulated primers.
  - 7. Testing will not be required if joint-sealant manufacturers submit data that are based on previous testing, not older than 24 months, of sealant products for adhesion to, staining of, and compatibility with joint substrates and other materials matching those submitted.
- B. Preconstruction Field-Adhesion Testing: Before installing sealants, field test their adhesion to Project joint substrates as follows:
  - 1. Locate test joints where indicated on Project or, if not indicated, as directed by Architect.
  - 2. Conduct field tests for each kind of sealant and joint substrate.
  - 3. Notify Architect seven days in advance of dates and times when test joints will be erected.
  - 4. Arrange for tests to take place with joint-sealant manufacturer's technical representative present.
    - a. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1.1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.

- 1) For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
5. Report whether sealant failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. For sealants that fail adhesively, retest until satisfactory adhesion is obtained.
6. Evaluation of Preconstruction Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.

## 1.8 FIELD CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
  1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer **or are below 40 deg F (5 deg C).**
  2. When joint substrates are wet.
  3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

## 1.9 WARRANTY

- A. Special Installer's Warranty: Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  1. Warranty Period: 2 years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer agrees to furnish joint sealants to repair or replace those joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  1. Warranty Period: 5 years from date of Substantial Completion.
- C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
  1. Movement of the structure caused by stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
  2. Disintegration of joint substrates from causes exceeding design specifications.
  3. Mechanical damage caused by individuals, tools, or other outside agents.
  4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

## PART 2 - PRODUCTS

### 2.1 JOINT SEALANTS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. Low-Emitting Interior Sealants: Sealants and sealant primers shall comply with the testing and product requirements of the California Department of Health's (formerly, the California Department of Health Services') "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- C. Colors of Exposed Joint Sealants: **As selected by Architect from manufacturer's full range.**

### 2.2 SILICONE JOINT SEALANTS

- A. Silicone, S, NS, 100/50, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Use NT.
  - 1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. GE Construction Sealants; SCS2700 SilPruf LM .
    - b. Sika Corporation U.S.
- B. Silicone, S, NS, 50, NT: Single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Use NT.
  - 1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. Dow Corning Corporation; 791.
    - b. GE Construction Sealants; SCS2000 SilPruf.
    - c. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; Bondaflex Sil 265 LTS.
    - d. Pecora Corporation; PCS.
    - e. Sika Corporation U.S.;
- C. Silicone, S, NS, 35, NT: Single-component, nonsag, plus 35 percent and minus 35 percent movement capability. nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 35, Use NT.
  - 1. Products: Subject to compliance with requirements, **provide the following**:
    - a. GE Construction Sealants; SWS.

- D. Silicone, S, NS, 25, NT: Single-component, nonsag, plus 25 percent and minus 25 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Use NT.
1. **Products:** Subject to compliance with requirements, **provide one of the following:**
    - a. Dow Corning Corporation; 758.
    - b. GE Construction Sealants; SCS2350.
    - c. Polymeric Systems, Inc.; [PSI-631] [PSI-641].
    - d. Schnee-Morehead, Inc., an ITW company; SM5731 Poly-Glaze Plus.
- E. Silicone, Acid Curing, S, NS, 25, NT: Single-component, nonsag, plus 25 percent and minus 25 percent movement capability, nontraffic-use, acid-curing silicone joint sealant: ASTM C 920, Type S, Grade NS, Class 25, Use NT.
1. **Products:** Subject to compliance with requirements, **provide one of the following:**
    - a. Bostik, Inc.; Chem-Calk 1200.
    - b. Dow Corning Corporation; [999A].
    - c. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; [**Bondaflex Sil 100 GC**] [**Bondaflex Sil 100 GP**] [**Bondaflex Sil 100 HT**].
    - d. Pecora Corporation; 860.
    - e. Polymeric Systems, Inc.; PSI-601.
    - f. Sika Corporation U.S.; Sikasil-GP.
- F. Silicone, S, NS, 100/50, T, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Uses T and NT.
1. **Products:** Subject to compliance with requirements, **provide one of the following:**
    - a. Dow Corning Corporation; NS.
    - b. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; [**Bondaflex Sil 728 NS**].
- G. Silicone, S, NS, 50, T, NT: Single-component, nonsag, plus 50 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Uses T and NT.
1. **Products:** Subject to compliance with requirements, **provide one of the following:**
    - a. Dow Corning Corporation; [799] [CCS].
    - b. Soudal USA; RTV 50.
- H. Silicone, S, NS, 25, T, NT: Single-component, nonsag, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Uses T and NT.
1. **Products:** Subject to compliance with requirements, **provide one of the following:**

- a. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; [**Bondaflex Sil 199 PG**] [**Bondaflex Sil 200 GPN**] [**Bondaflex Sil 201 FC**] [**Bondaflex Sil 211 FC**].
  - b. Sika Corporation U.S.; Sikasil-N Plus US.
- I. Silicone, S, P, 100/50, T, NT: Single-component, pourable, plus 100 percent and minus 50 percent movement capability traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade P, Class 100/50, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following:**
    - a. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; [**Bondaflex Sil 728 SG**] [**Bondaflex Sil 728 SL**].
- J. Silicone, S, P, 25, T, NT: Single-component, pourable, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade P, Class 25, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following:**
    - a. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; [**Bondaflex Sil 200 SC**] [**Bondaflex Sil 200 MJS**].
- K. Silicone, M, P, 100/50, T, NT: Multicomponent, pourable, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type M, Grade P, Class 100/50, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following:**
    - a. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; Bondaflex Sil 728 RCS.
- 2.3 NONSTAINING SILICONE JOINT SEALANTS
- A. Nonstaining Joint Sealants: No staining of substrates when tested according to ASTM C 1248.
- B. Silicone, Nonstaining, S, NS, 100/50, NT: Nonstaining, single-component, nonsag, plus 100 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Use NT.
1. Products: Subject to compliance with requirements, **provide one of the following:**
    - a. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; [**Bondaflex Sil 290 FPS-NB**] [**Bondaflex Sil 290 NB**].
    - b. Pecora Corporation; [**890FTS/TXTR**] [**890 NST**].
    - c. Tremco Incorporated; Spectrem 1.

- C. Silicone, Nonstaining, S, NS, 50, NT: Nonstaining, single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 50, Use NT.
1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. Dow Corning Corporation; [756 SMS] [795].
    - b. GE Construction Sealants; SilPruf NB.
    - c. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; Bondaflex Sil 295 FPS NB.
    - d. Pecora Corporation; [864NST] [895NST] [898NST].
    - e. Tremco Incorporated; [Spectrem 2] [Spectrem 3].
- D. Silicone, Nonstaining, S, NS, 100/50, T, NT: Nonstaining, single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following**:
    - a. Dow Corning Corporation; 790.
- E. Silicone, Nonstaining, M, NS, 50, NT: Nonstaining, multicomponent, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type M, Grade NS, Class 50, Use NT.
1. Products: Subject to compliance with requirements, **provide the following**:
    - a. Tremco Incorporated; Spectrem 4-TS.

#### 2.4 URETHANE JOINT SEALANTS

- A. Urethane, S, NS, 25, NT: Single-component, nonsag, nontraffic-use, plus 25 percent and minus 25 percent movement capability, urethane joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Use NT.
1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. BASF Construction Chemicals, LLC, Building Systems; Sonalastic TX1.
    - b. Bostik, Inc.; Chem-Calk [GPS1] [900] [915] [916] [2000].
    - c. ER Systems, an ITW Company; Pacific Polymers Elasto-Thane 230 MP.
    - d. Pecora Corporation; Dynatrol I-XL.
    - e. Polymeric Systems, Inc.; Flexiprene 1000.
    - f. Schnee-Morehead, Inc., an ITW company; Permathane SM7108.
    - g. Sherwin-Williams Company (The); [Stampede-1] [Stampede-TX].
    - h. Sika Corporation U.S.; Sikaflex Textured Sealant.
    - i. Tremco Incorporated; Dymonic.

- B. Urethane, S, NS, 100/50, T, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type S, Grade NS, Class 100/50, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following**:
    - a. Sika Corporation U.S.; Sikaflex 15LM.
- C. Urethane, S, NS, 25, T, NT: Single-component, nonsag, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following** :
    - a. LymTal International, Inc.; [**Iso-Flex 330**] [**Iso-Flex 875R**].
- D. Urethane, S, P, 35, T, NT: Single-component, pourable, plus 35 percent and minus 35 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type S, Grade P, Class 35, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following**:
    - a. Bostik, Inc.; Chem-Calk [**955-SL**].
- E. Urethane, S, P, 25, T, NT: Single-component, pourable, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type S, Grade P, Class 25, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. BASF Construction Chemicals, LLC, Building Systems; Sonolastic SL 1.
    - b. Pecora Corporation; NR-201.
    - c. Polymeric Systems, Inc.; Flexiprene 952.
    - d. Schnee-Morehead, Inc.; an ITW company; Permathane SM7101.
    - e. Sherwin-Williams Company (The); Stampede 1SL.
- F. Urethane, M, NS, 50, NT: Multicomponent, nonsag, plus 50 percent and minus 50 percent movement capability nontraffic-use, urethane joint sealant; ASTM C 920, Type M, Grade NS, Class 50, Use NT.
1. Products: Subject to compliance with requirements, **provide the following**:
    - a. Pecora Corporation; Dynatrol II.
- G. Urethane, M, NS, 25, NT: Multicomponent, nonsag, plus 25 percent and minus 25 percent movement capability, nontraffic-use, urethane joint sealant; ASTM C 920, Type M, Grade NS, Class 25, Use NT.
1. Products: Subject to compliance with requirements, **provide the following**:

- a. Sherwin-Williams Company (The); Stampede-2NS.
- H. Urethane, M, NS, 50, T, NT: Multicomponent, nonsag, plus 50 percent and minus 50 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type M, Grade NS, Class 50, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following**:
    - a. Tremco Incorporated; Dymeric 240.
- I. Urethane, M, NS, 25, T, NT: Multicomponent, nonsag, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type M, Grade NS, Class 25, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. Bostik, Inc.; Chem-Calk 505.
    - b. LymTal International, Inc.; [**Iso-Flex 881**] [**Iso-Flex 885 SG**].
    - c. Sika Corporation U.S.; Sikaflex - 2c NS EZ Mix.
- J. Urethane, M, P, 50, T, NT: Multicomponent, pourable, plus 50 percent and minus 50 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type M, Grade P, Class 50, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide the following**:
    - a. LymTal International, Inc.; Iso-Flex 888QC.
- K. Urethane, M, P, 25, T, NT: Multicomponent, pourable, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C 920, Type M, Grade P, Class 25, Uses T and NT.
1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. Bostik, Inc.; Chem-Calk 555-SL.
    - b. LymTal International, Inc.; Iso-Flex 880 GB.
    - c. Pecora Corporation; [**Dynatrol II SG**] [**Urexpan NR 200**]
    - d. Sherwin-Williams Company (The); Stampede-2SL.
    - e. Tremco Incorporated; THC 900/901.
- 2.5 BUTYL JOINT SEALANTS
- A. Butyl-Rubber-Based Joint Sealants: ASTM C 1311.
1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. Bostik, Inc.; Chem-Calk 300.
    - b. Pecora Corporation; BC-158.

## 2.6 LATEX JOINT SEALANTS

- A. Acrylic Latex: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.
1. Products: Subject to compliance with requirements, **provide one of the following**:
    - a. BASF Construction Chemicals, LLC, Building Systems; Sonolac.
    - b. May National Associates, Inc., a subsidiary of Sika Corporation U.S.; [Bondaflex 600] [Bondaflex Sil-A 700].
    - c. Pecora Corporation; AC-20.
    - d. Sherwin-Williams Company (The); [850A] [950A] [PowerHouse].
    - e. Tremco Incorporated; Tremflex 834.

## 2.7 JOINT-SEALANT BACKING

- A. Sealant Backing Material, General: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; and approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
1. Manufacturers: Subject to compliance with requirements, **available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following**:
  2. Basis-of-Design Product: Subject to compliance with requirements, provide
    - a. BASF Construction Chemicals, LLC, Building Systems.
    - b. Construction Foam Products, a division of Nomaco, Inc.
- B. Cylindrical Sealant Backings: ASTM C 1330, **Type C (closed-cell material with a surface skin or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated)**, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

## 2.8 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.

- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
    - a. Concrete.
    - b. Masonry.
    - c. Unglazed surfaces of ceramic tile.
    - d. Exterior Metal Panel Wall Systems.
  - 3. Remove laitance and form-release agents from concrete.
  - 4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
    - a. Metal.
    - b. Glass.
    - c. Porcelain enamel.
    - d. Glazed surfaces of ceramic tile.
    - e. Exterior Metal Panel Wall Systems.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to

comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### 3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
  - 1. Do not leave gaps between ends of sealant backings.
  - 2. Do not stretch, twist, puncture, or tear sealant backings.
  - 3. Remove absorbent sealant backings that have become wet before sealant application, and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealant from surfaces adjacent to joints.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 3. Provide concave joint profile per Figure 8A in ASTM C 1193 unless otherwise indicated.
  - 4. Provide recessed joint configuration of recess depth according to Figure 8C in ASTM C 1193.
    - a. Use masking tape to protect surfaces adjacent to recessed tooled joints.

### 3.4 FIELD QUALITY CONTROL

#### A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:

1. Extent of Testing: Test completed and cured sealant joints as follows:
  - a. Perform 10 tests for the first **1000 feet (300 m)** of joint length for each kind of sealant and joint substrate.
  - b. Perform one test for each **1000 feet (300 m)** of joint length thereafter or one test per each floor per elevation.
2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.
  - a. For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
3. Inspect tested joints and report on the following:
  - a. Whether sealants filled joint cavities and are free of voids.
  - b. Whether sealant dimensions and configurations comply with specified requirements.
  - c. Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. Compare these results to determine if adhesion complies with sealant manufacturer's field-adhesion hand-pull test criteria.
4. Record test results in a field-adhesion-test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant material, sealant configuration, and sealant dimensions.
5. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.

#### B. Evaluation of Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

### 3.5 CLEANING

- #### A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.6 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out, remove, and repair damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

END OF SECTION 079200

# City of Chelsea Chelsea High School

299 Everett Avenue  
Chelsea, MA 02150

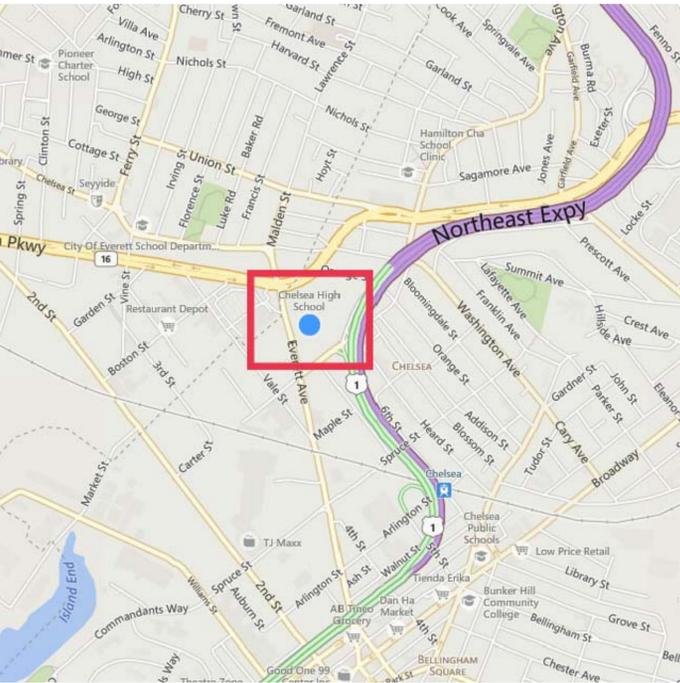


## FOR EXTERIOR WALL REPAIRS at Chelsea High School



DATE: NOVEMBER 19, 2015

Locus Map:



Project Team:

**JACOBS**<sup>TM</sup>  
CONSULTANTS, INC.

343 Congress Street  
Suite 2100  
Boston, MA 02210

V: 617.242.9222  
F: 617.242.9824

A part of the Jacobs Engineering Group, Inc.

### Drawing List:

SHEET NO.	CONTENTS OF DRAWINGS
A-0	GENERAL NOTES, REFERENCE PLANS, PHOTOGRAPHS AND ABBREVIATIONS
A-1	SKYLIGHT AND WINDOW REPAIR DETAILS
A-2	MECHANICAL PENTHOUSE EXTERIOR WALL LEAK REMEDIATION DETAILS

SPECIFICATIONS PROVIDED AS LETTER SIZED DOCUMENT

CONTRACTOR SHALL NOTE THAT APPENDED TO THIS SET OF DRAWINGS AND SPECIFICATIONS ARE ORIGINAL CONSTRUCTION DRAWINGS OF THE HIGH SCHOOL.

### Code Summary:

- PROJECT DESCRIPTION:  
REPAIR SELECT AREAS OF EXISTING EXTERIOR ENVELOPE
- APPLICABLE CODES:  
2009 INTERNATIONAL CODES (I-CODES)
 

IBC - INTERNATIONAL BUILDING CODE IEBG - INTERNATIONAL EXISTING BUILDING CODE IMC - INTERNATIONAL MECHANICAL CODE IECC - INTERNATIONAL ENERGY CONSERVATION CODE	<b>MASSACHUSETTS REGULATIONS</b> 780 CMR - MA AMENDMENTS TO THE IBC 527 CMR - MA FIRE PREVENTION & ELEC.REGULATIONS 248 CMR - MA PLUMBING REGULATIONS
--	--
- AREA OF WORK PROPOSED: EXTERIOR ONLY
- SCOPE OF WORK SHALL BE BASED ON:  
**IEBC - REPAIR**

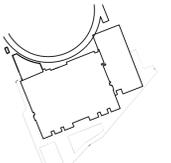
CONSULTANTS

Revision:  
Date: By: Description:

CLIENT AND/OR PROJECT INFO.

**CHELSEA HIGH SCHOOL**  
**299 EVERETT AVE.**  
**CHELSEA, MA**

Key Plan:



Scale: AS NOTED

Jacobs Project No.: R7W71640

Drawing Title:

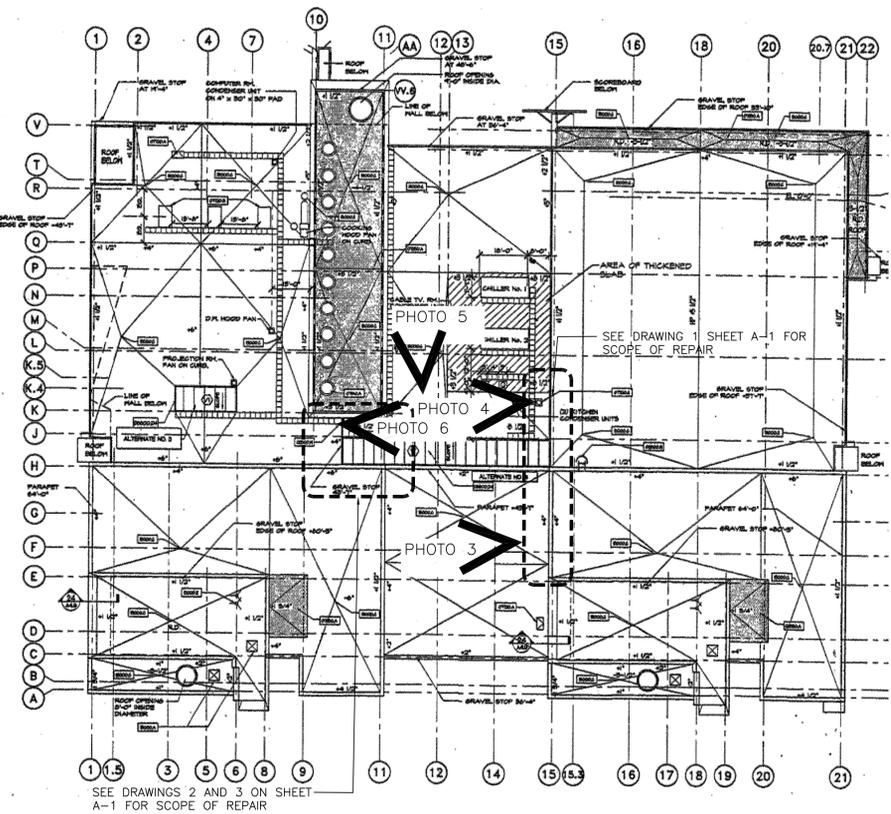
GENERAL NOTES, REF. PLANS  
PHOTOGRAPHS AND  
ABBREVIATIONS

Date: DEC. 2015

Designed By: c.g. Drawing No.:

Drawn By: c.g.

Checked By: A-0



**1** EXISTING ROOF PLAN  
A-0 NOT TO SCALE



PHOTO 1. VIEW OF EXISTING MECHANICAL PENTHOUSE



PHOTO 2. VIEW OF EXISTING MECHANICAL PENTHOUSE



PHOTO 3. VIEW OF EXISTING WINDOW



PHOTO 4. VIEW OF EXISTING SKYLIGHT: EAST END



PHOTO 5. VIEW OF EXISTING SKYLIGHT: SOUTH SIDE



PHOTO 6. VIEW OF EXISTING SKYLIGHT: WEST END

ROOF PLAN  
SCALE: 1/16" = 1'-0"

NOTE: THIS SYMBOL  
DENOTES DIRECTION  
OF CAMERA ANGLE



PHOTO 1



PHOTO 2



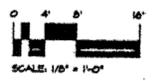
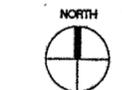
PHOTO 1



PHOTO 2

**2** EXISTING PENTHOUSE PLAN  
A-0 NOT TO SCALE

PENTHOUSE PLAN  
SCALE: 1/8" = 1'-0"





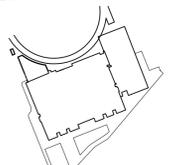
CONSULTANTS

Revision:  
Date: By: Description:

CLIENT AND/OR PROJECT INFO.

**CHELSEA HIGH SCHOOL**  
**299 EVERETT AVE.**  
**CHELSEA, MA**

Key Plan:



Scale: AS NOTED

Jacobs Project No.: R7W1640

Drawing Title:

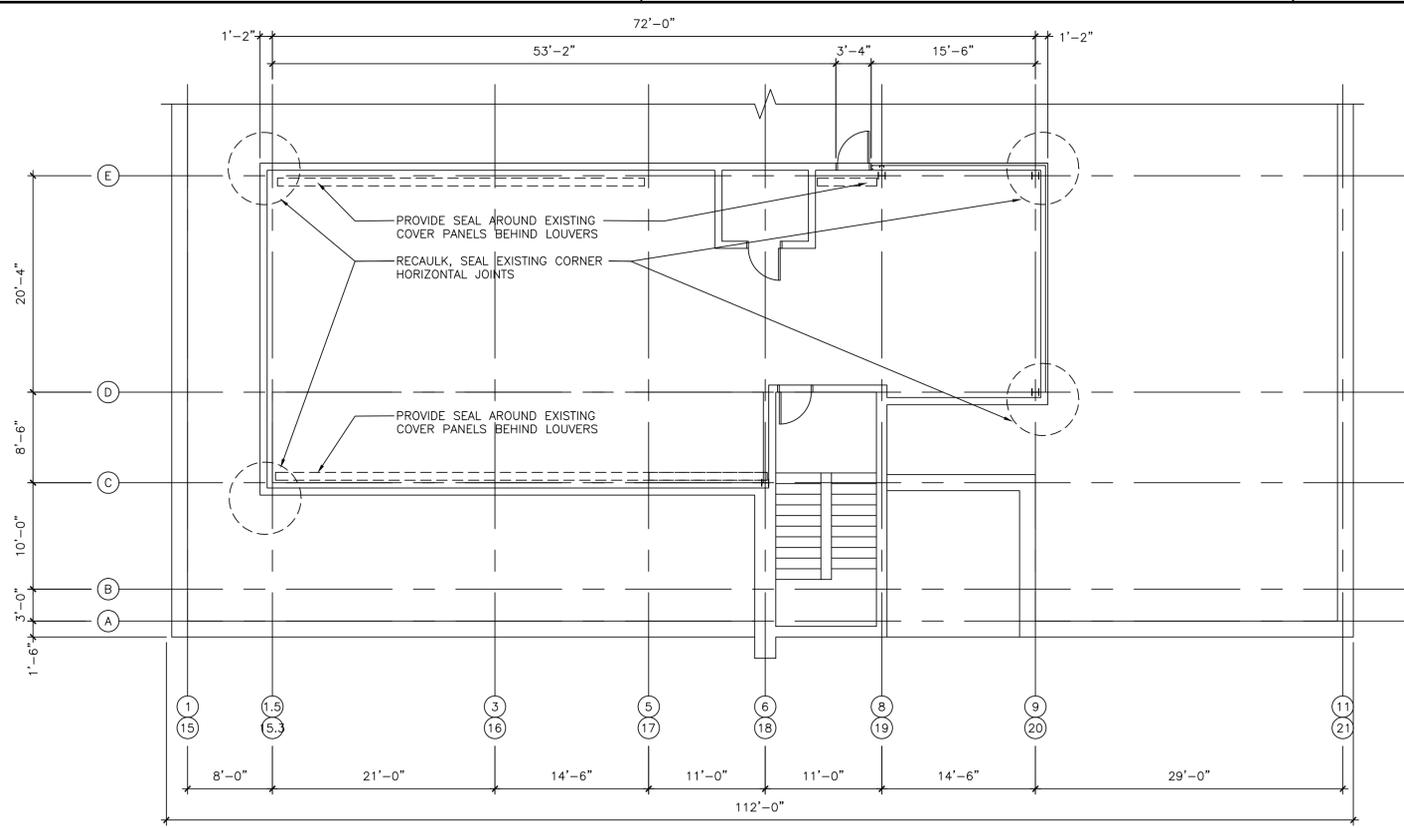
MECH. PENTHOUSE  
EXTERIOR WALL  
LEAK REMEDIATION

Date: DEC. 2015

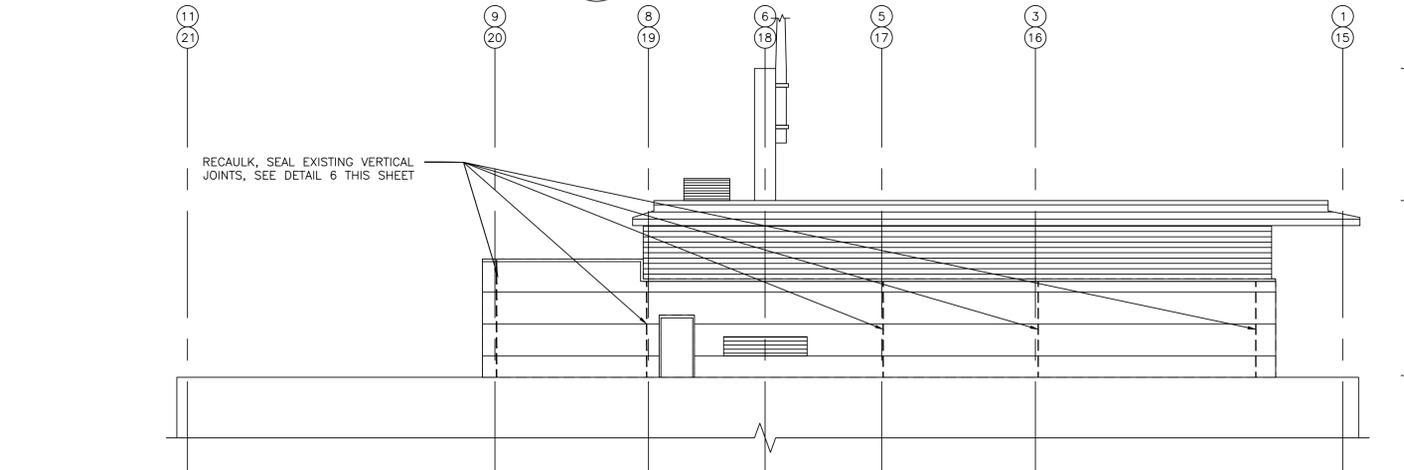
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Drawn By: G.B.

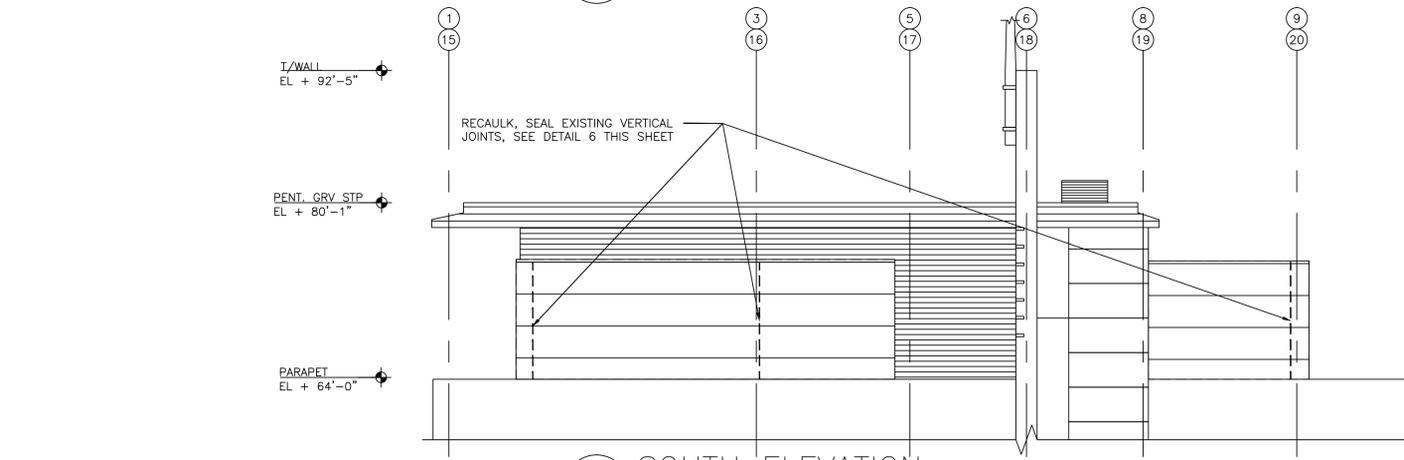
Checked By: A-2



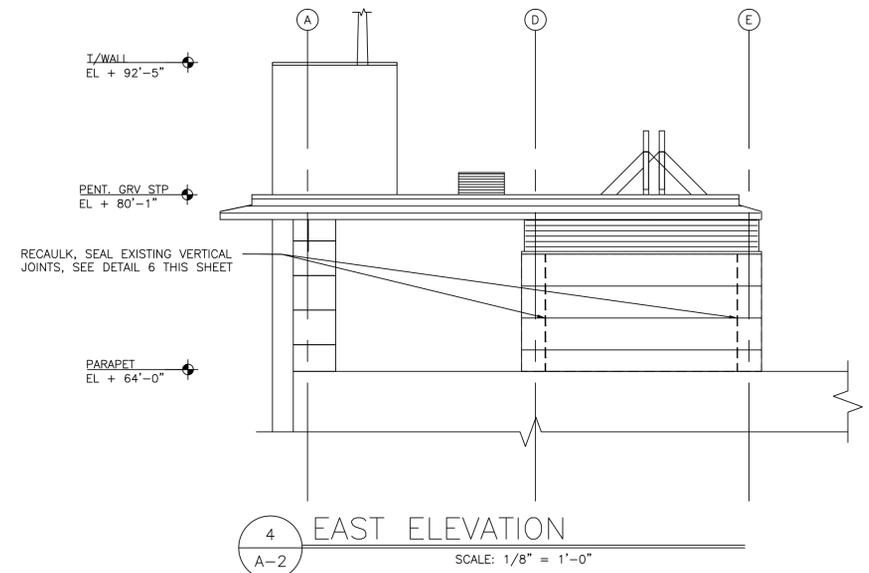
1 PLAN  
A-2 SCALE: 1/8" = 1'-0"



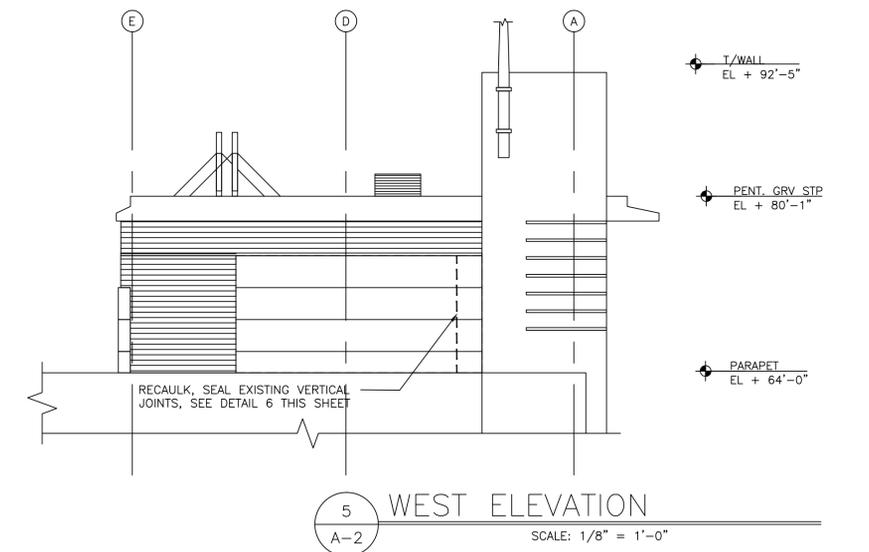
2 NORTH ELEVATION  
A-2 SCALE: 1/8" = 1'-0"



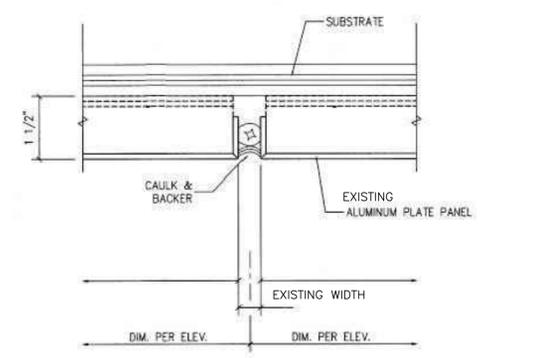
3 SOUTH ELEVATION  
A-2 SCALE: 1/8" = 1'-0"



4 EAST ELEVATION  
A-2 SCALE: 1/8" = 1'-0"



5 WEST ELEVATION  
A-2 SCALE: 1/8" = 1'-0"



6 DETAIL - PLAN VIEW  
A-2 SCALE: NOT TO SCALE

Jacobs - Chelsea Public Schools R7W1640 - 15-leak-repairs-300-CADD-01-Architectural-Sheets-A-0-1-2-3.dwg [A-2] November 11, 2015 - 2:54pm ChdDD

**Building Investigative Inspections Report**

**Chelsea High School**

**299 Everett Avenue**

**Chelsea, MA**



Prepared for

City of Chelsea School Department

February 2, 2015

Prepared by

**JACOBS**

343 Congress Street  
Boston, MA 02210

# **Table of Contents**

1. Introduction
2. Investigation Procedures and Findings
3. Reliance Restrictions & Recourses

## **1. Introduction:**

### **1.1 Purpose**

The purpose of this report is to assist the City of Chelsea School Department in identifying defects as part of an on call “house doctor services” agreement. The purpose of this site visit was to conduct an investigative assessment and identify areas of water infiltration.

- Conduct investigative intrusive testing of problem areas to include the Cafeteria skylight in two locations and visual inspection of caulking and flashing deficiencies of several other areas.
- Document and identify physical deficiencies and conditions that may limit the expected useful life of the building envelope.

### **1.2 Scope**

This report is the result and findings of the intrusive investigation. Working with Suburban Masonry Restoration & Waterproofing Co., we removed portions of the exterior masonry veneer materials.

JACOBS staff, which included David Choi, Architect, Brian J. Frigon, Field Service Project Manager traveled to Chelsea High School on January 16, 2015 to perform the selective building envelope inspections.

### **1.3 Research (Documentation and Personnel)**

JACOBS was provided entry to all reasonably accessible areas of the site. We inspected the areas of apparent roofs/wall leaks of the three major building volumes making up the Chelsea High School complex as well as various interior spaces including the Cafeteria skylight well, Room 3012 and mechanical penthouses. Intrusive investigation was conducted at two of the roof leak sites at the skylight light well. Both areas were temporarily restored to prevent water infiltration.

Present during the investigation was Brian Frigon (Jacobs), Richie DiMartino (Suburban) and Marlow Saravia (Suburban).

### **1.4 Methodology**

JACOBS performed professional services, obtained findings, and prepared recommendations according to customary principles and practices in the fields of property condition and engineering inspections.

### **1.5 Site**

Chelsea High School – 299 Everett Avenue Chelsea MA, 02150

## **1.6 General Site Description**

The Chelsea High School consists of four levels of classrooms in an urban setting – The Chelsea High School consists of 3 separate schools--Red, Blue, and Green Zones. The building was built in 1996 and then added to in 2002; the exterior envelope is mostly constructed of exterior masonry veneer. The condition of the exterior façades of the building appears to be in good to fair condition, with exceptions mentioned later in this report.

Chelsea School Department and JACOBS have noted evidence of water infiltration at several interior ceiling and wall locations. These locations include but are not limited to the Cafeteria skylight light well, corridors, Classroom 3012 and roof top Mechanical Penthouses.

## **1.7 Age of Building**

The buildings were constructed circa 1996 making their effective ages 19 years old. In 1996 as part of a citywide school building plan a new school located on Everett Avenue was opened. It is understood that a large addition was constructed on the east side of the building in 2002.

## **2. Investigation Procedures and Findings:**

### **2.1 Investigation Site #1**

Location:	Cafeteria skylight and interior light well below at column line H/11.
Evidence:	Apparent water infiltration staining on skylight well at vertical drywall finishes.
Deficiency:	Water infiltration at exterior skylight/wall intersection above Cafeteria.
Investigation Process:	Selective demolition of exterior masonry veneer at masonry control joint to expose thru-wall flashing.
Investigation Findings:	Through the removal of the masonry veneer to expose the thru-wall flashing it was apparent that the flashing was not on either side of the control joint and was not overlapping. The eastern side of the expansion joint did not have a thru-wall flashing installed. Also, the installed thru-wall flashing was not properly sized leaving 1½” gap between the flashing and the exterior face of the backer wall. The interior moisture and vapor barrier was also showing deficient installation. The flashing barrier was cut to follow the thru-wall flashing leaving a large gap for moisture to penetrate the interior portion of the wall below. Extensive amounts of mortar droppings had accumulated at the flashing level blocking several of the masonry weep holes.
Correction:	Jacobs recommends the removal of the bottom 3 courses of masonry veneer along the entire top of the skylight at the thru-wall flashing. Installing new aluminum thru-wall flashing with the correct width with new waterproofing membrane flashing to direct any water infiltration to the masonry veneer weeps. The thru-wall flashing should have an expansion overlap at the existing expansion joint located 16” off the corner. Re-install the masonry veneer and mortar set the joints. Please see schematic sketch A1
Photos:	1,2,3,4

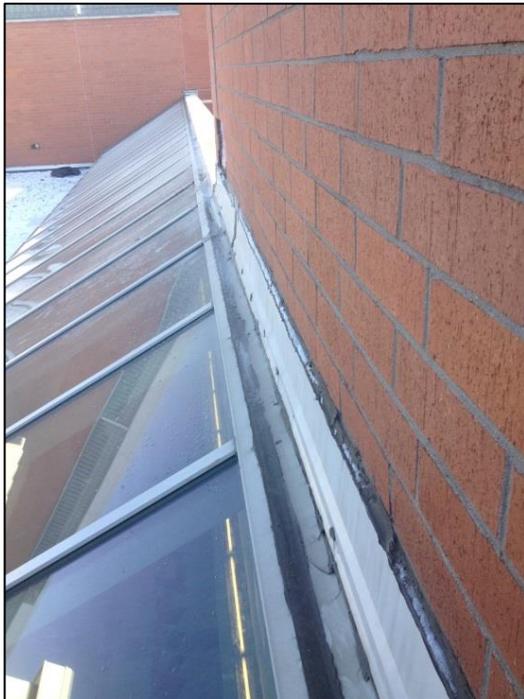


Photo 1



Photo 2



*Photo 3 Existing Masonry Expansion Joint & Air Cavity*

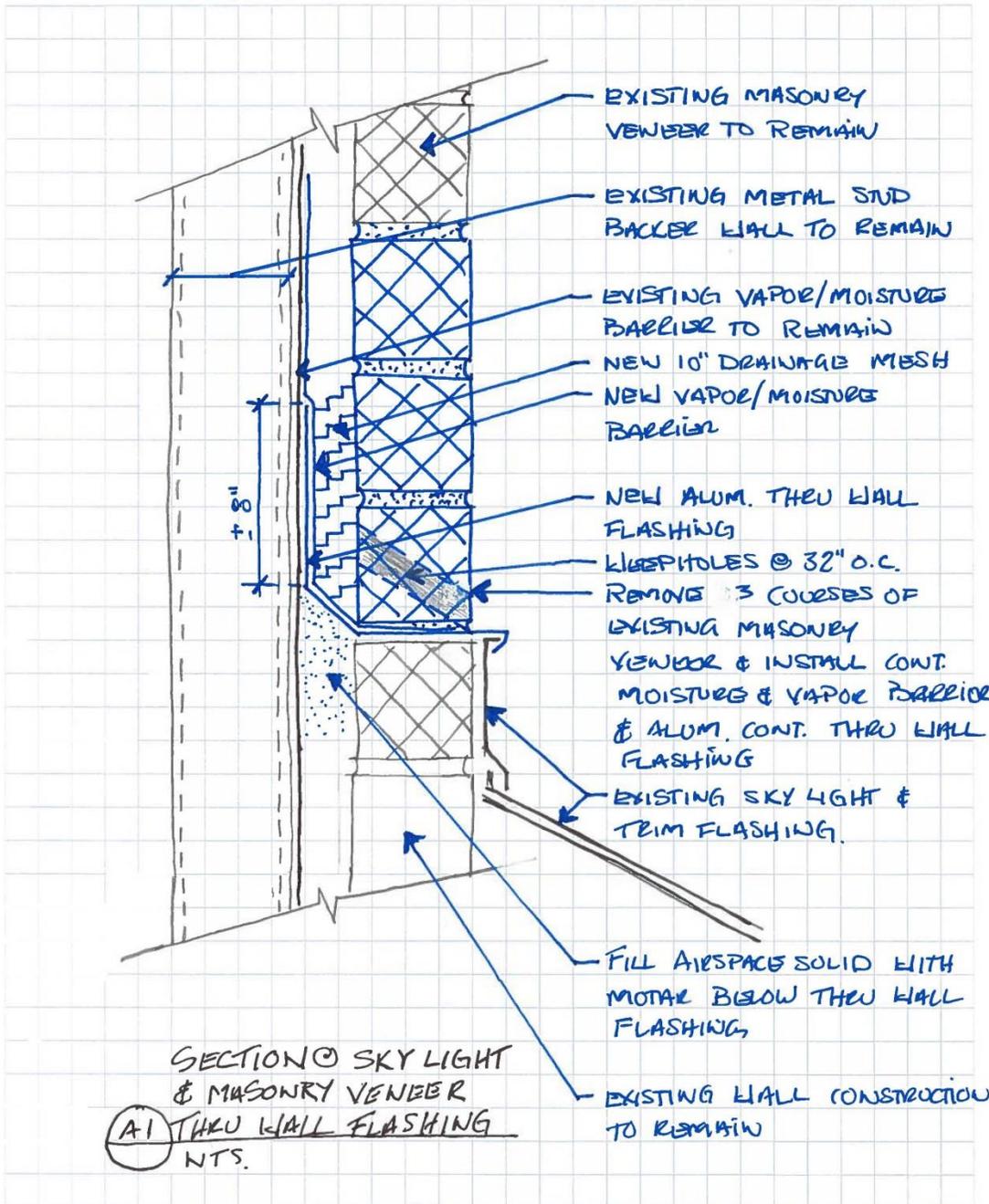


*Photo 4 Existing Thru-Wall Flashing @ Expansion Joint*

2.1a Investigation Site #1 – Schematic Sketch A1



Subject SKY LIGHT Project CHelsea HIGH SC.  
THRU WALL FLASHING Sheet No. \_\_\_\_\_ of A1  
 Authored by \_\_\_\_\_ Date \_\_\_\_\_ Checked by \_\_\_\_\_ Date \_\_\_\_\_



## 2.2 Investigation Site #2

Location:	Cafeteria skylight and interior light well below at column line J/15.
Evidence:	Apparent water infiltration staining on skylight well at vertical drywall finishes.
Deficiency:	Water infiltration at exterior sky light/wall intersection at left edge of skylight.
Investigation Process:	Selective demolition of skylight edge cap flashing at masonry veneer wall and masonry flashing reglet.
Investigation Findings:	Visual inspection of the masonry veneer wall shows that there is no apparent stepped flashing installed. This flashing is required to direct the moisture from the wall cavity to the exterior of the wall. Without the stepped flashing moisture is directed to the gypsum wall board walls below. Also, through the removal of the skylight edge cap wall flashing it was apparent that the cap flashing was not embedded into the masonry veneer flashing reglet. It appears the reglet was cut improperly not allowing the cap flashing to sit properly. The cap flashing was sitting flush with the face of the wall and a caulking bead was applied. The caulking has loosened and failed over time possibly allowing water infiltration down the edge of the skylight to enter the building. The reglet size was approximately 3/8" wide by 3/4" deep. There was also evidence of caulking failure at the vertical joint at the base of the skylight and the masonry veneer.
Correction:	Jacobs recommends the installation of a Hyload preformed cloaked stepped thru-wall flashing system to run the entire length of the sloped sky light. This would be accomplished by the removal of the skylight cap flashing, removal of several courses of masonry veneer in a stepped pattern, the installation of a stepped thru-wall flashing over-lapped a minimum of 4" with counter flashing would need to be tied into the edge cap flashing of the sky light assembly. New caulking for both the sloped cap flashing and the vertical intersection at the base.
Photos:	1,2,3,4



Photo 1

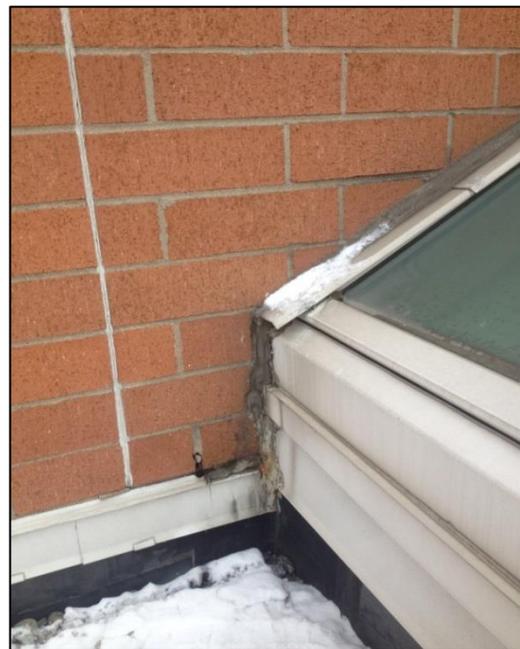


Photo 2



*Photo 3 Sky Light Edge Flashing*



*Photo 4 Sky Light Edge Flashing*

2.2a Investigation Site #2 – Schematic Sketch A2



Subject SKY LIGHT Project CHELSEA HIGH  
STEPPED FLASHING Sheet No. \_\_\_\_\_ of A2  
 Authored by \_\_\_\_\_ Date \_\_\_\_\_ Checked by \_\_\_\_\_ Date \_\_\_\_\_



STEPPED THRU-WALL FLASHING \*

VAPOR/MOISURE BARRIER TO OVERLAP THRU-WALL FLASHING @ METAL STUD BACKER W/IK

EXPOSED STEP FLASHING, OVERLAP 4" MIN.

COUNTER FLASHING BENEATH STEPPED FLASHING

SKY LIGHT EDGE CAP FLASHING

\* PROVIDE HYDROFORMED CLOAKED FLASHING SYSTEM FOR STEPPED THRU-WALL FLASHING

STEPPED FLASHING @  
 (A2) SKY LIGHT/MASONRY WALL  
 N.T.S.

### 2.3 Investigation Site #3

Location:	Classroom 3012 exterior window/wall G/11.
Evidence:	Apparent water infiltration staining on interior wall drywall finishes below windows and at ceiling above windows.
Deficiency:	Water infiltration at exterior window/wall at window openings.
Investigation Process:	Visual inspection of windows, window caulking, masonry veneer expansion caulking and masonry veneer wall/roof intersection. No intrusive investigation occurred in this area due to difficulty of demolition and/or disturbance of class.
Investigation Findings:	Through visual inspection of the area it was apparent that there are several failures in the exterior window caulking and exterior sill masonry grout joints. These failures are in the immediate vicinity of the drywall damage and water staining on the interior drywall of the classroom.
Correction:	Jacobs recommends the removal of the existing window caulking and window sill masonry grout joints and replace with new caulking and grout.
Photos:	1,2,3,4



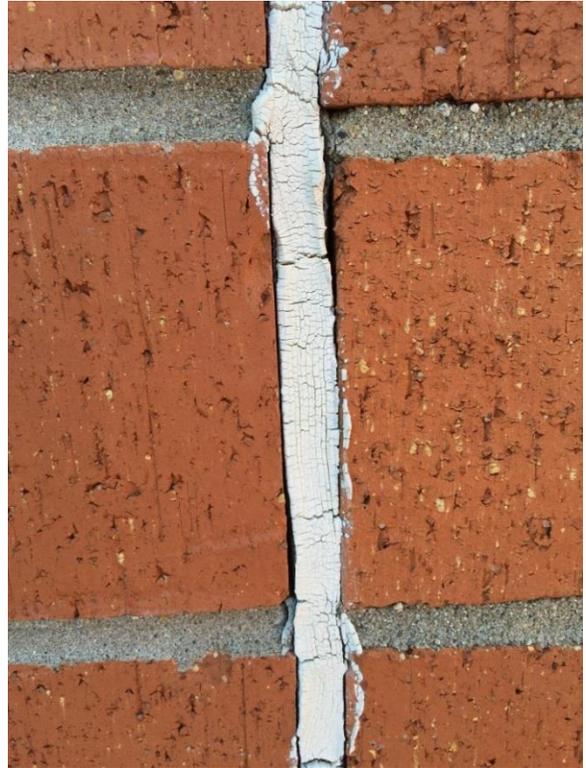
Photo 1



Photo 2 Window Sill



*Photo 3 Window Jamb Caulking*



*Photo 4 Masonry Expansion Joint*

## 2.4 Investigation Site #4

Location:	Mechanical Penthouses East & West.
Evidence:	Apparent water infiltration staining on interior wall panels, equipment and concrete slab
Deficiency:	Water infiltration at exterior wall panel and louver gasketing and sealants
Investigation Process:	Visual inspection of exterior wall panel system from both interior and exterior. No intrusive investigation was required for this area.
Investigation Findings:	Through the visual inspection of the area it was apparent that all of the insulated panel gaskets have failed due to their age. It was also discovered that there was minimal caulking of the panel intersection joints. It appears that some caulking has been installed over past years. All of the existing caulking is failing due to ultraviolet damage. It is also apparent that there is no evidence of caulking around the mechanical louvers leaving at some instances gaps as large then 1” wide. At these areas water infiltration is seen on the floors, walls, and adjacent equipment.
Correction:	Jacobs recommends the installation of new panel gaskets and caulking at all required areas to include vertical seams, horizontal corner gaps, around all louvers and at any other gaps in the panel system. Panel system, gaskets and joint caulking per manufacturer’s recommendations
Photos:	1,2,3,4,5,6



*Photo 1 Mechanical Penthouse Panel System*



*Photo 2 Vertical Gasket Joint*



*Photo 3 Vertical Gasket Joint (Interior)*



*Photo 4 Louver Jamb (Interior)*



*Photo 5 Louver Jamb (Exterior)*



*Photo 6 Louver Flashing*

### **3. Reliance Restrictions & Resources:**

#### **3.1 Restrictions**

JACOBS produced this document under an agreement between JACOBS and City of Chelsea School Department. All terms and conditions of that agreement are included within this document by reference. JACOBS disclaims any obligation to any other person with respect to any material presented in this document and no person may rely upon this document, with the exception of Chelsea Schools, without advance and express written consent from JACOBS and such person's written agreement to be bound by the limitations, qualifications, terms, conditions, and indemnities to JACOBS set forth in that agreement. JACOBS specifically states that its review of the property in question is subject to monetary restraints and scope limitations. Given those limitations and conditions, JACOBS has made what, in its opinion, is a reasonable investigation limited to visual observations. Design analysis of existing systems, including structural systems, has not been performed. JACOBS has also relied upon interviews and documents with the understanding that independent verification of their factual content is beyond the scope of JACOBS work. The materials presented in this document are "to JACOBS knowledge" where such phrase means to JACOBS actual knowledge of the subject matter after such inquiry as JACOBS considered reasonable in light of the qualifications and limitations upon the scope of work.

Assumptions regarding the overall condition of the property have been developed based upon inspection of "representative" areas of the building. As such, the development of schematic methods and associated costs for the correction of identified deficiencies is based upon the overview inspection and are also limited with respect to completeness.

#### **3.2 Resources and Contacts**

On-Site Review was conducted on January 16, 2015 by:

- Brian J. Frigon (Architect)

**Building Investigative Inspections Report**

**Chelsea High School**

**299 Everett Avenue**

**Chelsea, MA**



Prepared for

City of Chelsea School Department

February 2, 2015

Prepared by

**JACOBS**

343 Congress Street  
Boston, MA 02210

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Photos:	1,2,3,4

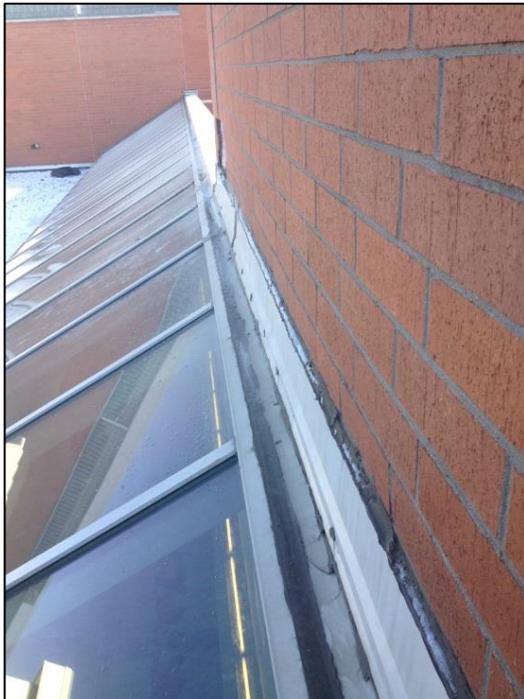


Photo 1



Photo 2



*Photo 3 Existing Masonry Expansion Joint & Air Cavity*

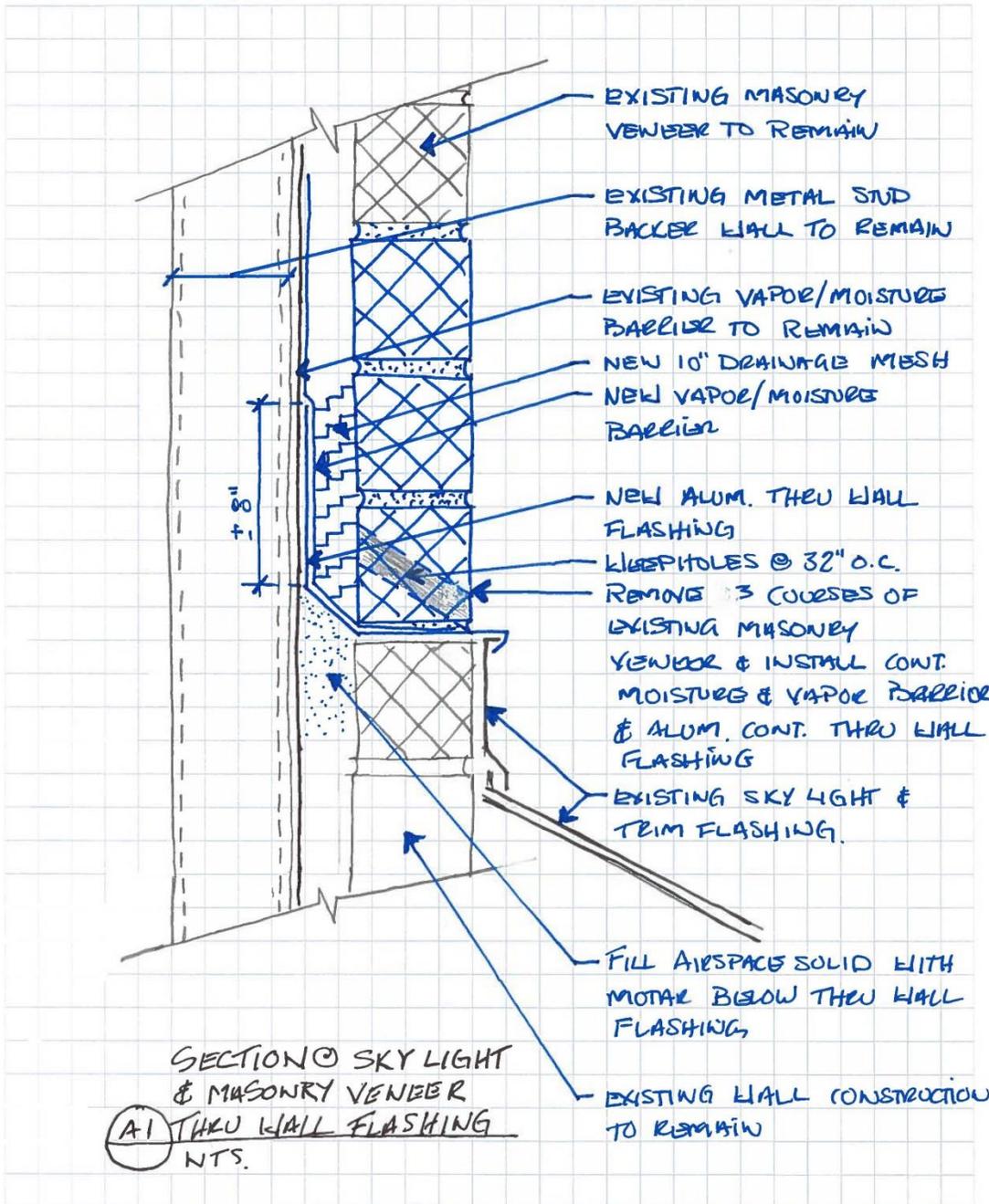


*Photo 4 Existing Thru-Wall Flashing @ Expansion Joint*

2.1a Investigation Site #1 – Schematic Sketch A1



Subject SKY LIGHT Project CHelsea HIGH SC.  
THRU WALL FLASHING Sheet No. \_\_\_\_\_ of A1  
 Authored by \_\_\_\_\_ Date \_\_\_\_\_ Checked by \_\_\_\_\_ Date \_\_\_\_\_



## 2.2 Investigation Site #2

Location:	Cafeteria skylight and interior light well below at column line J/15.
Evidence:	Apparent water infiltration staining on skylight well at vertical drywall finishes.
Deficiency:	Water infiltration at exterior sky light/wall intersection at left edge of skylight.
Investigation Process:	Selective demolition of skylight edge cap flashing at masonry veneer wall and masonry flashing reglet.
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Photos:	1,2,3,4



Photo 1

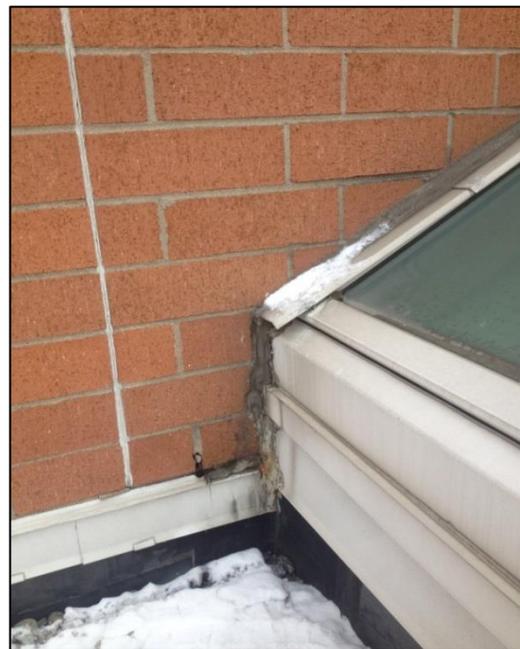
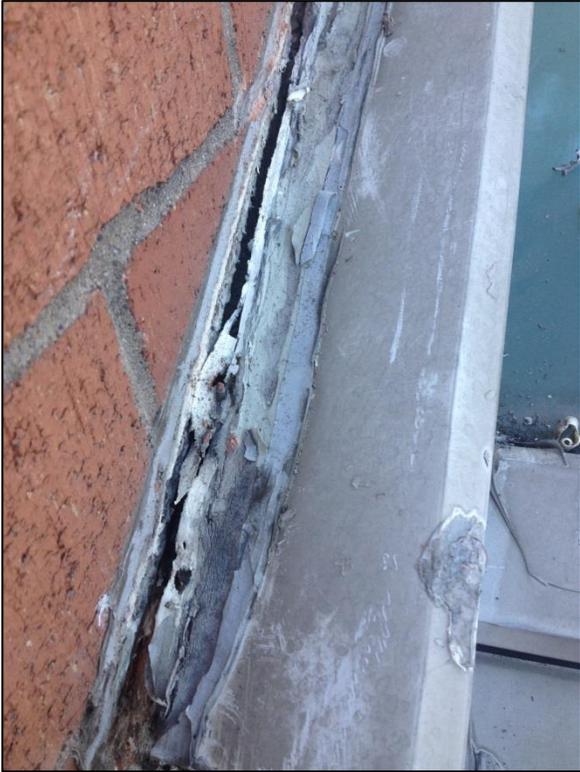


Photo 2



*Photo 3 Sky Light Edge Flashing*



*Photo 4 Sky Light Edge Flashing*

2.2a Investigation Site #2 – Schematic Sketch A2



Subject SKY LIGHT Project CHELSEA HIGH  
STEPPED FLASHING Sheet No. \_\_\_\_\_ of A2  
 Authored by \_\_\_\_\_ Date \_\_\_\_\_ Checked by \_\_\_\_\_ Date \_\_\_\_\_



STEPPED THRU-WALL FLASHING #

VAPOR/MOISURE BARRIER TO OVERLAP THRU-WALL FLASHING @ METAL STUD BACKER W/IK

EXPOSED STEP FLASHING, OVERLAP 4" MIN.

COUNTER FLASHING BENEATH STEPPED FLASHING

SKY LIGHT EDGE CAP FLASHING

\* PROVIDE HYDROFORMED CLOAKED FLASHING SYSTEM FOR STEPPED THRU-WALL FLASHING

STEPPED FLASHING @  
 (A2) SKY LIGHT/MASONRY WALL  
 N.T.S.

### 2.3 Investigation Site #3

Location:	Classroom 3012 exterior window/wall G/11.
Evidence:	Apparent water infiltration staining on interior wall drywall finishes below windows and at ceiling above windows.
Deficiency:	Water infiltration at exterior window/wall at window openings.
Investigation Process:	Visual inspection of windows, window caulking, masonry veneer expansion caulking and masonry veneer wall/roof intersection. No intrusive investigation occurred in this area due to difficulty of demolition and/or disturbance of class.
Investigation Findings:	Through visual inspection of the area it was apparent that there are several failures in the exterior window caulking and exterior sill masonry grout joints. These failures are in the immediate vicinity of the drywall damage and water staining on the interior drywall of the classroom.
Correction:	Jacobs recommends the removal of the existing window caulking and window sill masonry grout joints and replace with new caulking and grout.
Photos:	1,2,3,4



Photo 1



Photo 2 Window Sill



*Photo 3 Window Jamb Caulking*



*Photo 4 Masonry Expansion Joint*

## 2.4 Investigation Site #4

Location:	Mechanical Penthouses East & West.
Evidence:	Apparent water infiltration staining on interior wall panels, equipment and concrete slab
Deficiency:	Water infiltration at exterior wall panel and louver gasketing and sealants
Investigation Process:	Visual inspection of exterior wall panel system from both interior and exterior. No intrusive investigation was required for this area.
Investigation Findings:	Through the visual inspection of the area it was apparent that all of the insulated panel gaskets have failed due to their age. It was also discovered that there was minimal caulking of the panel intersection joints. It appears that some caulking has been installed over past years. All of the existing caulking is failing due to ultraviolet damage. It is also apparent that there is no evidence of caulking around the mechanical louvers leaving at some instances gaps as large then 1” wide. At these areas water infiltration is seen on the floors, walls, and adjacent equipment.
Correction:	Jacobs recommends the installation of new panel gaskets and caulking at all required areas to include vertical seams, horizontal corner gaps, around all louvers and at any other gaps in the panel system. Panel system, gaskets and joint caulking per manufacturer’s recommendations
Photos:	1,2,3,4,5,6



*Photo 1 Mechanical Penthouse Panel System*



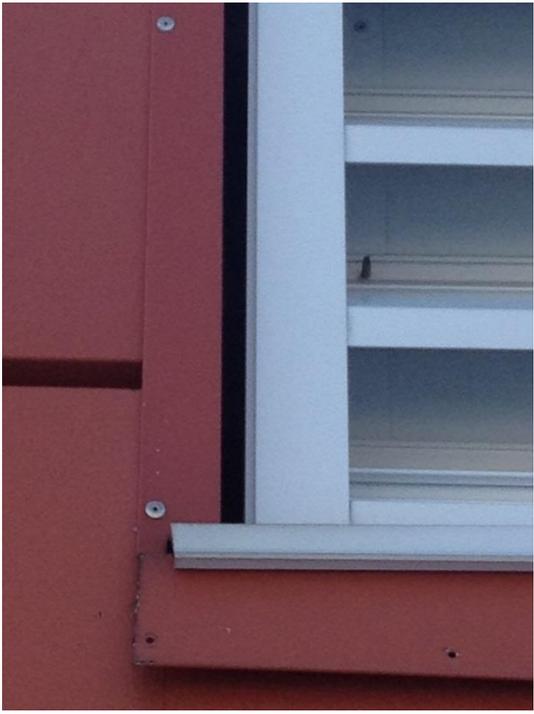
*Photo 2 Vertical Gasket Joint*



*Photo 3 Vertical Gasket Joint (Interior)*



*Photo 4 Louver Jamb (Interior)*



*Photo 5 Louver Jamb (Exterior)*



*Photo 6 Louver Flashing*

### **3. Reliance Restrictions & Resources:**

#### **3.1 Restrictions**

JACOBS produced this document under an agreement between JACOBS and City of Chelsea School Department. All terms and conditions of that agreement are included within this document by reference. JACOBS disclaims any obligation to any other person with respect to any material presented in this document and no person may rely upon this document, with the exception of Chelsea Schools, without advance and express written consent from JACOBS and such person's written agreement to be bound by the limitations, qualifications, terms, conditions, and indemnities to JACOBS set forth in that agreement. JACOBS specifically states that its review of the property in question is subject to monetary restraints and scope limitations. Given those limitations and conditions, JACOBS has made what, in its opinion, is a reasonable investigation limited to visual observations. Design analysis of existing systems, including structural systems, has not been performed. JACOBS has also relied upon interviews and documents with the understanding that independent verification of their factual content is beyond the scope of JACOBS work. The materials presented in this document are "to JACOBS knowledge" where such phrase means to JACOBS actual knowledge of the subject matter after such inquiry as JACOBS considered reasonable in light of the qualifications and limitations upon the scope of work.

Assumptions regarding the overall condition of the property have been developed based upon inspection of "representative" areas of the building. As such, the development of schematic methods and associated costs for the correction of identified deficiencies is based upon the overview inspection and are also limited with respect to completeness.

#### **3.2 Resources and Contacts**

On-Site Review was conducted on January 16, 2015 by:

- Brian J. Frigon (Architect)

**Bidder Information Form**

**Bid for Chelsea High School Envelope Repair**  
(To be first page of Bid)

Name of Company:

Address:

Telephone #:

Fax #:

Email Contact:

Is the Company a:

Corporation \_\_\_\_

Partnership \_\_\_\_

Sole Proprietorship \_\_\_\_

Publicly Held \_\_\_\_

Privately Held \_\_\_\_

Names and address of the Principals, Owners, Directors, Officers:

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\_\_\_\_\_  
Signature of authorizing party

**CITY OF CHELSEA**

**REQUIRED BID SUBMITTAL FORM**

**Certificate of Non-Collusion**

The undersigned certifies under the penalties of perjury that this proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this Certification the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals.

Signature

Date

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Name (Please Print)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Address

\_\_\_\_\_  
Contact Number

**CITY OF CHELSEA**

**REQUIRED BID SUBMITTAL FORM**

**STATEMENT OF CORPORATE AUTHORITY**

**REQUIRED (IF CORPORATION)** IF A CORPORATION, COMPLTE BELOW OR ATTACH TO EACH SIGNED COPYOF THE BID A NOTORIZED COPY OF VOTE OF CORPORATION AUTHORIZING THE SIGNATORY TO SIGN THIS CONTRACT. IF ATTESTING CLERK IS THE SAME PERSON AS THE INDIVIDUAL EXECUTING THIS CONTRACT, HAVE SIGNATURE NOTORIZED ABOVE.

At a duly authorized meeting of the Board of Directors of \_\_\_\_\_ held  
on \_\_\_\_\_ Name of Corporation  
Date

at which time all voted that \_\_\_\_\_  
Name Officer

of this Company, be and hereby is authorized to execute contracts and bonds in the name and behalf of said Company, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this Company's name on its behalf by such person \_\_\_\_\_ under seal of the Company, shall be valid and binding upon this company.

A TRUE COPY,

ATTEST: \_\_\_\_\_  
Clerk

PLACE OF BUSINESS: \_\_\_\_\_

DATE OF THIS BID: \_\_\_\_\_

I hereby certify that I am the Clerk of the \_\_\_\_\_

\_\_\_\_\_ and that \_\_\_\_\_ is

duly elected \_\_\_\_\_ of said Company, and that the above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract.

\_\_\_\_\_  
(Clerk's Signature)

(CORPORATE SEAL)

On this \_\_\_\_\_ day of \_\_\_\_\_, 2016, before me, the undersigned notary public, personally appeared \_\_\_\_\_, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_ to be the person whose name is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
Notary Public - My Commission Expires:

**CITY OF CHELSEA  
REQUIRED BID SUBMITTAL FORM**

**Bid Form: Chelsea High School Envelope Repair**

To The Awarding Authority:

- A. The undersigned proposes to furnish all labor and materials required for the City of Chelsea in Chelsea, Massachusetts in accordance with the Contract Documents for the **Chelsea High School Envelope Repair**, for the contract price specified below.
- B. This bid includes addenda number(s) \_\_\_\_\_.
- C. The subdivision of the proposed Contract Price is as follows:  
(Bidder: insert words and numbers. In cases of conflict between words and numbers, the words shall control).

Description and Amount in words	Amount in Figures
<p style="font-size: 1.2em; margin: 0;">Lump Sum Bid</p> <hr style="border: 1px solid black; margin: 10px 0;"/> <p style="font-size: 0.8em; margin: 0;">Lump Sum Bid Price <span style="float: right;">(words)</span></p>	<hr style="border: 1px solid black; margin: 10px 0;"/> <p style="font-size: 0.8em; margin: 0; text-align: center;">(figures)</p>

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_ Date: \_\_\_\_\_

In conjunction with the words, and figures submitted above for the requisite bid items, and an integral part of said bid submission, the undersigned certifies that:

The undersigned declares that the only persons or parties interested in his/her bid as principals area as stated; that the bid is made without any collusion with other persons, firms, or corporations; that he/she has carefully examined all the Contract Documents and has informed him/herself fully in regard to all conditions pertaining to the work and based on this information, the undersigned makes this bid. These prices shall cover all

expenses incurred in performing the work required under the Contract Documents of which this Bid Form is a part.

All responses shall remain open for thirty (30) days, not including Saturdays, Sundays, and legal holidays, after the date of the bid opening.

If a notice of award and three (3) unsigned copies of the Contract (and all other applicable Contract Documents) is delivered to the undersigned within thirty (30) calendar days, not including Saturdays, Sundays, and legal holidays, after the date of receipt of such notification, he/she shall within five (5) days execute and return all copies of the Contract (and all other applicable Contract Documents) to the City. The premiums for all bonds required shall be paid by the Contractor and shall be included in the contract price. The undersigned further agrees that the bid security accompanying this bid shall become the City's property if the Responder fails to execute the Contract as stated above.

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern. The above prices shall include all labor, materials, equipment, supervision, transportation, overhead, profit, insurance, and incidentals required to complete the Work.

The undersigned hereby certifies that s/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.

**Furthermore, 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 state tax returns and paid all state taxes required under the law.**

**The undersigned under penalties of perjury certifies that this bid is in all respects true, accurate, bonafide, fair, and made without collusion or fraud with any other person. As used in this section, the word "person" shall mean any natural person, joint venture partnership, corporation, or other business or legal entity.**

Signed this \_\_\_\_ day\_\_\_\_\_, 2016.

\_\_\_\_\_  
Social Security Number or  
Federal Identification Number

\_\_\_\_\_  
Signature of Individual or  
Corporate Name

By: \_\_\_\_\_  
Partner of Corporate

**CITY OF CHELSEA**  
**REQUIRED BID SUBMITTAL FORM**

**REFERENCE FORM**

Bidder: \_\_\_\_\_

Title of Bid: **Chelsea High School Envelope Repair**

**Bidder must provide references for:**

All contracts performed within the past five years of similar size and scope to this contract

- Reference: \_\_\_\_\_
- Address: \_\_\_\_\_
- Contact: \_\_\_\_\_
- Phone: \_\_\_\_\_
- Fax: \_\_\_\_\_
- Description and date(s) of services provided:

- Reference: \_\_\_\_\_
- Address: \_\_\_\_\_
- Contact: \_\_\_\_\_
- Phone: \_\_\_\_\_
- Fax: \_\_\_\_\_
- Description and date(s) of services provided:

- Reference: \_\_\_\_\_
- Address: \_\_\_\_\_
- Contact: \_\_\_\_\_
- Phone: \_\_\_\_\_
- Fax: \_\_\_\_\_
- Description and date(s) of services provided:

**CITY OF CHELSEA**

**REQUIRED BID SUBMITTAL FORM**

**OSHA COMPLIANCE CERTIFICATION**

**Any person submitting a bid for, signing a contract to work on, the construction, reconstruction, alteration, remodeling or repair of any building or public works project undertaken by a public awarding authority in Massachusetts and estimated to cost more than \$10,000 must certify on the bid or contract, under penalties of perjury, as follows:**

1. That he is able to furnish labor than can work in harmony with all other elements of labor employed or to be employed at the work
2. 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
3. That all employees to be employed in the work subject to this bid 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. (MGL. c. 30, Section 39S (a))

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Pursuant to M.G.L. c. 30, Section 39M and M.G.L. c. 149, I certify under penalties of perjury that, to the best of my Knowledge and belief, I am in compliance with the OSHA requirements as stated above.

Dated \_\_\_\_\_

\_\_\_\_\_  
Name of Company or Corporation

\_\_\_\_\_  
Authorized Official's Signature

BIDDERS/RESPONDENTS MUST SUBMIT THIS FORM FULLY COMPLETED

**CITY OF CHELSEA  
CONTRACT FOR SERVICES  
over \$10,000**

This agreement (the "Agreement") is made and entered into by and between the City of Chelsea (hereinafter the CITY), a municipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, and

[NAME]  
[ADDRESS]  
(hereinafter the CONTRACTOR)

For mutual consideration the Parties hereby agree as follows:

**ARTICLE 1. DEFINITION.**

This CONTRACT as used herein shall consist of this Agreement, and the "contract documents" which include but are not limited to the following identified items and all documents, and forms submitted therewith, or attached hereby.

- Attachment A: Scope of Services, and/or other bid package materials
- Attachment B: Additional Contract Terms and Conditions
- Attachment C: Certificate of Non-Collusion, Tax Compliance Certification, Statement of Corporate Authority
- Attachment D: Summaries of Laws Regarding State Ethics - Acknowledgment of Receipt
- Addenda through #

**ARTICLE II. AMOUNT AND TERM.**

Pursuant to the terms and conditions stated in the Contract, this CITY agrees to pay an amount not to exceed \$ \_\_\_\_\_, and the Contractor agrees to perform the services detailed in the Contract. The Contract shall commence on or about \_\_\_\_\_ (the "Commencing Date") unless earlier terminated pursuant to Article IV, Termination and shall terminate no later than \_\_\_\_\_, unless a written amendment to renew or extend this contract is executed in accordance with the provisions of this CONTRACT.

**ARTICLE III. PERFORMANCE.**

The Contractor agrees to provide all goods and/or services set forth in the Invitation for Bid/Request for Proposal Documents, Scope of Service, the Contractor's proposal for " \_\_\_\_\_ ", and/or as outlined in ATTACHMENT A - SCOPE OF SERVICES.

**ARTICLE IV. TERMINATION.**

- i) Without Cause. The CITY may terminate this CONTRACT on sixty (60) calendar day's notice, or may suspend this CONTRACT for up to sixty (60) calendar days upon receipt of notice, when in the best interests of the CITY, by providing notice to the CONTRACTOR, which shall be in writing and shall be deemed delivered and received when given in person to the CONTRACTOR, or when received by fax, express mail, certified mail return receipt requested,

regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the CONTRACTOR.

ii) For Cause. If the CONTRACTOR is determined by the CITY to be in default of any term or condition of CONTRACT, the CITY may terminate this contract on thirty (30) day's notice by providing notice to the CONTRACTOR, which shall be in writing and shall be deemed delivered and received when given in person to the CONTRACTOR, or when received by fax, express mail, certified mail return receipt requested, regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the CONTRACTOR. If the CITY is determined by the CONTRACTOR to be in default of any term or condition of this CONTRACT the CONTRACTOR may terminate this contract on thirty (30) day's notice by providing notice to the CITY, which shall be in writing and shall be deemed delivered and received when given in person to the CITY, or when received by fax, express mail, certified mail return receipt requested, regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the CITY.

iii) Default. Events of default under this CONTRACT shall include, but are not limited to the following: a) any material misrepresentation made by the CONTRACTOR to the CITY, b) any failure to perform any of its obligations under this CONTRACT including, but not limited to the following: (i) failure to commence performance of this CONTRACT at the time specified in this CONTRACT due to a reason or circumstance within the CONTRACTOR'S reasonable control, (ii) failure to perform this CONTRACT with sufficient personnel and equipment or with sufficient material to ensure the completion of this CONTRACT within the specified time due to a reason or circumstance within the CONTRACTOR'S reasonable control, (iii) failure to perform this CONTRACT in a manner reasonably satisfactory to the CITY, (iv) failure to promptly re-perform with reasonable time the services that were rejected by the CITY as unsatisfactory, or erroneous, (v) discontinuance of the services for reasons not beyond the CONTRACTOR'S reasonable control, (vi) failure to comply with a material term of this CONTRACT, including, but not limited to, the provision of insurance or failure to comply with nondiscrimination provisions, and (vii) any other acts specifically and expressly stated in this CONTRACT as constituting a basis for termination of this CONTRACT, and (viii) failure to comply with any and all requirements of state law, and/or regulations, and City ordinances, and/or regulations.

**ARTICLE V. REMEDIES OF THE CITY.**

The City hereby retains all remedies in law and equity, including but not limited to, the right to deduct the cost of any substitute contract or performance for expenses, losses, and all damages and the right to withhold from payment, any amounts for expenses, losses, and damages from sums due, or which become due.

**ARTICLE VI. REMEDIES OF THE CONTRACTOR.**

If the Contractor, due to any act or omission for which the City is legally responsible, sustains damages, other than loss, non-conformance, or non-performance, the Contractor may request, within 30 days of the alleged act or omission from the City, a sum equal to the amount of such damages sustained by the Contractor, which amount may be determined by the City in writing, at the City 's sole discretion, provided that the Contractor has provided to all signatories of this Agreement, a detailed, written statement of such damages and cause thereof within said 30 day period.

**ARTICLE VII. ASSIGNABILITY.**

The CONTRACTOR shall not assign, subcontract or in any way transfer any interest, rights or obligations in this CONTRACT without the prior written consent of the City Manager. In the

event of such assignment the CITY reserves the right to deal with any assignee subcontractor or transferee directly and the CONTRACTOR agrees to remain bound by all terms and conditions of this CONTRACT in accordance with its original tenor and in no way shall the CONTRACTOR be relieved of its responsibilities and obligations under this CONTRACT. The provisions of this CONTRACT shall be binding upon, and shall inure to the benefit of, the successors and assigns of the CONTRACTOR and any public body or bodies succeeding the interests of the CITY.

**ARTICLE VIII. INDEMNIFICATION.**

The CONTRACTOR shall assume the defense, indemnify and hold harmless the CITY, the CITY'S agents and employees, from and against all losses and all claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against them by reason of acts, in actions, omissions, negligence, reckless or intentional misconduct of the said CONTRACTOR, its agent(s), officers, employees, or subcontractors; in the execution of the work or in guarding the same. Unless otherwise provided by law, the CITY may elect, at its sole discretion, to indemnify the CONTRACTOR for claims arising in tort if it is determined that the CONTRACTOR performed its obligations under this CONTRACT pursuant to the direct supervision and control of the CITY or its designated agent(s).

**ARTICLE IX. WORKER'S COMPENSATION AND OTHER INSURANCE.**

The CONTRACTOR shall provide insurance for the payment of compensation and the furnishing of other benefits under Chapter 152 of the General Laws of Massachusetts (The Worker's Compensation Act) to all employees of the CONTRACTOR who are subject to the provisions of Chapter 152 of the General Laws of Massachusetts.

Failure to provide and continue in force such insurance during the period of this contract shall be deemed a material breach of this contract, shall operate as an immediate termination thereof, and CONTRACTOR shall indemnify the CITY for all losses, claims, and actions resulting from the failure to provide the insurance required by this Article.

The Contractor shall furnish to the CITY evidence of such insurance prior to the execution of this contract and before the same shall be binding on the parties thereto, except if specifically waived in Attachment B.

Prior to commencement of any work and until completion of its work under this CONTRACT, the CONTRACTOR shall maintain the following insurance coverage, at its cost, from insurance acceptable to the CITY, giving evidence of such coverage to the CITY prior to execution of this CONTRACT, a copy of such insurance coverage to be attached herewith:

1. Comprehensive Automobile Liability Insurance covering the use of all owned, non-owned and hired automobiles in connection with its operations with a combined single limit of \$1,000,000. The comprehensive Automobile Liability insurance may be provided through primary and excess or umbrella insurance policies.
2. CONTRACTOR'S Equipment Coverage (or a certification of self-insurance satisfactory to the CITY) must be provided on an "All Risks" basis, covering physical damage to all tools and equipment, including automotive equipment owned, rented, or used by the CONTRACTOR.
3. Commercial General Liability Insurance coverage which may be provided through primary and excess or umbrella liability policies for limits of \$1,000,000 general aggregate, and \$500,000 per occurrence.

All required insurance must be endorsed to name the CITY as Additional Insured. All required insurance shall be endorsed to waive the insurer's rights of subrogation against the City. All policies and certificates of insurance must contain language that the insurance shall not be canceled, materially changed or non-renewed without at least thirty (30) days advance written notice to the CITY. The CONTRACTOR under this CONTRACT shall not allow its subcontractors to begin work until similar insurance has been so obtained and certificates of insurance approved by the CONTRACTOR.

**ARTICLE X. CORPORATE CONTRACTOR.**

If CONTRACTOR is a corporation, CONTRACTOR shall endorse the Certificate of Corporate Authority for the CONTRACTORS' signatory (Exhibit C), or shall otherwise provide a form similar in nature and substance acceptable to the CITY at the City's sole discretion.

If CONTRACTOR is a non-profit corporation, CONTRACTOR shall provide satisfactory proof of present status as a non-profit corporation. Such proof shall be in the form of a certification from the Massachusetts Secretary of State's office and/or from the Internal Revenue Service and shall provide the Federal Tax Identification Number of the non-profit corporation. This CONTRACT shall not be enforceable against the CITY unless and until the CONTRACTOR complies with this Article. Failure to inform the CITY in writing of revocation, or other loss of non-profit status shall be deemed a material breach of this contract and operate as an immediate termination thereof.

**ARTICLE XI. SUBJECT TO APPROPRIATION.**

The obligations of the CITY under this CONTRACT shall be subject to appropriation. In the absence of appropriation this CONTRACT shall be immediately terminated without liability for damages, penalties, or other charges.

In the event any portion of this Agreement is to be funded with alternate funding including but not limited to state, local, federal or private grant funding. In the requisite circumstances, the obligations of the CITY under this CONTRACT shall be subject to the formal award of such state, local, federal or private grant.

**ARTICLE XII. DOCUMENTS, MATERIALS, ETC.**

Any materials, reports, information, data, etc. given to or prepared or assembled by the CONTRACTOR under this CONTRACT are to be kept confidential and shall not be made available to any individual or organization by the CONTRACTOR (except agents, servants, or employees of the CONTRACTOR) without the prior written approval of the CITY. The CONTRACTOR understands that he/she/it may acquire or have access to "personal data" otherwise kept by the CITY. The CONTRACTOR shall comply with the provisions Chapter 66A of the General Laws of Massachusetts as it relates to public documents, and all other state and federal laws and regulations relating to confidentiality, security, privacy and use of confidential data.

Any materials produced in whole or in part under this CONTRACT shall not be subject to copyright, except by the CITY, in the United States or any other country. The CITY shall have unrestricted authority to, without payment of any royalty, commission, or additional fee of any type or nature, publicly disclose, reproduce, distribute and otherwise use, and authorize other to use, in whole or in part, any reports, data or other materials prepared under this CONTRACT.

All data, reports, programs, software, equipment, furnishings, and any other documentation or product paid for by the CITY shall vest in the CITY at the termination of this CONTRACT. The CONTRACTOR shall at all times, during or after termination of this CONTRACT, obtain the prior written approval of the CITY before making any statement bearing on the work performed or data collected under this CONTRACT to the press or issues any material for publication through any medium.

**ARTICLE XIII.           AUDIT, INSPECTION, RECORDKEEPING.**

At any time during normal business hours, and as often as the CITY may deem it reasonably necessary, there shall be made available in the office of the CONTRACTOR for the purpose of audit, examination, and/or to make excerpts or transcripts, all records, contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this agreement.

Further the CONTRACTOR agrees to make its work papers, records and other evidence of audit available to the CITY for a period of three years after final payment under his CONTRACT. The CITY shall be entitled to reproduce any or all such documents at its own expense, for which provision shall be made at such time.

**ARTICLE XIV.           WEEKLY PAYROLL RECORDS REPORT.**

In accordance with Massachusetts General Law c. 149, s. 27B, a true and accurate record must be kept of all individuals employed on a public works construction project for which prevailing wage rates are applicable.

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. Once collected, the awarding authority is also required to preserve those records for three years.

**ARTICLE XV.           CONFLICT OF INTEREST.**

i) CITY. No officer, member or employee of the CITY and no members of its governing body who exercise any function or responsibility in review or approval of the undertaking or carrying out of this CONTRACT shall participate in any decision relating to the CONTRACT which affects his/her personal interests or the interest of any corporation, partnership, or association in which he/she has a direct or indirect pecuniary interest. None of the services to be provided by the CONTRACTOR shall be used for any partisan political activity or further the election or defeat of any candidate for political office in the CITY. Compliance with this section shall be material to the CONTRACT.

ii) CONTRACTOR. CONTRACTOR agrees that his/her/its agents, servants, and employees have neither presently nor during the period of this CONTRACT any interest direct or indirect which would impair, detract, or conflict in any manner or degree with the performance of services required under this CONTRACT. The CONTRACTOR, his/her/its agents, servants and employees further stipulate that in the performance of this CONTRACT, no person having any such interest shall be employed. Conflicts of Interest include but are not limited to (a) immediate family relationships with officials of the CITY, (b) instances where the CONTRACTOR, his/her/its agents, servants or employees during the period of this CONTRACT was connected as an officer, employee or member of the governing body of the CITY, and (c) instances where the CONTRACTOR has an interest in any CITY department, its agents, servants or employees or parcels of land within the CITY. Compliance with this section shall be material to the CONTRACT. The CONTRACTOR, his/her/its agents, servants and employees must disclose any and all such interests in writing to the CITY.

**ARTICLE XVI. PAYMENT.**

The City agrees to make all reasonable efforts to pay to the CONTRACTOR the sum set forth any invoice which has been approved by the City Manager or his authorized designee within thirty (30) days of receipt of such invoice at the Office of the City Auditor. Each invoice shall detail the work completed.

Subject to pending statutory appeal rights, the City hereby reserves the right and the CONTRACTOR hereby agrees that the City may deduct from the sum(s) otherwise payable under this CONTRACT any outstanding taxes, fines, fees and/or other municipal charges prior to disbursement to the CONTRACTOR.

**ARTICLE XVII. CONFLICT.**

In the event there is a conflict between these Articles and Attachment A, Attachment A shall supersede these Articles.

**ARTICLE XVIII. WAIVER AND AMENDMENT.**

The provisions contained in this CONTRACT may be modified only by the express written consent of the Parties. Any amendments, must be made only by written amendment executed by all signatories to the original agreement, prior to the effective date of the amendment.

The failure of any party to insist on the strict performance of any term, covenant or condition to this CONTRACT, at anytime, or in any one or more instances, or its failure to take advantage of any of its rights, or any course of conduct or dealing, shall not be construed as a waiver or a relinquishment of any such rights or conditions at any future time and shall, in no way act, as a wavier by any party of a breach of another party or have any affect on the continuance of or the full force and affect of any or all of the provisions of this Contract. The waiver of any provisions must be in writing and executed by all signatories to this Agreement prior to the force and effect of any such waiver.

Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any manner limit the legal or equitable remedies available to that party. No waiver by either party of any default or breach shall constitute a waiver of any subsequent default or breach of a similar or different matter.

**ARTICLE XIX. CERTIFICATION.**

IN WITNESS WHEREOF, THE CONTRACTOR CERTIFIES, UNDER THE PAINS AND PENALTIES OF PERJURY, THAT THE CONTRACTOR IS IN COMPLIANCE WITH EACH OF THE FOLLOWING:

- a. TAXES. PURSUANT to M.G.L. c. 62C, s. 49A, the CONTRACTOR has filed all state tax returns and complied with all laws of the Commonwealth relating to taxes.
- b. DEBARMENT. The CONTRACTOR is not currently debarred or suspended by the Commonwealth of Massachusetts, or any of its entities or subdivisions.
- c. AMERICANS WITH DISABILITIES ACT. The CONTRACTOR is aware of the Americans with Disabilities Act which prohibits discrimination based upon disability and shall meet any relevant standards, and/or conditions set out in the bid/proposal documents, bid/proposal specifications, and/or ATTACHMENT A - SCOPE OF SERVICES.

**ARTICLE XX. FORUM AND CHOICE OF LAW**

This CONTRACT and any performance herein shall be governed by and be construed in accordance with the laws of Commonwealth of Massachusetts, exclusive of its conflicts of law provisions. Any and all proceedings or actions relating to subject matter herein shall be brought and maintained in the courts of the Commonwealth of Massachusetts or the federal district court sitting in the Commonwealth of Massachusetts, which shall have exclusive jurisdiction thereof. Each of the Parties hereto irrevocably consents to and waives any objection to the exercise of personal jurisdiction by the state and federal courts of the Commonwealth of Massachusetts. This paragraph shall not be construed to limit any other legal rights of the parties.

**ARTICLE XXI. TAXES**

CONTRACTOR shall be solely responsible for the payment of any taxes, levies, betterments or assessments, fees or charges, whether in existence on the date hereof or becoming applicable pursuant to this Contract, which may be assessed against the CONTRACTOR or the CITY which are directly attributable to CONTRACTOR'S activities under this CONTRACT (the "Taxes"). CONTRACTOR shall pay all Taxes directly to the taxing authority before delinquency and before any fine, interest or penalty shall become due or be imposed by operation of law for their nonpayment.

**ARTICLE XXII. NOTICES**

All notices, demands, requests, consents, approvals and other instruments required or permitted to be given pursuant to the terms hereof (hereinafter "Notice"), shall be in writing and shall be deemed to have been properly given when delivered in hand or deposited in registered or certified United States mail, postage prepaid, return receipt requested, addressed, as described herein or when delivered by messenger or overnight mail service to the correct addressee. Unless otherwise specified, Notice shall be deemed received when actually received or when the proffered Notice has been refused by the Addressee. The signature of an employee, servant or agent of the Addressee shall be determinative on the issue of actual receipt.

All notices shall be sent to the persons and addresses listed below. CONTRACTOR and the CITY shall, at any time and from time to time, have the right to specify as their proper addresses for purposes of this CONTRACT any other address or addresses giving fifteen (15) days' written notice thereof to the other party.

All Notices shall be forwarded to:

FOR THE CITY  
Thomas G. Ambrosino, City Manager  
500 Broadway  
City Hall  
Chelsea, MA 02150

With a Copy to:  
Cheryl Watson Fisher  
City Solicitor  
Law Department, Room 307  
500 Broadway  
Chelsea, MA 02150

FOR THE CONTRACTOR:  
[NAME]  
[ADDRESS]

**ARTICLE XXIII. CONSIDERATION**

The Parties mutually agree to enter into this CONTRACT for good and valuable consideration.

**ARTICLE XXIV. REPRESENTATIONS AND WARRANTIES OF THE CONTRACTOR**

The CONTRACTOR represents and warrants (i) the CONTRACTOR has all requisite corporate power and authority to enter into this CONTRACT and to perform the obligations of the CONTRACTOR; (ii) that this CONTRACT has been duly and validly authorized, executed and delivered by the CONTRACTOR; (iii) the execution and delivery of this CONTRACT does not violate or conflict with any other agreement, license or obligation; (iv) the CONTRACTOR is duly organized, legal and validly existing and in good standing in the Commonwealth of Massachusetts; (v) that the CONTRACTOR is duly qualified and authorized to do business in the Commonwealth of Massachusetts; (vi) the CONTRACTOR is in compliance and is current with any payments under all federal, state and local tax laws; (vii) the CONTRACTOR will obtain any and all permits which may be necessary to perform the obligations of this CONTRACT; (viii) the CONTRACTOR will timely perform its obligations required by this CONTRACT.

**ARTICLE XXV. THIRD PARTY BENEFICIARIES**

This CONTRACT shall not be construed to create any third party beneficiary rights in favor of any other parties or any right or privilege for the benefit of any other parties.

**ARTICLE XXVI. ENTIRE CONTRACT**

This CONTRACT constitutes the entire Agreement of the parties hereto with respect to the subject matter hereof, and no representations, inducements, promises, or agreements, oral or otherwise, between the parties hereto with respect to the subject matter hereof not embodied herein shall be of any force or effect.

**ARTICLE XXVII. LIABILITY OF MUNICIPALITY**

The CITY shall not be liable to CONTRACTOR for any loss of business or any indirect, incidental, special, consequential or exemplary damages or lost profits unless expressly specified herein.

**ARTICLE XXVIII. HEADINGS**

Heading used in this Agreement are for convenience of reference only and shall not be construed as altering the meaning of this CONTRACT or any of its provisions.

**ARTICLE XXIX. DAYS**

Any reference to "days" in this CONTRACT, shall be deemed to mean business days (Monday through Friday, excluding generally recognized holidays) except where specific reference is made to calendar days.

**ARTICLE XXX. SURVIVAL**

The parties agree that the provisions of ARTICLE II – AMOUNT AND TERM; ARTICLE III – PERFORMANCE; ARTICLE V- REMEDIES OF THE CITY; ARTICLE VI- REMEDIES OF THE CONTRACTOR. ARTICLE VII – ASSIGNABILITY; ARTICLE VIII – INDEMNIFICATION; ARTICLE IX- WORKER’S COMPENSATION AND OTHER INSURANCE; ARTICLE XI-SUBJECT TO APPROPRIATION; ARTICLE XII – DOCUMENTS, MATERIALS, ETC; ARTICLE XIII – AUDIT, INSPECTION, RECORDKEEPING; ARTICLE XIV- WEEKLY PAYROLL RECORDS REPORT; ARTICLE XVI – PAYMENT; ARTICLE XVIII – WAIVER AND AMENDMENT; ARTICLE XIX –

CERTIFICATION; ARTICLE XX- FORUM AND CHOICE OF LAW; ARTICLE XXI – TAXES; ARTICLE XXIV- REPRESENTATIONS AND WARRANTIES OF THE CONTRACTOR; ARTICLE XXVII- LIABILITY OF THE MUNICIPALITY; ARTICLE XXX – SURVIVAL; and ARTICLE XXXI - SEVERABILITY shall survive the expiration or any earlier termination of this CONTRACT.

**ARTICLE XXXI. SEVERABILITY**

If any provision of this CONTRACT is held to be illegal, invalid or unenforceable, the remaining terms shall not be affected and shall remain in full force and effect. The Agreement shall be interpreted as if the illegal, invalid or unenforceable provision had not been included in it and the invalid or unenforceable provision shall be stricken and shall be replaced by a mutually acceptable provision which being valid and enforceable comes closest to the intention of the parties with respect to the invalid or unenforceable provision.

**ARTICLE XXXII. ADVICE AND COUNSEL**

The CONTRACTOR hereby acknowledges and agrees that CONTRACTOR has read this Agreement in its entirety and that CONTRACTOR has had the opportunity to consult legal and financial advisors of their choosing regarding the execution, delivery and performance of their obligations, hereunder.

**ARTICLE XXXIII. COUNTERPARTS**

This CONTRACT may be executed in counterpart.

THE REMAINDER OF THIS PAGE LEFT INTENTIONALLY BLANK

IN WITNESS WHEREOF the parties have hereto and to three other identical instruments set forth their hands the day and year first above written.

THE CONTRACTOR

CITY MANAGER

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Thomas G. Ambrosino, City Manager

\_\_\_\_\_  
Status (Corporation/Non-corporate)

\_\_\_\_\_  
Signature & Title

\_\_\_\_\_  
Please Print Name & Title

\_\_\_\_\_  
Dylan Cook  
Chief Procurement Officer

\_\_\_\_\_  
Date

\_\_\_\_\_  
Taxpayer Identification Number

APPROVED AS TO FORM:

\_\_\_\_\_  
Cheryl Watson Fisher  
City Solicitor

Approved as to Contract Manager:

I CERTIFY THAT FUNDS HAVE BEEN  
ENCUMBERED IN THE AMOUNT OF  
\$\_\_\_\_\_ FOR THIS CONTRACT  
Appropriation Number:  
\_\_\_\_\_

\_\_\_\_\_  
Department Head Name  
Department Name  
City of Chelsea

\_\_\_\_\_  
Edward M. Dunn  
City Auditor

# **ATTACHMENT A**

## **SCOPE OF SERVICES**

**INSTRUCTIONS FOR DEPARTMENT AND CONTRACTOR:** Please attach for reference purposes a copy of all bid/proposal documents, including but not limited to (i) invitations/instructions for bidders (ii) invitation/instructions for proposers, (iii) general and specific conditions, and please provide a detailed description of all types of goods and/or services that will be provided pursuant to this CONTRACT, not otherwise provided in any bid/proposal instructions, specifications, conditions or other documents.

## **ATTACHMENT B**

### **ADDITIONAL CONTRACT TERMS AND CONDITIONS**

**INSTRUCTIONS FOR DEPARTMENTS:** Please specify any additions or modifications to the terms and conditions (not to conflict with the public procurement laws or City ordinances or regulations:

# **ATTACHMENT C**

**CERTIFICATE OF NON-COLLUSION**

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**TAX COMPLIANCE CERTIFICATION**

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**STATEMENT OF CORPORATE AUTHORITY**

CERTIFICATE OF NON-COLLUSION  
MANDATORY

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Dated: \_\_\_\_\_

\_\_\_\_\_

Name of Company or Corporation

\_\_\_\_\_

Authorized Official's Signature

**BIDDERS/RESPONDENTS MUST SUBMIT THIS FORM FULLY COMPLETED.**

TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. c. 62C, Section 49A, I certify under penalties of perjury that I, to my best knowledge and belief, have filed all Massachusetts tax returns and paid all Massachusetts taxes required under law, as well as paid all contributions and payments in lieu of contributions pursuant to M.G.L., c. 151A, Section 19A(b).

I further certify that I have complied with all federal, state and local laws relating to taxes, including but not limited to the withholding and reporting of any income taxes for employees and contractors, and the withholding and remittance of child support.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Social Security or Federal ID No.

\_\_\_\_\_  
Date

**BIDDERS/RESPONDENTS MUST SUBMIT THIS FORM FULLY COMPLETED.**

STATEMENT OF CORPORATE AUTHORITY

At a duly authorized meeting of the Board of Directors of \_\_\_\_\_

held on \_\_\_\_\_ at which time all voted that \_\_\_\_\_

of this Company, be and hereby is authorized to execute contracts and bonds in the name and on behalf of said Company, and affix its Corporate seal thereto, and such execution of any contract

of obligation in this Company's name on its behalf by such person \_\_\_\_\_ under seal of the Company, shall be valid and binding upon this Company.

A TRUE COPY,  
ATTEST:

\_\_\_\_\_

PLACE OF BUSINESS:

\_\_\_\_\_

\_\_\_\_\_

DATE OF THIS CONTRACT:

\_\_\_\_\_

I hereby certify that I am Clerk of \_\_\_\_\_ and that

\_\_\_\_\_ is duly elected \_\_\_\_\_

of said Company, and that the above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract.

\_\_\_\_\_  
(Clerk's Signature)

## ATTACHMENT D

City of Chelsea  
**Conflict of Interest Law**  
Compliance Statement and Requirements for Vendors

On July 1, 2009, the Legislature enacted Chapter 28 of the Acts of 2009 which made changes to Mass. General Laws c. 268A and c. 268B, the Massachusetts' Conflict of Interest Law. On November 9, 2009, the Chelsea City Council designated the Chelsea City Solicitor as the Municipal Liaison to the State Ethics Commission and responsible for the facilitation of Chelsea's obligation to comply with the changes in the law.

The City has a requirement for compliance, which is to make sure that all municipal elected officials, board and commission members, and employees **including vendors** are provided copies of the Summaries of the Ethics Laws.

Enclosed is a packet that should be copied and provide to each one of your employees who are assigned to work in Chelsea; including yourself. At the end of the summary is an acknowledgement of receipt of the summary. The acknowledgments must be submitted along with any purchase order or contract with the City of Chelsea. All documents pursuant to this new law will be kept on file in the City Clerk's Office

The Procurement Officer will contact you directly, if there is a determination that you or your staff should undergo the Conflict of Interest Online Training Program.

If you have any questions, feel free to contact the Chelsea City Solicitor at 617-466-4150 as soon as possible.

# Summary of the Conflict of Interest Law for Municipal Employees

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This summary of the conflict of interest law, General Laws chapter 268A, is intended to help municipal employees understand how that law applies to them. This summary is not a substitute for legal advice, nor does it mention every aspect of the law that may apply in a particular situation. Municipal employees can obtain free confidential advice about the conflict of interest law from the Commission's Legal Division at our website, phone number, and address above. Municipal counsel may also provide advice.

The conflict of interest law seeks to prevent conflicts between private interests and public duties, foster integrity in public service, and promote the public's trust and confidence in that service by placing restrictions on what municipal employees may do on the job, after hours, and after leaving public service, as described below. The sections referenced below are sections of G.L. c. 268A.

When the Commission determines that the conflict of interest law has been violated, it can impose a civil penalty of up to \$10,000 (\$25,000 for bribery cases) for each violation. In addition, the Commission can order the violator to repay any economic advantage he gained by the violation, and to make restitution to injured third parties. Violations of the conflict of interest law can also be prosecuted criminally.

## I. Are you a municipal employee for conflict of interest law purposes?

You do not have to be a full-time, paid municipal employee to be considered a municipal employee for conflict of interest purposes. Anyone performing services for a city or town or holding a municipal position, whether paid or unpaid, including full- and part-time municipal employees, elected officials, volunteers, and consultants, is a municipal employee under the conflict of interest law. An employee of a private firm can also be a municipal employee, if the private firm has a contract with the city or town and the employee is a "key employee" under the contract, meaning the town has specifically contracted for her services. The law also covers private parties who engage in impermissible dealings with municipal employees, such as offering bribes or illegal gifts.

## II. On-the-job restrictions.

### (a) Bribes. Asking for and taking bribes is prohibited. (See Section 2)

A bribe is anything of value corruptly received by a municipal employee in exchange for the employee being influenced in his official actions. Giving, offering, receiving, or asking for a bribe is illegal.

Bribes are more serious than illegal gifts because they involve corrupt intent. In other words, the municipal employee intends to sell his office by agreeing to do or not do some official act, and the giver intends to influence him to do so. Bribes of any value are illegal.

(b) Gifts and gratuities. Asking for or accepting a gift because of your official position, or because of something you can do or have done in your official position, is prohibited. (See Sections 3, 23(b)(2), and 26)

Municipal employees may not accept gifts and gratuities valued at \$50 or more given to influence their official actions or because of their official position. Accepting a gift intended to reward past official action or to bring about future official action is illegal, as is giving such gifts. Accepting a gift given to you because of the municipal position you hold is also illegal. Meals, entertainment event tickets, golf, gift baskets, and payment of travel expenses can all be illegal gifts if given in connection with official action or position, as can anything worth \$50 or more. A number of smaller gifts together worth \$50 or more may also violate these sections.

***Example of violation*** : A town administrator accepts reduced rental payments from developers.

***Example of violation*** : A developer offers a ski trip to a school district employee who oversees the developer's work for the school district.

**Regulatory exemptions** . There are situations in which a municipal employee's receipt of a gift does not present a genuine risk of a conflict of interest, and may in fact advance the public interest. The Commission has created exemptions permitting giving and receiving gifts in these situations. One commonly used exemption permits municipal employees to accept payment of travel-related expenses when doing so advances a public purpose. Another commonly used exemption permits municipal employees to accept payment of costs involved in attendance at educational and training programs. Other exemptions are listed on the Commission's website.

***Example where there is no violation*** : A fire truck manufacturer offers to pay the travel expenses of a fire chief to a trade show where the chief can examine various kinds of fire-fighting equipment that the town may purchase. The chief fills out a disclosure form and obtains prior approval from his appointing authority.

***Example where there is no violation*** : A town treasurer attends a two-day annual school featuring multiple substantive seminars on issues relevant to treasurers. The annual school is paid for in part by banks that do business with town treasurers. The treasurer is only required to make a disclosure if one of the sponsoring banks has official business before her in the six months before or after the annual school.

(c) Misuse of position. Using your official position to get something you are not entitled to, or to get someone else something they are not entitled to, is prohibited. Causing someone else to do these things is also prohibited. (See Sections 23(b)(2) and 26)

A municipal employee may not use her official position to get something worth \$50 or more that would not be properly available to other similarly situated individuals. Similarly, a municipal employee may not use her official position to get something worth \$50 or more for someone else

that would not be properly available to other similarly situated individuals. Causing someone else to do these things is also prohibited.

*Example of violation* : A full-time town employee writes a novel on work time, using her office computer, and directing her secretary to proofread the draft.

*Example of violation* : A city councilor directs subordinates to drive the councilor's wife to and from the grocery store.

*Example of violation* : A mayor avoids a speeding ticket by asking the police officer who stops him, "Do you know who I am?" and showing his municipal I.D.

**(d) Self-dealing and nepotism. Participating as a municipal employee in a matter in which you, your immediate family, your business organization, or your future employer has a financial interest is prohibited. (See Section 19)**

A municipal employee may not participate in any particular matter in which he or a member of his immediate family (parents, children, siblings, spouse, and spouse's parents, children, and siblings) has a financial interest. He also may not participate in any particular matter in which a prospective employer, or a business organization of which he is a director, officer, trustee, or employee has a financial interest. Participation includes discussing as well as voting on a matter, and delegating a matter to someone else.

A financial interest may create a conflict of interest whether it is large or small, and positive or negative. In other words, it does not matter if a lot of money is involved or only a little. It also does not matter if you are putting money into your pocket or taking it out. If you, your immediate family, your business, or your employer have or has a financial interest in a matter, you may not participate. The financial interest must be direct and immediate or reasonably foreseeable to create a conflict. Financial interests which are remote, speculative or not sufficiently identifiable do not create conflicts.

*Example of violation* : A school committee member's wife is a teacher in the town's public schools. The school committee member votes on the budget line item for teachers' salaries.

*Example of violation* : A member of a town affordable housing committee is also the director of a non-profit housing development corporation. The non-profit makes an application to the committee, and the member/director participates in the discussion.

*Example* : A planning board member lives next door to property where a developer plans to construct a new building. Because the planning board member owns abutting property, he is presumed to have a financial interest in the matter. He cannot participate unless he provides the

State Ethics Commission with an opinion from a qualified independent appraiser that the new construction will not affect his financial interest.

In many cases, where not otherwise required to participate, a municipal employee may comply with the law by simply not participating in the particular matter in which she has a financial interest. She need not give a reason for not participating.

There are several exemptions to this section of the law. An appointed municipal employee may file a written disclosure about the financial interest with his appointing authority, and seek permission to participate notwithstanding the conflict. The appointing authority may grant written permission if she determines that the financial interest in question is not so substantial that it is likely to affect the integrity of his services to the municipality. Participating without disclosing the financial interest is a violation. Elected employees cannot use the disclosure procedure because they have no appointing authority.

***Example where there is no violation*** : An appointed member of the town zoning advisory committee, which will review and recommend changes to the town's by-laws with regard to a commercial district, is a partner at a company that owns commercial property in the district. Prior to participating in any committee discussions, the member files a disclosure with the zoning board of appeals that appointed him to his position, and that board gives him a written determination authorizing his participation, despite his company's financial interest. There is no violation.

There is also an exemption for both appointed and elected employees where the employee's task is to address a matter of general policy and the employee's financial interest is shared with a substantial portion (generally 10% or more) of the town's population, such as, for instance, a financial interest in real estate tax rates or municipal utility rates.

**(e) False claims. Presenting a false claim to your employer for a payment or benefit is prohibited, and causing someone else to do so is also prohibited. (See Sections 23(b)(4) and 26)**

A municipal employee may not present a false or fraudulent claim to his employer for any payment or benefit worth \$50 or more, or cause another person to do so.

***Example of violation*** : A public works director directs his secretary to fill out time sheets to show him as present at work on days when he was skiing.

**(f) Appearance of conflict. Acting in a manner that would make a reasonable person think you can be improperly influenced is prohibited. (See Section 23(b)(3))**

A municipal employee may not act in a manner that would cause a reasonable person to think that she would show favor toward someone or that she can be improperly influenced. Section 23(b)(3) requires a municipal employee to consider whether her relationships and affiliations could prevent her from acting fairly and objectively when she performs her duties for a city or town. If she cannot be fair and objective because of a relationship or affiliation, she should not perform her duties. However, a municipal employee, whether elected or appointed, can avoid violating this provision by making a public disclosure of the facts. An appointed employee must make the disclosure in writing to his appointing official.

*Example where there is no violation* : A developer who is the cousin of the chair of the conservation commission has filed an application with the commission. A reasonable person could conclude that the chair might favor her cousin. The chair files a written disclosure with her appointing authority explaining her relationship with her cousin prior to the meeting at which the application will be considered. There is no violation of Sec. 23(b)(3).

**(g) Confidential information. Improperly disclosing or personally using confidential information obtained through your job is prohibited. (See Section 23(c))**

Municipal employees may not improperly disclose confidential information, or make personal use of non-public information they acquired in the course of their official duties to further their personal interests.

III. After-hours restrictions.

**(a) Taking a second paid job that conflicts with the duties of your municipal job is prohibited. (See Section 23(b)(1))**

A municipal employee may not accept other paid employment if the responsibilities of the second job are incompatible with his or her municipal job.

*Example* : A police officer may not work as a paid private security guard in the town where he serves because the demands of his private employment would conflict with his duties as a police officer.

**(b) Divided loyalties. Receiving pay from anyone other than the city or town to work on a matter involving the city or town is prohibited. Acting as agent or attorney for anyone other**

**than the city or town in a matter involving the city or town is also prohibited whether or not you are paid. (See Sec. 17)**

Because cities and towns are entitled to the undivided loyalty of their employees, a municipal employee may not be paid by other people and organizations in relation to a matter if the city or town has an interest in the matter. In addition, a municipal employee may not act on behalf of other people and organizations or act as an attorney for other people and organizations in which the town has an interest. Acting as agent includes contacting the municipality in person, by phone, or in writing; acting as a liaison; providing documents to the city or town; and serving as spokesman.

A municipal employee may always represent his own personal interests, even before his own municipal agency or board, on the same terms and conditions that other similarly situated members of the public would be allowed to do so. A municipal employee may also apply for building and related permits on behalf of someone else and be paid for doing so, unless he works for the permitting agency, or an agency which regulates the permitting agency.

***Example of violation*** : A full-time health agent submits a septic system plan that she has prepared for a private client to the town's board of health.

***Example of violation*** : A planning board member represents a private client before the board of selectmen on a request that town meeting consider rezoning the client's property.

While many municipal employees earn their livelihood in municipal jobs, some municipal employees volunteer their time to provide services to the town or receive small stipends. Others, such as a private attorney who provides legal services to a town as needed, may serve in a position in which they may have other personal or private employment during normal working hours. In recognition of the need not to unduly restrict the ability of town volunteers and part-time employees to earn a living, the law is less restrictive for "special" municipal employees than for other municipal employees.

The status of "special" municipal employee has to be assigned to a municipal position by vote of the board of selectmen, city council, or similar body. A position is eligible to be designated as "special" if it is unpaid, or if it is part-time and the employee is allowed to have another job during normal working hours, or if the employee was not paid for working more than 800 hours during the preceding 365 days. It is the position that is designated as "special" and not the person or persons holding the position. Selectmen in towns of 10,000 or fewer are automatically "special"; selectman in larger towns cannot be "specials."

If a municipal position has been designated as "special," an employee holding that position may be paid by others, act on behalf of others, and act as attorney for others with respect to matters before municipal boards other than his own, provided that he has not officially participated in the

matter, and the matter is not now, and has not within the past year been, under his official responsibility.

**Example** : A school committee member who has been designated as a special municipal employee appears before the board of health on behalf of a client of his private law practice, on a matter that he has not participated in or had responsibility for as a school committee member. There is no conflict. However, he may not appear before the school committee, or the school department, on behalf of a client because he has official responsibility for any matter that comes before the school committee. This is still the case even if he has recused himself from participating in the matter in his official capacity.

**Example** : A member who sits as an alternate on the conservation commission is a special municipal employee. Under town by-laws, he only has official responsibility for matters assigned to him. He may represent a resident who wants to file an application with the conservation commission as long as the matter is not assigned to him and he will not participate in it.

**(c) Inside track. Being paid by your city or town, directly or indirectly, under some second arrangement in addition to your job is prohibited, unless an exemption applies. (See Section 20)**

A municipal employee generally may not have a financial interest in a municipal contract, including a second municipal job. A municipal employee is also generally prohibited from having an indirect financial interest in a contract that the city or town has with someone else. This provision is intended to prevent municipal employees from having an "inside track" to further financial opportunities.

**Example of violation** : Legal counsel to the town housing authority becomes the acting executive director of the authority, and is paid in both positions.

**Example of violation** : A selectman buys a surplus truck from the town DPW.

**Example of violation** : A full-time secretary for the board of health wants to have a second paid job working part-time for the town library. She will violate Section 20 unless she can meet the requirements of an exemption.

**Example of violation** : A city councilor wants to work for a non-profit that receives funding under a contract with her city. Unless she can satisfy the requirements of an exemption under Section 20, she cannot take the job.

There are numerous exemptions. A municipal employee may hold multiple unpaid or elected positions. Some exemptions apply only to special municipal employees. Specific exemptions may cover serving as an unpaid volunteer in a second town position, housing-related benefits, public safety positions, certain elected positions, small towns, and other specific situations. Please call the Ethics Commission's Legal Division for advice about a specific situation.

#### IV. After you leave municipal employment. (See Section 18)

**(a) Forever ban. After you leave your municipal job, you may never work for anyone other than the municipality on a matter that you worked on as a municipal employee.**

If you participated in a matter as a municipal employee, you cannot ever be paid to work on that same matter for anyone other than the municipality, nor may you act for someone else, whether paid or not. The purpose of this restriction is to bar former employees from selling to private interests their familiarity with the facts of particular matters that are of continuing concern to their former municipal employer. The restriction does not prohibit former municipal employees from using the expertise acquired in government service in their subsequent private activities.

*Example of violation* : A former school department employee works for a contractor under a contract that she helped to draft and oversee for the school department.

**(b) One year cooling-off period. For one year after you leave your municipal job you may not participate in any matter over which you had official responsibility during your last two years of public service.**

Former municipal employees are barred for one year after they leave municipal employment from personally appearing before any agency of the municipality in connection with matters that were under their authority in their prior municipal positions during the two years before they left.

*Example* : An assistant town manager negotiates a three-year contract with a company. The town manager who supervised the assistant, and had official responsibility for the contract but did not participate in negotiating it, leaves her job to work for the company to which the contract was awarded. The former manager may not call or write the town in connection with the company's work on the contract for one year after leaving the town.

A former municipal employee who participated as such in general legislation on expanded gaming and related matters may not become an officer or employee of, or acquire a financial interest in, an applicant for a gaming license, or a gaming licensee, for one year after his public employment ceases.

**(c) Partners. Your partners will be subject to restrictions while you serve as a municipal employee and after your municipal service ends.**

Partners of municipal employees and former municipal employees are also subject to restrictions under the conflict of interest law. If a municipal employee participated in a matter, or if he has official responsibility for a matter, then his partner may not act on behalf of anyone other than the municipality or provide services as an attorney to anyone but the city or town in relation to the matter.

*Example:* While serving on a city's historic district commission, an architect reviewed an application to get landmark status for a building. His partners at his architecture firm may not prepare and sign plans for the owner of the building or otherwise act on the owner's behalf in relation to the application for landmark status. In addition, because the architect has official responsibility as a commissioner for every matter that comes before the commission, his partners may not communicate with the commission or otherwise act on behalf of any client on any matter that comes before the commission during the time that the architect serves on the commission.

*Example:* A former town counsel joins a law firm as a partner. Because she litigated a lawsuit for the town, her new partners cannot represent any private clients in the lawsuit for one year after her job with the town ended.

\* \* \* \* \*

This summary is not intended to be legal advice and, because it is a summary, it does not mention every provision of the conflict law that may apply in a particular situation. Our website, <http://www.mass.gov/ethics> contains further information about how the law applies in many situations. You can also contact the Commission's Legal Division via our website, by telephone, or by letter. Our contact information is at the top of this document.

Version 5: Revised December 23, 2011

City of Chelsea  
**Conflict of Interest Law**

Compliance Statement and Requirements for Vendors

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**ACKNOWLEDGMENT OF RECEIPT**

I, \_\_\_\_\_,  
*(first and last name)*

an employee at \_\_\_\_\_,  
*(name of vendor)*

**Hereby acknowledge that I received a copy of the summary of the conflict of interest law for municipal employees, revised December 23, 2011, on**

\_\_\_\_\_.  
*(date)*

-----  
The City has a requirement for compliance, which is to make sure that all **vendors** are provided copies of the Summary of the Conflict of Interest Law for Municipal Employees (including Vendors).

*VENDORS should copy the Summary of the Conflict of Interest Law and provide it to each one of the employees who are assigned to work in Chelsea.*

*Each employee shall complete the "Acknowledgment of Receipt" and the Vendor shall return the acknowledgments-only (not the Summary) to the Chelsea the Chelsea Procurement Office.*

The "Acknowledgment of Receipt" must be submitted along with any purchase order or contract with the City of Chelsea



CHARLES D. BAKER  
Governor

KARYN E. POLITO  
Lt. Governor

THE COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT  
DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

As determined by the Director under the provisions of the  
Massachusetts General Laws, Chapter 149, Sections 26 to 27H

RONALD L. WALKER, II  
Secretary

WILLIAM D MCKINNEY  
Director

**Awarding Authority:** City of Chelsea  
**Contract Number:** 2016-136 **City/Town:** CHELSEA  
**Description of Work:** Various envelope repairs to the Chelsea High School  
**Job Location:** 299 Everett Ave, Chelsea

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Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the “Wage Request Number” on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule from the Department of Labor Standards (“DLS”) if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- All apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentice must keep his/her apprentice identification card on his/her person during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **If an apprentice rate is not listed on the prevailing wage schedule for the trade in which an apprentice is registered with the DAS, the apprentice must be paid the journeyworker's rate for the trade.**
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F “rental of equipment” contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee’s name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
<b>Construction</b>						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2015	\$32.75	\$10.41	\$10.08	\$0.00	\$53.24
	06/01/2016	\$33.25	\$10.41	\$10.08	\$0.00	\$53.74
	08/01/2016	\$33.25	\$10.91	\$10.08	\$0.00	\$54.24
	12/01/2016	\$33.25	\$10.91	\$10.89	\$0.00	\$55.05
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2015	\$32.82	\$10.41	\$10.08	\$0.00	\$53.31
	06/01/2016	\$33.32	\$10.41	\$10.08	\$0.00	\$53.81
	08/01/2016	\$33.32	\$10.91	\$10.08	\$0.00	\$54.31
	12/01/2016	\$33.32	\$10.91	\$10.89	\$0.00	\$55.12
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2015	\$32.94	\$10.41	\$10.08	\$0.00	\$53.43
	06/01/2016	\$33.44	\$10.41	\$10.08	\$0.00	\$53.93
	08/01/2016	\$33.44	\$10.91	\$10.08	\$0.00	\$54.43
	12/01/2016	\$33.44	\$10.91	\$10.89	\$0.00	\$55.24
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2015	\$88.29	\$9.80	\$19.23	\$0.00	\$117.32
AIR TRACK OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2015	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	06/01/2016	\$36.85	\$7.45	\$13.55	\$0.00	\$57.85
	12/01/2016	\$37.85	\$7.45	\$13.55	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. <i>HEAT &amp; FROST INSULATORS LOCAL 6 (BOSTON)</i>	12/01/2015	\$34.38	\$10.40	\$5.95	\$0.00	\$50.73
ASPHALT RAKER <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.73	\$10.00	\$14.90	\$0.00	\$68.63
	06/01/2016	\$44.48	\$10.00	\$14.90	\$0.00	\$69.38
	12/01/2016	\$45.73	\$10.00	\$14.90	\$0.00	\$70.63
	06/01/2017	\$46.73	\$10.00	\$14.90	\$0.00	\$71.63
	12/01/2017	\$47.73	\$10.00	\$14.90	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.73	\$10.00	\$14.90	\$0.00	\$68.63
	06/01/2016	\$44.48	\$10.00	\$14.90	\$0.00	\$69.38
	12/01/2016	\$45.73	\$10.00	\$14.90	\$0.00	\$70.63
	06/01/2017	\$46.73	\$10.00	\$14.90	\$0.00	\$71.63
	12/01/2017	\$47.73	\$10.00	\$14.90	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 1</i>	12/01/2015	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	06/01/2016	\$36.85	\$7.45	\$13.55	\$0.00	\$57.85
	12/01/2016	\$37.85	\$7.45	\$13.55	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	01/01/2016	\$41.62	\$6.97	\$16.21	\$0.00	\$64.80
	01/01/2017	\$42.92	\$6.97	\$16.21	\$0.00	\$66.10

**Classification**

**Effective Date   Base Wage   Health   Pension   Supplemental Unemployment   Total Rate**

**Apprentice - BOILERMAKER - Local 29**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$27.05	\$6.97	\$10.54	\$0.00	\$44.56
2	65	\$27.05	\$6.97	\$10.54	\$0.00	\$44.56
3	70	\$29.13	\$6.97	\$11.35	\$0.00	\$47.45
4	75	\$31.22	\$6.97	\$12.16	\$0.00	\$50.35
5	80	\$33.30	\$6.97	\$12.97	\$0.00	\$53.24
6	85	\$35.38	\$6.97	\$13.78	\$0.00	\$56.13
7	90	\$37.46	\$6.97	\$14.59	\$0.00	\$59.02
8	95	\$39.54	\$6.97	\$15.40	\$0.00	\$61.91

**Effective Date - 01/01/2017**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$27.90	\$6.97	\$10.54	\$0.00	\$45.41
2	65	\$27.90	\$6.97	\$10.54	\$0.00	\$45.41
3	70	\$30.04	\$6.97	\$11.35	\$0.00	\$48.36
4	75	\$32.19	\$6.97	\$12.16	\$0.00	\$51.32
5	80	\$34.34	\$6.97	\$12.97	\$0.00	\$54.28
6	85	\$36.48	\$6.97	\$13.78	\$0.00	\$57.23
7	90	\$38.63	\$6.97	\$14.59	\$0.00	\$60.19
8	95	\$40.77	\$6.97	\$15.40	\$0.00	\$63.14

**Notes:**

**Apprentice to Journeyworker Ratio:1:5**

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	02/01/2016	\$49.86	\$10.18	\$19.14	\$0.00	\$79.18
BRICKLAYERS LOCAL 3 (BOSTON)	08/01/2016	\$50.76	\$10.18	\$19.22	\$0.00	\$80.16
	02/01/2017	\$51.33	\$10.18	\$19.22	\$0.00	\$80.73

**Classification**

**Effective Date   Base Wage   Health   Pension   Supplemental Unemployment   Total Rate**

**Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Boston**

**Effective Date - 02/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.93	\$10.18	\$19.14	\$0.00	\$54.25
2	60	\$29.92	\$10.18	\$19.14	\$0.00	\$59.24
3	70	\$34.90	\$10.18	\$19.14	\$0.00	\$64.22
4	80	\$39.89	\$10.18	\$19.14	\$0.00	\$69.21
5	90	\$44.87	\$10.18	\$19.14	\$0.00	\$74.19

**Effective Date - 08/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.38	\$10.18	\$19.22	\$0.00	\$54.78
2	60	\$30.46	\$10.18	\$19.22	\$0.00	\$59.86
3	70	\$35.53	\$10.18	\$19.22	\$0.00	\$64.93
4	80	\$40.61	\$10.18	\$19.22	\$0.00	\$70.01
5	90	\$45.68	\$10.18	\$19.22	\$0.00	\$75.08

**Notes:**

**Apprentice to Journeyworker Ratio:1:5**

<b>BULLDOZER/GRADER/SCRAPER</b> <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
<b>CAISSON &amp; UNDERPINNING BOTTOM MAN</b> <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2015	\$36.45	\$7.45	\$13.75	\$0.00	\$57.65
	06/01/2016	\$37.20	\$7.45	\$13.75	\$0.00	\$58.40
	12/01/2016	\$38.20	\$7.45	\$13.75	\$0.00	\$59.40
For apprentice rates see "Apprentice- LABORER"						
<b>CAISSON &amp; UNDERPINNING LABORER</b> <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2015	\$35.30	\$7.45	\$13.75	\$0.00	\$56.50
	06/01/2016	\$36.05	\$7.45	\$13.75	\$0.00	\$57.25
	12/01/2016	\$37.05	\$7.45	\$13.75	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
<b>CAISSON &amp; UNDERPINNING TOP MAN</b> <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2015	\$35.30	\$7.45	\$13.75	\$0.00	\$56.50
	06/01/2016	\$36.05	\$7.45	\$13.75	\$0.00	\$57.25
	12/01/2016	\$37.05	\$7.45	\$13.75	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
<b>CARBIDE CORE DRILL OPERATOR</b> <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
<b>CARPENTER</b> <i>CARPENTERS -ZONE 1 (Metro Boston)</i>	03/01/2015	\$42.30	\$9.80	\$16.48	\$0.00	\$68.58

**Classification**

**Effective Date    Base Wage    Health    Pension    Supplemental Unemployment    Total Rate**

**Apprentice - CARPENTER - Zone 1 Metro Boston**

**Effective Date - 03/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.15	\$9.80	\$1.63	\$0.00	\$32.58
2	60	\$25.38	\$9.80	\$1.63	\$0.00	\$36.81
3	70	\$29.61	\$9.80	\$11.59	\$0.00	\$51.00
4	75	\$31.73	\$9.80	\$11.59	\$0.00	\$53.12
5	80	\$33.84	\$9.80	\$13.22	\$0.00	\$56.86
6	80	\$33.84	\$9.80	\$13.22	\$0.00	\$56.86
7	90	\$38.07	\$9.80	\$14.85	\$0.00	\$62.72
8	90	\$38.07	\$9.80	\$14.85	\$0.00	\$62.72

**Notes:**

**Apprentice to Journeyworker Ratio:1:5**

CEMENT MASONRY/PLASTERING BRICKLAYERS LOCAL 3 (BOSTON)	01/01/2016	\$46.44	\$10.90	\$18.71	\$1.30	\$77.35
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**Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (Boston)**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.22	\$10.90	\$12.21	\$0.00	\$46.33
2	60	\$27.86	\$10.90	\$13.71	\$1.30	\$53.77
3	65	\$30.19	\$10.90	\$14.71	\$1.30	\$57.10
4	70	\$32.51	\$10.90	\$15.71	\$1.30	\$60.42
5	75	\$34.83	\$10.90	\$16.71	\$1.30	\$63.74
6	80	\$37.15	\$10.90	\$17.71	\$1.30	\$67.06
7	90	\$41.80	\$10.90	\$18.71	\$1.30	\$72.71

**Notes:**

Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

**Apprentice to Journeyworker Ratio:1:3**

CHAIN SAW OPERATOR LABORERS - ZONE 1	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4	12/01/2015	\$44.73	\$10.00	\$14.90	\$0.00	\$69.63
	06/01/2016	\$45.48	\$10.00	\$14.90	\$0.00	\$70.38
	12/01/2016	\$46.73	\$10.00	\$14.90	\$0.00	\$71.63
	06/01/2017	\$47.73	\$10.00	\$14.90	\$0.00	\$72.63
	12/01/2017	\$48.73	\$10.00	\$14.90	\$0.00	\$73.63

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$30.13	\$10.00	\$14.90	\$0.00	\$55.03
	06/01/2016	\$30.65	\$10.00	\$14.90	\$0.00	\$55.55
	12/01/2016	\$31.52	\$10.00	\$14.90	\$0.00	\$56.42
	06/01/2017	\$32.21	\$10.00	\$14.90	\$0.00	\$57.11
	12/01/2017	\$32.90	\$10.00	\$14.90	\$0.00	\$57.80

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 1</i>	01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

**Apprentice - PAINTER Local 35 - BRIDGES/TANKS**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.76	\$7.85	\$0.00	\$0.00	\$32.61
2	55	\$27.23	\$7.85	\$3.66	\$0.00	\$38.74
3	60	\$29.71	\$7.85	\$3.99	\$0.00	\$41.55
4	65	\$32.18	\$7.85	\$4.32	\$0.00	\$44.35
5	70	\$34.66	\$7.85	\$14.11	\$0.00	\$56.62
6	75	\$37.13	\$7.85	\$14.44	\$0.00	\$59.42
7	80	\$39.61	\$7.85	\$14.77	\$0.00	\$62.23
8	90	\$44.56	\$7.85	\$15.44	\$0.00	\$67.85

**Effective Date - 07/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.23	\$7.85	\$0.00	\$0.00	\$33.08
2	55	\$27.75	\$7.85	\$3.66	\$0.00	\$39.26
3	60	\$30.28	\$7.85	\$3.99	\$0.00	\$42.12
4	65	\$32.80	\$7.85	\$4.32	\$0.00	\$44.97
5	70	\$35.32	\$7.85	\$14.11	\$0.00	\$57.28
6	75	\$37.85	\$7.85	\$14.44	\$0.00	\$60.14
7	80	\$40.37	\$7.85	\$14.77	\$0.00	\$62.99
8	90	\$45.41	\$7.85	\$15.44	\$0.00	\$68.70

**Notes:**

Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

DEMO: ADZEMAN <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.50	\$7.45	\$13.55	\$0.00	\$56.50
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For apprentice rates see "Apprentice- LABORER"

DEMO: BACKHOE/LOADER/HAMMER OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2015	\$36.50	\$7.45	\$13.55	\$0.00	\$57.50
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For apprentice rates see "Apprentice- LABORER"

DEMO: BURNERS <i>LABORERS - ZONE 1</i>	12/01/2015	\$36.25	\$7.45	\$13.55	\$0.00	\$57.25
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For apprentice rates see "Apprentice- LABORER"

<b>Classification</b>	<b>Effective Date</b>	<b>Base Wage</b>	<b>Health</b>	<b>Pension</b>	<b>Supplemental Unemployment</b>	<b>Total Rate</b>
DEMO: CONCRETE CUTTER/SAWYER <i>LABORERS - ZONE 1</i>	12/01/2015	\$36.50	\$7.45	\$13.55	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2015	\$36.25	\$7.45	\$13.55	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.50	\$7.45	\$13.55	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2015	\$58.86	\$9.80	\$19.23	\$0.00	\$87.89
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2015	\$42.04	\$9.80	\$19.23	\$0.00	\$71.07
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2015	\$63.06	\$9.80	\$19.23	\$0.00	\$92.09
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2015	\$88.23	\$9.80	\$19.23	\$0.00	\$117.26
DRAWBRIDGE OPERATOR (Construction) <i>ELECTRICIANS LOCAL 103</i>	09/01/2015	\$45.67	\$13.00	\$15.89	\$0.00	\$74.56
	03/01/2016	\$46.17	\$13.00	\$16.39	\$0.00	\$75.56
For apprentice rates see "Apprentice- ELECTRICIAN"						
ELECTRICIAN <i>ELECTRICIANS LOCAL 103</i>	09/01/2015	\$45.67	\$13.00	\$15.89	\$0.00	\$74.56
	03/01/2016	\$46.17	\$13.00	\$16.39	\$0.00	\$75.56

**Classification**

**Effective Date    Base Wage    Health    Pension    Supplemental Unemployment    Total Rate**

**Apprentice - ELECTRICIAN - Local 103**

**Effective Date - 09/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.27	\$13.00	\$0.55	\$0.00	\$31.82
2	40	\$18.27	\$13.00	\$0.55	\$0.00	\$31.82
3	45	\$20.55	\$13.00	\$11.86	\$0.00	\$45.41
4	45	\$20.55	\$13.00	\$11.86	\$0.00	\$45.41
5	50	\$22.84	\$13.00	\$12.23	\$0.00	\$48.07
6	55	\$25.12	\$13.00	\$12.58	\$0.00	\$50.70
7	60	\$27.40	\$13.00	\$12.95	\$0.00	\$53.35
8	65	\$29.69	\$13.00	\$13.32	\$0.00	\$56.01
9	70	\$31.97	\$13.00	\$13.69	\$0.00	\$58.66
10	75	\$34.25	\$13.00	\$14.06	\$0.00	\$61.31

**Effective Date - 03/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.47	\$13.00	\$0.55	\$0.00	\$32.02
2	40	\$18.47	\$13.00	\$0.55	\$0.00	\$32.02
3	45	\$20.78	\$13.00	\$11.84	\$0.00	\$45.62
4	45	\$20.78	\$13.00	\$11.84	\$0.00	\$45.62
5	50	\$23.09	\$13.00	\$12.71	\$0.00	\$48.80
6	55	\$25.39	\$13.00	\$13.07	\$0.00	\$51.46
7	60	\$27.70	\$13.00	\$13.39	\$0.00	\$54.09
8	65	\$30.01	\$13.00	\$13.81	\$0.00	\$56.82
9	70	\$32.32	\$13.00	\$14.18	\$0.00	\$59.50
10	75	\$34.63	\$13.00	\$14.55	\$0.00	\$62.18

**Notes :**  
 App Prior 1/1/03; 30/35/40/45/50/55/65/70/75/80

**Apprentice to Journeyworker Ratio:2:3\*\*\***

ELEVATOR CONSTRUCTOR	01/01/2016	\$54.53	\$14.43	\$14.96	\$0.00	\$83.92
ELEVATOR CONSTRUCTORS LOCAL 4	01/01/2017	\$55.86	\$15.28	\$15.71	\$0.00	\$86.85

**Classification**

**Effective Date    Base Wage    Health    Pension    Supplemental Unemployment    Total Rate**

**Apprentice - ELEVATOR CONSTRUCTOR - Local 4**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$27.27	\$14.43	\$0.00	\$0.00	\$41.70
2	55	\$29.99	\$14.43	\$14.96	\$0.00	\$59.38
3	65	\$35.44	\$14.43	\$14.96	\$0.00	\$64.83
4	70	\$38.17	\$14.43	\$14.96	\$0.00	\$67.56
5	80	\$43.62	\$14.43	\$14.96	\$0.00	\$73.01

**Effective Date - 01/01/2017**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$27.93	\$15.28	\$0.00	\$0.00	\$43.21
2	55	\$30.72	\$15.28	\$15.71	\$0.00	\$61.71
3	65	\$36.31	\$15.28	\$15.71	\$0.00	\$67.30
4	70	\$39.10	\$15.28	\$15.71	\$0.00	\$70.09
5	80	\$44.69	\$15.28	\$15.71	\$0.00	\$75.68

**Notes:**  
Steps 1-2 are 6 mos.; Steps 3-5 are 1 year

**Apprentice to Journeyworker Ratio:1:1**

ELEVATOR CONSTRUCTOR HELPER <i>ELEVATOR CONSTRUCTORS LOCAL 4</i>	01/01/2016	\$38.17	\$14.43	\$14.96	\$0.00	\$67.56
	01/01/2017	\$39.10	\$15.28	\$15.71	\$0.00	\$70.09
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"						
FENCE & GUARD RAIL ERECTOR <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2015	\$40.49	\$10.00	\$14.55	\$0.00	\$65.04
	05/01/2016	\$41.38	\$10.00	\$14.55	\$0.00	\$65.93
	11/01/2016	\$41.97	\$10.00	\$14.55	\$0.00	\$66.52
	05/01/2017	\$42.85	\$10.00	\$14.55	\$0.00	\$67.40
	11/01/2017	\$43.58	\$10.00	\$14.55	\$0.00	\$68.13
	05/01/2018	\$44.29	\$10.00	\$14.55	\$0.00	\$68.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2015	\$41.93	\$10.00	\$14.55	\$0.00	\$66.48
	05/01/2016	\$42.82	\$10.00	\$14.55	\$0.00	\$67.37
	11/01/2016	\$43.42	\$10.00	\$14.55	\$0.00	\$67.97
	05/01/2017	\$44.31	\$10.00	\$14.55	\$0.00	\$68.86
	11/01/2017	\$45.04	\$10.00	\$14.55	\$0.00	\$69.59
	05/01/2018	\$45.76	\$10.00	\$14.55	\$0.00	\$70.31
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2015	\$21.71	\$10.00	\$14.55	\$0.00	\$46.26
	05/01/2016	\$22.23	\$10.00	\$14.55	\$0.00	\$46.78
	11/01/2016	\$22.58	\$10.00	\$14.55	\$0.00	\$47.13
	05/01/2017	\$23.11	\$10.00	\$14.55	\$0.00	\$47.66
	11/01/2017	\$23.53	\$10.00	\$14.55	\$0.00	\$48.08
	05/01/2018	\$23.96	\$10.00	\$14.55	\$0.00	\$48.51
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 103</i>	09/01/2015	\$45.67	\$13.00	\$15.89	\$0.00	\$74.56
	03/01/2016	\$46.17	\$13.00	\$16.39	\$0.00	\$75.56
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONING <i>ELECTRICIANS LOCAL 103</i>	09/01/2015	\$34.25	\$13.00	\$14.06	\$0.00	\$61.31
	03/01/2016	\$34.63	\$13.00	\$14.55	\$0.00	\$62.18
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$36.34	\$10.00	\$14.90	\$0.00	\$61.24
	06/01/2016	\$36.96	\$10.00	\$14.90	\$0.00	\$61.86
	12/01/2016	\$38.00	\$10.00	\$14.90	\$0.00	\$62.90
	06/01/2017	\$38.84	\$10.00	\$14.90	\$0.00	\$63.74
	12/01/2017	\$39.67	\$10.00	\$14.90	\$0.00	\$64.57
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER <i>LABORERS - ZONE 1</i>	12/01/2015	\$20.50	\$7.45	\$13.55	\$0.00	\$41.50
	06/01/2016	\$20.50	\$7.45	\$13.55	\$0.00	\$41.50
	12/01/2016	\$20.50	\$7.45	\$13.55	\$0.00	\$41.50
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE 1</i>	09/01/2015	\$41.59	\$9.80	\$17.53	\$0.00	\$68.92

**Apprentice - FLOORCOVERER - Local 2168 Zone 1**

**Effective Date - 09/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.80	\$9.80	\$1.79	\$0.00	\$32.39
2	55	\$22.87	\$9.80	\$1.79	\$0.00	\$34.46
3	60	\$24.95	\$9.80	\$12.16	\$0.00	\$46.91
4	65	\$27.03	\$9.80	\$12.16	\$0.00	\$48.99
5	70	\$29.11	\$9.80	\$13.95	\$0.00	\$52.86
6	75	\$31.19	\$9.80	\$13.95	\$0.00	\$54.94
7	80	\$33.27	\$9.80	\$15.74	\$0.00	\$58.81
8	85	\$35.35	\$9.80	\$15.74	\$0.00	\$60.89

**Notes:**

Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FORK LIFT/CHERRY PICKER <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.73	\$10.00	\$14.90	\$0.00	\$68.63
	06/01/2016	\$44.48	\$10.00	\$14.90	\$0.00	\$69.38
	12/01/2016	\$45.73	\$10.00	\$14.90	\$0.00	\$70.63
	06/01/2017	\$46.73	\$10.00	\$14.90	\$0.00	\$71.63
	12/01/2017	\$47.73	\$10.00	\$14.90	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GENERATOR/LIGHTING PLANT/HEATERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$30.13	\$10.00	\$14.90	\$0.00	\$55.03
	06/01/2016	\$30.65	\$10.00	\$14.90	\$0.00	\$55.55
	12/01/2016	\$31.52	\$10.00	\$14.90	\$0.00	\$56.42
	06/01/2017	\$32.21	\$10.00	\$14.90	\$0.00	\$57.11
	12/01/2017	\$32.90	\$10.00	\$14.90	\$0.00	\$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) <i>GLAZIERS LOCAL 35 (ZONE 1)</i>	01/01/2016	\$44.80	\$7.85	\$16.10	\$0.00	\$68.75
	07/01/2016	\$45.75	\$7.85	\$16.10	\$0.00	\$69.70
	01/01/2017	\$46.70	\$7.85	\$16.10	\$0.00	\$70.65

**Apprentice - GLAZIER - Local 35 Zone 1**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.40	\$7.85	\$0.00	\$0.00	\$30.25
2	55	\$24.64	\$7.85	\$3.66	\$0.00	\$36.15
3	60	\$26.88	\$7.85	\$3.99	\$0.00	\$38.72
4	65	\$29.12	\$7.85	\$4.32	\$0.00	\$41.29
5	70	\$31.36	\$7.85	\$14.11	\$0.00	\$53.32
6	75	\$33.60	\$7.85	\$14.44	\$0.00	\$55.89
7	80	\$35.84	\$7.85	\$14.77	\$0.00	\$58.46
8	90	\$40.32	\$7.85	\$15.44	\$0.00	\$63.61

**Effective Date - 07/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.88	\$7.85	\$0.00	\$0.00	\$30.73
2	55	\$25.16	\$7.85	\$3.66	\$0.00	\$36.67
3	60	\$27.45	\$7.85	\$3.99	\$0.00	\$39.29
4	65	\$29.74	\$7.85	\$4.32	\$0.00	\$41.91
5	70	\$32.03	\$7.85	\$14.11	\$0.00	\$53.99
6	75	\$34.31	\$7.85	\$14.44	\$0.00	\$56.60
7	80	\$36.60	\$7.85	\$14.77	\$0.00	\$59.22
8	90	\$41.18	\$7.85	\$15.44	\$0.00	\$64.47

**Notes:**

Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HOISTING ENGINEER/CRANES/GRADALLS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.73	\$10.00	\$14.90	\$0.00	\$68.63
	06/01/2016	\$44.48	\$10.00	\$14.90	\$0.00	\$69.38
	12/01/2016	\$45.73	\$10.00	\$14.90	\$0.00	\$70.63
	06/01/2017	\$46.73	\$10.00	\$14.90	\$0.00	\$71.63
	12/01/2017	\$47.73	\$10.00	\$14.90	\$0.00	\$72.63

**Apprentice - OPERATING ENGINEERS - Local 4**

**Effective Date - 12/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$24.05	\$10.00	\$0.00	\$0.00	\$34.05
2	60	\$26.24	\$10.00	\$14.90	\$0.00	\$51.14
3	65	\$28.42	\$10.00	\$14.90	\$0.00	\$53.32
4	70	\$30.61	\$10.00	\$14.90	\$0.00	\$55.51
5	75	\$32.80	\$10.00	\$14.90	\$0.00	\$57.70
6	80	\$34.98	\$10.00	\$14.90	\$0.00	\$59.88
7	85	\$37.17	\$10.00	\$14.90	\$0.00	\$62.07
8	90	\$39.36	\$10.00	\$14.90	\$0.00	\$64.26

**Effective Date - 06/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$24.46	\$10.00	\$0.00	\$0.00	\$34.46
2	60	\$26.69	\$10.00	\$14.90	\$0.00	\$51.59
3	65	\$28.91	\$10.00	\$14.90	\$0.00	\$53.81
4	70	\$31.14	\$10.00	\$14.90	\$0.00	\$56.04
5	75	\$33.36	\$10.00	\$14.90	\$0.00	\$58.26
6	80	\$35.58	\$10.00	\$14.90	\$0.00	\$60.48
7	85	\$37.81	\$10.00	\$14.90	\$0.00	\$62.71
8	90	\$40.03	\$10.00	\$14.90	\$0.00	\$64.93

**Notes:**

**Apprentice to Journeyworker Ratio:1:6**

HVAC (DUCTWORK) <i>SHEETMETAL WORKERS LOCAL 17 - A</i>	02/01/2016	\$43.31	\$10.70	\$21.95	\$2.28	\$78.24
	08/01/2016	\$44.46	\$10.70	\$21.95	\$2.28	\$79.39
	02/01/2017	\$45.56	\$10.70	\$21.95	\$2.28	\$80.49
	08/01/2017	\$46.66	\$10.70	\$21.95	\$2.28	\$81.59
	02/01/2018	\$47.81	\$10.70	\$21.95	\$2.28	\$82.74

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS) <i>ELECTRICIANS LOCAL 103</i>	09/01/2015	\$45.67	\$13.00	\$15.89	\$0.00	\$74.56
	03/01/2016	\$46.17	\$13.00	\$16.39	\$0.00	\$75.56

For apprentice rates see "Apprentice- ELECTRICIAN"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR) <i>SHEETMETAL WORKERS LOCAL 17 - A</i>	02/01/2016	\$43.31	\$10.70	\$21.95	\$2.28	\$78.24
	08/01/2016	\$44.46	\$10.70	\$21.95	\$2.28	\$79.39
	02/01/2017	\$45.56	\$10.70	\$21.95	\$2.28	\$80.49
	08/01/2017	\$46.66	\$10.70	\$21.95	\$2.28	\$81.59
	02/01/2018	\$47.81	\$10.70	\$21.95	\$2.28	\$82.74
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER) <i>PIPEFITTERS LOCAL 537</i>	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC <i>PIPEFITTERS LOCAL 537</i>	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS <i>LABORERS - ZONE 1</i>	12/01/2015	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	06/01/2016	\$36.85	\$7.45	\$13.55	\$0.00	\$57.85
	12/01/2016	\$37.85	\$7.45	\$13.55	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
INSULATOR (PIPES & TANKS) <i>HEAT &amp; FROST INSULATORS LOCAL 6 (BOSTON)</i>	09/01/2015	\$43.81	\$11.50	\$13.80	\$0.00	\$69.11
	09/01/2016	\$45.81	\$11.50	\$13.80	\$0.00	\$71.11
	09/01/2017	\$47.81	\$11.50	\$13.80	\$0.00	\$73.11
	09/01/2018	\$50.06	\$11.50	\$13.80	\$0.00	\$75.36
	09/01/2019	\$52.56	\$11.50	\$13.80	\$0.00	\$77.86

**Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Boston**

**Effective Date - 09/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.91	\$11.50	\$10.05	\$0.00	\$43.46
2	60	\$26.29	\$11.50	\$10.80	\$0.00	\$48.59
3	70	\$30.67	\$11.50	\$11.55	\$0.00	\$53.72
4	80	\$35.05	\$11.50	\$12.30	\$0.00	\$58.85

**Effective Date - 09/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.91	\$11.50	\$10.05	\$0.00	\$44.46
2	60	\$27.49	\$11.50	\$10.80	\$0.00	\$49.79
3	70	\$32.07	\$11.50	\$11.55	\$0.00	\$55.12
4	80	\$36.65	\$11.50	\$12.30	\$0.00	\$60.45

**Notes:**

Steps are 1 year

**Apprentice to Journeyworker Ratio:1:4**

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (BOSTON AREA)</i>	09/16/2015	\$42.40	\$7.80	\$20.85	\$0.00	\$71.05
	03/16/2016	\$43.40	\$7.80	\$20.85	\$0.00	\$72.05
	09/16/2016	\$44.05	\$7.80	\$20.85	\$0.00	\$72.70
	03/16/2017	\$44.65	\$7.80	\$20.85	\$0.00	\$73.30

**Apprentice - IRONWORKER - Local 7 Boston**

**Effective Date - 09/16/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$25.44	\$7.80	\$20.85	\$0.00	\$54.09
2	70	\$29.68	\$7.80	\$20.85	\$0.00	\$58.33
3	75	\$31.80	\$7.80	\$20.85	\$0.00	\$60.45
4	80	\$33.92	\$7.80	\$20.85	\$0.00	\$62.57
5	85	\$36.04	\$7.80	\$20.85	\$0.00	\$64.69
6	90	\$38.16	\$7.80	\$20.85	\$0.00	\$66.81

**Effective Date - 03/16/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$26.04	\$7.80	\$20.85	\$0.00	\$54.69
2	70	\$30.38	\$7.80	\$20.85	\$0.00	\$59.03
3	75	\$32.55	\$7.80	\$20.85	\$0.00	\$61.20
4	80	\$34.72	\$7.80	\$20.85	\$0.00	\$63.37
5	85	\$36.89	\$7.80	\$20.85	\$0.00	\$65.54
6	90	\$39.06	\$7.80	\$20.85	\$0.00	\$67.71

**Notes:**

\*\* Structural 1:6; Ornamental 1:4

**Apprentice to Journeyworker Ratio:\*\***

JACKHAMMER & PAVING BREAKER OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

LABORER <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.35	\$7.45	\$13.55	\$0.00	\$56.35
	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10

**Apprentice - LABORER - Zone 1**

**Effective Date - 12/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$21.21	\$7.45	\$13.55	\$0.00	\$42.21
2	70	\$24.75	\$7.45	\$13.55	\$0.00	\$45.75
3	80	\$28.28	\$7.45	\$13.55	\$0.00	\$49.28
4	90	\$31.82	\$7.45	\$13.55	\$0.00	\$52.82

**Effective Date - 06/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$21.66	\$7.45	\$13.55	\$0.00	\$42.66
2	70	\$25.27	\$7.45	\$13.55	\$0.00	\$46.27
3	80	\$28.88	\$7.45	\$13.55	\$0.00	\$49.88
4	90	\$32.49	\$7.45	\$13.55	\$0.00	\$53.49

**Notes:**

**Apprentice to Journeyworker Ratio:1:5**

<b>LABORER: CARPENTER TENDER</b> <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.35	\$7.45	\$13.55	\$0.00	\$56.35
	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10

For apprentice rates see "Apprentice- LABORER"

<b>LABORER: CEMENT FINISHER TENDER</b> <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.35	\$7.45	\$13.55	\$0.00	\$56.35
	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10

For apprentice rates see "Apprentice- LABORER"

<b>LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER</b> <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.50	\$7.45	\$13.55	\$0.00	\$56.50
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For apprentice rates see "Apprentice- LABORER"

<b>LABORER: MASON TENDER</b> <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

<b>LABORER: MULTI-TRADE TENDER</b> <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.35	\$7.45	\$13.55	\$0.00	\$56.35
	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10

For apprentice rates see "Apprentice- LABORER"

<b>LABORER: TREE REMOVER</b> <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.35	\$7.45	\$13.55	\$0.00	\$56.35
	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10

This classification applies to all tree work associated with the removal of standing trees, and trimming and removal of branches and limbs when the work is not done for a utility company for the purpose of operation, maintenance or repair of utility company equipment. For apprentice rates see "Apprentice- LABORER"

<b>LASER BEAM OPERATOR</b> <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE &amp; TILE</i>	02/01/2016	\$38.08	\$10.18	\$17.70	\$0.00	\$65.96
	08/01/2016	\$38.78	\$10.18	\$17.78	\$0.00	\$66.74
	02/01/2017	\$39.24	\$10.18	\$17.78	\$0.00	\$67.20

**Apprentice - MARBLE & TILE FINISHER - Local 3 Marble & Tile**

**Effective Date - 02/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.04	\$10.18	\$17.70	\$0.00	\$46.92
2	60	\$22.85	\$10.18	\$17.70	\$0.00	\$50.73
3	70	\$26.66	\$10.18	\$17.70	\$0.00	\$54.54
4	80	\$30.46	\$10.18	\$17.70	\$0.00	\$58.34
5	90	\$34.27	\$10.18	\$17.70	\$0.00	\$62.15

**Effective Date - 08/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.39	\$10.18	\$17.78	\$0.00	\$47.35
2	60	\$23.27	\$10.18	\$17.78	\$0.00	\$51.23
3	70	\$27.15	\$10.18	\$17.78	\$0.00	\$55.11
4	80	\$31.02	\$10.18	\$17.78	\$0.00	\$58.98
5	90	\$34.90	\$10.18	\$17.78	\$0.00	\$62.86

**Notes:**

**Apprentice to Journeyworker Ratio:1:3**

MARBLE MASONS, TILELAYERS & TERRAZZO MECH <i>BRICKLAYERS LOCAL 3 - MARBLE &amp; TILE</i>	02/01/2016	\$49.90	\$10.18	\$19.14	\$0.00	\$79.22
	08/01/2016	\$50.80	\$10.18	\$19.22	\$0.00	\$80.20
	02/01/2017	\$51.37	\$10.18	\$19.22	\$0.00	\$80.77

**Classification**

**Effective Date   Base Wage   Health   Pension   Supplemental Unemployment   Total Rate**

**Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile**

**Effective Date - 02/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.95	\$10.18	\$19.14	\$0.00	\$54.27
2	60	\$29.94	\$10.18	\$19.14	\$0.00	\$59.26
3	70	\$34.93	\$10.18	\$19.14	\$0.00	\$64.25
4	80	\$39.92	\$10.18	\$19.14	\$0.00	\$69.24
5	90	\$44.91	\$10.18	\$19.14	\$0.00	\$74.23

**Effective Date - 08/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.40	\$10.18	\$19.22	\$0.00	\$54.80
2	60	\$30.48	\$10.18	\$19.22	\$0.00	\$59.88
3	70	\$35.56	\$10.18	\$19.22	\$0.00	\$64.96
4	80	\$40.64	\$10.18	\$19.22	\$0.00	\$70.04
5	90	\$45.72	\$10.18	\$19.22	\$0.00	\$75.12

**Notes:**

**Apprentice to Journeyworker Ratio:1:5**

MECH. SWEEPER OPERATOR (ON CONST. SITES) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MECHANICS MAINTENANCE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 1) <i>MILLWRIGHTS LOCAL 1121 - Zone 1</i>	04/01/2015	\$37.64	\$9.80	\$16.21	\$0.00	\$63.65
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**Apprentice - MILLWRIGHT - Local 1121 Zone 1**

**Effective Date - 04/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.70	\$9.80	\$4.48	\$0.00	\$34.98
2	65	\$24.47	\$9.80	\$13.36	\$0.00	\$47.63
3	75	\$28.23	\$9.80	\$14.18	\$0.00	\$52.21
4	85	\$31.99	\$9.80	\$14.99	\$0.00	\$56.78

**Notes:**

Steps are 2,000 hours

**Apprentice to Journeyworker Ratio:1:5**

<b>MORTAR MIXER</b>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
<i>LABORERS - ZONE 1</i>	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

<b>OILER (OTHER THAN TRUCK CRANES,GRADALLS)</b>	12/01/2015	\$22.27	\$10.00	\$14.90	\$0.00	\$47.17
<i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$22.66	\$10.00	\$14.90	\$0.00	\$47.56
	12/01/2016	\$23.31	\$10.00	\$14.90	\$0.00	\$48.21
	06/01/2017	\$23.82	\$10.00	\$14.90	\$0.00	\$48.72
	12/01/2017	\$24.34	\$10.00	\$14.90	\$0.00	\$49.24

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

<b>OILER (TRUCK CRANES, GRADALLS)</b>	12/01/2015	\$26.08	\$10.00	\$14.90	\$0.00	\$50.98
<i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$26.54	\$10.00	\$14.90	\$0.00	\$51.44
	12/01/2016	\$27.29	\$10.00	\$14.90	\$0.00	\$52.19
	06/01/2017	\$27.89	\$10.00	\$14.90	\$0.00	\$52.79
	12/01/2017	\$28.50	\$10.00	\$14.90	\$0.00	\$53.40

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

<b>OTHER POWER DRIVEN EQUIPMENT - CLASS II</b>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
<i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

<b>PAINTER (BRIDGES/TANKS)</b>	01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
<i>PAINTERS LOCAL 35 - ZONE 1</i>	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

**Apprentice - PAINTER Local 35 - BRIDGES/TANKS**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.76	\$7.85	\$0.00	\$0.00	\$32.61
2	55	\$27.23	\$7.85	\$3.66	\$0.00	\$38.74
3	60	\$29.71	\$7.85	\$3.99	\$0.00	\$41.55
4	65	\$32.18	\$7.85	\$4.32	\$0.00	\$44.35
5	70	\$34.66	\$7.85	\$14.11	\$0.00	\$56.62
6	75	\$37.13	\$7.85	\$14.44	\$0.00	\$59.42
7	80	\$39.61	\$7.85	\$14.77	\$0.00	\$62.23
8	90	\$44.56	\$7.85	\$15.44	\$0.00	\$67.85

**Effective Date - 07/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.23	\$7.85	\$0.00	\$0.00	\$33.08
2	55	\$27.75	\$7.85	\$3.66	\$0.00	\$39.26
3	60	\$30.28	\$7.85	\$3.99	\$0.00	\$42.12
4	65	\$32.80	\$7.85	\$4.32	\$0.00	\$44.97
5	70	\$35.32	\$7.85	\$14.11	\$0.00	\$57.28
6	75	\$37.85	\$7.85	\$14.44	\$0.00	\$60.14
7	80	\$40.37	\$7.85	\$14.77	\$0.00	\$62.99
8	90	\$45.41	\$7.85	\$15.44	\$0.00	\$68.70

**Notes:**  
Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

PAINTER (SPRAY OR SANDBLAST, NEW) *	01/01/2016	\$46.20	\$7.85	\$16.10	\$0.00	\$70.15
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 1	07/01/2016	\$47.15	\$7.85	\$16.10	\$0.00	\$71.10
	01/01/2017	\$48.10	\$7.85	\$16.10	\$0.00	\$72.05

**Apprentice - PAINTER Local 35 Zone 1 - Spray/Sandblast - New**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.10	\$7.85	\$0.00	\$0.00	\$30.95
2	55	\$25.41	\$7.85	\$3.66	\$0.00	\$36.92
3	60	\$27.72	\$7.85	\$3.99	\$0.00	\$39.56
4	65	\$30.03	\$7.85	\$4.32	\$0.00	\$42.20
5	70	\$32.34	\$7.85	\$14.11	\$0.00	\$54.30
6	75	\$34.65	\$7.85	\$14.44	\$0.00	\$56.94
7	80	\$36.96	\$7.85	\$14.77	\$0.00	\$59.58
8	90	\$41.58	\$7.85	\$15.44	\$0.00	\$64.87

**Effective Date - 07/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.58	\$7.85	\$0.00	\$0.00	\$31.43
2	55	\$25.93	\$7.85	\$3.66	\$0.00	\$37.44
3	60	\$28.29	\$7.85	\$3.99	\$0.00	\$40.13
4	65	\$30.65	\$7.85	\$4.32	\$0.00	\$42.82
5	70	\$33.01	\$7.85	\$14.11	\$0.00	\$54.97
6	75	\$35.36	\$7.85	\$14.44	\$0.00	\$57.65
7	80	\$37.72	\$7.85	\$14.77	\$0.00	\$60.34
8	90	\$42.44	\$7.85	\$15.44	\$0.00	\$65.73

**Notes:**  
Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

PAINTER (SPRAY OR SANDBLAST, REPAINT)	01/01/2016	\$44.26	\$7.85	\$16.10	\$0.00	\$68.21
PAINTERS LOCAL 35 - ZONE 1	07/01/2016	\$45.21	\$7.85	\$16.10	\$0.00	\$69.16
	01/01/2017	\$46.16	\$7.85	\$16.10	\$0.00	\$70.11

**Classification**

**Effective Date    Base Wage    Health    Pension    Supplemental Unemployment    Total Rate**

**Apprentice - PAINTER Local 35 Zone 1 - Spray/Sandblast - Repaint**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.13	\$7.85	\$0.00	\$0.00	\$29.98
2	55	\$24.34	\$7.85	\$3.66	\$0.00	\$35.85
3	60	\$26.56	\$7.85	\$3.99	\$0.00	\$38.40
4	65	\$28.77	\$7.85	\$4.32	\$0.00	\$40.94
5	70	\$30.98	\$7.85	\$14.11	\$0.00	\$52.94
6	75	\$33.20	\$7.85	\$14.44	\$0.00	\$55.49
7	80	\$35.41	\$7.85	\$14.77	\$0.00	\$58.03
8	90	\$39.83	\$7.85	\$15.44	\$0.00	\$63.12

**Effective Date - 07/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.61	\$7.85	\$0.00	\$0.00	\$30.46
2	55	\$24.87	\$7.85	\$3.66	\$0.00	\$36.38
3	60	\$27.13	\$7.85	\$3.99	\$0.00	\$38.97
4	65	\$29.39	\$7.85	\$4.32	\$0.00	\$41.56
5	70	\$31.65	\$7.85	\$14.11	\$0.00	\$53.61
6	75	\$33.91	\$7.85	\$14.44	\$0.00	\$56.20
7	80	\$36.17	\$7.85	\$14.77	\$0.00	\$58.79
8	90	\$40.69	\$7.85	\$15.44	\$0.00	\$63.98

**Notes:**

Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

PAINTER (TRAFFIC MARKINGS) LABORERS - ZONE 1	12/01/2015	\$35.35	\$7.45	\$13.55	\$0.00	\$56.35
	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
	12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10

For Apprentice rates see "Apprentice- LABORER"

PAINTER / TAPER (BRUSH, NEW) *	01/01/2016	\$44.80	\$7.85	\$16.10	\$0.00	\$68.75
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 1	07/01/2016	\$45.75	\$7.85	\$16.10	\$0.00	\$69.70
	01/01/2017	\$46.70	\$7.85	\$16.10	\$0.00	\$70.65

**Apprentice - PAINTER - Local 35 Zone 1 - BRUSH NEW**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.40	\$7.85	\$0.00	\$0.00	\$30.25
2	55	\$24.64	\$7.85	\$3.66	\$0.00	\$36.15
3	60	\$26.88	\$7.85	\$3.99	\$0.00	\$38.72
4	65	\$29.12	\$7.85	\$4.32	\$0.00	\$41.29
5	70	\$31.36	\$7.85	\$14.11	\$0.00	\$53.32
6	75	\$33.60	\$7.85	\$14.44	\$0.00	\$55.89
7	80	\$35.84	\$7.85	\$14.77	\$0.00	\$58.46
8	90	\$40.32	\$7.85	\$15.44	\$0.00	\$63.61

**Effective Date - 07/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.88	\$7.85	\$0.00	\$0.00	\$30.73
2	55	\$25.16	\$7.85	\$3.66	\$0.00	\$36.67
3	60	\$27.45	\$7.85	\$3.99	\$0.00	\$39.29
4	65	\$29.74	\$7.85	\$4.32	\$0.00	\$41.91
5	70	\$32.03	\$7.85	\$14.11	\$0.00	\$53.99
6	75	\$34.31	\$7.85	\$14.44	\$0.00	\$56.60
7	80	\$36.60	\$7.85	\$14.77	\$0.00	\$59.22
8	90	\$41.18	\$7.85	\$15.44	\$0.00	\$64.47

**Notes:**

Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

PAINTER / TAPER (BRUSH, REPAINT)	01/01/2016	\$42.86	\$7.85	\$16.10	\$0.00	\$66.81
PAINTERS LOCAL 35 - ZONE 1	07/01/2016	\$43.81	\$7.85	\$16.10	\$0.00	\$67.76
	01/01/2017	\$44.76	\$7.85	\$16.10	\$0.00	\$68.71

**Apprentice - PAINTER Local 35 Zone 1 - BRUSH REPAINT**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.43	\$7.85	\$0.00	\$0.00	\$29.28
2	55	\$23.57	\$7.85	\$3.66	\$0.00	\$35.08
3	60	\$25.72	\$7.85	\$3.99	\$0.00	\$37.56
4	65	\$27.86	\$7.85	\$4.32	\$0.00	\$40.03
5	70	\$30.00	\$7.85	\$14.11	\$0.00	\$51.96
6	75	\$32.15	\$7.85	\$14.44	\$0.00	\$54.44
7	80	\$34.29	\$7.85	\$14.77	\$0.00	\$56.91
8	90	\$38.57	\$7.85	\$15.44	\$0.00	\$61.86

**Effective Date - 07/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.91	\$7.85	\$0.00	\$0.00	\$29.76
2	55	\$24.10	\$7.85	\$3.66	\$0.00	\$35.61
3	60	\$26.29	\$7.85	\$3.99	\$0.00	\$38.13
4	65	\$28.48	\$7.85	\$4.32	\$0.00	\$40.65
5	70	\$30.67	\$7.85	\$14.11	\$0.00	\$52.63
6	75	\$32.86	\$7.85	\$14.44	\$0.00	\$55.15
7	80	\$35.05	\$7.85	\$14.77	\$0.00	\$57.67
8	90	\$39.43	\$7.85	\$15.44	\$0.00	\$62.72

**Notes:**

Steps are 750 hrs.

**Apprentice to Journeyworker Ratio:1:1**

PANEL & PICKUP TRUCKS DRIVER <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2015	\$32.58	\$10.41	\$10.08	\$0.00	\$53.07
	06/01/2016	\$33.08	\$10.41	\$10.08	\$0.00	\$53.57
	08/01/2016	\$33.08	\$10.91	\$10.08	\$0.00	\$54.07
	12/01/2016	\$33.08	\$10.91	\$10.89	\$0.00	\$54.88
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2015	\$42.04	\$9.80	\$19.23	\$0.00	\$71.07
PILE DRIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2015	\$42.04	\$9.80	\$19.23	\$0.00	\$71.07

**Apprentice - PILE DRIVER - Local 56 Zone 1**

**Effective Date - 08/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.02	\$9.80	\$19.23	\$0.00	\$50.05
2	60	\$25.22	\$9.80	\$19.23	\$0.00	\$54.25
3	70	\$29.43	\$9.80	\$19.23	\$0.00	\$58.46
4	75	\$31.53	\$9.80	\$19.23	\$0.00	\$60.56
5	80	\$33.63	\$9.80	\$19.23	\$0.00	\$62.66
6	80	\$33.63	\$9.80	\$19.23	\$0.00	\$62.66
7	90	\$37.84	\$9.80	\$19.23	\$0.00	\$66.87
8	90	\$37.84	\$9.80	\$19.23	\$0.00	\$66.87

Notes:

**Apprentice to Journeyworker Ratio:1:3**

PIPEFITTER & STEAMFITTER	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
PIPEFITTERS LOCAL 537	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28

**Apprentice - PIPEFITTER - Local 537**

**Effective Date - 09/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.88	\$9.70	\$7.50	\$0.00	\$37.08
2	45	\$22.36	\$9.70	\$16.89	\$0.00	\$48.95
3	60	\$29.81	\$9.70	\$16.89	\$0.00	\$56.40
4	70	\$34.78	\$9.70	\$16.89	\$0.00	\$61.37
5	80	\$39.75	\$9.70	\$16.89	\$0.00	\$66.34

**Effective Date - 03/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$20.28	\$9.70	\$7.50	\$0.00	\$37.48
2	45	\$22.81	\$9.70	\$16.89	\$0.00	\$49.40
3	60	\$30.41	\$9.70	\$16.89	\$0.00	\$57.00
4	70	\$35.48	\$9.70	\$16.89	\$0.00	\$62.07
5	80	\$40.55	\$9.70	\$16.89	\$0.00	\$67.14

Notes:

\*\* 1:3; 3:15; 1:10 thereafter / Steps are 1 yr.  
Refrig/AC Mechanic \*\*1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:17;9:20;10:23(Max)

**Apprentice to Journeyworker Ratio:\*\***

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIPELAYER <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
PLUMBERS & GASFITTERS <i>PLUMBERS &amp; GASFITTERS LOCAL 12</i>	09/01/2015	\$50.46	\$10.82	\$15.14	\$0.00	\$76.42
	03/01/2016	\$51.61	\$10.82	\$15.14	\$0.00	\$77.57
	09/01/2016	\$52.66	\$10.82	\$15.14	\$0.00	\$78.62
	03/01/2017	\$53.66	\$10.82	\$15.14	\$0.00	\$79.62

**Apprentice - PLUMBER/GASFITTER - Local 12**

**Effective Date - 09/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.66	\$10.82	\$5.63	\$0.00	\$34.11
2	40	\$20.18	\$10.82	\$6.37	\$0.00	\$37.37
3	55	\$27.75	\$10.82	\$8.56	\$0.00	\$47.13
4	65	\$32.80	\$10.82	\$10.03	\$0.00	\$53.65
5	75	\$37.85	\$10.82	\$11.48	\$0.00	\$60.15

**Effective Date - 03/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$18.06	\$10.82	\$5.63	\$0.00	\$34.51
2	40	\$20.64	\$10.82	\$6.37	\$0.00	\$37.83
3	55	\$28.39	\$10.82	\$8.56	\$0.00	\$47.77
4	65	\$33.55	\$10.82	\$10.03	\$0.00	\$54.40
5	75	\$38.71	\$10.82	\$11.48	\$0.00	\$61.01

**Notes:**

\*\* 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr  
Step4 with lic\$56.90 Step5 with lic\$63.40

**Apprentice to Journeyworker Ratio:\*\***

PNEUMATIC CONTROLS (TEMP.) <i>PIPEFITTERS LOCAL 537</i>	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

PNEUMATIC DRILL/TOOL OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

POWDERMAN & BLASTER <i>LABORERS - ZONE 1</i>	12/01/2015	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	06/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10
	12/01/2016	\$38.10	\$7.45	\$13.55	\$0.00	\$59.10

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.73	\$10.00	\$14.90	\$0.00	\$68.63
	06/01/2016	\$44.48	\$10.00	\$14.90	\$0.00	\$69.38
	12/01/2016	\$45.73	\$10.00	\$14.90	\$0.00	\$70.63
	06/01/2017	\$46.73	\$10.00	\$14.90	\$0.00	\$71.63
	12/01/2017	\$47.73	\$10.00	\$14.90	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.73	\$10.00	\$14.90	\$0.00	\$68.63
	06/01/2016	\$44.48	\$10.00	\$14.90	\$0.00	\$69.38
	12/01/2016	\$45.73	\$10.00	\$14.90	\$0.00	\$70.63
	06/01/2017	\$46.73	\$10.00	\$14.90	\$0.00	\$71.63
	12/01/2017	\$47.73	\$10.00	\$14.90	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$30.13	\$10.00	\$14.90	\$0.00	\$55.03
	06/01/2016	\$30.65	\$10.00	\$14.90	\$0.00	\$55.55
	12/01/2016	\$31.52	\$10.00	\$14.90	\$0.00	\$56.42
	06/01/2017	\$32.21	\$10.00	\$14.90	\$0.00	\$57.11
	12/01/2017	\$32.90	\$10.00	\$14.90	\$0.00	\$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY MIX CONCRETE DRIVERS after 4/30/10 (Drivers Hired After 4/30/2010) <i>TEAMSTERS LOCAL 25c</i>	07/01/2015	\$27.88	\$7.98	\$8.92	\$0.00	\$44.78
	05/01/2016	\$28.03	\$7.98	\$9.31	\$0.00	\$45.32
	07/01/2016	\$28.03	\$8.23	\$9.31	\$0.00	\$45.57
	05/01/2017	\$28.18	\$8.23	\$9.72	\$0.00	\$46.13
	07/01/2017	\$28.18	\$8.48	\$9.72	\$0.00	\$46.38
READY-MIX CONCRETE DRIVER <i>TEAMSTERS LOCAL 25c</i>	07/01/2015	\$29.18	\$7.98	\$8.92	\$0.00	\$46.08
	05/01/2016	\$29.33	\$7.98	\$9.31	\$0.00	\$46.62
	07/01/2016	\$29.33	\$8.23	\$9.31	\$0.00	\$46.87
	05/01/2017	\$29.48	\$8.23	\$9.72	\$0.00	\$47.43
	07/01/2017	\$29.48	\$8.48	\$9.72	\$0.00	\$47.68
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RESIDENTIAL WOOD FRAME (All Other Work) <i>CARPENTERS -ZONE 2 (Residential Wood)</i>	04/01/2011	\$24.24	\$8.67	\$15.51	\$0.00	\$48.42
RESIDENTIAL WOOD FRAME CARPENTER ** ** The Residential Wood Frame Carpenter classification applies only to the construction of new, wood frame residences that do not exceed four stories including the basement. <i>CARPENTERS -ZONE 2 (Residential Wood)</i> As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.	05/01/2011	\$24.24	\$6.34	\$6.23	\$0.00	\$36.81

**Classification**

**Effective Date   Base Wage   Health   Pension   Supplemental Unemployment   Total Rate**

**Apprentice - CARPENTER (Residential Wood Frame) - Zone 2**

**Effective Date - 05/01/2011**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$14.54	\$6.34	\$0.00	\$0.00	\$20.88
2	60	\$14.54	\$6.34	\$6.23	\$0.00	\$27.11
3	65	\$15.76	\$6.34	\$6.23	\$0.00	\$28.33
4	70	\$16.97	\$6.34	\$6.23	\$0.00	\$29.54
5	75	\$18.18	\$6.34	\$6.23	\$0.00	\$30.75
6	80	\$19.39	\$6.34	\$6.23	\$0.00	\$31.96
7	85	\$20.60	\$6.34	\$6.23	\$0.00	\$33.17
8	90	\$21.82	\$6.34	\$6.23	\$0.00	\$34.39

**Notes:**

**Apprentice to Journeyworker Ratio:1:5**

RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Inc.Roofing Waterproofing &Roofing Damproofing) <i>ROOFERS LOCAL 33</i>	02/01/2016	\$40.11	\$11.00	\$12.90	\$0.00	\$64.01
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**Apprentice - ROOFER - Local 33**

**Effective Date - 02/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.06	\$11.00	\$3.39	\$0.00	\$34.45
2	60	\$24.07	\$11.00	\$12.90	\$0.00	\$47.97
3	65	\$26.07	\$11.00	\$12.90	\$0.00	\$49.97
4	75	\$30.08	\$11.00	\$12.90	\$0.00	\$53.98
5	85	\$34.09	\$11.00	\$12.90	\$0.00	\$57.99

**Notes: \*\* 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1  
Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.**

**Apprentice to Journeyworker Ratio:\*\***

ROOFER SLATE / TILE / PRECAST CONCRETE <i>ROOFERS LOCAL 33</i>	02/01/2016	\$40.36	\$11.00	\$12.90	\$0.00	\$64.26
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For apprentice rates see "Apprentice- ROOFER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SHEETMETAL WORKER SHEETMETAL WORKERS LOCAL 17 - A	02/01/2016	\$43.31	\$10.70	\$21.95	\$2.28	\$78.24
	08/01/2016	\$44.46	\$10.70	\$21.95	\$2.28	\$79.39
	02/01/2017	\$45.56	\$10.70	\$21.95	\$2.28	\$80.49
	08/01/2017	\$46.66	\$10.70	\$21.95	\$2.28	\$81.59
	02/01/2018	\$47.81	\$10.70	\$21.95	\$2.28	\$82.74

**Apprentice - SHEET METAL WORKER - Local 17-A**

**Effective Date - 02/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.32	\$10.70	\$4.90	\$0.00	\$32.92
2	40	\$17.32	\$10.70	\$4.90	\$0.00	\$32.92
3	45	\$19.49	\$10.70	\$9.79	\$1.20	\$41.18
4	45	\$19.49	\$10.70	\$9.79	\$1.20	\$41.18
5	50	\$21.66	\$10.70	\$10.65	\$1.29	\$44.30
6	50	\$21.66	\$10.70	\$10.90	\$1.30	\$44.56
7	60	\$25.99	\$10.70	\$12.37	\$1.47	\$50.53
8	65	\$28.15	\$10.70	\$13.24	\$1.56	\$53.65
9	75	\$32.48	\$10.70	\$14.97	\$1.74	\$59.89
10	85	\$36.81	\$10.70	\$16.18	\$1.91	\$65.60

**Effective Date - 08/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.78	\$10.70	\$4.90	\$0.00	\$33.38
2	40	\$17.78	\$10.70	\$4.90	\$0.00	\$33.38
3	45	\$20.01	\$10.70	\$9.79	\$1.22	\$41.72
4	45	\$20.01	\$10.70	\$9.79	\$1.22	\$41.72
5	50	\$22.23	\$10.70	\$10.65	\$1.31	\$44.89
6	50	\$22.23	\$10.70	\$10.90	\$1.31	\$45.14
7	60	\$26.68	\$10.70	\$12.37	\$1.49	\$51.24
8	65	\$28.90	\$10.70	\$13.24	\$1.59	\$54.43
9	75	\$33.35	\$10.70	\$14.97	\$1.77	\$60.79
10	85	\$37.79	\$10.70	\$16.18	\$1.94	\$66.61

**Notes:**

Steps are 6 mos.

**Apprentice to Journeyworker Ratio:1:4**

SIGN ERECTOR PAINTERS LOCAL 35 - ZONE 1	06/01/2013	\$25.81	\$7.07	\$7.05	\$0.00	\$39.93
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**Classification**

**Effective Date    Base Wage    Health    Pension    Supplemental Unemployment    Total Rate**

**Apprentice - SIGN ERECTOR - Local 35 Zone 1**

**Effective Date - 06/01/2013**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.98
2	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72
3	60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.01
4	65	\$16.78	\$7.07	\$2.45	\$0.00	\$26.30
5	70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.19
6	75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.48
7	80	\$20.65	\$7.07	\$7.05	\$0.00	\$34.77
8	85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06
9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35

**Notes:**  
Steps are 4 mos.

**Apprentice to Journeyworker Ratio:1:1**

<b>SPECIALIZED EARTH MOVING EQUIP &lt; 35 TONS</b> <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
	12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34
<b>SPECIALIZED EARTH MOVING EQUIP &gt; 35 TONS</b> <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2015	\$33.33	\$10.41	\$10.08	\$0.00	\$53.82
	06/01/2016	\$33.83	\$10.41	\$10.08	\$0.00	\$54.32
	08/01/2016	\$33.83	\$10.91	\$10.08	\$0.00	\$54.82
	12/01/2016	\$33.83	\$10.91	\$10.89	\$0.00	\$55.63
<b>SPRINKLER FITTER</b> <i>SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1</i>	01/01/2016	\$54.43	\$8.67	\$15.80	\$0.00	\$78.90
	03/01/2016	\$55.43	\$8.67	\$15.80	\$0.00	\$79.90
	10/01/2016	\$56.58	\$8.67	\$15.80	\$0.00	\$81.05
	03/01/2017	\$57.58	\$8.67	\$15.80	\$0.00	\$82.05

**Classification**

**Effective Date   Base Wage   Health   Pension   Supplemental Unemployment   Total Rate**

**Apprentice - SPRINKLER FITTER - Local 550 (Section A) Zone 1**

**Effective Date - 01/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$19.05	\$8.67	\$8.55	\$0.00	\$36.27
2	40	\$21.77	\$8.67	\$8.55	\$0.00	\$38.99
3	45	\$24.49	\$8.67	\$8.55	\$0.00	\$41.71
4	50	\$27.22	\$8.67	\$8.55	\$0.00	\$44.44
5	55	\$29.94	\$8.67	\$8.55	\$0.00	\$47.16
6	60	\$32.66	\$8.67	\$8.55	\$0.00	\$49.88
7	65	\$35.38	\$8.67	\$8.55	\$0.00	\$52.60
8	70	\$38.10	\$8.67	\$8.55	\$0.00	\$55.32
9	75	\$40.82	\$8.67	\$8.55	\$0.00	\$58.04
10	80	\$43.54	\$8.67	\$8.55	\$0.00	\$60.76

**Effective Date - 03/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$19.40	\$8.67	\$8.55	\$0.00	\$36.62
2	40	\$22.17	\$8.67	\$8.55	\$0.00	\$39.39
3	45	\$24.94	\$8.67	\$8.55	\$0.00	\$42.16
4	50	\$27.72	\$8.67	\$8.55	\$0.00	\$44.94
5	55	\$30.49	\$8.67	\$8.55	\$0.00	\$47.71
6	60	\$33.26	\$8.67	\$8.55	\$0.00	\$50.48
7	65	\$36.03	\$8.67	\$8.55	\$0.00	\$53.25
8	70	\$38.80	\$8.67	\$8.55	\$0.00	\$56.02
9	75	\$41.57	\$8.67	\$8.55	\$0.00	\$58.79
10	80	\$44.34	\$8.67	\$8.55	\$0.00	\$61.56

**Notes:** Apprentice entered prior 9/30/10:  
40/45/50/55/60/65/70/75/80/85  
Steps are 850 hours

**Apprentice to Journeyworker Ratio:1:3**

STEAM BOILER OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TELECOMMUNICATION TECHNICIAN <i>ELECTRICIANS LOCAL 103</i>	09/01/2015	\$34.25	\$13.00	\$14.06	\$0.00	\$61.31
	03/01/2016	\$34.63	\$13.00	\$14.55	\$0.00	\$62.18

**Apprentice - TELECOMMUNICATION TECHNICIAN - Local 103**

**Effective Date - 09/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.70	\$13.00	\$0.41	\$0.00	\$27.11
2	40	\$13.70	\$13.00	\$0.41	\$0.00	\$27.11
3	45	\$15.41	\$13.00	\$11.03	\$0.00	\$39.44
4	45	\$15.41	\$13.00	\$11.03	\$0.00	\$39.44
5	50	\$17.13	\$13.00	\$11.30	\$0.00	\$41.43
6	55	\$18.84	\$13.00	\$11.58	\$0.00	\$43.42
7	60	\$20.55	\$13.00	\$11.86	\$0.00	\$45.41
8	65	\$22.26	\$13.00	\$12.13	\$0.00	\$47.39
9	70	\$23.98	\$13.00	\$12.41	\$0.00	\$49.39
10	75	\$25.69	\$13.00	\$12.68	\$0.00	\$51.37

**Effective Date - 03/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.85	\$13.00	\$0.42	\$0.00	\$27.27
2	40	\$13.85	\$13.00	\$0.42	\$0.00	\$27.27
3	45	\$15.58	\$13.00	\$11.52	\$0.00	\$40.10
4	45	\$15.58	\$13.00	\$11.52	\$0.00	\$40.10
5	50	\$17.32	\$13.00	\$11.79	\$0.00	\$42.11
6	55	\$19.05	\$13.00	\$12.06	\$0.00	\$44.11
7	60	\$20.78	\$13.00	\$12.34	\$0.00	\$46.12
8	65	\$22.51	\$13.00	\$12.62	\$0.00	\$48.13
9	70	\$24.24	\$13.00	\$12.90	\$0.00	\$50.14
10	75	\$25.97	\$13.00	\$13.17	\$0.00	\$52.14

**Notes:**

**Apprentice to Journeyworker Ratio:1:1**

TERRAZZO FINISHERS	02/01/2016	\$48.80	\$10.18	\$19.14	\$0.00	\$78.12
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2016	\$49.70	\$10.18	\$19.22	\$0.00	\$79.10
	02/01/2017	\$50.27	\$10.18	\$19.22	\$0.00	\$79.67

**Classification**

**Effective Date   Base Wage   Health   Pension   Supplemental Unemployment   Total Rate**

**Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile**

**Effective Date - 02/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.40	\$10.18	\$19.14	\$0.00	\$53.72
2	60	\$29.28	\$10.18	\$19.14	\$0.00	\$58.60
3	70	\$34.16	\$10.18	\$19.14	\$0.00	\$63.48
4	80	\$39.04	\$10.18	\$19.14	\$0.00	\$68.36
5	90	\$43.92	\$10.18	\$19.14	\$0.00	\$73.24

**Effective Date - 08/01/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.85	\$10.18	\$19.22	\$0.00	\$54.25
2	60	\$29.82	\$10.18	\$19.22	\$0.00	\$59.22
3	70	\$34.79	\$10.18	\$19.22	\$0.00	\$64.19
4	80	\$39.76	\$10.18	\$19.22	\$0.00	\$69.16
5	90	\$44.73	\$10.18	\$19.22	\$0.00	\$74.13

**Notes:**

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**Apprentice to Journeyworker Ratio:1:3**

<b>TEST BORING DRILLER</b> <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2015	\$36.70	\$7.45	\$13.75	\$0.00	\$57.90
	06/01/2016	\$37.45	\$7.45	\$13.75	\$0.00	\$58.65
	12/01/2016	\$38.45	\$7.45	\$13.75	\$0.00	\$59.65
For apprentice rates see "Apprentice- LABORER"						
<b>TEST BORING DRILLER HELPER</b> <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2015	\$35.42	\$7.45	\$13.75	\$0.00	\$56.62
	06/01/2016	\$36.17	\$7.45	\$13.75	\$0.00	\$57.37
	12/01/2016	\$37.17	\$7.45	\$13.75	\$0.00	\$58.37
For apprentice rates see "Apprentice- LABORER"						
<b>TEST BORING LABORER</b> <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2015	\$35.30	\$7.45	\$13.75	\$0.00	\$56.50
	06/01/2016	\$36.05	\$7.45	\$13.75	\$0.00	\$57.25
	12/01/2016	\$37.05	\$7.45	\$13.75	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
<b>TRACTORS/PORTABLE STEAM GENERATORS</b> <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.31	\$10.00	\$14.90	\$0.00	\$68.21
	06/01/2016	\$44.06	\$10.00	\$14.90	\$0.00	\$68.96
	12/01/2016	\$45.29	\$10.00	\$14.90	\$0.00	\$70.19
	06/01/2017	\$46.28	\$10.00	\$14.90	\$0.00	\$71.18
	12/01/2017	\$47.27	\$10.00	\$14.90	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
<b>TRAILERS FOR EARTH MOVING EQUIPMENT</b> <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2015	\$33.62	\$10.41	\$10.08	\$0.00	\$54.11
	06/01/2016	\$34.12	\$10.41	\$10.08	\$0.00	\$54.61
	08/01/2016	\$34.12	\$10.91	\$10.08	\$0.00	\$55.11
	12/01/2016	\$34.12	\$10.91	\$10.89	\$0.00	\$55.92

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	12/01/2015	\$47.58	\$7.45	\$14.15	\$0.00	\$69.18
	06/01/2016	\$48.33	\$7.45	\$14.15	\$0.00	\$69.93
	12/01/2016	\$49.33	\$7.45	\$14.15	\$0.00	\$70.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	12/01/2015	\$49.58	\$7.45	\$14.15	\$0.00	\$71.18
	06/01/2016	\$50.33	\$7.45	\$14.15	\$0.00	\$71.93
	12/01/2016	\$51.33	\$7.45	\$14.15	\$0.00	\$72.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2015	\$39.65	\$7.45	\$14.15	\$0.00	\$61.25
	06/01/2016	\$40.40	\$7.45	\$14.15	\$0.00	\$62.00
	12/01/2016	\$41.40	\$7.45	\$14.15	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2015	\$41.65	\$7.45	\$14.15	\$0.00	\$63.25
	06/01/2016	\$42.40	\$7.45	\$14.15	\$0.00	\$64.00
	12/01/2016	\$43.40	\$7.45	\$14.15	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
	12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34
WAGON DRILL OPERATOR <i>LABORERS - ZONE 1</i>	12/01/2015	\$35.60	\$7.45	\$13.55	\$0.00	\$56.60
	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2015	\$43.73	\$10.00	\$14.90	\$0.00	\$68.63
	06/01/2016	\$44.48	\$10.00	\$14.90	\$0.00	\$69.38
	12/01/2016	\$45.73	\$10.00	\$14.90	\$0.00	\$70.63
	06/01/2017	\$46.73	\$10.00	\$14.90	\$0.00	\$71.63
	12/01/2017	\$47.73	\$10.00	\$14.90	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS &amp; GASFITTERS LOCAL 12</i>	09/01/2015	\$50.46	\$10.82	\$15.14	\$0.00	\$76.42
	03/01/2016	\$51.61	\$10.82	\$15.14	\$0.00	\$77.57
	09/01/2016	\$52.66	\$10.82	\$15.14	\$0.00	\$78.62
	03/01/2017	\$53.66	\$10.82	\$15.14	\$0.00	\$79.62
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						
<b>Outside Electrical - East</b>						
CABLE TECHNICIAN (Power Zone) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$26.11	\$7.25	\$1.78	\$0.00	\$35.14
	08/28/2016	\$26.61	\$7.50	\$1.80	\$0.00	\$35.91
	09/03/2017	\$27.14	\$7.75	\$1.81	\$0.00	\$36.70
For apprentice rates see "Apprentice- LINEMAN"						
CABLEMAN (Underground Ducts & Cables) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$36.98	\$7.25	\$8.12	\$0.00	\$52.35
	08/28/2016	\$37.70	\$7.50	\$8.87	\$0.00	\$54.07
	09/03/2017	\$38.45	\$7.75	\$9.53	\$0.00	\$55.73
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN CDL <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$30.46	\$7.25	\$8.34	\$0.00	\$46.05
	08/28/2016	\$31.05	\$7.50	\$8.89	\$0.00	\$47.44
	09/03/2017	\$31.66	\$7.75	\$9.44	\$0.00	\$48.85
For apprentice rates see "Apprentice- LINEMAN"						

<b>Classification</b>	<b>Effective Date</b>	<b>Base Wage</b>	<b>Health</b>	<b>Pension</b>	<b>Supplemental Unemployment</b>	<b>Total Rate</b>
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$23.93	\$7.25	\$1.72	\$0.00	\$32.90
	08/28/2016	\$24.39	\$7.50	\$1.73	\$0.00	\$33.62
	09/03/2017	\$24.88	\$7.75	\$1.75	\$0.00	\$34.38
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class A CDL) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$36.98	\$7.25	\$12.29	\$0.00	\$56.52
	08/28/2016	\$37.70	\$7.50	\$12.95	\$0.00	\$58.15
	09/03/2017	\$38.45	\$7.75	\$13.61	\$0.00	\$59.81
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class B CDL) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$32.63	\$7.25	\$9.05	\$0.00	\$48.93
	08/28/2016	\$33.26	\$7.50	\$9.63	\$0.00	\$50.39
	09/03/2017	\$33.92	\$7.75	\$10.21	\$0.00	\$51.88
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$23.93	\$7.25	\$1.72	\$0.00	\$32.90
	08/28/2016	\$24.39	\$7.50	\$1.73	\$0.00	\$33.62
	09/03/2017	\$24.88	\$7.75	\$1.75	\$0.00	\$34.38
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN -Inexperienced (<2000 Hrs.) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$19.58	\$7.25	\$1.59	\$0.00	\$28.42
	08/28/2016	\$19.96	\$7.50	\$1.60	\$0.00	\$29.06
	09/03/2017	\$20.35	\$7.75	\$1.61	\$0.00	\$29.71
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	08/30/2015	\$43.51	\$7.25	\$15.06	\$0.00	\$65.82
	08/28/2016	\$44.35	\$7.50	\$15.83	\$0.00	\$67.68
	09/03/2017	\$45.23	\$7.75	\$16.61	\$0.00	\$69.59

**Classification**

**Effective Date   Base Wage   Health   Pension   Supplemental Unemployment   Total Rate**

**Apprentice - LINEMAN (Outside Electrical) - East Local 104**

**Effective Date - 08/30/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$26.11	\$7.25	\$3.28	\$0.00	\$36.64
2	65	\$28.28	\$7.25	\$3.35	\$0.00	\$38.88
3	70	\$30.46	\$7.25	\$3.41	\$0.00	\$41.12
4	75	\$32.63	\$7.25	\$4.98	\$0.00	\$44.86
5	80	\$34.81	\$7.25	\$5.04	\$0.00	\$47.10
6	85	\$36.98	\$7.25	\$5.11	\$0.00	\$49.34
7	90	\$39.16	\$7.25	\$7.17	\$0.00	\$53.58

**Effective Date - 08/28/2016**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$26.61	\$7.50	\$3.30	\$0.00	\$37.41
2	65	\$28.83	\$7.50	\$3.36	\$0.00	\$39.69
3	70	\$31.05	\$7.50	\$3.43	\$0.00	\$41.98
4	75	\$33.26	\$7.50	\$5.00	\$0.00	\$45.76
5	80	\$35.48	\$7.50	\$5.06	\$0.00	\$48.04
6	85	\$37.70	\$7.50	\$5.13	\$0.00	\$50.33
7	90	\$39.92	\$7.50	\$7.20	\$0.00	\$54.62

**Notes:**

**Apprentice to Journeyworker Ratio:1:2**

TELEDATA CABLE SPLICER  
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104      01/01/2016      \$28.98      \$4.25      \$3.12      \$0.00      \$36.35

TELEDATA LINEMAN/EQUIPMENT OPERATOR  
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104      01/01/2016      \$27.31      \$4.25      \$3.07      \$0.00      \$34.63

TELEDATA WIREMAN/INSTALLER/TECHNICIAN  
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104      01/01/2016      \$27.31      \$4.25      \$3.07      \$0.00      \$34.63

TREE TRIMMER  
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104      01/31/2016      \$18.51      \$3.55      \$0.00      \$0.00      \$22.06

This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is not on the ground. This classification does not apply to wholesale tree removal.

TREE TRIMMER GROUNDMAN  
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104      01/31/2016      \$16.32      \$3.55      \$0.00      \$0.00      \$19.87

This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is on the ground. This classification does not apply to wholesale tree removal.

Additional Apprentices Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentices ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

\*\* Multiple ratios are listed in the comment field.

\*\*\* APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

\*\*\*\* APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.