

# **INVITATION FOR BIDS**

**(IFB # 15-33)**

## **Marshall Street Park RENOVATIONS OF AN EXISTING PARK**

**Bid Opening: 11:30 AM, Wednesday, October 29, 2014**



**CITY OF SOMERVILLE, MASSACHUSETTS  
Joseph A. Curtatone, Mayor**

Purchasing Department  
Angela M. Allen, Purchasing Director

Luisa Oliveira  
Office Strategic Planning & Community Development.  
City of Somerville  
93 Highland Avenue  
Somerville, MA 02143  
PH: 617-625-6600 x2529  
FX: 617-625-0722

Marshall Street Park  
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## **Marshall Street Park – RENOVATION OF AN EXISTING PARK**

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**PART 1 SECTION 00020:  
CITY OF SOMERVILLE MASSACHUSETTS  
INVITATION TO BID  
MARSHALL STREET PARK – RENOVATION OF AN EXISTING PARK  
Bid No. 15-33**

**Enclosed you will find an invitation to bid for:**

**MARSHALL STREET PARK – RENOVATION OF AN EXISTING PARK**

**Marshall Street Park is located on Marshall Street at the corner of Mortimer Place in the Winter Hill neighborhood of Somerville, MA 02145.**

Plans and specifications will be available from 8:30 AM to 4:30 PM, Monday through Wednesday, 8:30 AM to 7:30 PM on Thursday, and 8:30 AM to 12:00 Noon, Fridays, at the Purchasing Department, 1<sup>st</sup> Floor, City Hall, 93 Highland Avenue, Somerville, MA 02143 from **Wednesday, October 15, 2014**. The bid specifications the technical specifications and drawings are included as part of this bid package. The Purchasing Department may furnish the bid documents in print form on 8.5"x11" paper upon request. .

When submitting bid, please identify the bid item and number clearly. All bids must be sealed and delivered to Purchasing Department, City of Somerville, 93 Highland Ave., Somerville, MA 02143, **no later than 11:30AM, on Wednesday, October 29, 2014**. Please mark the outside of all bid envelopes with the following: **"Bid #15-33, Marshall Street Park"** on the bid envelope.

**BIDS SUBMITTED MUST BE AN ORIGINAL.**

The completion of the following forms is necessary for consideration of a potential contract award. When submitting bid documents, please retain the order of documents as provided below:

- 1) Form for General Bid
- 2) Bid Form for Alternates
- 3) Unit Price Form
- 4) Somerville Living Wage Form
- 5) Acknowledgement of Notice to Bidders
- 6) Quality Requirements Form
- 7) Certificate of Non-Collusion & Tax Compliance
- 8) Certificate of Signature Authority
- 9) Signature Form complete when submitting your bid.
- 10) Reference Form
- 11) 5% Bid Deposit
- 12) Wages, Statement of Compliance Form

**NOTE:** If Vendor is incorporated an updated "CERTIFICATE OF GOOD STANDING" from the Commonwealth of Massachusetts will be needed for the awarded vendor only.

**CITY HALL HOURS HAVE BEEN CHANGED. WE ARE OPEN UNTIL 7:30 P.M. ON THURSDAYS AND CLOSE ON FRIDAYS AT 12:30 P.M.**

Please review and return with your sealed bids as sent. Also, ensure that all forms are completed and that your bid response is submitted as requested.

Your cooperation is greatly appreciated.

**PART 1, SECTION 2:**

**INSTRUCTIONS TO BIDDERS**

**(Chapter 30:39M or 30B:5 – Construction- Competitive Sealed Bids)**

**1. NAME OF PROJECT**

**Marshall Street Park – RENOVATION OF AN EXISTING PARK**

**2. AWARDING AUTHORITY**

The City of Somerville (City), acting by and through the Purchasing Department, invites sealed bids for the Marshall Street Park, in accordance with contract documents.

**OSPCD Contact:**

Luisa Oliveira  
Office of Strategic Planning & Community Development  
City of Somerville  
93 Highland Avenue  
Somerville, MA 02143  
Phone (617) 625-6600 x2529  
Fax: (617) 625-0722

**3. LANDSCAPE ARCHITECT:**

**Leonard Design Associates  
95 Ronald Road  
Arlington, MA 02474  
781-641-0750**

Contact: Andrew Leonard  
[aleonard@leonarddesign.info](mailto:aleonard@leonarddesign.info)

**4. LOCATION OF PROJECT**

Marshall Street at the Corner of Mortimer Place in the Winter Hill neighborhood of Somerville, MA 02145

**5. BRIEF DESCRIPTION OF WORK MORE PARTICULARLY DESCRIBED IN THE PLANS AND SPECIFICATIONS INCLUDED AS PART OF THIS BID PACKAGE.**

Marshall Street Park is a small playground and seating area (.24 acres) located at the corner of Marshall St and Mortimer Place in the Winter Hill neighborhood of Somerville, MA. Both streets are residential in character with limited parking. Work on this project is scheduled to begin on November 1, 2014 and be completed by early 2015. This project is funded through a grant with very tight end of year deadlines.

Construction documents for this project have been prepared by Leonard Design Associates who provide construction phase services in accordance with the contract documents. The City's Office of Strategic Planning and Community Development (OSPCD) is responsible for project management, and will also interact with the General Contractor during construction.

### Marshall Street Park

Marshall St Playground project is a renovation to an existing playground. The scope of work includes the rehabilitation of 3 play structures based on a Playground Inspection Report, repairs to fences, repair to an existing wall as well as resetting a granite curb and rehab and replacement of other minor items. New elements include the installation of poured in place rubber surfacing as well as bituminous concrete and new site furnishings. There is no subsurface water or electrical work.

Contractor will be responsible for providing as-built drawings and a maintenance manual at final completion. The City will not assume maintenance of Marshall Street Park until final completion and a park walk-through/review meeting with the Somerville Department of Public Works at which all systems and maintenance plans will be reviewed and approved by the Somerville Department of Public Works. After this approval, the contractor will submit the maintenance manual and as-built drawings to the City.

## **6. ESTIMATED CONSTRUCTION COST OF THE PROJECT**

The estimated cost for the project is \$ 210,000.00

## **7. PROJECT SCHEDULE:**

Estimated Construction Start: November 1, 2014

Date of Substantial Completion: December 31<sup>st</sup>, 2014

Date of Final Completion: January 15<sup>th</sup>, 2015

100% completion of all work.

Bidders are instructed to note the firmness of the dates of: Substantial Completion, and Final Completion. For the purpose of meeting these deadlines, the City may be prepared to authorize extended work hours beyond those prescribed by City ordinance, to include work on Sundays with the prior permission of the City.

Contractor submission of all paperwork required for the Construction Contract, including but not limited to insurance certificates, performance and payment bonds, a certificate of good standing from the Secretary of Corporations, and signature pages shall be submitted to the Purchasing Director no later than 5 working days from award of the contract.

The successful bidder shall be required to submit a preliminary construction schedule within 10 days of the established date of award of the Contract and a more detailed Gantt-type construction schedule within 15 days of the established award of the contract, which shows the dates of substantial and final completion.

As the work is scheduled to start November 1, 2014, the City is requesting that the Contractor be mobilized as soon as possible after the contract is awarded and any materials should be ordered as soon as possible, after contract execution, to prevent delays.

## **8. GOVERNING LAW**

Massachusetts General Laws, c. 30, §39M.

## **9. SALES TAX EXEMPTION**

Materials, equipment, and supplies for this project are exempt from sales tax in accordance with M.G.L. Chapter 64H, Section 6 (d). The city will furnish the successful bidder with its sales tax exemption number.

## **10. PERMIT FEES(Contractor responsible obtaining permits/City of Somerville permit fees waived)**

DPW permits to obstruct or excavate the public streets and/or sidewalks; ISD building code permits; and Traffic and Parking permits; are waived by the City of Somerville. However, license fees are not waived by the City of Somerville. The Contractor shall pay all license fees (e.g., drain layer's license fee). The City of Somerville Traffic and Parking Department must be contacted directly for all required permits.

If water usage is required in the commitment of this project, the Contractor needs to contact the DPW Water Dept., and make arrangements for a water meter. There will be a charge for the water meter and the water usage.

The Contractor is responsible for obtaining NSTAR work orders and for all costs and fees associated with NSTAR.

Permits to excavate the public way cannot be issued until the applicant has notified the appropriate utility companies, as required by Massachusetts General Laws, Chapter 370 of the Acts of 1963. The applicant must either: 1) obtain written receipts from the affected utilities, and provide copies of same to the owner; or 2) utilize the Dig-Safe System for the required

notifications, and also submit written notifications for those utilities not participating in the Dig-Safe System. Written notifications must state that utility companies have been notified and the contractor cleared to begin work.

The following utility companies must be notified in writing:

M.B.T.A. Engineering and Maintenance Division 617-722-5454  
Attn: Mr. William Bregoli, Chief Engineer  
500 Arborway  
Jamaica Plain, MA 02130

M.W.R.A. Sewer Division 617-242-6000  
100 First Avenue  
Charlestown Navy Yard  
Boston, MA 02129

M.W.R.A. Water Division 617-242-6000  
100 First Avenue  
Charlestown Navy Yard  
Boston, MA 02129

The following utility companies must be notified in writing or through Dig-Safe;

Algonquin Gas Transmission Corp. 617-254-4050  
Attn: Mr. James Grasso  
Manager of Land and Public Relations  
1284 Soldiers Field Road  
Brighton, MA 02135

Verizon 781-290-5154  
Attn: Mr. Jim Warren  
460 Totten Pond Road  
Waltham, MA 02154

Boston Edison 617-541-5730  
Attn: Mr. William Lemos  
Right of Way  
1165 Massachusetts Avenue  
Dorchester, MA 02125

Boston Gas Company 617-323-9210  
Attn: Mr. Dennis Peri  
201 Rivermoor Street  
West Roxbury, MA 02132

N-Star Electric 617-497-1236, x4195  
Attn: Mr. Wendell Berthelson  
46 Blackstone Street  
Somerville, MA 02139

N-Star Steam 617-225-4568  
Attn: Mr. Thomas Connelly  
Supervisor of Maintenance  
265 First Street  
Somerville, MA 02142

N-Star Gas 617-369-5591  
Attn: Mr. Steve Richmond  
303 Third Street  
Somerville, MA 02142

A T & T Broadband 981-658-0400, x2210  
Attn: Mr. Rich Ferrucci  
760 Main Street  
Malden, MA 01887

Somerville Public Works Department 617-625-6600, x5200  
One Franey Road  
Somerville, MA 02145

Somerville Fire Department 617-625-6600, x8100  
266 Broadway  
Somerville, MA 02143

Dig-Safe 1-800-322-4844

The contractor shall have all utilities marked out along the course of this work by such means as the Engineer shall approve and shall preserve such marked locations until the work has progressed to the point where the encountered utility is fully exposed and protected as required. It shall be the contractor's responsibility to notify utilities at least 48 hours prior to the start of any excavation.

The contractor is responsible for contacting any other utilities that are not listed herein.

#### **11. MINIMUM BID CRITERIA**

- All bidders must have been conducting business, in this specified field, for a minimum of five (5) years.
- All bidders must have successfully constructed a minimum of three (3) municipal park projects similar in magnitude within the last six (6) years.

#### **12. QUESTIONS AND INFORMATION**

Marshall Street Park  
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All questions regarding the project and this Invitation to Bid should be in writing, submitted to Michael Richards, Procurement Analyst, Purchasing Department, Somerville City Hall, First Floor, 93 Highland Avenue, Somerville, Massachusetts, 02143. Questions may be submitted either by mail or email to [mrichards@somervillema.gov](mailto:mrichards@somervillema.gov). Questions must be submitted in writing **by 12:30 pm, Wednesday, October 22, 2014**; they will be answered in writing (via addendum) to all holders of the bid proposals. Bidders must submit e-mail address (preferred) or a fax number with their inquiries. If any bidders contact any other person or department outside of Purchasing with inquiries, they may be disqualified from the bidding process.

### **Key Dates**

Deadline for Questions	12:30 PM	Wednesday, October 22, 2014
Proposals Due and Bids Opened	11:30 AM	Wednesday, October 29, 2014
Evaluation of Bid Documentation Begins		Wednesday, October 29, 2014
Anticipated Contract Award		Thursday, October 30, 2014
Anticipated Notice to Proceed		Friday, October 31, 2014
Commencement of Work		November 1, 2014

### **13. BID SUBMISSION TIME AND PLACE OF BID OPENING**

Sealed bids (clearly identified as a bid and endorsed with the name and address of the bidder) must be received at the Purchasing Department, First floor, City Hall, 93 Highland Avenue, Somerville, MA, 02143 on or before **11:30 AM, Wednesday, October 29, 2014**, at which time they will be publicly opened and read aloud. In the event City Hall is closed, the deadline shall be 11:30 a.m. on the next day City Hall is open for business.

**ADDITIONAL REQUIREMENTS: PLEASE READ CAREFULLY, FAILURE TO MEET THESE REQUIREMENTS COULD RESULT IN REJECTION OF A BID.**

## **14. BID SUBMISSION REQUIREMENTS**

### **Bid Signature**

A bid must be signed as follows: 1) if the bidder is an individual, by her/him personally; 2) if the bidder is a partnership, by the name of the partnership, followed by the signature of each general partner; and 3) if the bidder is a corporation, by the authorized officer, whose signature must be a person named on the Corporate Secretary's Certificate of Authority.

### **Changes and Addenda**

If any changes are made to this IFB, an addendum will be issued. Addenda will be emailed to all bidders on record as having picked up the IFB. No changes may be made to the bid documents, except as authorized in an addendum from the Purchasing Department.

### **Modification or Withdrawal of Bids, Mistakes, and Minor Informalities**

A bidder may correct, modify, or withdraw a bid by written notice received by the City of Somerville prior to the time and date set for the bid opening. Bid modifications must be submitted in a sealed envelope clearly labeled "Modification No.\_\_\_\_" to the address listed in part one of this section. Each modification must be numbered in sequence, and must reference the original IFB.

After the bid opening, a bidder may not change any provision of the bid in a manner prejudicial to the interests of the City or fair competition. Minor informalities will be waived or the bidder will be allowed to correct them. If a mistake and the intended correct bid are clearly evident on the face of the bid document, the mistake will be corrected to reflect the intended correct bid, and the bidder will be notified in writing; the bidder may not withdraw the bid. A bidder may withdraw a bid if a mistake is clearly evident on the face of the bid document, but the intended correct bid is not similarly evident.

### **Right to Cancel/Reject Bids**

The City of Somerville may cancel this IFB, or reject any and all bids, if the City determines that cancellation serves the best interests of the City; or that such rejection of bids is in the public interest.

### **Bid Prices to Remain Firm**

All bid prices submitted in response to this IFB must remain firm for 60 days following the bid opening.

### **Unbalanced Bids**

The City reserves the right to reject unbalanced, front loaded, and conditional bids.

### **Documents to be Submitted as part of Bid**

The following documents must be submitted with the complete signed bid package:

Form for General Bid (Section 00300)

Marshall Street Park  
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Bid Form for Alternates (Section 00310)

Unit Price Form (Section 00315)

Somerville Living Wage Form (Section 00320)

Acknowledgement of Notice to Bidders (Section 00330)

Quality Requirements Form (Section 00335)

Certificate of Non-Collusion and Tax Compliance (Section 00340)

Certificate of Signature Authority (Section 00350)

Signature Form (Section 00360)

Reference Form (Section 00370)

Bid bond (Section 00380)

Wage Compliance Form (Section 00385)

Schedule of Values. Bidders do NOT need to include a Schedule of Values with their bid package. The successful bidder will be required to submit a refined and detailed schedule of values for review and approval by the design professional prior to signing the construction contract.

5% Statutory Bid Guaranty. All bids shall be accompanied by a bid bond or bank certified check or bank treasurer's check in the amount of 5% of the bid price, which shall become the property of the City of Somerville if the bid is accepted and the bidder neglects or refuses to comply with the terms of the bid.

For successful bidder: Certificate of Good Standing: If the bidder is a corporation, a Certificate of Good Standing should accompany the signed contract. Certificate available online at: [http://corp.sec.state.ma.us/corp/Certificates/Certificate\\_Request.asp](http://corp.sec.state.ma.us/corp/Certificates/Certificate_Request.asp) or call Tel: (617) 727-9640 for more information.

## **15. PREVAILING and DAVIS BACON WAGE RATE REQUIREMENTS**

The contractor shall pay the greater of either Davis Bacon or Mass. Prevailing Wage Rates. The applicable prevailing and Davis Bacon wage rates are attached as part of this bid package and will be included as Appendix J in the contract. A signed Compliance Form must be included with the bid package, Form included.

- (a) The Contractor shall pay wages at no less than the greater of either Davis Bacon or Mass.

Prevailing Wage Rates set forth in Appendix J. Notwithstanding anything to the contrary, the City may, in its sole discretion withhold payment unless the City has in its possession payroll records that are complete, accurate, and current as of the date of said application for payment.

- (b) The Contractor shall:
  - (1) Pay wages at least once a week;
  - (2) Submit payroll information on a weekly basis in a format approved by the City, numbered in numerical sequence and signed by the Contractor (including forms for weeks when the Contractor is not on the Project Site, in which case there shall be a notation to the effect "no work this payroll period" and a date anticipated for resuming work).
- (c) The Contractor shall submit to the City within the first week of construction:
  - (1) A list of apprenticeship programs with which the Contractor is affiliated;
  - (2) The number of apprentices that will be employed by the Contractor on the Project;
  - (3) A list of the Contractor's employee fringe benefits;
  - (4) A copy of each project schedule, including the anticipated commencement date for each Subcontractor; and
  - (5) A list of each Subcontractor's suppliers and material men.
- (d) The Contractor shall include language similar to the above in all subcontracts.

## **16. SAMPLE CONSTRUCTION CONTRACT**

The successful bidder shall execute with the City of Somerville a Public Works Contract ("Contract") in substantially the same form as the sample contract included in this bid package. In addition to the items submitted with the bid, the contract includes certain other documents which may be executed by the Bidder selected as contractor and which are included as Appendices to the Sample Construction Contract (see Part 2) include:

Appendix F: Certificate of Authority (for corporations if the contract is signed by anyone other than the President, there must be a current Certificate of Vote signed by the corporate clerk or secretary stating who is authorized to sign contracts on the Corporations behalf)

Appendix D: Insurance Certificates— evidencing minimum coverage as follows:

General Liability - \$2,000,000 per occurrence, \$2,000,000 aggregate

Automobile Liability: \$1,000,000 per occurrence, \$1,000,000 aggregate

Workman's Compensation: statutory coverage

**Certificates must stipulate "City of Somerville" as a certificate holder and as an additional insured for general liability.**

Appendix F: Certificate of Good Standing: Certificate available online at [http://corp.sec.state.ma.us/corp/Certificates/Certificate\\_Request.asp](http://corp.sec.state.ma.us/corp/Certificates/Certificate_Request.asp) or call Tel: (617) 727-9640 for more information.

Appendix H: Statement of Management (for contracts over \$100,000.00)

Appendix I: Performance and Payment Bonds for 100% of the contract sum

All paperwork required for the contract shall be completed and delivered to the Purchasing Department no later than five (5) working days after the Award of the Contract.

#### **ITEMS OF SPECIAL CONSIDERATION**

The Contractor's attention is specifically drawn to the following items of special consideration relative to this project, most of which are also addressed in the Technical Specifications.

- a. The Contractor must provide police details at the Contractor's expense.
- b. All new Handicapped Accessible ramps must meet the most current state ADA and City of Somerville standards.
- c. The Contractor must obtain all street and sidewalk permits as necessary.

#### **19. RESERVATION OF RIGHTS**

The City reserves the right to extend the deadline for submission of bids, to waive minor informalities, and to reject any and all bids, if in its sole judgment, the best interests of the City of Somerville would be served by doing so.

#### **20. RULE FOR AWARD**

A contract will be awarded to the lowest responsible and eligible bidder. All required bid documents must be provided to be deemed responsible and eligible.

#### **21. MAINTENANCE MANUAL AND AS-BUILT DRAWING REQUIREMENTS**

Upon Final Completion of all park construction, the contractor shall submit: two complete copies of a park maintenance manual, and two copies of an as-built drawing set, with two compact disc (CD) copies of the as-built drawings.

The City will not issue the final check for park retainage until the submittal and approval of the maintenance manual and as-built drawings.

1) The Maintenance Manual shall be in the form of a three ring binder, organized and tabbed into appropriate sections, and shall include the following items:

- A complete landscape maintenance plan with recommended maintenance schedules and procedures for all park systems including: watering, fertilization, spring start up procedures, fall clean-up, irrigation and water systems shut-down procedures, and park winterization procedures;
- A letter from the contractor stating the period of warranty for all parts, materials, and workmanship, from the date of Final Completion;
- A letter from the contractor stating the period of warranty for the irrigation system;

- All product information, product directions, and warranties;
  - List of all plant material, and sizes of plant containers;
  - Copies of City permits with signatures of inspectors;
  - Contact information for all subcontractors including email addresses; and,
  - A record of all submittals and dates of approvals.
- 2) As-Built drawing shall be a complete and accurate record that incorporate any and all changes to the construction plan set issued at the time of contract initiation. As-built drawings shall be clearly marked and annotated and shall include but not be limited to: all field changes, change orders, and supplemental drawing provided by the landscape architect.
- 3) The Compact Discs shall include an electronic copy of all as-built drawings.

## **PART 1 SECTION 3**

# **Marshall Street Park**

**(IFB # 15-33)**

## **BID SUBMISSION DOCUMENTS**

**BIDDERS NAME:** \_\_\_\_\_

This Bid Submission includes the following:

- \_\_\_\_\_ Form for General Bid
- \_\_\_\_\_ Bid Form for Alternates
- \_\_\_\_\_ Unit Price Form
- \_\_\_\_\_ Somerville Living Wage Form
- \_\_\_\_\_ Acknowledgement of Notice to Bidders
- \_\_\_\_\_ Quality Requirements
- \_\_\_\_\_ Certificate of Non-Collusion and Tax Compliance
- \_\_\_\_\_ Certificate of Signature Authority
- \_\_\_\_\_ Signature Form
- \_\_\_\_\_ Reference Form
- \_\_\_\_\_ 5% Statutory Bid Bond or Guaranty
- \_\_\_\_\_ Wage Rate Compliance Forms

**Part 1 Section 00300: FORM FOR GENERAL BID  
FOR CONSTRUCTION CONTRACT**

To the Awarding Authority:

A. The undersigned proposes to furnish all labor and materials required for:

**Marshall Street Park**

in accordance with the accompanying plans and specifications prepared by

**Leonard Design Associates  
95 Ronald Road  
Arlington, MA 02474  
781-641-0750**

Contact: Andrew Leonard  
[aleonard@leonarddesign.info](mailto:aleonard@leonarddesign.info)

specified below, subject to additions and deductions according to the terms of the specifications.

B. This bid includes addenda #1\_\_\_\_\_, #2 \_\_\_\_\_, #3 \_\_\_\_\_, #4 \_\_\_\_\_.

C. The proposed contract price is:

\$\_\_\_\_\_.  
(total bid in figures)

\_\_\_\_\_ DOLLARS  
(total bid in words)

D. While the proposed contract price does not include the items listed on the attached "Bid Form for Alternates," the bidder understands that the project construction cost estimate provided by the city is inclusive of all the work described in this form.

E. The Undersigned Bidder agrees that, if it is selected as general contractor, it will within five working days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the Awarding Authority, execute a contract in accordance with the terms of this bid, including furnishing a 100% performance bond and a 100% labor and materials or payment bond, each of a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and

satisfactory to the Awarding Authority and each in the sum of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price; and, in addition, furnishing a certificate of good standing and insurance certificates as required by the bid documents.

- F. The Undersigned Bidder hereby certifies that it is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Project and that it will comply fully with all laws and regulations applicable to this Award, including applicable provisions of MGL Chapter 30, ss. 39M et seq.
- G. The Undersigned Bidder further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used 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.

H. The Undersigned Bidder certifies under the penalties of perjury that:

(1) Pursuant to M.G.L. c. 62C, §49A, to the best of the signatories knowledge and belief, that the Undersigned Bidder is in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support, as well as paid all contributions and payments in lieu of contributions pursuant to MGL 151A, §19A(b), and

(2) the Federal Employer Identification Number (EIN) of the Bidder is # \_\_\_\_\_, and that it is in compliance with all federal, state, and local laws regarding taxation.

- I. The Undersigned Bidder certifies under penalties of perjury that the Bidder is not presently debarred from doing federal or state public construction work, that the Bidder has not had its low bid rejected by any municipality in the previous two years, except

\_\_\_\_\_

in which case the reasons for rejection were as follows:

\_\_\_\_\_

J. The Undersigned Bidder has submitted the information on the Reference Form:

- (00370-1), requesting three references for municipal park projects completed during the previous six (6) years. The Undersigned Bidder understands that the contractor and subcontractors will be required to pay prevailing wages to laborers and mechanics, and that if the Undersigned's bid is significantly below the average bid, the Awarding Authority may require the Bidder to substantiate that the bid is based on payment of wages at prevailing rates.

M. The Undersigned Bidder certifies that it can achieve substantial completion by: \_\_\_\_\_ and achieve Final Completion by: \_\_\_\_\_.

N. Unit Price Form

1. Should certain additional work be required, or should the quantities of certain classes of work be increased or decreased from those required by the Contract Documents, by authorization of the City, unit prices listed on the attached "Unit Price Form" shall at the option of the City be the basis of payment to the Contractor or credit to the City, for such increase or decrease in the work. The unit prices shall represent the exact net amount per unit to be paid the Contractor (in the case of addition or increase) or to be refunded the City (in the case of decrease). Contractually noted adjustments will be allowed for overhead, profit, insurance or other direct or indirect expenses of the Contractor or Subcontractors.
2. The unit prices shall include cost of fuel, all labor, materials, equipment, overhead, profit, insurance, etc. to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the provisions of the General Conditions governing changes in the work.

Executed this \_\_\_\_ day of \_\_\_\_ 2014.

On behalf of :

\_\_\_\_\_  
(Undersigned Bidder Business Name)

\_\_\_\_\_  
\_\_\_\_\_  
(Business Address) and (Telephone)

By:

\_\_\_\_\_  
(Name and Address of Person Signing Bid)

\_\_\_\_\_  
(Title of Person Signing bid)



## **SOMERVILLE LIVING WAGE ORDINANCE CERTIFICATION FORM**

### **CITY OF SOMERVILLE CODE OF ORDINANCES SECTION 2-397 et seq<sup>1</sup>**

**Instructions:** This form shall be included in all Invitations for Bids and Requests for Proposals which involve the furnishing of labor, time or effort (with no end product other than reports) by vendors contracting or subcontracting with the City of Somerville, where the contract price meets or exceeds the following dollar threshold: \$10,000. If the undersigned is selected, this form will be attached to the contract or subcontract and the certifications made herein shall be incorporated as part of such contract or subcontract. **Complete this form and sign and date where indicated below on page 2.**

**Purpose:** The purpose of this form is to ensure that such vendors pay a “Living Wage” (defined below) to all covered employees (i.e., all employees except individuals in a city, state or federally funded youth program). In the case of bids, the City will award the contract to the lowest responsive and responsible bidder paying a Living Wage. In the case of RFP’s, the City will select the most advantageous proposal from a responsive and responsible offeror paying a Living Wage. In neither case, however, shall the City be under any obligation to select a bid or proposal that exceeds the funds available for the contract.

**Definition of “Living Wage”:** For this contract or subcontract, as of 7/1/2014 “Living Wage” shall be deemed to be an hourly wage of no less than \$12.05 per hour. From time to time, the Living Wage may be upwardly adjusted and amendments, if any, to the contract or subcontract may require the payment of a higher hourly rate if a higher rate is then in effect.

### **CERTIFICATIONS**

1. The undersigned shall pay no less than the Living Wage to all covered employees who directly expend their time on the contract or subcontract with the City of Somerville.
2. The undersigned shall post a notice, (copy enclosed), to be furnished by the contracting City Department, informing covered employees of the protections and obligations provided for in the Somerville Living Wage Ordinance, and that for assistance and information, including copies of the Ordinance, employees should contact the contracting City Department. Such notice shall be posted in each location where services are performed by covered employees, in a conspicuous place where notices to employees are customarily posted.
3. The undersigned shall maintain payrolls for all covered employees and basic records relating hereto and shall preserve them for a period of three years. The records shall contain the name and address of each employee, the number of hours worked, the gross wages, a copy of the social

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<sup>1</sup>Copies of the Ordinance are available upon request to the Purchasing Department.

security returns, and evidence of payment thereof and such other data as may be required by the contracting City Department from time to time.

4. The undersigned shall submit payroll records to the City upon request and, if the City receives information of possible noncompliance with the provisions the Somerville Living Wage Ordinance, the undersigned shall permit City representatives to observe work being performed at the work site, to interview employees, and to examine the books and records relating to the payrolls being investigated to determine payment of wages.

5. The undersigned shall not fund wage increases required by the Somerville Living Wage Ordinance by reducing the health insurance benefits of any of its employees.

6. The undersigned agrees that the penalties and relief set forth in the Somerville Living Wage Ordinance shall be in addition to the rights and remedies set forth in the contract and/or subcontract.

**CERTIFIED BY:**

**Signature:** \_\_\_\_\_  
(Duly Authorized Representative of Vendor)

**Title:** \_\_\_\_\_

**Name of Vendor:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**INSTRUCTIONS: PLEASE POST**

**NOTICE TO ALL EMPLOYEES  
REGARDING PAYMENT OF LIVING WAGE**

Under the Somerville, Massachusetts' Living Wage Ordinance (Ordinance No. 1999-1), any person or entity who has entered into a contract with the City of Somerville is required to pay its employees who are involved in providing services to the City of Somerville no less than a "Living Wage".

The Living Wage as of **7/1/2014** is **\$12.05** per hour. The only employees who are not covered by the Living Wage Ordinance are individuals in a Youth Program. "Youth Program" as defined in the Ordinance, "means any city, state or federally funded program which employs youth, as defined by city, state or federal guidelines, during the summer, or as part of a school to work program, or in any other related seasonal or part-time program."

For assistance and information regarding the protections and obligations provided for in the Living Wage Ordinance and/or a copy of the Living Wage Ordinance, all employees should contact the City of Somerville's Purchasing Department directly.

### Part 1 Section 3: BID SUBMISSION DOCUMENTS

#### NOTICE TO BIDDERS BID #15-33

All bids must be in accordance with terms and conditions set forth herein as stated.

- SECTION A. Sealed bids for: **Marshall Street Park**. The bids will be received at the office of the Purchasing Director, Somerville City Hall, 93 Highland Avenue, Somerville, MA. 02143 no later than **Wednesday, October 29, 2014 at 11:30 A.M.** at which time and place they will be publicly opened and read.
- SECTION B. Forms of price bid, specifications and terms of contract can be obtained at the Purchasing Department office on or after **Wednesday, October 15, 2014.**
- SECTION C. Bid envelopes shall be clearly marked as follows: **"Bid No: 15-33, Bid for Marshall Street Park"**.
- SECTION D. If **awarded** vendor is a Corporation, vendor must comply with request for "Certificate of Good Standing". See attached instructions.
- SECTION E. **INSURANCE: Awarded Vendor** must comply with insurance requirements as stated in the bid package.
- SECTION F. Living Wage - see Somerville Living Wage Form (00320)  
Davis Bacon and Prevailing Wage Rates – and Compliance Form
- SECTION G. The requirements in Section **E or F** will be waived if the words "Non-Applicable" (N/A) are inserted in the space designated.
- SECTION H. The copy of the bid deposited with the City will be accompanied by a bid guarantee in the amount of 5% of the proposed bid amount. A Bid bond, Certified Check, Treasurer's Check, or Cashier's Check made payable to the City must be submitted with each bid. Said bid guarantee will become the property of the City of Somerville if the proposal is accepted and the bidder either neglects or refuses to comply with the terms of the proposal. Bid guarantee will be returned within 30 days to all unsuccessful bidders.
- SECTION I. A Performance Bond and a Payment Bond in the amount of 100% of the total contract price will be required by the City.

**Part 1 Section 3: BID SUBMISSION DOCUMENTS**

- SECTION J. The Purchasing Director reserves the right to accept or reject any or all bids, to waive any minor informalities, if in her sole judgment, the best interest of the City of Somerville would be served by so doing.
- SECTION K. The City reserves the right to cancel a contract, if awarded bidder does not respond to all necessary documents and required signature forms within ten (10) working days of receipt of contract.
- SECTION L. The Vendor must certify that all employees to be provided have successfully completed at least ten (10) hours of OSHA approved training in Construction Safety and Health.

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

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

By: \_\_\_\_\_ Title: \_\_\_\_\_

Date: \_\_\_\_\_ Tel. No: \_\_\_\_\_ Fax: \_\_\_\_\_

Applicable to Corporations:

I hereby attest that the signatory to this bid has the authority to sign and submit bids for the Corporation.

ATTEST: \_\_\_\_\_  
Secretary

**Part 1, Section 3: BID SUBMISSION DOCUMENTS**

**QUALITY REQUIREMENTS**

Please respond to the following questions. A negative response to any of the first four questions will automatically disqualify the Bidder. A negative response to the fifth question about SOMWBA will not disqualify the Bidder.

	Yes	No
Has the contractor been established in this specified field for at least 5 years?		
Has the contractor successfully completed a minimum of three (3) similar Municipal Park projects within the past six (6) years?		
Has the Contractor included a Health and Safety Plan Form with their bid documents?		
Can the contractor certify that all employees to be provided, have successfully completed at least 10 hours of OSHA approved training in Construction Safety and Health?		
Optional: Vendor: Are you a State Office for Minority and Women Owned Business Assistance (SOMWBA) certified minority- or woman-owned business?		



## **Non-Collusion Form and Tax Compliance Certification**

**Instructions:** Complete each part of this two-part form and sign and date where indicated below.

### **A. NON-COLLUSION FORM**

I, the undersigned, hereby certify 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.

**Signature:** \_\_\_\_\_  
(Individual Submitted Bid or Proposal)  
Duly Authorized

**Name of Business or Entity:** \_\_\_\_\_

**Date:** \_\_\_\_\_

### **B. TAX COMPLIANCE CERTIFICATION**

Pursuant to M.G.L. c. 62C, §49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support, as well as paid all contributions and payments in lieu of contributions pursuant to MGL 151A, §19A(b).

**Signature:** \_\_\_\_\_  
(Duly Authorized Representative of Vendor)

**Name of Business or Entity:** \_\_\_\_\_

**Social Security Number or Federal Tax ID#:** \_\_\_\_\_

**Date:** \_\_\_\_\_



## **Certificate of Authority (Corporations Only)**

**Instructions:** Complete this form and sign and date where indicated below.

1. I hereby certify that I, the undersigned, am the duly elected Clerk/Secretary of

\_\_\_\_\_  
**(Insert Full Name of Corporation)**

2. I hereby certify that the following individual \_\_\_\_\_  
**(Insert the Name of Officer who Signed the Contract and Bonds)**

is the duly elected \_\_\_\_\_ of said Corporation.  
**(Insert the Title of the Officer in Line 2)**

3. I hereby certify that on \_\_\_\_\_  
**(Insert Date: Must be on or before Date Officer Signed Contract/Bonds)**

at a duly authorized meeting of the Board of Directors of said corporation, at which a quorum was present, it was voted that

\_\_\_\_\_  
**(Insert Name of Officer from Line 2) (Insert Title of Officer from Line 2)**

of this corporation be and hereby is authorized to make, enter into, execute, and deliver contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.

4. **ATTEST:**

**Signature:** \_\_\_\_\_  
**(Clerk or Secretary)**

**AFFIX CORPORATE SEAL HERE**

**Printed Name:** \_\_\_\_\_

**Printed Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_  
**(Date Must Be on or after Date Officer Signed Contract/Bonds)**



**Certificate of Authority  
(Limited Liability Companies Only)**

**Instructions:** Complete this form and sign and date where indicated below.

1. I, the undersigned, being a member or manager of

\_\_\_\_\_,  
(Complete Name of Limited Liability Company)

a limited liability company (LLC) hereby certify as to the contents of this form for the purpose of contracting with the City of Somerville.

2. The LLC is organized under the laws of the state of: \_\_\_\_\_.

3. The LLC is managed by (**check one**) a     Manager or by its     Members.

4. I hereby certify that each of the following individual(s) is:

- a member/manager of the LLC;
- duly authorized to execute and deliver this contract, agreement, and/or other legally binding documents relating to any contract and/or agreement on behalf of the LLC;
- duly authorized to do and perform all acts and things necessary or appropriate to carry out the terms of this contract or agreement on behalf of the LLC; and
- that no resolution, vote, or other document or action is necessary to establish such authority.

<u>Name</u>	<u>Title</u>

5. **Signature:**\_\_\_\_\_

**Printed Name:** \_\_\_\_\_

**Printed Title:**\_\_\_\_\_

**Date:** \_\_\_\_\_

**Part 1, Section 3: BID SUBMISSION DOCUMENTS**

**CITY OF SOMERVILLE**

**SIGNATURE FORM**

NAME OF COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE #: \_\_\_\_\_ FAX #: \_\_\_\_\_

DATE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

SIGNATURE OF AUTHORIZED CONTRACTING OFFICIAL:

\_\_\_\_\_

TITLE: \_\_\_\_\_

RESIDENCE: \_\_\_\_\_

IF COMPANY IS A PARTNERSHIP:

FULL NAME AND RESIDENCE OF EACH PARTNER:

\_\_\_\_\_

\_\_\_\_\_

IF COMPANY IS A CORPORATION:

THE CORPORATE NAME IS: \_\_\_\_\_

THE CORPORATION IS ORGANIZED UNDER THE LAWS OF: \_\_\_\_\_

THE PRESIDENT IS: \_\_\_\_\_

THE TREASURER IS: \_\_\_\_\_

THE CLERK/SECRETARY OR ASSISTANT CLERK/SECRETARY WHO WILL EXECUTE THE  
CONTRACT AND SIGN THE CERTIFICATE OF AUTHORITY IS:

\_\_\_\_\_

NAME OF CORPORATION THAT WILL APPEAR ON A POTENTIAL CONTRACTUAL  
AGREEMENT IF DIFFERENT FROM ABOVE: \_\_\_\_\_.

NAME AND TITLE OF PERSON WHO WILL BE THE PRINCIPAL SIGNATORY ON THE  
CONTRACT IF OTHER THAN THE PRESIDENT:

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

**Part 1, Section 3: BID SUBMISSION DOCUMENTS**

**REFERENCE FORM**

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

IFB Title: **IFB# 15-33- Marshall Street Park**

Bidder must provide references from three municipalities for similar municipal park projects completed during the previous six (6) years.

Reference: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

\_\_\_\_\_ Fax: \_\_\_\_\_

Description and date(s) of supplies or services provided: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Reference: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

\_\_\_\_\_ Fax: \_\_\_\_\_

Description and date(s) of supplies or services provided: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Reference: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

\_\_\_\_\_ Fax: \_\_\_\_\_

Description and date(s) of supplies or services provided: \_\_\_\_\_

\_\_\_\_\_

**BID BOND OR GUARANTY**

***BIDDER TO INSERT HERE***

**Prevailing Wage Rates**  
**Davis Bacon Wage Rates**  
**Payroll Submission Forms**

## WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

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

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

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

### STATEMENT OF COMPLIANCE

\_\_\_\_\_, 20\_\_\_\_

I, \_\_\_\_\_,  
(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by  
\_\_\_\_\_ on the \_\_\_\_\_

(Contractor, subcontractor or public body)

(Building or project)

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

Signature \_\_\_\_\_

Title \_\_\_\_\_

# MASSACHUSETTS WEEKLY CERTIFIED PAYROLL REPORT FORM



Company's Name:		Address:		Phone No.:		Payroll No.:														
Employer's Signature:		Title:		Contract No.:		Work Week Ending:														
Awarding Authority's Name:		Public Works Project Name:		Public Works Project Location:		Min. Wage Rate Sheet No.														
General / Prime Contractor's Name:		Subcontractor's Name:		"Employer" Hourly Fringe Benefit Contributions																
Employee Name & Complete Address	Employee is OSHA 10 Certified (?)	Work Classification	Appr. Rate (%)	Hours							Project Hours (A)	Hourly Base Wage (B)	Health & Welfare Insurance (C)	ERISA Pension Plan (D)	Supp. Unemp. (E)	Total Hourly Prev. Wage (F)	(A x F)		Check No. (H)	
				Su.	Mo.	Tu.	We.	Th.	Fr.	Sa.							All Other Hours	Total Gross Wages (G)		Project Gross Wages (H)
	<input type="checkbox"/>																			
	<input type="checkbox"/>																			
	<input type="checkbox"/>																			
	<input type="checkbox"/>																			
	<input type="checkbox"/>																			
	<input type="checkbox"/>																			
	<input type="checkbox"/>																			

**NOTE:** Pursuant to MGL Ch. 149 s.27B, every contractor and subcontractor is required to submit a "true and accurate" copy of their weekly payroll records directly to the awarding authority. Failure to comply may result in the commencement of a criminal action or the issuance of a civil citation.



DEVAL L. PATRICK  
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**

RACHEL KAPRIELIAN  
Secretary  
HEATHER E. ROWE  
Director

**Awarding Authority:** City of Somerville  
**Contract Number:** **City/Town:** SOMERVILLE  
**Description of Work:** Renovations of an existing park at Marshall Street in Somerville, MA 02145  
**Job Location:** Marshall Street Somerville, MA 02145

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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>	08/01/2014	\$32.40	\$9.91	\$8.80	\$0.00	\$51.11
	12/01/2014	\$32.40	\$9.91	\$9.33	\$0.00	\$51.64
	06/01/2015	\$32.75	\$9.91	\$9.33	\$0.00	\$51.99
	08/01/2015	\$32.75	\$10.41	\$9.33	\$0.00	\$52.49
	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>	08/01/2014	\$32.47	\$9.91	\$8.80	\$0.00	\$51.18
	12/01/2014	\$32.47	\$9.91	\$9.33	\$0.00	\$51.71
	06/01/2015	\$32.82	\$9.91	\$9.33	\$0.00	\$52.06
	08/01/2015	\$32.82	\$10.41	\$9.33	\$0.00	\$52.56
	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>	08/01/2014	\$32.59	\$9.91	\$8.80	\$0.00	\$51.30
	12/01/2014	\$32.59	\$9.91	\$9.33	\$0.00	\$51.83
	06/01/2015	\$32.94	\$9.91	\$9.33	\$0.00	\$52.18
	08/01/2015	\$32.94	\$10.41	\$9.33	\$0.00	\$52.68
	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>	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
AIR TRACK OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	12/01/2014	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	06/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	12/01/2015	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	06/01/2016	\$37.85	\$7.30	\$12.70	\$0.00	\$57.85
	12/01/2016	\$38.85	\$7.30	\$12.70	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. <i>HEAT &amp; FROST INSULATORS LOCAL 6 (BOSTON)</i>	06/01/2014	\$31.58	\$10.40	\$5.95	\$0.00	\$47.93
	12/01/2014	\$32.48	\$10.40	\$5.95	\$0.00	\$48.83
	06/01/2015	\$33.43	\$10.40	\$5.95	\$0.00	\$49.78
	12/01/2015	\$34.38	\$10.40	\$5.95	\$0.00	\$50.73
ASPHALT RAKER <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.49	\$10.00	\$14.20	\$0.00	\$65.69
	12/01/2014	\$42.49	\$10.00	\$14.20	\$0.00	\$66.69
	06/01/2015	\$43.24	\$10.00	\$14.20	\$0.00	\$67.44
	12/01/2015	\$44.49	\$10.00	\$14.20	\$0.00	\$68.69
	06/01/2016	\$45.24	\$10.00	\$14.20	\$0.00	\$69.44
	12/01/2016	\$46.49	\$10.00	\$14.20	\$0.00	\$70.69
	06/01/2017	\$47.49	\$10.00	\$14.20	\$0.00	\$71.69
	12/01/2017	\$48.49	\$10.00	\$14.20	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.49	\$10.00	\$14.20	\$0.00	\$65.69
	12/01/2014	\$42.49	\$10.00	\$14.20	\$0.00	\$66.69
	06/01/2015	\$43.24	\$10.00	\$14.20	\$0.00	\$67.44
	12/01/2015	\$44.49	\$10.00	\$14.20	\$0.00	\$68.69
	06/01/2016	\$45.24	\$10.00	\$14.20	\$0.00	\$69.44
	12/01/2016	\$46.49	\$10.00	\$14.20	\$0.00	\$70.69
	06/01/2017	\$47.49	\$10.00	\$14.20	\$0.00	\$71.69
	12/01/2017	\$48.49	\$10.00	\$14.20	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	12/01/2014	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	06/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	12/01/2015	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	06/01/2016	\$37.85	\$7.30	\$12.70	\$0.00	\$57.85
	12/01/2016	\$38.85	\$7.30	\$12.70	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	01/01/2010	\$37.70	\$6.97	\$11.18	\$0.00	\$55.85

**Apprentice - BOILERMAKER - Local 29****Effective Date -** 01/01/2010

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$24.51	\$6.97	\$11.18	\$0.00	\$42.66
2	65	\$24.51	\$6.97	\$11.18	\$0.00	\$42.66
3	70	\$26.39	\$6.97	\$11.18	\$0.00	\$44.54
4	75	\$28.28	\$6.97	\$11.18	\$0.00	\$46.43
5	80	\$30.16	\$6.97	\$11.18	\$0.00	\$48.31
6	85	\$32.05	\$6.97	\$11.18	\$0.00	\$50.20
7	90	\$33.93	\$6.97	\$11.18	\$0.00	\$52.08
8	95	\$35.82	\$6.97	\$11.18	\$0.00	\$53.97

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

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	08/01/2014	\$48.96	\$10.18	\$18.22	\$0.00	\$77.36
BRICKLAYERS LOCAL 3 (BOSTON)	02/01/2015	\$49.52	\$10.18	\$18.22	\$0.00	\$77.92
	08/01/2015	\$50.42	\$10.18	\$18.29	\$0.00	\$78.89
	02/01/2016	\$50.99	\$10.18	\$18.29	\$0.00	\$79.46
	08/01/2016	\$51.89	\$10.18	\$18.37	\$0.00	\$80.44
	02/01/2017	\$52.46	\$10.18	\$18.37	\$0.00	\$81.01

**Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Boston****Effective Date -** 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.48	\$10.18	\$18.22	\$0.00	\$52.88
2	60	\$29.38	\$10.18	\$18.22	\$0.00	\$57.78
3	70	\$34.27	\$10.18	\$18.22	\$0.00	\$62.67
4	80	\$39.17	\$10.18	\$18.22	\$0.00	\$67.57
5	90	\$44.06	\$10.18	\$18.22	\$0.00	\$72.46

**Effective Date -** 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.76	\$10.18	\$18.22	\$0.00	\$53.16
2	60	\$29.71	\$10.18	\$18.22	\$0.00	\$58.11
3	70	\$34.66	\$10.18	\$18.22	\$0.00	\$63.06
4	80	\$39.62	\$10.18	\$18.22	\$0.00	\$68.02
5	90	\$44.57	\$10.18	\$18.22	\$0.00	\$72.97

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BULLDOZER/GRADER/SCRAPER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
CAISSON & UNDERPINNING BOTTOM MAN <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2014	\$35.20	\$7.30	\$12.90	\$0.00	\$55.40
	12/01/2014	\$35.95	\$7.30	\$12.90	\$0.00	\$56.15
	06/01/2015	\$36.70	\$7.30	\$12.90	\$0.00	\$56.90
	12/01/2015	\$37.45	\$7.30	\$12.90	\$0.00	\$57.65
	06/01/2016	\$38.20	\$7.30	\$12.90	\$0.00	\$58.40
	12/01/2016	\$39.20	\$7.30	\$12.90	\$0.00	\$59.40
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2014	\$34.05	\$7.30	\$12.90	\$0.00	\$54.25
	12/01/2014	\$34.80	\$7.30	\$12.90	\$0.00	\$55.00
	06/01/2015	\$35.55	\$7.30	\$12.90	\$0.00	\$55.75
	12/01/2015	\$36.30	\$7.30	\$12.90	\$0.00	\$56.50
	06/01/2016	\$37.05	\$7.30	\$12.90	\$0.00	\$57.25
	12/01/2016	\$38.05	\$7.30	\$12.90	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2014	\$34.05	\$7.30	\$12.90	\$0.00	\$54.25
	12/01/2014	\$34.80	\$7.30	\$12.90	\$0.00	\$55.00
	06/01/2015	\$35.55	\$7.30	\$12.90	\$0.00	\$55.75
	12/01/2015	\$36.30	\$7.30	\$12.90	\$0.00	\$56.50
	06/01/2016	\$37.05	\$7.30	\$12.90	\$0.00	\$57.25
	12/01/2016	\$38.05	\$7.30	\$12.90	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
CARPENTER <i>CARPENTERS -ZONE 1 (Metro Boston)</i>	09/01/2014	\$41.65	\$9.80	\$16.11	\$0.00	\$67.56
	03/01/2015	\$42.67	\$9.80	\$16.11	\$0.00	\$68.58

**Apprentice - CARPENTER - Zone 1 Metro Boston****Effective Date - 09/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.83	\$9.80	\$1.57	\$0.00	\$32.20
2	60	\$24.99	\$9.80	\$1.57	\$0.00	\$36.36
3	70	\$29.16	\$9.80	\$11.40	\$0.00	\$50.36
4	75	\$31.24	\$9.80	\$11.40	\$0.00	\$52.44
5	80	\$33.32	\$9.80	\$12.97	\$0.00	\$56.09
6	80	\$33.32	\$9.80	\$12.97	\$0.00	\$56.09
7	90	\$37.49	\$9.80	\$14.54	\$0.00	\$61.83
8	90	\$37.49	\$9.80	\$14.54	\$0.00	\$61.83

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.34	\$9.80	\$1.57	\$0.00	\$32.71
2	60	\$25.60	\$9.80	\$1.57	\$0.00	\$36.97
3	70	\$29.87	\$9.80	\$11.40	\$0.00	\$51.07
4	75	\$32.00	\$9.80	\$11.40	\$0.00	\$53.20
5	80	\$34.14	\$9.80	\$12.97	\$0.00	\$56.91
6	80	\$34.14	\$9.80	\$12.97	\$0.00	\$56.91
7	90	\$38.40	\$9.80	\$14.54	\$0.00	\$62.74
8	90	\$38.40	\$9.80	\$14.54	\$0.00	\$62.74

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

CEMENT MASONRY/PLASTERING

BRICKLAYERS LOCAL 3 (BOSTON)

07/01/2014

\$43.77

\$10.90

\$18.71

\$1.30

\$74.68

01/01/2015

\$44.69

\$10.90

\$18.71

\$1.30

\$75.60

07/01/2015

\$45.29

\$10.90

\$18.71

\$1.30

\$76.20

01/01/2016

\$46.21

\$10.90

\$18.71

\$1.30

\$77.12

**Classification**

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

**Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (Boston)**
**Effective Date - 07/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.89	\$10.90	\$12.21	\$1.30	\$46.30
2	60	\$26.26	\$10.90	\$13.71	\$1.30	\$52.17
3	65	\$28.45	\$10.90	\$14.71	\$1.30	\$55.36
4	70	\$30.64	\$10.90	\$15.71	\$1.30	\$58.55
5	75	\$32.83	\$10.90	\$16.71	\$1.30	\$61.74
6	80	\$35.02	\$10.90	\$17.71	\$1.30	\$64.93
7	90	\$39.39	\$10.90	\$18.71	\$1.30	\$70.30

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.35	\$10.90	\$12.21	\$1.30	\$46.76
2	60	\$26.81	\$10.90	\$13.71	\$1.30	\$52.72
3	65	\$29.05	\$10.90	\$14.71	\$1.30	\$55.96
4	70	\$31.28	\$10.90	\$15.71	\$1.30	\$59.19
5	75	\$33.52	\$10.90	\$16.71	\$1.30	\$62.43
6	80	\$35.75	\$10.90	\$17.71	\$1.30	\$65.66
7	90	\$40.22	\$10.90	\$18.71	\$1.30	\$71.13

**Notes:**

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

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

CHAIN SAW OPERATOR	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
LABORERS - ZONE 1	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	06/01/2014	\$42.49	\$10.00	\$14.20	\$0.00	\$66.69
OPERATING ENGINEERS LOCAL 4	12/01/2014	\$43.49	\$10.00	\$14.20	\$0.00	\$67.69
	06/01/2015	\$44.24	\$10.00	\$14.20	\$0.00	\$68.44
	12/01/2015	\$45.49	\$10.00	\$14.20	\$0.00	\$69.69
	06/01/2016	\$46.24	\$10.00	\$14.20	\$0.00	\$70.44
	12/01/2016	\$47.49	\$10.00	\$14.20	\$0.00	\$71.69
	06/01/2017	\$48.49	\$10.00	\$14.20	\$0.00	\$72.69
	12/01/2017	\$49.49	\$10.00	\$14.20	\$0.00	\$73.69

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>	06/01/2014	\$28.80	\$10.00	\$14.20	\$0.00	\$53.00
	12/01/2014	\$29.50	\$10.00	\$14.20	\$0.00	\$53.70
	06/01/2015	\$30.02	\$10.00	\$14.20	\$0.00	\$54.22
	12/01/2015	\$30.89	\$10.00	\$14.20	\$0.00	\$55.09
	06/01/2016	\$31.41	\$10.00	\$14.20	\$0.00	\$55.61
	12/01/2016	\$32.28	\$10.00	\$14.20	\$0.00	\$56.48
	06/01/2017	\$32.97	\$10.00	\$14.20	\$0.00	\$57.17
	12/01/2017	\$33.66	\$10.00	\$14.20	\$0.00	\$57.86

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 1</i>	07/01/2014	\$46.76	\$7.85	\$16.10	\$0.00	\$70.71
	01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
	07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
	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 - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.38	\$7.85	\$0.00	\$0.00	\$31.23
2	55	\$25.72	\$7.85	\$3.66	\$0.00	\$37.23
3	60	\$28.06	\$7.85	\$3.99	\$0.00	\$39.90
4	65	\$30.39	\$7.85	\$4.32	\$0.00	\$42.56
5	70	\$32.73	\$7.85	\$14.11	\$0.00	\$54.69
6	75	\$35.07	\$7.85	\$14.44	\$0.00	\$57.36
7	80	\$37.41	\$7.85	\$14.77	\$0.00	\$60.03
8	90	\$42.08	\$7.85	\$15.44	\$0.00	\$65.37

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.83	\$7.85	\$0.00	\$0.00	\$31.68
2	55	\$26.21	\$7.85	\$3.66	\$0.00	\$37.72
3	60	\$28.60	\$7.85	\$3.99	\$0.00	\$40.44
4	65	\$30.98	\$7.85	\$4.32	\$0.00	\$43.15
5	70	\$33.36	\$7.85	\$14.11	\$0.00	\$55.32
6	75	\$35.75	\$7.85	\$14.44	\$0.00	\$58.04
7	80	\$38.13	\$7.85	\$14.77	\$0.00	\$60.75
8	90	\$42.89	\$7.85	\$15.44	\$0.00	\$66.18

#### Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: ADZEMAN <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.25	\$7.30	\$12.70	\$0.00	\$54.25
	12/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	06/01/2015	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	12/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: BACKHOE/LOADER/HAMMER OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$35.25	\$7.30	\$12.70	\$0.00	\$55.25
	12/01/2014	\$36.00	\$7.30	\$12.70	\$0.00	\$56.00
	06/01/2015	\$36.75	\$7.30	\$12.70	\$0.00	\$56.75
	12/01/2015	\$37.50	\$7.30	\$12.70	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS <i>LABORERS - ZONE 1</i>	06/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	12/01/2014	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	06/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50
	12/01/2015	\$37.25	\$7.30	\$12.70	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER <i>LABORERS - ZONE 1</i>	06/01/2014	\$35.25	\$7.30	\$12.70	\$0.00	\$55.25
	12/01/2014	\$36.00	\$7.30	\$12.70	\$0.00	\$56.00
	06/01/2015	\$36.75	\$7.30	\$12.70	\$0.00	\$56.75
	12/01/2015	\$37.50	\$7.30	\$12.70	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	12/01/2014	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	06/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50
	12/01/2015	\$37.25	\$7.30	\$12.70	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.25	\$7.30	\$12.70	\$0.00	\$54.25
	12/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	06/01/2015	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	12/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$58.24	\$9.80	\$18.17	\$0.00	\$86.21
	08/01/2015	\$60.34	\$9.80	\$18.17	\$0.00	\$88.31
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$62.40	\$9.80	\$18.17	\$0.00	\$90.37
	08/01/2015	\$64.65	\$9.80	\$18.17	\$0.00	\$92.62
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DRAWBRIDGE OPERATOR (Construction)	09/01/2014	\$44.79	\$13.00	\$15.04	\$0.00	\$72.83
<i>ELECTRICIANS LOCAL 103</i>	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54

For apprentice rates see "Apprentice- ELECTRICIAN"

ELECTRICIAN	09/01/2014	\$44.79	\$13.00	\$15.04	\$0.00	\$72.83
<i>ELECTRICIANS LOCAL 103</i>	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54

#### Apprentice - *ELECTRICIAN - Local 103*

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.92	\$13.00	\$0.54	\$0.00	\$31.46
2	40	\$17.92	\$13.00	\$0.54	\$0.00	\$31.46
3	45	\$20.16	\$13.00	\$11.33	\$0.00	\$44.49
4	45	\$20.16	\$13.00	\$11.33	\$0.00	\$44.49
5	50	\$22.40	\$13.00	\$11.67	\$0.00	\$47.07
6	55	\$24.63	\$13.00	\$12.01	\$0.00	\$49.64
7	60	\$26.87	\$13.00	\$12.35	\$0.00	\$52.22
8	65	\$29.11	\$13.00	\$12.68	\$0.00	\$54.79
9	70	\$31.35	\$13.00	\$13.02	\$0.00	\$57.37
10	75	\$33.59	\$13.00	\$13.36	\$0.00	\$59.95

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.07	\$13.00	\$0.54	\$0.00	\$31.61
2	40	\$18.07	\$13.00	\$0.54	\$0.00	\$31.61
3	45	\$20.33	\$13.00	\$11.63	\$0.00	\$44.96
4	45	\$20.33	\$13.00	\$11.63	\$0.00	\$44.96
5	50	\$22.59	\$13.00	\$11.97	\$0.00	\$47.56
6	55	\$24.84	\$13.00	\$12.32	\$0.00	\$50.16
7	60	\$27.10	\$13.00	\$12.66	\$0.00	\$52.76
8	65	\$29.36	\$13.00	\$13.00	\$0.00	\$55.36
9	70	\$31.62	\$13.00	\$13.34	\$0.00	\$57.96
10	75	\$33.88	\$13.00	\$13.69	\$0.00	\$60.57

Notes: :

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

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

ELEVATOR CONSTRUCTOR	01/01/2012	\$52.45	\$8.78	\$6.96	\$0.00	\$68.19
<i>ELEVATOR CONSTRUCTORS LOCAL 4</i>						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - ELEVATOR CONSTRUCTOR - Local 4**

**Effective Date - 01/01/2012**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.23	\$8.78	\$0.00	\$0.00	\$35.01
2	55	\$28.85	\$8.78	\$6.96	\$0.00	\$44.59
3	65	\$34.09	\$8.78	\$6.96	\$0.00	\$49.83
4	70	\$36.72	\$8.78	\$6.96	\$0.00	\$52.46
5	80	\$41.96	\$8.78	\$6.96	\$0.00	\$57.70

**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>	01/01/2012	\$38.59	\$8.78	\$6.96	\$0.00	\$54.33
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"						
FENCE & GUARD RAIL ERECTOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2014	\$38.87	\$10.00	\$14.18	\$0.00	\$63.05
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2014	\$40.29	\$10.00	\$14.18	\$0.00	\$64.47
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2014	\$20.92	\$10.00	\$14.18	\$0.00	\$45.10
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 103</i>	09/01/2014	\$44.79	\$13.00	\$15.04	\$0.00	\$72.83
	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE <i>LOCAL 103</i>	09/01/2014	\$33.59	\$13.00	\$13.36	\$0.00	\$59.95
/ COMMISSIONING <i>ELECTRICIANS</i>	03/01/2015	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58
	09/01/2015	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32
	03/01/2016	\$35.31	\$13.00	\$13.74	\$0.00	\$62.05
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$34.59	\$10.00	\$14.20	\$0.00	\$58.79
	12/01/2014	\$35.43	\$10.00	\$14.20	\$0.00	\$59.63
	06/01/2015	\$36.05	\$10.00	\$14.20	\$0.00	\$60.25
	12/01/2015	\$37.10	\$10.00	\$14.20	\$0.00	\$61.30
	06/01/2016	\$37.72	\$10.00	\$14.20	\$0.00	\$61.92
	12/01/2016	\$38.76	\$10.00	\$14.20	\$0.00	\$62.96
	06/01/2017	\$39.60	\$10.00	\$14.20	\$0.00	\$63.80
	12/01/2017	\$40.43	\$10.00	\$14.20	\$0.00	\$64.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER <i>LABORERS - ZONE I</i>	06/01/2014	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	12/01/2014	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	06/01/2015	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	12/01/2015	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	06/01/2016	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	12/01/2016	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE I</i>	09/01/2014	\$40.40	\$9.80	\$17.21	\$0.00	\$67.41

**Apprentice - FLOORCOVERER - Local 2168 Zone I**

**Effective Date - 09/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.20	\$9.80	\$1.79	\$0.00	\$31.79
2	55	\$22.22	\$9.80	\$1.79	\$0.00	\$33.81
3	60	\$24.24	\$9.80	\$11.84	\$0.00	\$45.88
4	65	\$26.26	\$9.80	\$11.84	\$0.00	\$47.90
5	70	\$28.28	\$9.80	\$13.63	\$0.00	\$51.71
6	75	\$30.30	\$9.80	\$13.63	\$0.00	\$53.73
7	80	\$32.32	\$9.80	\$15.42	\$0.00	\$57.54
8	85	\$34.34	\$9.80	\$15.42	\$0.00	\$59.56

**Notes:**

Steps are 750 hrs.

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

FORK LIFT/CHERRY PICKER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.49	\$10.00	\$14.20	\$0.00	\$65.69
	12/01/2014	\$42.49	\$10.00	\$14.20	\$0.00	\$66.69
	06/01/2015	\$43.24	\$10.00	\$14.20	\$0.00	\$67.44
	12/01/2015	\$44.49	\$10.00	\$14.20	\$0.00	\$68.69
	06/01/2016	\$45.24	\$10.00	\$14.20	\$0.00	\$69.44
	12/01/2016	\$46.49	\$10.00	\$14.20	\$0.00	\$70.69
	06/01/2017	\$47.49	\$10.00	\$14.20	\$0.00	\$71.69
	12/01/2017	\$48.49	\$10.00	\$14.20	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
GENERATOR/LIGHTING PLANT/HEATERS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$28.80	\$10.00	\$14.20	\$0.00	\$53.00
	12/01/2014	\$29.50	\$10.00	\$14.20	\$0.00	\$53.70
	06/01/2015	\$30.02	\$10.00	\$14.20	\$0.00	\$54.22
	12/01/2015	\$30.89	\$10.00	\$14.20	\$0.00	\$55.09
	06/01/2016	\$31.41	\$10.00	\$14.20	\$0.00	\$55.61
	12/01/2016	\$32.28	\$10.00	\$14.20	\$0.00	\$56.48
	06/01/2017	\$32.97	\$10.00	\$14.20	\$0.00	\$57.17
	12/01/2017	\$33.66	\$10.00	\$14.20	\$0.00	\$57.86

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) <i>GLAZIERS LOCAL 35 (ZONE 1)</i>	07/01/2014	\$42.05	\$7.85	\$16.10	\$0.00	\$66.00
	01/01/2015	\$42.95	\$7.85	\$16.10	\$0.00	\$66.90
	07/01/2015	\$43.85	\$7.85	\$16.10	\$0.00	\$67.80
	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 - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.03	\$7.85	\$0.00	\$0.00	\$28.88
2	55	\$23.13	\$7.85	\$3.66	\$0.00	\$34.64
3	60	\$25.23	\$7.85	\$3.99	\$0.00	\$37.07
4	65	\$27.33	\$7.85	\$4.32	\$0.00	\$39.50
5	70	\$29.44	\$7.85	\$14.11	\$0.00	\$51.40
6	75	\$31.54	\$7.85	\$14.44	\$0.00	\$53.83
7	80	\$33.64	\$7.85	\$14.77	\$0.00	\$56.26
8	90	\$37.85	\$7.85	\$15.44	\$0.00	\$61.14

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.48	\$7.85	\$0.00	\$0.00	\$29.33
2	55	\$23.62	\$7.85	\$3.66	\$0.00	\$35.13
3	60	\$25.77	\$7.85	\$3.99	\$0.00	\$37.61
4	65	\$27.92	\$7.85	\$4.32	\$0.00	\$40.09
5	70	\$30.07	\$7.85	\$14.11	\$0.00	\$52.03
6	75	\$32.21	\$7.85	\$14.44	\$0.00	\$54.50
7	80	\$34.36	\$7.85	\$14.77	\$0.00	\$56.98
8	90	\$38.66	\$7.85	\$15.44	\$0.00	\$61.95

#### 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>	06/01/2014	\$41.49	\$10.00	\$14.20	\$0.00	\$65.69
	12/01/2014	\$42.49	\$10.00	\$14.20	\$0.00	\$66.69
	06/01/2015	\$43.24	\$10.00	\$14.20	\$0.00	\$67.44
	12/01/2015	\$44.49	\$10.00	\$14.20	\$0.00	\$68.69
	06/01/2016	\$45.24	\$10.00	\$14.20	\$0.00	\$69.44
	12/01/2016	\$46.49	\$10.00	\$14.20	\$0.00	\$70.69
	06/01/2017	\$47.49	\$10.00	\$14.20	\$0.00	\$71.69
	12/01/2017	\$48.49	\$10.00	\$14.20	\$0.00	\$72.69

**Apprentice - OPERATING ENGINEERS - Local 4**

**Effective Date - 06/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$22.82	\$10.00	\$0.00	\$0.00	\$32.82
2	60	\$24.89	\$10.00	\$14.18	\$0.00	\$49.07
3	65	\$26.97	\$10.00	\$14.18	\$0.00	\$51.15
4	70	\$29.04	\$10.00	\$14.18	\$0.00	\$53.22
5	75	\$31.12	\$10.00	\$14.18	\$0.00	\$55.30
6	80	\$33.19	\$10.00	\$14.18	\$0.00	\$57.37
7	85	\$35.27	\$10.00	\$14.18	\$0.00	\$59.45
8	90	\$37.34	\$10.00	\$14.18	\$0.00	\$61.52

**Effective Date - 12/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$23.37	\$10.00	\$0.00	\$0.00	\$33.37
2	60	\$25.49	\$10.00	\$14.18	\$0.00	\$49.67
3	65	\$27.62	\$10.00	\$14.18	\$0.00	\$51.80
4	70	\$29.74	\$10.00	\$14.18	\$0.00	\$53.92
5	75	\$31.87	\$10.00	\$14.18	\$0.00	\$56.05
6	80	\$33.99	\$10.00	\$14.18	\$0.00	\$58.17
7	85	\$36.12	\$10.00	\$14.18	\$0.00	\$60.30
8	90	\$38.24	\$10.00	\$14.18	\$0.00	\$62.42

**Notes:**

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

HVAC (DUCTWORK) <i>SHEETMETAL WORKERS LOCAL 17 - A</i>	08/01/2014	\$42.79	\$9.82	\$20.54	\$2.19	\$75.34
	02/01/2015	\$43.69	\$9.82	\$20.54	\$2.19	\$76.24
	08/01/2015	\$44.69	\$9.82	\$20.54	\$2.19	\$77.24
	02/01/2016	\$45.69	\$9.82	\$20.54	\$2.19	\$78.24
	08/01/2016	\$46.84	\$9.82	\$20.54	\$2.19	\$79.39
	02/01/2017	\$47.94	\$9.82	\$20.54	\$2.19	\$80.49
	08/01/2017	\$49.04	\$9.82	\$20.54	\$2.19	\$81.59
	02/01/2018	\$50.19	\$9.82	\$20.54	\$2.19	\$82.74

For apprentice rates see "Apprentice- SHEET METAL WORKER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (ELECTRICAL CONTROLS) <i>ELECTRICIANS LOCAL 103</i>	09/01/2014	\$44.79	\$13.00	\$15.04	\$0.00	\$72.83
	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
HVAC (TESTING AND BALANCING - AIR) <i>SHEETMETAL WORKERS LOCAL 17 - A</i>	08/01/2014	\$42.79	\$9.82	\$20.54	\$2.19	\$75.34
	02/01/2015	\$43.69	\$9.82	\$20.54	\$2.19	\$76.24
	08/01/2015	\$44.69	\$9.82	\$20.54	\$2.19	\$77.24
	02/01/2016	\$45.69	\$9.82	\$20.54	\$2.19	\$78.24
	08/01/2016	\$46.84	\$9.82	\$20.54	\$2.19	\$79.39
	02/01/2017	\$47.94	\$9.82	\$20.54	\$2.19	\$80.49
	08/01/2017	\$49.04	\$9.82	\$20.54	\$2.19	\$81.59
	02/01/2018	\$50.19	\$9.82	\$20.54	\$2.19	\$82.74
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING - WATER) <i>PIPEFITTERS LOCAL 537</i>	09/01/2014	\$48.69	\$9.20	\$16.64	\$0.00	\$74.53
	03/01/2015	\$49.69	\$9.20	\$16.64	\$0.00	\$75.53
	09/01/2015	\$50.69	\$9.20	\$16.64	\$0.00	\$76.53
	03/01/2016	\$51.69	\$9.20	\$16.64	\$0.00	\$77.53
	09/01/2016	\$52.69	\$9.20	\$16.64	\$0.00	\$78.53
	03/01/2017	\$53.69	\$9.20	\$16.64	\$0.00	\$79.53
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC <i>PIPEFITTERS LOCAL 537</i>	09/01/2014	\$48.69	\$9.20	\$16.64	\$0.00	\$74.53
	03/01/2015	\$49.69	\$9.20	\$16.64	\$0.00	\$75.53
	09/01/2015	\$50.69	\$9.20	\$16.64	\$0.00	\$76.53
	03/01/2016	\$51.69	\$9.20	\$16.64	\$0.00	\$77.53
	09/01/2016	\$52.69	\$9.20	\$16.64	\$0.00	\$78.53
	03/01/2017	\$53.69	\$9.20	\$16.64	\$0.00	\$79.53
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	12/01/2014	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	06/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	12/01/2015	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	06/01/2016	\$37.85	\$7.30	\$12.70	\$0.00	\$57.85
	12/01/2016	\$38.85	\$7.30	\$12.70	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
INSULATOR (PIPES & TANKS) <i>HEAT &amp; FROST INSULATORS LOCAL 6 (BOSTON)</i>	09/01/2014	\$43.31	\$11.25	\$12.60	\$0.00	\$67.16

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Boston**

**Effective Date -** 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.66	\$11.25	\$9.35	\$0.00	\$42.26
2	60	\$25.99	\$11.25	\$10.00	\$0.00	\$47.24
3	70	\$30.32	\$11.25	\$10.65	\$0.00	\$52.22
4	80	\$34.65	\$11.25	\$11.30	\$0.00	\$57.20

**Notes:**

Steps are 1 year

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

IRONWORKER/WELDER	03/16/2014	\$41.19	\$7.70	\$19.25	\$0.00	\$68.14
<i>IRONWORKERS LOCAL 7 (BOSTON AREA)</i>						

**Apprentice - IRONWORKER - Local 7 Boston**

**Effective Date -** 03/16/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$24.71	\$7.70	\$19.25	\$0.00	\$51.66
2	70	\$28.83	\$7.70	\$19.25	\$0.00	\$55.78
3	75	\$30.89	\$7.70	\$19.25	\$0.00	\$57.84
4	80	\$32.95	\$7.70	\$19.25	\$0.00	\$59.90
5	85	\$35.01	\$7.70	\$19.25	\$0.00	\$61.96
6	90	\$37.07	\$7.70	\$19.25	\$0.00	\$64.02

**Notes:**

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

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

JACKHAMMER & PAVING BREAKER OPERATOR	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
<i>LABORERS - ZONE 1</i>						
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

LABORER	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
<i>LABORERS - ZONE 1</i>						
	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10

**Classification**
**Effective Date**
**Base Wage**
**Health**
**Pension**
**Supplemental  
Unemployment**
**Total Rate**
**Apprentice - LABORER - Zone 1**
**Effective Date - 06/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$20.46	\$7.30	\$12.70	\$0.00	\$40.46
2	70	\$23.87	\$7.30	\$12.70	\$0.00	\$43.87
3	80	\$27.28	\$7.30	\$12.70	\$0.00	\$47.28
4	90	\$30.69	\$7.30	\$12.70	\$0.00	\$50.69

**Effective Date - 12/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$20.91	\$7.30	\$12.70	\$0.00	\$40.91
2	70	\$24.40	\$7.30	\$12.70	\$0.00	\$44.40
3	80	\$27.88	\$7.30	\$12.70	\$0.00	\$47.88
4	90	\$31.37	\$7.30	\$12.70	\$0.00	\$51.37

**Notes:**
**Apprentice to Journeyworker Ratio:1:5**
**LABORER: CARPENTER TENDER**
*LABORERS - ZONE 1*

06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10

For apprentice rates see "Apprentice- LABORER"

**LABORER: CEMENT FINISHER TENDER**
*LABORERS - ZONE 1*

06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10

For apprentice rates see "Apprentice- LABORER"

**LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER**
*LABORERS - ZONE 1*

06/01/2014	\$34.25	\$7.30	\$12.70	\$0.00	\$54.25
12/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
06/01/2015	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
12/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50

For apprentice rates see "Apprentice- LABORER"

**LABORER: MASON TENDER**
*LABORERS - ZONE 1*

06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: MULTI-TRADE TENDER <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$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"						
LASER BEAM OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE &amp; TILE</i>	08/01/2014	\$37.37	\$10.18	\$16.90	\$0.00	\$64.45
	02/01/2015	\$37.82	\$10.18	\$16.90	\$0.00	\$64.90
	08/01/2015	\$38.53	\$10.18	\$16.97	\$0.00	\$65.68
	02/01/2016	\$38.98	\$10.18	\$16.97	\$0.00	\$66.13
	08/01/2016	\$39.68	\$10.18	\$17.05	\$0.00	\$66.91
	02/01/2017	\$40.14	\$10.18	\$17.05	\$0.00	\$67.37

**Classification**

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

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

**Effective Date - 08/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.69	\$10.18	\$16.90	\$0.00	\$45.77
2	60	\$22.42	\$10.18	\$16.90	\$0.00	\$49.50
3	70	\$26.16	\$10.18	\$16.90	\$0.00	\$53.24
4	80	\$29.90	\$10.18	\$16.90	\$0.00	\$56.98
5	90	\$33.63	\$10.18	\$16.90	\$0.00	\$60.71

**Effective Date - 02/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.91	\$10.18	\$16.90	\$0.00	\$45.99
2	60	\$22.69	\$10.18	\$16.90	\$0.00	\$49.77
3	70	\$26.47	\$10.18	\$16.90	\$0.00	\$53.55
4	80	\$30.26	\$10.18	\$16.90	\$0.00	\$57.34
5	90	\$34.04	\$10.18	\$16.90	\$0.00	\$61.12

**Notes:**

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

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	08/01/2014	\$49.00	\$10.18	\$18.22	\$0.00	\$77.40
BRICKLAYERS LOCAL 3 - MARBLE & TILE	02/01/2015	\$49.56	\$10.18	\$18.22	\$0.00	\$77.96
	08/01/2015	\$50.46	\$10.18	\$18.29	\$0.00	\$78.93
	02/01/2016	\$51.03	\$10.18	\$18.29	\$0.00	\$79.50
	08/01/2016	\$51.93	\$10.18	\$18.37	\$0.00	\$80.48
	02/01/2017	\$52.50	\$10.18	\$18.37	\$0.00	\$81.05

**Classification**

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

**Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile**
**Effective Date - 08/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.50	\$10.18	\$18.22	\$0.00	\$52.90
2	60	\$29.40	\$10.18	\$18.22	\$0.00	\$57.80
3	70	\$34.30	\$10.18	\$18.22	\$0.00	\$62.70
4	80	\$39.20	\$10.18	\$18.22	\$0.00	\$67.60
5	90	\$44.10	\$10.18	\$18.22	\$0.00	\$72.50

**Effective Date - 02/01/2015**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.78	\$10.18	\$18.22	\$0.00	\$53.18
2	60	\$29.74	\$10.18	\$18.22	\$0.00	\$58.14
3	70	\$34.69	\$10.18	\$18.22	\$0.00	\$63.09
4	80	\$39.65	\$10.18	\$18.22	\$0.00	\$68.05
5	90	\$44.60	\$10.18	\$18.22	\$0.00	\$73.00

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

MECH. SWEEPER OPERATOR (ON CONST. SITES)	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
OPERATING ENGINEERS LOCAL 4	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MECHANICS MAINTENANCE	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
OPERATING ENGINEERS LOCAL 4	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MILLWRIGHT (Zone 1)	10/01/2014	\$36.68	\$9.80	\$16.21	\$0.00	\$62.69
MILLWRIGHTS LOCAL 1121 - Zone 1	04/01/2015	\$37.64	\$9.80	\$16.21	\$0.00	\$63.65

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - MILLWRIGHT - Local 1121 Zone 1**

**Effective Date - 10/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.17	\$9.80	\$4.48	\$0.00	\$34.45
2	65	\$23.84	\$9.80	\$13.36	\$0.00	\$47.00
3	75	\$27.51	\$9.80	\$14.18	\$0.00	\$51.49
4	85	\$31.18	\$9.80	\$14.99	\$0.00	\$55.97

**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**

MORTAR MIXER	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
LABORERS - ZONE 1	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

OILER (OTHER THAN TRUCK CRANES,GRADALLS)	06/01/2014	\$21.48	\$10.00	\$14.20	\$0.00	\$45.68
OPERATING ENGINEERS LOCAL 4	12/01/2014	\$22.00	\$10.00	\$14.20	\$0.00	\$46.20
	06/01/2015	\$22.38	\$10.00	\$14.20	\$0.00	\$46.58
	12/01/2015	\$23.03	\$10.00	\$14.20	\$0.00	\$47.23
	06/01/2016	\$23.42	\$10.00	\$14.20	\$0.00	\$47.62
	12/01/2016	\$24.07	\$10.00	\$14.20	\$0.00	\$48.27
	06/01/2017	\$24.58	\$10.00	\$14.20	\$0.00	\$48.78
	12/01/2017	\$25.10	\$10.00	\$14.20	\$0.00	\$49.30

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OILER (TRUCK CRANES, GRADALLS)	06/01/2014	\$25.03	\$10.00	\$14.20	\$0.00	\$49.23
OPERATING ENGINEERS LOCAL 4	12/01/2014	\$25.64	\$10.00	\$14.20	\$0.00	\$49.84
	06/01/2015	\$26.09	\$10.00	\$14.20	\$0.00	\$50.29
	12/01/2015	\$26.84	\$10.00	\$14.20	\$0.00	\$51.04
	06/01/2016	\$27.30	\$10.00	\$14.20	\$0.00	\$51.50
	12/01/2016	\$28.05	\$10.00	\$14.20	\$0.00	\$52.25
	06/01/2017	\$28.65	\$10.00	\$14.20	\$0.00	\$52.85
	12/01/2017	\$29.26	\$10.00	\$14.20	\$0.00	\$53.46

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
OTHER POWER DRIVEN EQUIPMENT - CLASS II <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS) <i>PAINTERS LOCAL 35 - ZONE 1</i>	07/01/2014	\$46.76	\$7.85	\$16.10	\$0.00	\$70.71
	01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
	07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
	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 - 07/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.38	\$7.85	\$0.00	\$0.00	\$31.23
2	55	\$25.72	\$7.85	\$3.66	\$0.00	\$37.23
3	60	\$28.06	\$7.85	\$3.99	\$0.00	\$39.90
4	65	\$30.39	\$7.85	\$4.32	\$0.00	\$42.56
5	70	\$32.73	\$7.85	\$14.11	\$0.00	\$54.69
6	75	\$35.07	\$7.85	\$14.44	\$0.00	\$57.36
7	80	\$37.41	\$7.85	\$14.77	\$0.00	\$60.03
8	90	\$42.08	\$7.85	\$15.44	\$0.00	\$65.37

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.83	\$7.85	\$0.00	\$0.00	\$31.68
2	55	\$26.21	\$7.85	\$3.66	\$0.00	\$37.72
3	60	\$28.60	\$7.85	\$3.99	\$0.00	\$40.44
4	65	\$30.98	\$7.85	\$4.32	\$0.00	\$43.15
5	70	\$33.36	\$7.85	\$14.11	\$0.00	\$55.32
6	75	\$35.75	\$7.85	\$14.44	\$0.00	\$58.04
7	80	\$38.13	\$7.85	\$14.77	\$0.00	\$60.75
8	90	\$42.89	\$7.85	\$15.44	\$0.00	\$66.18

**Notes:**

Steps are 750 hrs.

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PAINTER (SPRAY OR SANDBLAST, NEW) *	07/01/2014	\$43.45	\$7.85	\$16.10	\$0.00	\$67.40
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. <i>PAINTERS LOCAL 35 - ZONE 1</i>	01/01/2015	\$44.35	\$7.85	\$16.10	\$0.00	\$68.30
	07/01/2015	\$45.25	\$7.85	\$16.10	\$0.00	\$69.20
	01/01/2016	\$46.20	\$7.85	\$16.10	\$0.00	\$70.15
	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 - 07/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.73	\$7.85	\$0.00	\$0.00	\$29.58
2	55	\$23.90	\$7.85	\$3.66	\$0.00	\$35.41
3	60	\$26.07	\$7.85	\$3.99	\$0.00	\$37.91
4	65	\$28.24	\$7.85	\$4.32	\$0.00	\$40.41
5	70	\$30.42	\$7.85	\$14.11	\$0.00	\$52.38
6	75	\$32.59	\$7.85	\$14.44	\$0.00	\$54.88
7	80	\$34.76	\$7.85	\$14.77	\$0.00	\$57.38
8	90	\$39.11	\$7.85	\$15.44	\$0.00	\$62.40

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.18	\$7.85	\$0.00	\$0.00	\$30.03
2	55	\$24.39	\$7.85	\$3.66	\$0.00	\$35.90
3	60	\$26.61	\$7.85	\$3.99	\$0.00	\$38.45
4	65	\$28.83	\$7.85	\$4.32	\$0.00	\$41.00
5	70	\$31.05	\$7.85	\$14.11	\$0.00	\$53.01
6	75	\$33.26	\$7.85	\$14.44	\$0.00	\$55.55
7	80	\$35.48	\$7.85	\$14.77	\$0.00	\$58.10
8	90	\$39.92	\$7.85	\$15.44	\$0.00	\$63.21

**Notes:**

Steps are 750 hrs.

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

PAINTER (SPRAY OR SANDBLAST, REPAINT)	07/01/2014	\$41.51	\$7.85	\$16.10	\$0.00	\$65.46
<i>PAINTERS LOCAL 35 - ZONE 1</i>	01/01/2015	\$42.41	\$7.85	\$16.10	\$0.00	\$66.36
	07/01/2015	\$43.31	\$7.85	\$16.10	\$0.00	\$67.26
	01/01/2016	\$44.26	\$7.85	\$16.10	\$0.00	\$68.21
	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 - 07/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.76	\$7.85	\$0.00	\$0.00	\$28.61
2	55	\$22.83	\$7.85	\$3.66	\$0.00	\$34.34
3	60	\$24.91	\$7.85	\$3.99	\$0.00	\$36.75
4	65	\$26.98	\$7.85	\$4.32	\$0.00	\$39.15
5	70	\$29.06	\$7.85	\$14.11	\$0.00	\$51.02
6	75	\$31.13	\$7.85	\$14.44	\$0.00	\$53.42
7	80	\$33.21	\$7.85	\$14.77	\$0.00	\$55.83
8	90	\$37.36	\$7.85	\$15.44	\$0.00	\$60.65

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.21	\$7.85	\$0.00	\$0.00	\$29.06
2	55	\$23.33	\$7.85	\$3.66	\$0.00	\$34.84
3	60	\$25.45	\$7.85	\$3.99	\$0.00	\$37.29
4	65	\$27.57	\$7.85	\$4.32	\$0.00	\$39.74
5	70	\$29.69	\$7.85	\$14.11	\$0.00	\$51.65
6	75	\$31.81	\$7.85	\$14.44	\$0.00	\$54.10
7	80	\$33.93	\$7.85	\$14.77	\$0.00	\$56.55
8	90	\$38.17	\$7.85	\$15.44	\$0.00	\$61.46

**Notes:**

Steps are 750 hrs.

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

PAINTER (TRAFFIC MARKINGS)	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
LABORERS - ZONE 1	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10

For Apprentice rates see "Apprentice- LABORER"

PAINTER / TAPER (BRUSH, NEW) *	07/01/2014	\$42.05	\$7.85	\$16.10	\$0.00	\$66.00
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 1	01/01/2015	\$42.95	\$7.85	\$16.10	\$0.00	\$66.90
	07/01/2015	\$43.85	\$7.85	\$16.10	\$0.00	\$67.80
	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 - PAINTER - Local 35 Zone 1 - BRUSH NEW****Effective Date - 07/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.03	\$7.85	\$0.00	\$0.00	\$28.88
2	55	\$23.13	\$7.85	\$3.66	\$0.00	\$34.64
3	60	\$25.23	\$7.85	\$3.99	\$0.00	\$37.07
4	65	\$27.33	\$7.85	\$4.32	\$0.00	\$39.50
5	70	\$29.44	\$7.85	\$14.11	\$0.00	\$51.40
6	75	\$31.54	\$7.85	\$14.44	\$0.00	\$53.83
7	80	\$33.64	\$7.85	\$14.77	\$0.00	\$56.26
8	90	\$37.85	\$7.85	\$15.44	\$0.00	\$61.14

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.48	\$7.85	\$0.00	\$0.00	\$29.33
2	55	\$23.62	\$7.85	\$3.66	\$0.00	\$35.13
3	60	\$25.77	\$7.85	\$3.99	\$0.00	\$37.61
4	65	\$27.92	\$7.85	\$4.32	\$0.00	\$40.09
5	70	\$30.07	\$7.85	\$14.11	\$0.00	\$52.03
6	75	\$32.21	\$7.85	\$14.44	\$0.00	\$54.50
7	80	\$34.36	\$7.85	\$14.77	\$0.00	\$56.98
8	90	\$38.66	\$7.85	\$15.44	\$0.00	\$61.95

**Notes:**

Steps are 750 hrs.

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

PAINTER / TAPER (BRUSH, REPAINT)

PAINTERS LOCAL 35 - ZONE 1

07/01/2014	\$40.11	\$7.85	\$16.10	\$0.00	\$64.06
01/01/2015	\$41.01	\$7.85	\$16.10	\$0.00	\$64.96
07/01/2015	\$41.91	\$7.85	\$16.10	\$0.00	\$65.86
01/01/2016	\$42.86	\$7.85	\$16.10	\$0.00	\$66.81
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

**Classification**

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

**Apprentice - PAINTER Local 35 Zone 1 - BRUSH REPAINT**
**Effective Date - 07/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.06	\$7.85	\$0.00	\$0.00	\$27.91
2	55	\$22.06	\$7.85	\$3.66	\$0.00	\$33.57
3	60	\$24.07	\$7.85	\$3.99	\$0.00	\$35.91
4	65	\$26.07	\$7.85	\$4.32	\$0.00	\$38.24
5	70	\$28.08	\$7.85	\$14.11	\$0.00	\$50.04
6	75	\$30.08	\$7.85	\$14.44	\$0.00	\$52.37
7	80	\$32.09	\$7.85	\$14.77	\$0.00	\$54.71
8	90	\$36.10	\$7.85	\$15.44	\$0.00	\$59.39

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.51	\$7.85	\$0.00	\$0.00	\$28.36
2	55	\$22.56	\$7.85	\$3.66	\$0.00	\$34.07
3	60	\$24.61	\$7.85	\$3.99	\$0.00	\$36.45
4	65	\$26.66	\$7.85	\$4.32	\$0.00	\$38.83
5	70	\$28.71	\$7.85	\$14.11	\$0.00	\$50.67
6	75	\$30.76	\$7.85	\$14.44	\$0.00	\$53.05
7	80	\$32.81	\$7.85	\$14.77	\$0.00	\$55.43
8	90	\$36.91	\$7.85	\$15.44	\$0.00	\$60.20

**Notes:**

Steps are 750 hrs.

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

PANEL & PICKUP TRUCKS DRIVER	08/01/2014	\$32.23	\$9.91	\$8.80	\$0.00	\$50.94
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2014	\$32.23	\$9.91	\$9.33	\$0.00	\$51.47
	06/01/2015	\$32.58	\$9.91	\$9.33	\$0.00	\$51.82
	08/01/2015	\$32.58	\$10.41	\$9.33	\$0.00	\$52.32
	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)	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
PILE DRIVER	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07

**Classification**
**Effective Date**
**Base Wage**
**Health**
**Pension**
**Supplemental  
Unemployment**
**Total Rate**
**Apprentice - PILE DRIVER - Local 56 Zone 1**
**Effective Date - 08/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.80	\$9.80	\$18.17	\$0.00	\$48.77
2	60	\$24.96	\$9.80	\$18.17	\$0.00	\$52.93
3	70	\$29.12	\$9.80	\$18.17	\$0.00	\$57.09
4	75	\$31.20	\$9.80	\$18.17	\$0.00	\$59.17
5	80	\$33.28	\$9.80	\$18.17	\$0.00	\$61.25
6	80	\$33.28	\$9.80	\$18.17	\$0.00	\$61.25
7	90	\$37.44	\$9.80	\$18.17	\$0.00	\$65.41
8	90	\$37.44	\$9.80	\$18.17	\$0.00	\$65.41

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.55	\$9.80	\$18.17	\$0.00	\$49.52
2	60	\$25.86	\$9.80	\$18.17	\$0.00	\$53.83
3	70	\$30.17	\$9.80	\$18.17	\$0.00	\$58.14
4	75	\$32.33	\$9.80	\$18.17	\$0.00	\$60.30
5	80	\$34.48	\$9.80	\$18.17	\$0.00	\$62.45
6	80	\$34.48	\$9.80	\$18.17	\$0.00	\$62.45
7	90	\$38.79	\$9.80	\$18.17	\$0.00	\$66.76
8	90	\$38.79	\$9.80	\$18.17	\$0.00	\$66.76

**Notes:**
**Apprentice to Journeyworker Ratio:1:3**
**PIPEFITTER & STEAMFITTER**
*PIPEFITTERS LOCAL 537*

09/01/2014	\$48.69	\$9.20	\$16.64	\$0.00	\$74.53
03/01/2015	\$49.69	\$9.20	\$16.64	\$0.00	\$75.53
09/01/2015	\$50.69	\$9.20	\$16.64	\$0.00	\$76.53
03/01/2016	\$51.69	\$9.20	\$16.64	\$0.00	\$77.53
09/01/2016	\$52.69	\$9.20	\$16.64	\$0.00	\$78.53
03/01/2017	\$53.69	\$9.20	\$16.64	\$0.00	\$79.53

**Classification**
**Effective Date**
**Base Wage**
**Health**
**Pension**
**Supplemental  
Unemployment**
**Total Rate**
**Apprentice - PIPEFITTER - Local 537**
**Effective Date - 09/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.48	\$9.20	\$7.50	\$0.00	\$36.18
2	45	\$21.91	\$9.20	\$16.64	\$0.00	\$47.75
3	60	\$29.21	\$9.20	\$16.64	\$0.00	\$55.05
4	70	\$34.08	\$9.20	\$16.64	\$0.00	\$59.92
5	80	\$38.95	\$9.20	\$16.64	\$0.00	\$64.79

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.88	\$9.20	\$7.50	\$0.00	\$36.58
2	45	\$22.36	\$9.20	\$16.64	\$0.00	\$48.20
3	60	\$29.81	\$9.20	\$16.64	\$0.00	\$55.65
4	70	\$34.78	\$9.20	\$16.64	\$0.00	\$60.62
5	80	\$39.75	\$9.20	\$16.64	\$0.00	\$65.59

**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:\*\***

PIPELAYER	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
LABORERS - ZONE 1	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
PLUMBERS & GASFITTERS	09/01/2014	\$49.66	\$10.32	\$14.54	\$0.00	\$74.52
PLUMBERS & GASFITTERS LOCAL 12	03/01/2015	\$50.66	\$10.32	\$14.54	\$0.00	\$75.52
	09/01/2015	\$51.66	\$10.32	\$14.54	\$0.00	\$76.52
	03/01/2016	\$52.81	\$10.32	\$14.54	\$0.00	\$77.67
	09/01/2016	\$53.86	\$10.32	\$14.54	\$0.00	\$78.72
	03/01/2017	\$54.86	\$10.32	\$14.54	\$0.00	\$79.72

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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**Apprentice - PLUMBER/GASFITTER - Local 12**

**Effective Date - 09/01/2014**

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.38	\$10.32	\$5.42	\$0.00	\$33.12
2	40	\$19.86	\$10.32	\$6.13	\$0.00	\$36.31
3	55	\$27.31	\$10.32	\$8.23	\$0.00	\$45.86
4	65	\$32.28	\$10.32	\$9.64	\$0.00	\$52.24
5	75	\$37.25	\$10.32	\$11.04	\$0.00	\$58.61

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.73	\$10.32	\$5.42	\$0.00	\$33.47
2	40	\$20.26	\$10.32	\$6.11	\$0.00	\$36.69
3	55	\$27.86	\$10.32	\$8.22	\$0.00	\$46.40
4	65	\$32.93	\$10.32	\$9.62	\$0.00	\$52.87
5	75	\$38.00	\$10.32	\$11.03	\$0.00	\$59.35

**Notes:**

\*\* 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr  
Step4 with lic\$55.42 Step5 with lic\$61.79

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

PNEUMATIC CONTROLS (TEMP.)	09/01/2014	\$48.69	\$9.20	\$16.64	\$0.00	\$74.53
PIPEFITTERS LOCAL 537	03/01/2015	\$49.69	\$9.20	\$16.64	\$0.00	\$75.53
	09/01/2015	\$50.69	\$9.20	\$16.64	\$0.00	\$76.53
	03/01/2016	\$51.69	\$9.20	\$16.64	\$0.00	\$77.53
	09/01/2016	\$52.69	\$9.20	\$16.64	\$0.00	\$78.53
	03/01/2017	\$53.69	\$9.20	\$16.64	\$0.00	\$79.53
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
PNEUMATIC DRILL/TOOL OPERATOR	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
LABORERS - ZONE 1	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
POWDERMAN & BLASTER	06/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
LABORERS - ZONE 1	12/01/2014	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	06/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	12/01/2015	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	06/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10
	12/01/2016	\$39.10	\$7.30	\$12.70	\$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>	06/01/2014	\$41.49	\$10.00	\$14.20	\$0.00	\$65.69
	12/01/2014	\$42.49	\$10.00	\$14.20	\$0.00	\$66.69
	06/01/2015	\$43.24	\$10.00	\$14.20	\$0.00	\$67.44
	12/01/2015	\$44.49	\$10.00	\$14.20	\$0.00	\$68.69
	06/01/2016	\$45.24	\$10.00	\$14.20	\$0.00	\$69.44
	12/01/2016	\$46.49	\$10.00	\$14.20	\$0.00	\$70.69
	06/01/2017	\$47.49	\$10.00	\$14.20	\$0.00	\$71.69
	12/01/2017	\$48.49	\$10.00	\$14.20	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.49	\$10.00	\$14.20	\$0.00	\$65.69
	12/01/2014	\$42.49	\$10.00	\$14.20	\$0.00	\$66.69
	06/01/2015	\$43.24	\$10.00	\$14.20	\$0.00	\$67.44
	12/01/2015	\$44.49	\$10.00	\$14.20	\$0.00	\$68.69
	06/01/2016	\$45.24	\$10.00	\$14.20	\$0.00	\$69.44
	12/01/2016	\$46.49	\$10.00	\$14.20	\$0.00	\$70.69
	06/01/2017	\$47.49	\$10.00	\$14.20	\$0.00	\$71.69
	12/01/2017	\$48.49	\$10.00	\$14.20	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$28.80	\$10.00	\$14.20	\$0.00	\$53.00
	12/01/2014	\$29.50	\$10.00	\$14.20	\$0.00	\$53.70
	06/01/2015	\$30.02	\$10.00	\$14.20	\$0.00	\$54.22
	12/01/2015	\$30.89	\$10.00	\$14.20	\$0.00	\$55.09
	06/01/2016	\$31.41	\$10.00	\$14.20	\$0.00	\$55.61
	12/01/2016	\$32.28	\$10.00	\$14.20	\$0.00	\$56.48
	06/01/2017	\$32.97	\$10.00	\$14.20	\$0.00	\$57.17
	12/01/2017	\$33.66	\$10.00	\$14.20	\$0.00	\$57.86
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY MIX CONCRETE DRIVERS after 4/30/10 (Drivers Hired After 4/30/2010) <i>TEAMSTERS LOCAL 25a</i>	07/01/2014	\$27.73	\$7.73	\$8.65	\$0.00	\$44.11
	05/01/2015	\$27.88	\$7.73	\$8.92	\$0.00	\$44.53
	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 25a</i>	07/01/2014	\$30.99	\$7.73	\$8.65	\$0.00	\$47.37
	05/01/2015	\$31.14	\$7.73	\$8.92	\$0.00	\$47.79
	07/01/2015	\$31.14	\$7.98	\$8.92	\$0.00	\$48.04
	05/01/2016	\$31.29	\$7.98	\$9.31	\$0.00	\$48.58
	07/01/2016	\$31.29	\$8.23	\$9.31	\$0.00	\$48.83
	05/01/2017	\$31.44	\$8.23	\$9.72	\$0.00	\$49.39
	07/01/2017	\$31.44	\$8.48	\$9.72	\$0.00	\$49.64

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
RECLAIMERS	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
OPERATING ENGINEERS LOCAL 4	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

RESIDENTIAL WOOD FRAME (All Other Work)	04/01/2011	\$37.25	\$8.67	\$15.51	\$0.00	\$61.43
CARPENTERS -ZONE 1 (Residential Wood)						

RESIDENTIAL WOOD FRAME CARPENTER **	05/01/2011	\$27.49	\$6.34	\$6.23	\$0.00	\$40.06
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\*\* 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. CARPENTERS -ZONE 1 (Residential Wood)

As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.

#### Apprentice - CARPENTER (Residential Wood Frame) - Zone 1

Effective Date - 05/01/2011

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$16.49	\$6.34	\$0.00	\$0.00	\$22.83
2	60	\$16.49	\$6.34	\$6.23	\$0.00	\$29.06
3	65	\$17.87	\$6.34	\$6.23	\$0.00	\$30.44
4	70	\$19.24	\$6.34	\$6.23	\$0.00	\$31.81
5	75	\$20.62	\$6.34	\$6.23	\$0.00	\$33.19
6	80	\$21.99	\$6.34	\$6.23	\$0.00	\$34.56
7	85	\$23.37	\$6.34	\$6.23	\$0.00	\$35.94
8	90	\$24.74	\$6.34	\$6.23	\$0.00	\$37.31

Notes:

Apprentice to Journeyworker Ratio:1:5

RIDE-ON MOTORIZED BUGGY OPERATOR	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
LABORERS - ZONE 1	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Inc.Roofing Waterproofing &Roofing Damproofg) <i>ROOFERS LOCAL 33</i>	08/01/2014	\$39.21	\$10.50	\$11.60	\$0.00	\$61.31
	02/01/2015	\$40.11	\$10.50	\$11.60	\$0.00	\$62.21
	08/01/2015	\$41.01	\$10.50	\$11.60	\$0.00	\$63.11
	02/01/2016	\$41.91	\$10.50	\$11.60	\$0.00	\$64.01

#### Apprentice - ROOFER - Local 33

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.61	\$10.50	\$3.38	\$0.00	\$33.49
2	60	\$23.53	\$10.50	\$11.60	\$0.00	\$45.63
3	65	\$25.49	\$10.50	\$11.60	\$0.00	\$47.59
4	75	\$29.41	\$10.50	\$11.60	\$0.00	\$51.51
5	85	\$33.33	\$10.50	\$11.60	\$0.00	\$55.43

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.06	\$10.50	\$3.38	\$0.00	\$33.94
2	60	\$24.07	\$10.50	\$11.60	\$0.00	\$46.17
3	65	\$26.07	\$10.50	\$11.60	\$0.00	\$48.17
4	75	\$30.08	\$10.50	\$11.60	\$0.00	\$52.18
5	85	\$34.09	\$10.50	\$11.60	\$0.00	\$56.19

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>	08/01/2014	\$39.46	\$10.50	\$11.60	\$0.00	\$61.56
	02/01/2015	\$40.36	\$10.50	\$11.60	\$0.00	\$62.46
	08/01/2015	\$41.26	\$10.50	\$11.60	\$0.00	\$63.36
	02/01/2016	\$42.16	\$10.50	\$11.60	\$0.00	\$64.26

For apprentice rates see "Apprentice- ROOFER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SHEETMETAL WORKER	08/01/2014	\$42.79	\$9.82	\$20.54	\$2.19	\$75.34
<i>SHEETMETAL WORKERS LOCAL 17 - A</i>	02/01/2015	\$43.69	\$9.82	\$20.54	\$2.19	\$76.24
	08/01/2015	\$44.69	\$9.82	\$20.54	\$2.19	\$77.24
	02/01/2016	\$45.69	\$9.82	\$20.54	\$2.19	\$78.24
	08/01/2016	\$46.84	\$9.82	\$20.54	\$2.19	\$79.39
	02/01/2017	\$47.94	\$9.82	\$20.54	\$2.19	\$80.49
	08/01/2017	\$49.04	\$9.82	\$20.54	\$2.19	\$81.59
	02/01/2018	\$50.19	\$9.82	\$20.54	\$2.19	\$82.74

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

**Effective Date -** 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.12	\$9.82	\$4.58	\$0.00	\$31.52
2	40	\$17.12	\$9.82	\$4.58	\$0.00	\$31.52
3	45	\$19.26	\$9.82	\$9.09	\$1.15	\$39.32
4	45	\$19.26	\$9.82	\$9.09	\$1.15	\$39.32
5	50	\$21.40	\$9.82	\$9.91	\$1.23	\$42.36
6	50	\$21.40	\$9.82	\$10.16	\$1.24	\$42.62
7	60	\$25.67	\$9.82	\$11.55	\$1.41	\$48.45
8	65	\$27.81	\$9.82	\$12.38	\$1.50	\$51.51
9	75	\$32.09	\$9.82	\$14.02	\$1.68	\$57.61
10	85	\$36.37	\$9.82	\$15.16	\$1.84	\$63.19

**Effective Date -** 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.48	\$9.82	\$4.58	\$0.00	\$31.88
2	40	\$17.48	\$9.82	\$4.58	\$0.00	\$31.88
3	45	\$19.66	\$9.82	\$9.09	\$1.16	\$39.73
4	45	\$19.66	\$9.82	\$9.09	\$1.16	\$39.73
5	50	\$21.85	\$9.82	\$9.91	\$1.25	\$42.83
6	50	\$21.85	\$9.82	\$10.16	\$1.25	\$43.08
7	60	\$26.21	\$9.82	\$11.55	\$1.43	\$49.01
8	65	\$28.40	\$9.82	\$12.38	\$1.52	\$52.12
9	75	\$32.77	\$9.82	\$14.02	\$1.70	\$58.31
10	85	\$37.14	\$9.82	\$15.16	\$1.86	\$63.98

**Notes:**

Steps are 6 mos.

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

SIGN ERECTOR	06/01/2013	\$25.81	\$7.07	\$7.05	\$0.00	\$39.93
<i>PAINTERS LOCAL 35 - ZONE 1</i>						

**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**
**SPECIALIZED EARTH MOVING EQUIP < 35 TONS**
*TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*

08/01/2014	\$32.69	\$9.91	\$8.80	\$0.00	\$51.40
12/01/2014	\$32.69	\$9.91	\$9.33	\$0.00	\$51.93
06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
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

**SPECIALIZED EARTH MOVING EQUIP > 35 TONS**
*TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*

08/01/2014	\$32.98	\$9.91	\$8.80	\$0.00	\$51.69
12/01/2014	\$32.98	\$9.91	\$9.33	\$0.00	\$52.22
06/01/2015	\$33.33	\$9.91	\$9.33	\$0.00	\$52.57
08/01/2015	\$33.33	\$10.41	\$9.33	\$0.00	\$53.07
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

**SPRINKLER FITTER**
*SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1*

10/01/2014	\$53.73	\$8.42	\$14.60	\$0.00	\$76.75
01/01/2015	\$53.73	\$8.42	\$14.75	\$0.00	\$76.90
03/01/2015	\$54.73	\$8.42	\$14.75	\$0.00	\$77.90
10/01/2015	\$55.88	\$8.42	\$14.75	\$0.00	\$79.05
01/01/2016	\$55.88	\$8.67	\$14.90	\$0.00	\$79.45
03/01/2016	\$56.88	\$8.67	\$14.90	\$0.00	\$80.45
10/01/2016	\$58.03	\$8.67	\$14.90	\$0.00	\$81.60
03/01/2017	\$59.03	\$8.67	\$14.90	\$0.00	\$82.60

**Apprentice - SPRINKLER FITTER - Local 550 (Section A) Zone 1****Effective Date -** 10/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$18.81	\$8.42	\$8.25	\$0.00	\$35.48
2	40	\$21.49	\$8.42	\$8.25	\$0.00	\$38.16
3	45	\$24.18	\$8.42	\$8.25	\$0.00	\$40.85
4	50	\$26.87	\$8.42	\$8.25	\$0.00	\$43.54
5	55	\$29.55	\$8.42	\$8.25	\$0.00	\$46.22
6	60	\$32.24	\$8.42	\$8.25	\$0.00	\$48.91
7	65	\$34.92	\$8.42	\$8.25	\$0.00	\$51.59
8	70	\$37.61	\$8.42	\$8.25	\$0.00	\$54.28
9	75	\$40.30	\$8.42	\$8.25	\$0.00	\$56.97
10	80	\$42.98	\$8.42	\$8.25	\$0.00	\$59.65

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

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$18.81	\$8.42	\$8.40	\$0.00	\$35.63
2	40	\$21.49	\$8.42	\$8.40	\$0.00	\$38.31
3	45	\$24.18	\$8.42	\$8.40	\$0.00	\$41.00
4	50	\$26.87	\$8.42	\$8.40	\$0.00	\$43.69
5	55	\$29.55	\$8.42	\$8.40	\$0.00	\$46.37
6	60	\$32.24	\$8.42	\$8.40	\$0.00	\$49.06
7	65	\$34.92	\$8.42	\$8.40	\$0.00	\$51.74
8	70	\$37.61	\$8.42	\$8.40	\$0.00	\$54.43
9	75	\$40.30	\$8.42	\$8.40	\$0.00	\$57.12
10	80	\$42.98	\$8.42	\$8.40	\$0.00	\$59.80

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  
OPERATING ENGINEERS LOCAL 4

06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TELECOMMUNICATION TECHNICIAN <i>ELECTRICIANS LOCAL 103</i>	09/01/2014	\$33.59	\$13.00	\$13.36	\$0.00	\$59.95
	03/01/2015	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58
	09/01/2015	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32
	03/01/2016	\$35.31	\$13.00	\$13.74	\$0.00	\$62.05

#### Apprentice - TELECOMMUNICATION TECHNICIAN - Local 103

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.44	\$13.00	\$0.40	\$0.00	\$26.84
2	40	\$13.44	\$13.00	\$0.40	\$0.00	\$26.84
3	45	\$15.12	\$13.00	\$10.57	\$0.00	\$38.69
4	45	\$15.12	\$13.00	\$10.57	\$0.00	\$38.69
5	50	\$16.80	\$13.00	\$10.83	\$0.00	\$40.63
6	55	\$18.47	\$13.00	\$11.08	\$0.00	\$42.55
7	60	\$20.15	\$13.00	\$11.33	\$0.00	\$44.48
8	65	\$21.83	\$13.00	\$11.59	\$0.00	\$46.42
9	70	\$23.51	\$13.00	\$11.85	\$0.00	\$48.36
10	75	\$25.19	\$13.00	\$12.10	\$0.00	\$50.29

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.55	\$13.00	\$0.41	\$0.00	\$26.96
2	40	\$13.55	\$13.00	\$0.41	\$0.00	\$26.96
3	45	\$15.25	\$13.00	\$10.87	\$0.00	\$39.12
4	45	\$15.25	\$13.00	\$10.87	\$0.00	\$39.12
5	50	\$16.94	\$13.00	\$11.13	\$0.00	\$41.07
6	55	\$18.63	\$13.00	\$11.38	\$0.00	\$43.01
7	60	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97
8	65	\$22.02	\$13.00	\$11.89	\$0.00	\$46.91
9	70	\$23.72	\$13.00	\$12.15	\$0.00	\$48.87
10	75	\$25.41	\$13.00	\$12.41	\$0.00	\$50.82

Notes:

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TERRAZZO FINISHERS	08/01/2014	\$47.90	\$10.18	\$18.22	\$0.00	\$76.30
BRICKLAYERS LOCAL 3 - MARBLE & TILE	02/01/2015	\$48.46	\$10.18	\$18.22	\$0.00	\$76.86
	08/01/2015	\$49.36	\$10.18	\$18.29	\$0.00	\$77.83
	02/01/2016	\$49.93	\$10.18	\$18.29	\$0.00	\$78.40
	08/01/2016	\$50.83	\$10.18	\$18.37	\$0.00	\$79.38
	02/01/2017	\$51.40	\$10.18	\$18.37	\$0.00	\$79.95

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

**Effective Date -** 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.95	\$10.18	\$18.22	\$0.00	\$52.35
2	60	\$28.74	\$10.18	\$18.22	\$0.00	\$57.14
3	70	\$33.53	\$10.18	\$18.22	\$0.00	\$61.93
4	80	\$38.32	\$10.18	\$18.22	\$0.00	\$66.72
5	90	\$43.11	\$10.18	\$18.22	\$0.00	\$71.51

**Effective Date -** 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.23	\$10.18	\$18.22	\$0.00	\$52.63
2	60	\$29.08	\$10.18	\$18.22	\$0.00	\$57.48
3	70	\$33.92	\$10.18	\$18.22	\$0.00	\$62.32
4	80	\$38.77	\$10.18	\$18.22	\$0.00	\$67.17
5	90	\$43.61	\$10.18	\$18.22	\$0.00	\$72.01

**Notes:**

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

TEST BORING DRILLER	06/01/2014	\$35.45	\$7.30	\$12.90	\$0.00	\$55.65
LABORERS - FOUNDATION AND MARINE	12/01/2014	\$36.20	\$7.30	\$12.90	\$0.00	\$56.40
	06/01/2015	\$36.95	\$7.30	\$12.90	\$0.00	\$57.15
	12/01/2015	\$37.70	\$7.30	\$12.90	\$0.00	\$57.90
	06/01/2016	\$38.45	\$7.30	\$12.90	\$0.00	\$58.65
	12/01/2016	\$39.45	\$7.30	\$12.90	\$0.00	\$59.65

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER	06/01/2014	\$34.17	\$7.30	\$12.90	\$0.00	\$54.37
LABORERS - FOUNDATION AND MARINE	12/01/2014	\$34.92	\$7.30	\$12.90	\$0.00	\$55.12
	06/01/2015	\$35.67	\$7.30	\$12.90	\$0.00	\$55.87
	12/01/2015	\$36.42	\$7.30	\$12.90	\$0.00	\$56.62
	06/01/2016	\$37.17	\$7.30	\$12.90	\$0.00	\$57.37
	12/01/2016	\$38.17	\$7.30	\$12.90	\$0.00	\$58.37

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2014	\$34.05	\$7.30	\$12.90	\$0.00	\$54.25
	12/01/2014	\$34.80	\$7.30	\$12.90	\$0.00	\$55.00
	06/01/2015	\$35.55	\$7.30	\$12.90	\$0.00	\$55.75
	12/01/2015	\$36.30	\$7.30	\$12.90	\$0.00	\$56.50
	06/01/2016	\$37.05	\$7.30	\$12.90	\$0.00	\$57.25
	12/01/2016	\$38.05	\$7.30	\$12.90	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.10	\$10.00	\$14.20	\$0.00	\$65.30
	12/01/2014	\$42.09	\$10.00	\$14.20	\$0.00	\$66.29
	06/01/2015	\$42.83	\$10.00	\$14.20	\$0.00	\$67.03
	12/01/2015	\$44.07	\$10.00	\$14.20	\$0.00	\$68.27
	06/01/2016	\$44.82	\$10.00	\$14.20	\$0.00	\$69.02
	12/01/2016	\$46.05	\$10.00	\$14.20	\$0.00	\$70.25
	06/01/2017	\$47.04	\$10.00	\$14.20	\$0.00	\$71.24
	12/01/2017	\$48.03	\$10.00	\$14.20	\$0.00	\$72.23
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	08/01/2014	\$33.27	\$9.91	\$8.80	\$0.00	\$51.98
	12/01/2014	\$33.27	\$9.91	\$9.33	\$0.00	\$52.51
	06/01/2015	\$33.62	\$9.91	\$9.33	\$0.00	\$52.86
	08/01/2015	\$33.62	\$10.41	\$9.33	\$0.00	\$53.36
	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
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	06/01/2014	\$46.33	\$7.30	\$13.30	\$0.00	\$66.93
	12/01/2014	\$47.08	\$7.30	\$13.30	\$0.00	\$67.68
	06/01/2015	\$47.83	\$7.30	\$13.30	\$0.00	\$68.43
	12/01/2015	\$48.58	\$7.30	\$13.30	\$0.00	\$69.18
	06/01/2016	\$49.33	\$7.30	\$13.30	\$0.00	\$69.93
	12/01/2016	\$50.33	\$7.30	\$13.30	\$0.00	\$70.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	06/01/2014	\$48.33	\$7.30	\$13.30	\$0.00	\$68.93
	12/01/2014	\$49.08	\$7.30	\$13.30	\$0.00	\$69.68
	06/01/2015	\$49.83	\$7.30	\$13.30	\$0.00	\$70.43
	12/01/2015	\$50.58	\$7.30	\$13.30	\$0.00	\$71.18
	06/01/2016	\$51.33	\$7.30	\$13.30	\$0.00	\$71.93
	12/01/2016	\$52.33	\$7.30	\$13.30	\$0.00	\$72.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2014	\$38.40	\$7.30	\$13.30	\$0.00	\$59.00
	12/01/2014	\$39.15	\$7.30	\$13.30	\$0.00	\$59.75
	06/01/2015	\$39.90	\$7.30	\$13.30	\$0.00	\$60.50
	12/01/2015	\$40.65	\$7.30	\$13.30	\$0.00	\$61.25
	06/01/2016	\$41.40	\$7.30	\$13.30	\$0.00	\$62.00
	12/01/2016	\$42.40	\$7.30	\$13.30	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2014	\$40.40	\$7.30	\$13.30	\$0.00	\$61.00
	12/01/2014	\$41.15	\$7.30	\$13.30	\$0.00	\$61.75
	06/01/2015	\$41.90	\$7.30	\$13.30	\$0.00	\$62.50
	12/01/2015	\$42.65	\$7.30	\$13.30	\$0.00	\$63.25
	06/01/2016	\$43.40	\$7.30	\$13.30	\$0.00	\$64.00
	12/01/2016	\$44.40	\$7.30	\$13.30	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	08/01/2014	\$32.69	\$9.91	\$8.80	\$0.00	\$51.40
	12/01/2014	\$32.69	\$9.91	\$9.33	\$0.00	\$51.93
	06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
	08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
	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>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2014	\$41.49	\$10.00	\$14.20	\$0.00	\$65.69
	12/01/2014	\$42.49	\$10.00	\$14.20	\$0.00	\$66.69
	06/01/2015	\$43.24	\$10.00	\$14.20	\$0.00	\$67.44
	12/01/2015	\$44.49	\$10.00	\$14.20	\$0.00	\$68.69
	06/01/2016	\$45.24	\$10.00	\$14.20	\$0.00	\$69.44
	12/01/2016	\$46.49	\$10.00	\$14.20	\$0.00	\$70.69
	06/01/2017	\$47.49	\$10.00	\$14.20	\$0.00	\$71.69
	12/01/2017	\$48.49	\$10.00	\$14.20	\$0.00	\$72.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS &amp; GASFITTERS LOCAL 12</i>	09/01/2014	\$49.66	\$10.32	\$14.54	\$0.00	\$74.52
	03/01/2015	\$50.66	\$10.32	\$14.54	\$0.00	\$75.52
	09/01/2015	\$51.66	\$10.32	\$14.54	\$0.00	\$76.52
	03/01/2016	\$52.81	\$10.32	\$14.54	\$0.00	\$77.67
	09/01/2016	\$53.86	\$10.32	\$14.54	\$0.00	\$78.72
	03/01/2017	\$54.86	\$10.32	\$14.54	\$0.00	\$79.72
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>	09/01/2013	\$25.66	\$8.70	\$4.48	\$0.00	\$38.84
For apprentice rates see "Apprentice- LINEMAN"						
CABLEMAN (Underground Ducts & Cables) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$36.55	\$8.70	\$6.58	\$0.00	\$51.83
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN CDL <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$29.94	\$8.70	\$6.05	\$0.00	\$44.69
For apprentice rates see "Apprentice- LINEMAN"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$23.52	\$8.70	\$5.24	\$0.00	\$37.46
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class A CDL) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$36.35	\$8.70	\$9.43	\$0.00	\$54.48
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class B CDL) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$32.08	\$8.70	\$6.59	\$0.00	\$47.37
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$23.52	\$8.70	\$3.72	\$0.00	\$35.94
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN -Inexperienced (<2000 Hrs.) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$19.25	\$8.70	\$2.85	\$0.00	\$30.80
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$42.77	\$8.70	\$11.78	\$0.00	\$63.25

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

**Effective Date -** 09/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$25.66	\$8.70	\$4.24	\$0.00	\$38.60
2	65	\$27.80	\$8.70	\$4.71	\$0.00	\$41.21
3	70	\$29.94	\$8.70	\$5.43	\$0.00	\$44.07
4	75	\$32.08	\$8.70	\$6.16	\$0.00	\$46.94
5	80	\$34.22	\$8.70	\$6.88	\$0.00	\$49.80
6	85	\$36.35	\$8.70	\$7.62	\$0.00	\$52.67
7	90	\$38.49	\$8.70	\$8.83	\$0.00	\$56.02

**Notes:**

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

TELEDATA CABLE SPLICER <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	07/16/2012	\$26.33	\$4.18	\$2.79	\$0.00	\$33.30
TELEDATA LINEMAN/EQUIPMENT OPERATOR <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	07/16/2012	\$24.78	\$4.18	\$2.74	\$0.00	\$31.70
TELEDATA WIREMAN/INSTALLER/TECHNICIAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	07/16/2012	\$24.78	\$4.18	\$2.74	\$0.00	\$31.70
TREE TRIMMER <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	01/29/2012	\$17.18	\$3.37	\$0.00	\$0.00	\$20.55
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 <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	01/29/2012	\$15.15	\$3.37	\$0.00	\$0.00	\$18.52

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.

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Additional Apprentice 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. Apprentice 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.

&gt;

General Decision Number: MA140013 09/05/2014 MA13

Superseded General Decision Number: MA20130013

State: Massachusetts

Construction Types: Heavy (Heavy and Marine)

Counties: Barnstable, Bristol, Dukes, Essex, Middlesex,  
Nantucket, Norfolk, Plymouth and Suffolk Counties in  
Massachusetts.

## HEAVY AND MARINE CONTRUCTION PROJECTS

Modification Number	Publication Date
0	01/03/2014
1	01/31/2014
2	03/07/2014
3	03/28/2014
4	05/09/2014
5	06/06/2014
6	06/13/2014
7	07/18/2014
8	08/01/2014
9	08/08/2014
10	08/15/2014
11	09/05/2014

BOIL0029-001 10/01/2009

	Rates	Fringes
BOILERMAKER.....	\$ 38.25	17.04

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BRMA0001-011 09/01/2013

## FOXBORO CHAPTER

BRISTOL (Attleboro, Berkley, Dighton, Mansfield, North  
Attleboro, Norton, Raynham, Rehoboth, Seekonk, Taunton);  
NORFOLK, (Bellingham, Canton, Dedham, Foxboro, Franklin,  
Norfolk, Norwood, Plainville, Sharon, Walpole, Westwood,  
Wrentham); and PLYMOUTH (Lakeville)

	Rates	Fringes
Bricklayer/Cement Mason.....	\$ 45.96	29.74

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BRMA0001-012 09/01/2013

## LOWELL CHAPTER

MIDDLESEX (Acton, Ashby, Ayer, Bedford, Billerica, Boxboro,  
Carlisle, Chemsford, Dracut, Dunstabale, Ft Devens, Groton,  
Littleton, Lowell, North Acton, Pepperell, Shirley, South

Acton, Tewksbury, Townsend, Tyngsboro, West Acton, Westford,  
Wilmington)

	Rates	Fringes
BRICKLAYER.....	\$ 45.96	29.74
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BRMA0001-013 09/01/2013		

LOWELL CHAPTER

MIDDLESEX (Ashland, Framingham, Holliston, Hopkinton, Hudson,  
Maynard, Natick, Sherbourn, Stow); and NORFOLK (Medfield,  
Medway, Millis)

	Rates	Fringes
BRICKLAYER.....	\$ 45.96	29.74
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* BRMA0003-001 09/01/2014		

	Rates	Fringes
Marble & Tile Finisher.....	\$ 37.46	26.66
Marble, Tile & Terrazzo Workers.....	\$ 46.86	27.90
TERRAZZO FINISHER.....	\$ 46.86	27.90
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BRMA0003-003 08/01/2014		

BOSTON CHAPTER

MIDDLESEX (Arlington, Cambridge, Everett, Malden, Medford,  
Melrose, Somerville); NORFOLK (Brookline, Milton); and SUFFOLK

	Rates	Fringes
BRICKLAYER.....	\$ 48.96	28.77
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BRMA0003-011 08/01/2014		

LYNN CHAPTER

ESSEX (Amesbury, Andover, Beverly, Boxford, Danvers, Essex,  
Georgetown, Gloucester, Groveland, Hamilton, Haverhill,  
Ipswich, Lawrence, Lynn, Lynnfield, Manchester, Marblehead,  
Merrimac, Methuen, Middleton, Nahant, Newbury, Newburyport,  
North Andover, Peabody, Rockport, Rowley, Salisbury, Salem,  
Saugus, Swampscott, Topsfield, Wakefield, Wenham, West  
Newbury); and MIDDLESEX (North Reading, Reading, Wakefield)

	Rates	Fringes
Bricklayer/Cement Mason.....	\$ 48.96	28.77
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BRMA0003-012 08/01/2014		

	Rates	Fringes
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## BRICKLAYER

WALTHAM CHAPTER -  
 MIDDLESEX (Belmont,  
 Burlington, Concord,  
 Lexington, Lincoln,  
 Stoneham, Sudbury,  
 Waltham, Watertown,  
 Wayland, Weston,  
 Winchester, Woburn).....\$ 48.96 28.77

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 BRMA0003-014 08/01/2014

## QUINCY CHAPTER

PLYMOUTH COUNTY (Abington, Bridgewater, Brockton, Carver,  
 Duxbury, East Bridgewater, Halifax, Hanover, Hanson, Hingham,  
 Hull, Kingston, Marshfield, Middleboro, Norwell, Pembroke,  
 Plymouth, Rockland, Scituate, West Bridgewater, Whitman)

	Rates	Fringes
Bricklayer/Cement Mason.....	\$ 48.96	28.77

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 BRMA0003-025 08/01/2014

## NEW BEDFORD CHAPTER

BARNSTABLE; BRISTOL (Acushnet, Darmouth, Fairhaven, Fall River,  
 Freetown, New Bedford, Somerset, Swansea, Westport); DUKES;  
 NANTUCKET; PLYMOUTH (Marion, Mattapoisett, Rochester, Wareham)

	Rates	Fringes
Bricklayer/Cement Mason.....	\$ 48.96	28.77

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 BRMA0003-033 08/01/2014

## NEWTON CHAPTER

MIDDLESEX (Newton); NORFOLK (Dover, Needham, Wellesley)

	Rates	Fringes
Bricklayer, Plasterer.....	\$ 48.96	28.77

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 CARP0026-003 09/01/2013

BRISTOL (Attleborough, North Attleborough); ESSEX; MIDDLESEX  
 (Except Belmont, Cambridge, Everett, Malden, Medford,  
 Somerville); AND NORFOLK (Bellingham, Braintree, Canton,  
 Cohasset, Foxboro, Franklin, Medfield, Medway, Millis,  
 Needham, Norfolk, Norwood, Plainville, Quincy, Sharon, Walpole,  
 Wellesley, Westwood, Weymouth, Wrentham) COUNTIES

	Rates	Fringes
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CARPENTER.....	\$ 34.28	26.06
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CARP0033-003 09/01/2013

MIDDLESEX (Belmont, Cambridge, Everett, Malden, Medford, Somerville); NORFOLK (Brookline, Dedham, Milton); AND SUFFOLK COUNTIES

	Rates	Fringes
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CARPENTER.....	\$ 40.10	26.56
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CARP0056-001 08/01/2013

All of SUFFOLK COUNTY; and those areas of BARNSTABLE, BRISTOL, ESSEX, MIDDLESEX, NORFOLK, and PLYMOUTH COUNTIES situated INSIDE Boston Beltway (I-495) and North of Cape Cod Canal. ALL of DUKES and NANTUCKET COUNTIES

	Rates	Fringes
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PILEDRIVERMAN.....	\$ 40.10	28.57
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CARP0056-002 08/01/2013

The areas of BARNSTABLE, BRISTOL, PLYMOUTH, and NORFOLK COUNTIES situated OUTSIDE Boston Beltway (I-495) and South of Cape Cod Canal

	Rates	Fringes
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PILEDRIVERMAN.....	\$ 40.10	28.57
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CARP0056-003 08/01/2013

Those areas of ESSEX and MIDDLESEX COUNTIES situated OUTSIDE Boston Beltway (I-495)

	Rates	Fringes
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PILEDRIVERMAN.....	\$ 40.10	28.57
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CARP0056-004 08/01/2013

	Rates	Fringes
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DIVER TENDER.....	\$ 40.10	28.57
DIVER.....	\$ 56.14	28.57

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CARP0424-001 09/01/2013

NORFOLK (Braintree, Quincy, Cohasset, Weymouth, etc.) PLYMOUTH (Duxbury, Hanover, Hull, Hingham, Marshfield, Norwell, Pembroke Rockland, Scituate)

	Rates	Fringes
CARPENTER.....	\$ 34.28	26.06

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CARP0624-002 09/01/2013

BARNSTABLE; BRISTOL (Except Attleboro & North Attleboro);  
 DUKES; NANTUCKET; NORFOLK (Avon, Holbrook, Randolph,  
 Stoughton); PLYMOUTH (Bridgewater, Kingston, Lakeville,  
 Middleboro, Plymouth, S. Hanover, Whitman)

	Rates	Fringes
CARPENTER.....	\$ 40.10	26.56

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CARP1121-001 04/01/2014

	Rates	Fringes
MILLWRIGHT.....	\$ 35.73	26.81

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ELEC0096-001 06/01/2014

MIDDLESEX (Ashby, Ashland, Ayer, Ft. Devens, Groton, Hopkinton,  
 Hudson, Marlboro, Pepperell, Shirley, Stow, Townsend)

	Rates	Fringes
ELECTRICIAN.....	\$ 38.12	11%+17.03
Teledata System Installer.....	\$ 25.86	3%+17.37

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ELEC0099-001 06/01/2014

BRISTOL (Attleboro, North Attleboro, Seekonk)

	Rates	Fringes
ELECTRICIAN.....	\$ 34.83	61.56%
Teledata System Installer.....	\$ 25.56	14.26%+13.57

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ELEC0103-002 09/01/2013

ESSEX (Amesbury, Andover, Boxford, Georgetown, Groveland,  
 Haverhill, Lawrence, Merrimac, Methuen, Newbury, Newburyport,  
 North Andover, Rowley, Salisbury, West Newbury); MIDDLESEX  
 (Bedford, Billerica, Boxboro, Burlington, Carlisle, Chelmsford,  
 Dracut, Dunstable littleton, Lowell, North Reading, Tewksbury,  
 Tyngsboro, Westford, Wilmington)

	Rates	Fringes
ELECTRICIAN.....	\$ 43.96	28.04

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ELEC0103-004 09/01/2013

ESSEX (Beverly, Danvers, Essex, Gloucester, Hamilton, Ipswich,  
 Manchester, Marblehead, Middleton, Peabody, Rockport, Salem,

Topsfield, Wenham)

	Rates	Fringes
ELECTRICIAN.....	\$ 43.96	28.04

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ELEC0103-005 09/01/2013

ESSEX (Lynn, Lynnfield, Nahant, Saugus, Swampscott); MIDDLESEX (Acton, Arlington, Belmont, Cambridge, Concord, Everett, Framingham, Holliston, Lexington, Lincoln, Malden, Maynard, Medford, Melrose, Natick, Newton, Reading, Sherborn, Somerville, Stoneham, Sudbury, Wakefield, Waltham, Watertown, Wayland, Weston, Winchester, Woburn); NORFOLK (Bellingham, Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Foxboro, Franklino, Medfield, Medway, Millis, Milton, Needham, Norfolk, Norwood, Quincy, Sharon, Walpole, Wellesley, Westwood, Weymouth, Wrentham); PLYMOUTH (Hingham and Hull); SUFFOLK

	Rates	Fringes
ELECTRICIAN.....	\$ 43.96	28.04

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ELEC0104-001 09/03/2012

	Rates	Fringes
Line Construction:		
Cableman.....	\$ 41.97	19.08+A
Equipment Operator.....	\$ 35.67	17.54+A
Groundman.....	\$ 23.08	11.85+A
Lineman.....	\$ 41.97	19.08+A

A. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Christmas Day and Columbus Day, provided the employee has been employed 5 working days prior to any one of the listed holidays.

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ELEC0223-002 09/01/2013

BARNSTABLE, BRISTOL (Except Attleboro, North Attleboro, Seekonk); DUKES; NANTUCKET; PLYMOUTH (Except Hingham and Hull Twps); NORFOLK (Avon, Halbrook, Randolph, Sloughton)

	Rates	Fringes
ELECTRICIAN.....	\$ 36.41	32.25%+7.70

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ENGI0004-009 06/01/2014

	Rates	Fringes
Power equipment operators:		
Group 1.....	\$ 41.49	25.04+A
Group 2.....	\$ 41.10	25.04+A

Group 3.....	\$ 28.80	25.04+A
Group 4.....	\$ 34.59	25.04+A
Group 5.....	\$ 21.48	25.04+A
Group 6.....	\$ 25.03	25.04+A

#### HOURLY PREMIUM FOR BOOM LENGTHS (Including Jib):

Over 150 ft.	+2.12
Over 185 ft.	+3.72
Over 210 ft.	+5.23
Over 250 ft.	+7.92
Over 295 ft.	+10.97
Over 350 ft.	+12.76

#### FOOTNOTE FOR POWER EQUIPMENT OPERATORS:

A. PAID HOLIDAYS: New Year's Day, Washington,s Birthday, Labor Day, Memorial Day, Independence Day, Patriot's Day, Columbus Day, Veteran's Day, Thanksgiving Day, Christmas Day

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS [HEAVY CONSTRUCTION]

GROUP 1: Power shovel; crane; truck crane; derrick; pile driver; trenching machine; mechanical hoist pavement breaker; cement concrete paver; dragline; hoisting engine; three drum machine; pumpcrete machine; loaders; shovel dozer; front end loader; mucking machine; shaft hoist; steam engine; backhoe; gradall; cable way; fork lift; cherry picker; boring machine; rotary drill; post hole hammer; post hole digger; asphalt plant on job site; concrete batching and/or mixing plant on job site; crusher plant on job site; paving concrete mixer; timber jack

GROUP 2: Sonic or vibratory hammer; grader; scraper; tandem scraper; bulldozer; tractor; mechanic - maintenance; York rake; mulching machine; paving screed machine; stationary steam boiler; paving concrete finishing machine; grout pump; portable steam boiler; portable steam generator; roller; spreader; asphalt paver; locomotives or machines used in place thereof; tamper (self propelled or tractor-draw); cal tracks; ballast regulator; rail anchor machine; switch tamper; tire truck

GROUP 3: Pumps (1-3 grouped); compressor; welding machines (1-3 grouped); generator; sighting plant; heaters (power driven, 1- 5); syphon-pulsometer; concrete mixer; valves controlling permanent plant air steam, conveyor, wellpoint system (operating)

GROUP 4: Assitant engineer (fireman)

GROUP 5: Oiler (other than truck cranes and gradalls)

GROUP 6: Oiler (on truck cranes and gradalls)

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IRON0007-001 03/16/2014

AREA 1: BRISTOL (Easton); ESSEX (Beverly,Gloucester,Lynn, Lynnfield, Manchester,Marblehead, Nahant, Salem, Saugus, Swampscott); MIDDLESEX (Arlington, Bedford, Belmont, Burlington, Cambridge, Concord,Everett, Framingham, Lexington, Lincoln, Malden, Maynard, Medford, Melrose, Natick, Newton, Reading, Sherborn, Somerville, Stoneham, Sudbury, Wakefield, Waltham, Watertown, Wayland, Weston, Winchester, Woburn); NORFOLK (Except Medway); PLYMOUTH (Abington, Bridgewater, Brocton, Duxbury, East Bridgewater, Halifax, Hanover, Hanson,

Hingham, Hull, Kingston, Marshfield, Norwell, Pembroke, Plymouth, Plympton, Rockland, Scituate, West Bridgewater, Whitman); SUFFOLK

AREA 2: ESSEX (Amesbury, Andover, Boxford, Danvers, Essex, Georgetown, Hamilton, Haverhill, Ipswich, Lawrence, Merrimac, Methuen, Newbury, Newburyport, North Andover, Rockport, Rowley, Salisbury, Topsfield, Wenham, West Newbury); MIDDLESEX (Action, Billerica, Carlisle, Chelmsford, Dracut, Dunstable, Groton, Groveland, Littleton, Lowell, Middleton, North Reading, Pepperell, Tewksbury, Tyngsboro, Westford, Wilminton)

	Rates	Fringes
IRONWORKER		
AREA 1.....	\$ 41.19	27.80
AREA 2.....	\$ 36.78	27.80

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IRON0007-010 03/16/2014

MIDDLESEX (Ashby, Ashland, Ayer, Boxboro, Holliston, Hopkinton, Hudson, Marlboro, Shirley, Stow, Townsend); NORFOLK (Medway)

	Rates	Fringes
IRONWORKER.....	\$ 40.89	27.80

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IRON0037-002 03/16/2014

BARNSTABLE; BRISTOL (Acushnet, Attleboro, Berkley, Dartmouth, Dighton, Fairhaven, Fall River, Freetown, Mansfield, New Bedford, North Attleboro, Norton, Raynham, Rehoboth, Seekonk, Somerset, Swansea, Taunton, Westport); DUKES; NANTUCKET; NORFOLK (Billingham, Franklin, Plainville, Wrentham); PLYMOUTH (Lakeville, Marion, Mattapoisett, Middleboro, Rochester, Wareham)

	Rates	Fringes
IRONWORKER.....	\$ 33.56	22.77

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LABO0022-006 12/01/2012

SUFFOLK COUNTY (Boston, Chelsea, Revere, Winthrop, Deer & Nut Islands); MIDDLESEX COUNTY (Arlington, Belmont, Burlington, Cambridge, Everett, Malden, Medford, Melrose, Reading, Somerville, Stoneham, Wakefield, Winchester, Winthrop and Woburn only); NORFOLK COUNTY (Brookline, Dedham, and Milton only)

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 32.30	20.40
GROUP 2.....	\$ 32.55	20.40
GROUP 3.....	\$ 33.05	20.40

GROUP 4.....	\$ 33.30	20.40
GROUP 5.....	\$ 20.50	20.40
GROUP 6.....	\$ 34.30	20.40

## LABORERS CLASSIFICATIONS

GROUP 1: Laborers; carpenter tenders; cement finisher tenders

GROUP 2: Asphalt raker; fence and guard rail erector; laser beam operator; mason tender; pipelayer; pneumatic drill operator; pneumatic tool operator; wagon drill operator

GROUP 3: Air track operator; block paver; rammer; curb setter

GROUP 4: Blaster; powderman

GROUP 5: Flagger

GROUP 6: Asbestos Abatement; Toxic and Hazardous Waste Laborers

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LABO0022-012 12/01/2012

Counties of BARNSTABLE; BRISTOL; DUKES; ESSEX; NANTUCKET; PLYMOUTH; MIDDLESEX (With the exception of Arlington, Belmont, Burlington, Cambridge, Everett, Malden, Melrose, Reading, Somerville, Stoneham, Wakefield, Winchester, Winthrop and Woburn); NORFOLK (With the exception of Brookline, Dedham, and Milton)

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 29.60	19.50
GROUP 2.....	\$ 29.85	19.50
GROUP 3.....	\$ 30.35	19.50
GROUP 4.....	\$ 30.60	19.50
GROUP 5.....	\$ 20.50	19.50
GROUP 6.....	\$ 31.60	19.50

## LABORERS CLASSIFICATIONS

GROUP 1: Laborers; carpenter tenders; cement finisher tenders

GROUP 2: Asphalt raker; fence and guard rail erector; laser beam operator; mason tender; pipelayer; pneumatic drill operator; pneumatic tool operator; wagon drilloperator

GROUP 3: Air track operator; block paver; rammer; curb setter; hydraulic & similar self powere drills

GROUP 4: Blaster; powderman

GROUP 5: Flagger

GROUP 6: Asbestos Abatement; Toxic and Hazardous Waste  
Laborers

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LABO0022-013 12/01/2012

	Rates	Fringes
Laborers:		
(FREE AIR OPERATION):		
SHIELD DRIVEN AND LINER		
PLATE IN FREE AIR)		
GROUP 1.....	\$ 32.90	20.30+A
GROUP 2.....	\$ 32.90	20.30+A
(OPEN AIR CASSONS,		
UNDERPINNING AND TEST		
BORING INDUSTRIES):		
TEST BORING & WELL DRILLING		
Driller.....	\$ 33.70	19.85+A
Laborer.....	\$ 32.30	19.85+A
(OPEN AIR CASSONS,		
UNDERPINNING AND TEST		
BORING INDUSTRIES):		
OPEN AIR CASSON,		
UNDERPINNING WORK & BORING		
CREW		
Bottom man.....	\$ 33.45	19.85+A
Laborers; Top man.....	\$ 32.30	19.85+A
(TUNNELS, CAISSON &		
CYLINDER WORK IN		
COMPRESSED AIR)		
GROUP 1.....	\$ 30.35	20.30+A
GROUP 2.....	\$ 40.83	20.30+A
GROUP 3.....	\$ 40.83	20.30+A
GROUP 4.....	\$ 40.83	20.30+A
GROUP 5.....	\$ 40.83	20.30+A
GROUP 6.....	\$ 42.83	20.30+A
CLEANING CONCRETE AND		
CAULKING TUNNEL (Both New		
& Existing)		
GROUP 1.....	\$ 32.90	20.30+A
GROUP 2.....	\$ 32.90	20.30+A
ROCK SHAFT, CONCRETE		
LINING OF SAME AND TUNNEL		
IN FREE AIR		
GROUP 1.....	\$ 30.35	20.30+A
GROUP 2.....	\$ 32.90	20.30+A
GROUP 3.....	\$ 32.90	20.30+A
GROUP 4.....	\$ 32.90	20.30+A
GROUP 5.....	\$ 34.90	20.30+A

LABORERS CLASSIFICATIONS for TUNNELS, CAISSON & CYLINDER WORK  
IN COMPRESSED AIR

GROUP 1: Powder watchman; Top man on iron bolt; change house attendant

GROUP 2: Brakeman; trackman; groutman; tunnel laborer; outside lock tender; lock tender; guage tender

GROUP 3: Motorman, miner

GROUP 4: Blaster

GROUP 5: Mucking machine operator

GROUP 6: Hazardous Waste work within the "HOT" zone. (A premium of two dollars \$2.00 per hour over the basic wage rate.

LABORERS CLASSIFICATIONS for (FREE AIR OPERATION): SHIELD DRIVEN AND LINER PLATE IN FREE AIR

GROUP 1: Miner; miner welder; conveyor operator; motorman; mucking machine operator; nozzle man; grout man-; pumps, shaft and tunnel steel and rodman; shield and erector arm operators, mole nipper, outside motorman, burner, TBM operator, safety miner; laborer topside; heading motormen; erecting operators; top signal men

GROUP 2: Brakeman; trackman

LABORERS CLASSIFICATIONS FOR CLEANING CONCRETE AND CAULKING TUNNEL (Both New & Existing)

GROUP 1: Concrete workers; strippers and form movers (wood & steel), cement finisher

GROUP 2: Form erector (wood & steel and all accessories)

LABORERS CLASSIFICATIONS for ROCK SHAFT, CONCRETE LINING OF SAME AND TUNNE IN FREE AIR

GROUP 1: Change house attendants

GROUP 2: Laborers, topside, bottom men (when heading is 50 ft. from shaft) and all other laborers

GROUP 3: Brakeman; trackman; tunnel laborers; shaft laborers

GROUP 4: Miner; cage tender; bellman

GROUP 5: Hazardous Waste work within the "HOT" zone. (A premium of two dollars \$2.00 per hour over the basic wage rate)

FOOTNOTE FOR LABORERS:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Patriot's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas Day

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LAB01421-001 06/01/2011

WRECKING LABORERS:

	Rates	Fringes
Laborers: (Wrecking)		
Group 1.....	\$ 31.05	19.75
Group 2.....	\$ 31.80	19.75
Group 3.....	\$ 32.05	19.75
Group 4.....	\$ 27.05	19.75
Group 5.....	\$ 30.15	19.75
Group 6.....	\$ 31.05	19.75

Group 1: Adzeman, Wrecking Laborer.

Group 2: Burners, Jackhammers.

Group 3: Small Backhoes, Loaders on tracks, Bobcat Type Loaders, Hydraulic "Brock" Type Hammer Operators, Concrete Cutting Saws.

Group 4: Yardman (Salvage Yard Only).

Group 5: Yardman, Burners, Sawyers.

Group 6: Asbestos, Lead Paint, Toxic and Hazardous Waste.

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PAIN0035-001 07/01/2014

BARNSTABLE BRISTOL; DUKES; ESSEX; NANTUCKET; PLYMOUTH  
(Remainder of NORFOLK; MIDDLESEX AND SUFFOLK COUNTIES)

	Rates	Fringes
Painters:		
NEW CONSTRUCTION:		
Bridge.....	\$ 46.36	25.50
Brush, Taper.....	\$ 35.86	25.50
Spray, Sandblast.....	\$ 37.26	25.50
REPAINT:		
Bridge.....	\$ 46.36	25.50
Brush, Taper.....	\$ 33.92	25.50
Spray, Sandblast.....	\$ 35.32	25.50

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PAIN0035-015 07/01/2014

MIDDLESEX (Cambridge, Everett, Malden, Medford, Somerville)  
SUFFOLK COUNTY (Boston, Chelsea) NORFOLK COUNTY (Brookline)

	Rates	Fringes
Painters:		
NEW CONSTRUCTION:		
Brush, Taper.....	\$ 41.65	25.50
Spray, Sandblast.....	\$ 43.05	25.50

## REPAINT:

Bridge.....	\$ 46.36	25.50
Brush, Taper.....	\$ 39.71	25.50
Spray, Sandblast.....	\$ 41.11	25.50

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PLAS0534-001 07/01/2014

ESSEX; MIDDLESEX; NORFOLK AND SUFFOLK COUNTY

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 37.25	32.26

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PLUM0004-001 03/01/2013MIDDLESEX (Ashby, Ayer-West of Greenville branch of Boston and  
Maine Railroad, Ft. Devens, Groton, Shirley, Townsend)

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 40.01	24.21

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PLUM0012-001 09/01/2013ESSEX (Ames, Andover, Beverly, Boxford, Byfield, Danvers,  
Essex, Georgetown, Gloucester, Groveland, Hamilton, Haverhill,  
Ipswich, Lawrence, Manchester, Marblehead, Merrimac, Methuen,  
Middleton, Newbury, Newburyport, North Andover, Peabody,  
Rockport, Rowley, Salem, Salisbury, Topsfield, Wenham, West  
Newbury)

	Rates	Fringes
PLUMBER.....	\$ 44.98	24.56

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PLUM0012-003 09/01/2013ESSEX (Ames, Andover, Beverly, Boxford, Byfield, Danvers,  
Essex, Georgetown, Gloucester, Groveland, Hamilton, Haverhill,  
Ipswich, Lawrence, Manchester, Marblehead, Merrimac, Methuen,  
Middleton, Newbury, Newburyport, North Andover, Peabody,  
Rockport, Rowley, Salem, Salisbury, Topsfield, Wenham, West  
Newbury)

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 44.98	24.56

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PLUM0012-006 09/01/2013ESSEX (Lynn, Lynnfield, Nahant, Saugus, and Swampscott);  
MIDDLESEX (Acton, Arlington, Ashland, Ayer - except W. of  
Greenville Branch of Boston & Maine RR, Bedford, Belmont,  
Billerica, Boxboro, Burlington, Cambridge, Carlisle,  
Chelmsford, Concord, Dracut, Dunstable, Everett, Framingham,  
Hudson, Holliston, Hopkinton, Lexington, Lincoln, Littleton,

Lowell, Malden, Marlboro, Maynard, Medford, Melrose, Natick, Newton, North Reading, Pepperell, Reading, Sherborn, Somerville, Stoneham, Stow, Sudbury, Tewksbury, Tyngsboro, Wakefield, Waltham, Watertown, Wayland, Westford, Wilmington, Winchester, Woburn); NORFOLK (Bellingham, Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Foxboro, Franklin, Medfield, Medway, Millis, Milton, Needham, Norfolk, Norwood, Plainville, Quincy, Sharon, Walpole, Wellesley, Westwood, Weymouth, Wrentham); PLYMOUTH (Hingham, Hull, Scituate); SUFFOLK

	Rates	Fringes
PLUMBER.....	\$ 49.06	24.56

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PLUM0051-005 03/01/2014

BARNSTABLE; BRISTOL; DUKES; NANTUCKET; NORFOLK (Avon, Holbrook, Randolph, Stoughton) PLYMOUTH(Remainder of County)

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 35.51	27.32

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PLUM0537-001 09/01/2013

MIDDLESEX (Arlington, Cambridge, Everett, Malden, Medford, Melrose, Reading, Wakefield, Winchester and Woburn); NORFOLK (Bellingham, Braintree, Brookline, Canton, Cohasset, Dedham, Foxboro, Franklin, Millis, Milton, Sharon, Walpole, Westwood, and Wrentham); PLYMOUTH (Hingham, Hull, Scituate); ESSEX (Ames, Andover, Beverly, Boxford, Byfield, Danvers, Essex, Georgetown, Gloucester, Groveland, Hamilton, Haverhill, Ipswich, Lawrence, Lynn, Lynnfield, Manchester, Marblehead, Merrimac, Methuen, Middleton, Nahant, Newbury, Newburyport, North Andover, Peabody, Rockport, Rowley, Salem, Salisbury, Saugus, Swampscott, Topsfield, Wenham, West Newbury)

	Rates	Fringes
PIPEFITTER.....	\$ 47.94	26.51

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TEAM0379-001 08/01/2013

	Rates	Fringes
Truck drivers:		
Group 1.....	\$ 30.78	18.37+A+B
Group 2.....	\$ 30.95	18.37+A+B
Group 3.....	\$ 31.02	18.37+A+B
Group 4.....	\$ 31.14	18.37+A+B
Group 5.....	\$ 31.24	18.37+A+B
Group 6.....	\$ 31.53	18.37+A+B
Group 7.....	\$ 31.82	18.37+A+B

POWER TRUCKS \$.25 DIFFERENTIAL BY AXLE

TUNNEL WORK (UNDERGROUND ONLY) \$.40 DIFFERENTIAL BY AXLE

HAZARDOUS MATERIALS (IN HOT ZONE ONLY) \$2.00 PREMIUM

#### TRUCK DRIVERS CLASSIFICATIONS

Group 1: Station wagons; panel trucks; and pickup trucks

Group 2: Two axle equipment; & forklift operator

Group 3: Three axle equipment and tireman

Group 4: Four and Five Axle equipment

Group 5: Specialized earth moving equipment under 35 tons  
other than conventional type trucks; low bed; vachual;  
mechanics, paving restoration equipment

Group 6: Specialized earth moving equipment over 35 tons

Group 7: Trailers for earth moving equipment (double hookup)

#### FOOTNOTES:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday,  
Memorial Day, Independence Day, Labor Day, Patriot's Day,  
Columbus Day, Veteran's Day, Thanksgiving Day and Christmas  
Day

B. PAID VACATION: Employees with 4 months to 1 year of  
service receive 1/2 day's pay per month; 1 week vacation  
for 1 - 5 years of service; 2 weeks vacation for 5 - 10  
years of service; and 3 weeks vacation for more than 10  
years of service

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WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

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Unlisted classifications needed for work not included within  
the scope of the classifications listed may be added after  
award only as provided in the labor standards contract clauses  
(29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification  
and wage rates that have been found to be prevailing for the  
cited type(s) of construction in the area covered by the wage  
determination. The classifications are listed in alphabetical  
order of "identifiers" that indicate whether the particular  
rate is union or non-union.

## Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

## Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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## WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial

contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

### Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

**A. 1. (i) Minimum Wages.** All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

**3. (i) Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and Trainees.**

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

**6. Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

**7. Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

**10. (I) Certification of Eligibility.** By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

**11. Complaints, Proceedings, or Testimony by Employees.** No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

**B. Contract Work Hours and Safety Standards Act.** The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

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**(3) Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

**(4) Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

**C. Health and Safety.** The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

**(1)** No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

**(2)** The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

**(3)** The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.



## **Division of Labor and Industries Statement of Compliance**

## **GENERAL TERMS & CONDITIONS**

## General Conditions

### GENERAL TERMS AND CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, RECONSTRUCTION, ALTERATION, REMODELING, OR REPAIR OF ANY PUBLIC BUILDING OR PUBLIC WORK IN THE CITY OF SOMERVILLE

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### GENERAL TERMS AND CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, RECONSTRUCTION, INSTALLATION,

**DEMOLITION, MAINTENANCE, OR REPAIR OF ANY  
PUBLIC BUILDING OR PUBLIC WORK  
IN THE CITY OF SOMERVILLE**

**ARTICLE 1: DEFINITIONS**

**1.1. In General.**

**1.1.1. Well-known meanings.** When words or phrases that have a well-known technical, or construction industry, or trade meaning are used in the Contract Documents, such words or phrases shall be interpreted in accordance with that meaning, unless otherwise stated.

**1.1.2. Capitalization.** The words and terms defined in this Article are capitalized in these General Terms and Conditions of the Contract. Other capitalized words may refer to a specific document found in the Contract Documents.

**1.1.3. Persons.** Whenever the word person or persons is used, it includes, unless otherwise stated, entity or entities, respectively, including, but not limited to, corporations, partnerships, and joint venturers.

**1.1.4. Singular and Plural.** The following terms have the meanings indicated which are applicable to both the singular and the plural thereof.

**1.2. Definitions.**

**1.2.1. Agreement.** The Agreement is the written document between the **City** and the **Contractor** which is titled: Agreement between the City of Somerville and the Contractor, which is the executed portion of the Contract, and which forms a part of the Contract. The Agreement also includes all documents required to be attached thereto, including, but not limited to, the performance bond, the labor and materials or payment bonds, certificates of insurance, and all Modifications of the Agreement.

**1.2.2. Change Order.** A Change Order is a document which is signed by the **Contractor**, the **Design Professional**, and the **City**; which is directed to the **Contractor**; which authorizes the **Contractor** to make an addition to, a deletion from or a revision in the Work, or an adjustment in the Contract Sum or in the Contract Time; and which is issued on or after the date of the Agreement between the **Contractor** and the **City**.

**1.2.3. City.** The **City** refers to the City of Somerville, which is the owner of the Project and is the public awarding authority with whom the **Contractor** has entered into the Contract and for whom the Work is to be provided.

**1.2.4. Claim.** A Claim is a dispute, demand, or assertion by one of the parties arising out of or relating to the Contract for which such party is seeking relief.

**1.2.5. Contract.** The Contract consists of all the Contract Documents. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification to the Contract signed by both parties.

**1.2.6. Contract Documents.** The Contract Documents consist of the Agreement; the notice of award of the Contract; the Notice to Proceed; the entire Project Manual; Change Orders; Construction Change Directives; the **Contractor's** Bid and all accompanying documents; and the **Design Professional's** written interpretations and clarifications issued on or after the issuance of the Notice to Proceed. Shop Drawing submittals and reports or drawings utilized by the **Design Professional** in preparing the Contract Documents are not Contract Documents.

**1.2.7. Contractor.** The **Contractor** is the person who is awarded the Contract for the Project herein pursuant to M.G.L. c. 149, §44A or M.G.L. c. 39, §39M; and is identified in the Agreement as such. The term "**Contractor**" is intended to include the **Contractor** as well as its authorized representative(s).

**1.2.8. Contract Sum.** The Contract Sum is the total amount stated in the Agreement payable by the **City** to the **Contractor** for the completion of the Work in accordance with the Contract Documents.

**1.2.9. Contract Time.** Unless otherwise provided, the Contract Time is the number of days allotted in the Contract Documents or the dates stated in the Agreement, including authorized adjustments, for Substantial Completion. We usually put a contract end date that is beyond the date of substantial completion.

**1.2.10. Coordination Drawings.** Coordination Drawings are those drawings, which are prepared by the **Contractor** or a Subcontractor that show the exact alignment, physical locations, and configuration of the mechanical, electrical, and fire protection installations.

**1.2.11. Day.** The term "day" shall mean calendar day unless otherwise stated.

**1.2.12. Design Professional.** The **Design Professional** is the person lawfully licensed to practice architecture, engineering, or landscape architecture and has been selected by the **City** to administer the Contract. The term "**Design Professional**," while referred to in the singular, means the **Design Professional** and/or the **Design Professional's** representative. For the purposes of this project, **Design Professional** shall mean the firm of Weston Sampson Engineers and appropriate consultants.

**1.2.13. Field Order.** A Field Order is a written order issued by the **Design**

**Professional** which orders minor changes in the Work, but which does not involve a change in the Contract Sum or the Contract Time.

**1.2.14. Final Completion.** Final Completion is the point in time when the Design Professional finds that the Work has been fully completed in accordance with the Contract Documents. Final Completion shall be no later than thirty (30) days after Substantial Completion.

**1.2.15. General Requirements.** General Requirements refer to Sections of Division 1 of the Specifications.

**1.2.16. Modification.** A Modification is a written instrument that amends the Contract after execution of the Agreement.

**1.2.17. Notice to Proceed.** A Notice to Proceed is a written notice given by the **City**, or the **Design Professional**, to the **Contractor** fixing the date on which the Contract Time will begin to run and on which the **Contractor** shall start to perform its obligations under the Contract Documents.

**1.2.18. Plans.** The Plans are the drawings which are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location, dimensions, scope, extent, and character of the Work to be furnished and performed by the **Contractor** and which have been prepared or approved by the **Design Professional**.

**1.2.19. Product Data.** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the **Contractor** to illustrate materials or equipment for some portion of the Work. Product Data are not considered part of the Contract Documents.

**1.2.20. Project.** The Project is the total Work to be provided under the Contract Documents and may be the whole or a part as indicated elsewhere in the Contract Documents and may include construction by the **City** or by separate contractors. The Project is the Work described in the invitation to bid (advertisement) and Specifications and illustrated by the Plans, including any Modifications.

**1.2.21. Project Manual.** The Project Manual is the entire set of bidding documents which includes, but is not limited to, the invitation to bid (advertisement), the instructions to bidders, all of the forms, the wage rates, all City and state requirements, the General Terms and Conditions of the Contract, any supplementary conditions thereto, the Plans, the Specifications, and all addenda.

**1.2.22. Proposed Change Order.** A Proposed Change Order is a Change Order that has been submitted by the **Contractor** to the **Design Professional**, is under review, and has

not been approved by the **City**.

**1.2.23. Samples.** Samples are physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged. Samples are not considered part of the Contract Documents.

**1.2.24. Shop Drawings.** Shop Drawings are all drawings, diagrams, illustrations, schedules, and other information that are specifically prepared or assembled by or for the **Contractor** and submitted by the **Contractor** to illustrate some portion of the Work. Shop Drawings are not considered part of the Contract Documents.

**1.2.25. Site.** The Site is the location of the Project and of the Work.

**1.2.26. Specifications.** Specifications are those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

**1.2.27. Subcontractor.** A Subcontractor is a person who contracts directly with the **Contractor**, unless otherwise stated.

**1.2.28. Submittals.** Submittals are those Shop Drawings, Product Data, Samples, or any other required document that are provided to the Design Professional for review and approval.

**1.2.29. Substantial Completion.** Substantial Completion means that the Work has been completed and the Site or the facility is opened for full and intended public use, except for minor incomplete or unsatisfactory items that do not materially impair the usefulness of the Work. The **Design Professional** shall decide what constitutes “minor,” “incomplete,” “unsatisfactory,” and “materially” and the **Design Professional's** decision shall be final.

**1.2.30. Sub-subcontractor.** A Sub-subcontractor is a person who has contracted directly with a Subcontractor.

**1.2.31. Supplier.** A Supplier is a manufacturer, fabricator, distributor, material person, or vendor having a direct contract with the Contractor or with any Subcontractor to furnish materials or equipment to be incorporated into the Work by the Contractor or any Subcontractor.

**1.2.32. Work.** Work refers to the services and the entire completed construction or the various separately identifiable parts thereof required by the Contract Documents, including all labor, materials, and equipment furnished, furnished and incorporated into the

Project, or to be provided by the **Contractor** to fulfill the **Contractor's** obligations. The Work may constitute the whole or a part of the Project.

**1.2.33. Construction Change Directive.** A **Construction Change** Directive is a written directive to the **Contractor** ordering an addition to, a deletion from, or a revision to the Work issued on or after the date of the Agreement, signed by the **City**, and recommended by the **Design Professional**.

## **ARTICLE 2: ABOUT THE CONTRACT DOCUMENTS**

### **2.1. Priority/Conflict.**

**2.1.1. Priority Among Contract Documents.** In the event of conflict among the Contract Documents, the Contract Documents shall be construed according to the following priorities:

Highest Priority:	Modifications
Second Priority:	Agreement
Third Priority:	Addenda-later date to take precedence
Fourth Priority:	Supplementary General Conditions
Fifth Priority:	General Conditions
Sixth Priority:	Plans and Specifications

**2.1.1.1.** If there is a conflict between the Plans and Specifications, the figured dimensions shall govern over the scaled dimensions. Detailed Plans shall govern over the general Plans. Larger scale Plans shall take precedence over smaller scale Plans. Plans shall govern over Shop Drawings. Whenever notes, specifications, dimensions, details, or schedules in the Specifications or in the Plans, or between the Specifications and the Plans, or in all other instances not specifically noted above, the **Contractor** shall provide, unless otherwise directed by a Modification of the Contract, the better quality or greater quantity of Work at no increase in the Contract Sum or in the Contract Time.

**2.1.1.2.** Compliance with these priority conditions shall not justify any changes in the Work or any increase in the Contract Sum or Contract Time, unless any such compliance results in Work that may not be reasonably inferred from the Contract Documents as being required to produce the intended result as determined by the **Design Professional**.

**2.1.2. Review of the Contract Documents and Field Conditions and Discovery of Conflict, Error, Ambiguity, or Discrepancy.** Before starting the Work, and during the progress thereof, the **Contractor** shall carefully study and compare the Contract Documents with each other and with the information furnished by the **City** pursuant to Article 3 and shall

at once report to the **Design Professional** any error, inconsistency, or omission the **Contractor** may discover. Any necessary change shall be ordered as provided in Article 11, subject to the requirements of any other provisions of the Contract Documents. The **Contractor** shall not proceed with the Work affected thereby (except in an emergency) until a Modification has been issued. If the **Contractor** proceeds with the Work having discovered such errors, inconsistencies, or omissions contrary to the provisions contained herein, or if by reasonable study of the Contract Documents the **Contractor** could have discovered such, the **Contractor** shall bear all costs arising therefrom. The **Contractor** shall be liable to the **City** for failure to report any conflict, error, ambiguity, or discrepancy of which it knew or should have known.

**2.1.3. Field Measurements.** The **Contractor** shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the **Contractor** with the Contract Documents before commencing activities. Errors, inconsistencies, or omissions discovered shall be reported to the **Design Professional** at once.

**2.1.4. Statutory Provisions.** The **City** and the **Contractor** recognize that other rights duties and obligations with respect to public construction contracts are provided for by statute, notwithstanding the fact that they may not be provided for in the Contract Documents. In case of conflict between the statutory provisions and other provisions of the Contract Documents and the provisions of any applicable statute, the statutory provisions shall govern.

**2.1.5. Voided or Unlawful Provisions.** In the event any provision in the Contract is voided or deemed unlawful, such provision shall be deleted without affecting the remainder of the Contract.

## **2.2. Execution.**

**2.2.1.** Execution of the Agreement by the **Contractor** is a representation that the **Contractor** has visited the Site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

## **2.3. Intent.**

**2.3.1. Entire Agreement.** The Contract Documents comprise the entire agreement between the **City** and the **Contractor** concerning the Work. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the **Contractor**. The Contract Documents are complementary; what is required by one shall be as binding as if required by all. Performance by the **Contractor** shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results. All Work mentioned or indicated in the Contract Documents shall be performed by the **Contractor** as part of this

Contract unless it is specifically indicated in the Contract Documents that such Work is to be done by others.

**2.3.2. Statutory Provisions.** Each and every provision of law, code, and regulation, required by law to be inserted in these Contract Documents shall be deemed to be inserted herein, and they shall be read and enforced as though it were included herein, and if through mistake or otherwise, any such provision is not inserted, or if not correctly inserted, then upon the application of either party, the Contract Documents shall forthwith be physically amended to make such insertion.

**2.3.3. Functionally Complete Project.** It is the intent of the Contract Documents to describe a functionally complete Project. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the **Contractor**. Any Work, materials, or equipment that may be reasonably inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed by the **Contractor** whether or not specifically called for in the Contract Documents.

**2.3.4. Indications or Notations.** All indications or notations which apply to one of a number of similar situations, materials, or processes shall be deemed to apply to all such situations, materials, or processes wherever they appear in the Work, except where a contrary result is clearly indicated by the Contract Documents.

**2.3.5. Standards or Quality of Materials or Workmanship.** Where no explicit quality or standards for materials or workmanship are established for Work, such Work is to be of good quality for the intended use and consistent with the quality of the surrounding Work and of the construction of the Project generally.

**2.3.6. Manufactured Products.** All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's written or printed directions and instructions unless otherwise indicated in the Contract Documents.

**2.3.7. Mechanical, Electrical, and Fire Protection Plans.** The mechanical, electrical, and fire protection Plans are diagrammatic only and are not intended to show the alignment, physical locations, or configurations of such Work. Such Work shall be installed without additional cost to the **City** to clear all obstructions, permit proper clearances for the Work of other trades, and present an orderly appearance where exposed. Prior to beginning such Work, the **Contractor** shall prepare Coordination Drawings and demonstrate to the **Design Professional's** satisfaction that the installations will comply with the preceding sentence. The **Contractor** shall be solely liable and responsible for any costs and/or delays resulting from the **Contractor's** failure to prepare such Coordination Drawings.

**2.3.8. Locations of Fixtures and Outlets.** Exact locations of fixtures and outlets shall be obtained from the **Design Professional** as provided in Article 5 before the Work is roughed in. Work installed without such information from the **Design Professional** shall be relocated at the **Contractor's** expense.

**2.3.9. Tests.** When test boring or soil test information are included with the Contract Documents or otherwise made available to the **Contractor** and such test boring or soil test information was obtained by the **City** for use by the **Design Professional** in the design of the Project or Work, the **City** does not hold out such information to the **Contractor** as an accurate or approximate indication of subsurface conditions, and no claim for extra cost of extension of time resulting from a reliance by the **Contractor** on such information shall be allowed except as otherwise provided herein. Any such reports are not part of the Contract Documents.

**2.3.10. Joining Work.** Where the Work is to fit with existing conditions or work to be performed by others, the **Contractor** shall fully and completely join the Work with such conditions or work, unless otherwise specified.

**2.4. Organization.**

**2.4.1.** Except as provided in M.G.L. c. 149, §44F, the organization of the Specifications into divisions, sections, and articles, and the arrangement of Plans shall not control the **Contractor** in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

**2.5. References.**

**2.5.1.** Where codes, manuals, specifications, standards, requirements and publications of public and private bodies are referred to in the Contract Documents whether specifically or by implication, references shall be understood to be to the latest revision prior to the date of receiving bids, except where otherwise indicated. Where statutes are referred to in the Contract Documents whether specifically or by implication, references shall be understood to be to the latest revision.

**2.5.2.** References herein to particular paragraphs or Articles are solely to facilitate finding additional information with regard to the specific matters and are not to be construed in any way as limiting the possible paragraphs and Articles in which such matters may be found elsewhere in this document.

**2.6. Reuse of Design Professional's Written Instruments.**

**2.6.1.** Neither the **Contractor** nor any Subcontractor or Supplier shall have or acquire any title to or ownership rights in any of the Plans, Specifications, or other documents prepared by the **Design Professional** and shall not reuse any of such Plans, Specifications, or other documents without prior written consent of the **City** and the **Design**

**Professional.**

**2.7. Written Material of the Contractor.**

**2.7.1.** All written material prepared or collected by the **Contractor** in the course of completing the Work shall be the exclusive property of the **City** and shall not be used by the **Contractor** for any purpose other than the purpose of this Contract.

**2.8. Modifying Words.**

**2.8.1.** In the interest of simplicity, modifying words such as “all” and “any” may be omitted, but the fact that such words may be absent from one sentence and appear in another is not intended to affect the interpretation of either statement.

**2.9. Use of Certain Words and Terms.**

**2.9.1.** Whenever in the Contract Documents the terms “as ordered,” “as directed,” “as required,” “as allowed,” “as approved,” or terms of like effect or import are used, or the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe a requirement, direction, review, or judgment of the **City** or of the **Design Professional** as to the Work, it is intended that such requirement, direction, review, or judgment will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise).

**2.9.2.** The use of any such term or adjective shall not be effective to change the duties and responsibilities of the **City** or the **Design Professional** from those assigned in the Contract Documents or to assign any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of the Contract Documents.

**2.9.3.** When the words “Contractor,” “Subcontractor,” “Sub-subcontractor,” and “Supplier” are used, they are intended to include their employees and agents, unless otherwise specified.

**2.10. Modification of the Contract Documents.**

**2.10.1. Major Modifications.** Major Modifications may affect the Contract Sum or the Contract Time. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways, all of which must contain a written endorsement by the **City**:

**2.10.1.1.** a formal written amendment;

**2.10.1.2.** a Change Order;

**2.10.1.3.** a **Construction Change** Directive; or

**2.10.1.4.** the **Design Professional's** written interpretation, clarification, or decision.

**2.10.2. Minor Modifications.** Minor modifications do not affect the Contract Sum or the Contract Time. The requirements of the Contract Documents may be supplemented and minor variations and deviations of the Work may be authorized in one or more of the following ways:

**2.10.2.1.** a Field Order; or

**2.10.2.2.** the **Design Professional's** approval of a Shop Drawing or Sample.

## **ARTICLE 3: THE CITY**

### **3.1. Signatory.**

**3.1.1.** All documents which require a signature or an endorsement by the **City** must be signed by the Mayor in order to be deemed ratified by the **City**.

### **3.2. Requirements to Provide Documents.**

**3.2.1.** To the extent they are available, the **City** shall furnish surveys describing physical characteristics, legal limitations, and utility locations for the site of the Project, and a legal description of the Site.

**3.2.2.** The **City** shall obtain and pay for necessary approvals, easements, assessments, and charges that are customarily secured prior to the execution of the Contract.

**3.2.3.** The **City** shall furnish information or services required of the **City** hereunder with reasonable promptness after receipt from the **Contractor** of a written request for such information or services.

**3.2.4.** The **City** shall provide the **Contractor**, at no charge, such copies of the Project Manual as are reasonably necessary for the execution of the Work.

### **3.3. Clerk of the Works.**

**3.3.1.** The **City** may engage a Clerk of the Works for this Project, in which case the **City** shall, upon request of the **Contractor**, provide the **Contractor** with a written statement of the duties, responsibilities, and limitations of authority of such Clerk of the Works. Except as expressly set forth in such written statement, the Clerk of the Works shall have no authority to approve Work, to approve Change Orders, or to exercise any of the power and authority of the **City** or the **Design Professional**. The Clerk of the Works shall observe the **Contractor's** operations and construction activities for compliance with the Plans and Specifications. The Clerk of the Works shall have access to all areas of the Project at all times. The **Contractor**

shall fully cooperate with the Clerk of the Works in the performance of the Clerk's duties.

**3.4. City's Right to Perform Construction and to Award Separate Contracts.**

**3.4.1.** The **City** reserves the right to perform construction or operations at the Site with its own forces or others. If the **Contractor** claims that a delay or additional cost is involved because of such action by the **City**, the **Contractor** shall make such Claim as provided elsewhere in the Contract Documents.

**3.4.2.** When the separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "**Contractor**" in the Contract Documents in each case shall mean the **Contractor** who executes each separate City-Contractor Agreement.

**3.4.3.** The **City** shall provide for coordination of the activities of the **City's** own forces and of each separate contractor with the Work of the **Contractor**, who shall cooperate with them. The **Contractor** shall afford each other person access to the Site and shall properly coordinate its Work with that of the persons performing other work. The **Contractor** shall participate with other separate contractors and the **City** in reviewing their construction schedules when directed to do so. The **Contractor** shall make any revisions to the construction schedules deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the **Contractor**, separate contractors, and the **City** until subsequently revised.

**3.5. Limitations on the City's Responsibilities.**

**3.5.1.** The **City** shall not supervise, direct, or have control or authority over, nor be responsible for the **Contractor's** means, methods, techniques, sequences, or procedures of construction or the safety precautions and programs incident thereto, or for any failure of the **Contractor** to comply with laws, codes and regulations applicable to the furnishing or performance of the Work. The **City** will not be responsible for the **Contractor's** failure to perform or furnish the Work in accordance with the Contract Documents. The **City** is not responsible for the acts or omissions of the **Contractor**, any Subcontractor, Supplier, or anyone for whose acts the **Contractor**, any Subcontractor or Suppliers may be liable.

**3.5.2.** The **City's** authority to review any of the **Contractor's** progress schedules, or its decision to raise or not to raise any objections about such schedules shall not impose on the **City** any responsibility for the timing, planning, scheduling, or execution of the Work, nor in any way give rise to any duty or responsibility on the part of the **City** to exercise this authority for the benefit of the **Contractor**, any Subcontractor or Supplier or any other party.

**3.5.3.** The **City's** decision to raise or not to raise objections with regard to any aspects of the **Contractor's** insurance shall in no way give rise to any duty or responsibility on the part of the **City** to or for the benefit of the **Contractor**, any Subcontractor, any Supplier, or any other party.

**3.6. Reservation of Rights.**

**3.6.1.** The **City** reserves the right to correct at any time any error in any progress payment that may have been made.

**3.6.2.** Should defective Work be discovered subsequent to final payment, the **City** reserves the right to make a claim and recover all costs and professional fees associated therewith, including the cost of removing and/or replacing the defective Work.

**3.7. Waivers.**

**3.7.1.** All waivers by the **City** are valid only to the extent that they are signed by the **City**. Any such waivers pertain only to the specific matter contained in the waiver and not to any similar, subsequent matters.

**ARTICLE 4: THE DESIGN PROFESSIONAL**

**4.1. City's Representative.**

**4.1.1.** The **Design Professional** is the **City's** representative (1) during construction, (2) until final payment is due, and (3) with the **City's** concurrence, from time to time during the correction period described in Article 10. The **Design Professional** will advise and consult with the **City**. The **Design Professional** will have authority to act on behalf of the **City** only to the extent provided in the Contract Documents, unless otherwise modified by a written instrument in accordance with other provisions of the Contract.

**4.1.2.** The duties, responsibilities, and the limitations of authority of the **Design Professional** as the **City's** representative during construction are set forth in the Contract Documents and shall not be extended without the written consent of the **City** and the **Design Professional**.

**4.2. Administration of the Contract.**

**4.2.1.** The **Design Professional** will provide administration of the Contract as described in the Contract Documents, unless the **City** has engaged a construction manager.

**4.3. Visits to the Site.**

**4.3.1.** The **Design Professional** will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. However, the **Design Professional** will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of on-site observations as an architect, engineer, or landscape architect, the **Design Professional** will keep the **City** informed of progress of the Work in writing and will endeavor to guard the **City** against defects and deficiencies in the Work.

**4.4. Communications Facilitating Contract Administration.**

**4.4.1.** Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the **City** and the **Contractor** shall endeavor to communicate through the **Design Professional**. Communications by and with the **Design Professional's** consultants shall be through the **Design Professional**. Communications by and with Subcontractors and Suppliers shall be through the **Contractor**. Communications by and with **City** employees and separate contractors shall be through the **City**.

**4.4.2.** When it deems it necessary or expedient, the **City** may communicate directly with the **Contractor**, any Subcontractors, Suppliers, or consultants.

**4.5. Certification of Applications for Payment.**

**4.5.1.** Based on the **Design Professional's** observations and evaluations of the **Contractor's** applications for payment, the **Design Professional** will review and certify the amounts due the **Contractor** and will issue certificates for payment in such amounts.

**4.6. Rejection of Work.**

**4.6.1.** The **Design Professional** will have authority to reject or disapprove Work (1) that does not conform to the Contract Documents; (2) that the **Design Professional** believes to be defective; and (3) that the **Design Professional** believes will not produce a completed Project conforming to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Whenever the **Design Professional** considers it necessary or advisable for implementation of the intent of the Contract Documents, the **Design Professional** will have authority to require additional inspection or testing of the Work in accordance with Article 9, whether or not such Work is fabricated, installed, or completed. However, neither this authority of the **Design Professional** nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the **Design Professional** to the **Contractor**, Subcontractors, Suppliers, or other persons performing portions of the Work.

**4.7. Review of Submittals.**

**4.7.1.** The **Design Professional** will review or take other appropriate action upon the **Contractor's** submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents and only to the extent that the **Design Professional** believes desirable to protect the **City's** interest. The **Design Professional's** action will be taken with reasonable promptness, while allowing sufficient time in the **Design Professional's** professional judgment to permit adequate review, taking into account the time periods set forth in the latest schedule prepared by the **Contractor** and approved by the **Design Professional**. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of

the **Contractor** as required by the Contract Documents. The **Design Professional's** review of the **Contractor's** submittals shall not relieve the **Contractor** of the obligations under Article 5. The **Design Professional's** review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The **Design Professional's** approval of a specific item shall not indicate approval of an assembly of which the item is a component. After the rejection of the second resubmittal of any one Submittal, the **Contractor** shall bear the cost of the review of each subsequent resubmittal.

**4.8. Preparation of Change Orders and Construction Change Directives.**

**4.8.1.** The **Design Professional** will prepare Change Orders and **Construction Change Directives** and may authorize minor Modifications in the Work as provided in Article 11.

**4.9. Inspections.**

**4.9.1.** The **Design Professional** will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; will receive and forward to the **City** for the **City's** review and records written warranties and related documents required by the Contract and assembled by the **Contractor**; and will issue a final certificate for payment upon the **Contractor's** compliance with all of the requirements of the Contract Documents.

**4.10. Interpretations, Clarifications, and Decisions.**

**4.10.1.** The **Design Professional** will interpret and decide matters concerning performance under and requirements of the Contract Documents on written request of either the **City** or the **Contractor**. The **Design Professional's** response to such requests will be made with reasonable promptness and within the time set forth in the Agreement between the **City** and the **Design Professional**. Any such written interpretations, clarifications, and decisions shall be binding on the **Contractor**.

**4.10.2.** Interpretations, clarifications, and decisions of the **Design Professional** will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. The **Design Professional** will not be liable to the **Contractor**, any Subcontractor, or Supplier for results of interpretations, clarifications, or decisions so rendered in good faith.

**4.10.3.** The **Design Professional** may, as the **Design Professional** judges desirable, issue additional drawings or instructions indicating in greater detail the construction or design of the various parts of the Work; such drawings or instructions may be effected by a Field Order or other notice to the **Contractor**, and provided such drawings or instructions are reasonably consistent with the previously existing Contract Documents, the Work shall be executed in accordance with such additional drawings or instructions without any additional cost or an extension of the Contract Time.

**4.10.4.** The **Design Professional's** decisions on matters relating to aesthetic effect must

be consistent with the **City's** and will be final.

**4.11. Limitation on the Design Professional's Responsibilities.**

**4.11.1.** Neither the **Design Professional's** authority to act under the provisions of the Contract Documents nor any decision made by the **Design Professional** in good faith to exercise or not to exercise such authority shall give rise to any duty or responsibility of the **Design Professional** to the **Contractor**, any Subcontractor, any Supplier, any surety for any of them or any other person.

**4.11.2.** The **Design Professional** will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the **Contractor's** responsibility as provided in Article 5. The **Design Professional** will not be responsible for the **Contractor's** failure to carry out the Work in accordance with the Contract Documents. The **Design Professional** will not have control over or charge of and will not be responsible for acts or omissions of the **Contractor**, Subcontractors, Suppliers, or of any other persons performing portions of the Work.

**ARTICLE 5: THE CONTRACTOR**

**5.1. Relationship with the City.**

**5.1.1.** The **Contractor** is an independent contractor and not an employee of the **City**. The **Contractor** is engaged by virtue of the Contract to perform only those services contained therein. The **Contractor** is not authorized to contract on behalf of the **City** or to incur any liability on the part of the **City**.

**5.2. Code of Conduct.**

**5.2.1.** M.G.L. c. 268A establishes standards of conduct for officials and employees of the **City**. The **Contractor** shall familiarize itself with the statute and act accordingly.

**5.3. Quality Assurance.**

**5.3.1.** The **Contractor** shall be responsible for ensuring that it, all Subcontractors, Suppliers, and all persons employed to do the Work under the Contract Documents perform in a professional manner, provide a high quality of service and Work, and perform in accordance with the Contract Documents.

**5.4. Supervision.**

**5.4.1. Competence and Efficiency.** The **Contractor** shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills, attention and expertise as may be necessary to perform the Work in accordance with the Contract Documents.

**5.4.2. Construction Means, Methods, Techniques, Etc.** The **Contractor** shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract. Where the Contract Documents refer to particular construction means, methods, techniques, sequences, or procedures or indicate or imply that such are to be used in the Work, such mention is intended only to indicate that the operations of the **Contractor** shall be such as to produce at least the quality of Work implied by the operations described. The actual determination of whether or not the described operations may be safely and suitably employed on the Work shall be the responsibility of the **Contractor**, who shall notify the **Design Professional** in writing, prior to implementation, of the actual means, methods, techniques, sequences, or procedures which will be employed on the Work, if these differ from those mentioned in the Contract Documents. All loss, damage, liability or cost of correcting defective work arising from the employment of any construction means, methods, techniques, sequences, or procedures shall be borne by the **Contractor**, notwithstanding that such construction means, methods, techniques, sequences, or procedures are referred to, indicated or implied by the Contract Documents, unless the **Contractor** has given timely notice to the **City** and the **Design Professional** in writing that such means, methods, techniques, sequences, or procedures are not safe or suitable, and the **City** has then instructed the **Contractor** in writing to proceed at the **City's** risk.

**5.4.3. Variance between the Contract Documents and Statutes, Ordinances, Codes, Rules, and Regulations.** The **Contractor** shall promptly notify the **Design Professional** and the **City** in writing of any variances between the Contract Documents and statutes, ordinances, codes, rules, and regulations. If the **Contractor**, without written notice to the **Design Professional** and the **City**, performs Work knowing that it is contrary to statutes, ordinances, codes, rules, and regulations, the **Contractor** shall assume full responsibility for such Work and shall bear the costs associated therewith, i.e., replacement, repairs, removal, and fines.

**5.4.4. Acts and Omissions.** The **Contractor** shall be responsible to the **City** for the acts and omissions of all persons performing or supplying the Work.

**5.4.5. Inspections.** The **Contractor** shall be responsible for inspection of portions of Work already performed under this Contract to determine whether such portions are in proper condition to receive subsequent Work.

## **5.5. Personnel.**

**5.5.1. Suitability.** The **Contractor** shall provide competent, properly licensed and/or certified, suitably qualified, and reliable personnel to perform the Work required by the Contract Documents. The **Contractor** shall enforce strict discipline and maintain good order at the site at all times. The **Contractor** shall not employ any Subcontractor, Supplier, or other person, whether initially or as a substitute, against whom the **City** may have reasonable objection. Acceptance of any Subcontractor or other person by the **City** shall not constitute a waiver of any

right of the **City** to reject defective Work.

**5.5.2. Sexual Harassment.** Sexual harassment is an unlawful practice under M.G.L. c. 151B. The **Contractor**, Subcontractors, and all other persons responsible for any portion of the Work shall refrain from engaging in sexual harassment. The **Contractor** shall be responsible for any acts of sexual harassment committed by any persons responsible for any portion of the Work. The **Contractor** shall take appropriate action against any such individuals.

**5.5.3. Weapons and Illegal Drugs.** No weapons or illegal drugs are permitted on the Site. It is the responsibility of the **Contractor** to ensure that no weapons or illegal drugs are brought to the Site.

**5.5.4. Maximum Work Day and Work Week.** (*Reference:* M.G.L. c. 149, §§30 and 34;). No laborer, worker, mechanic, foreperson or inspector working within this Commonwealth in the employ of the **Contractor**, Subcontractor or other person doing or contracting to do the whole or part of the work contemplated by the Contract, shall be required or permitted to work more than eight (8) hours in any one day or more than forty-eight (48) hours in any one week, or more than six (6) days in any one week, except in cases of emergency.

**5.5.5. Lodging.** (*Reference:* M.G.L. c. 149, §25;). Every employee under this Contract shall lodge, board and trade where and with whom he or she elects, and neither the **Contractor** nor its agents or employees shall, either directly or indirectly, require as a condition of the employment of any person that the employee shall lodge, board or trade at a particular place or with a particular person.

**5.5.6. Wage Rates.** (*Reference:* M.G.L. c. 149, §27). Mechanics and apprentices, teamsters, chauffeurs and laborers performing Work shall be paid no less than the minimum rate of wages included in the bid documents and the Project Manual and which are made part of the Contract. They shall continue to be the minimum rate of wages for said employees during the life of the Contract. The **Contractor** shall keep a legible copy of the wage rates posted in a conspicuous place at the site during the life of the Contract. These rates of wages shall include payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans as provided in M.G.L. c. 149, §26;, and such payments shall be considered as payments to persons under M.G.L. c. 149, §27 performing work as therein provided. If the **Contractor** does not make payments to a health and welfare plan, a pension plan and a supplementary unemployment benefit plan, where such payments are included in the rates of wages, the **Contractor** shall pay the amount of said payments directly to each employee engaged in the Work. If the **Contractor** pays less than the rate of wages, including payments to health and welfare funds and pension funds, or the equivalent payments in wages to any person performing Work within the classifications as determined by the Commissioner of Labor and Industries, and if the **Contractor** takes or receives for its own use or the use of any other person, as a rebate, refund or gratuity, or in any other guise, any part or portion of the wages, including payments to health and welfare funds and pension funds, or the equivalent payment in wages,

paid to such person for Work done or service rendered on the Project, the **Contractor** will be subject to the penalties set forth in M.G.L. c. 149, §27. Notwithstanding the foregoing and the requirements of 5.5.7.1 and 5.5.7.2 below, if the Contract is federally funded, federal labor standards apply, including Davis Bacon minimum wage rates and payroll reporting requirements. See the “Federal Requirements” section at the end of these contract documents.

**5.5.7. Payroll Records of Employees.** (*Reference:* M.G.L. c. 149, §27B;). The **Contractor** and all Subcontractors who are subject to M.G.L. c. 149, §§27 and 27A shall keep a true and accurate record of all mechanics and apprentices, teamsters, chauffeurs, and laborers performing Work showing the name, address and occupational classification of each such employee, the hours worked by and the wages paid to all such employees. The **Contractor** and the Subcontractors shall submit a copy of said record to the **City** on a weekly basis.

**5.5.7.1.** (*Reference:* M.G.L. c. 149, §27B;). The **Contractor** and all Subcontractors who are subject to M.G.L. c. 149, §§27 and 27A shall preserve their payroll records for a period of three (3) years from the date of completion of the Contract.

**5.5.7.2.** (*Reference:* M.G.L. c. 149, §27B). The **Contractor** and all Subcontractors who are subject to M.G.L. c. 149, §§27 and 27A shall furnish to the Commissioner of Labor and Industries and the **City** within fifteen (15) days after completion of their portion of the Work a statement executed by the **Contractor** or Subcontractor or by any authorized officer or employee of the **Contractor** or Subcontractor who supervises the payment of wages in the form found in M.G.L. c.149, §27B.

## **5.6. Superintendence.**

**5.6.1. Employment of a Superintendent.** The **Contractor** shall employ a competent, properly licensed superintendent, reasonably acceptable to the **City**, and necessary assistants who shall be in attendance at the Site full time during the progress of the Work until the date of Substantial Completion and for such additional time thereafter as the **Design Professional** or the **City** may determine to be necessary for the expeditious completion of the Work, including final completion. If continually in the employ of the Contractor, the same Superintendent shall be assigned to this project.

**5.6.2. Removal/Replacement of a Superintendent.** The **Contractor** shall remove the superintendent if requested to do so in writing by the **City** and shall promptly replace such superintendent with a competent person reasonably acceptable to the **City**. The superintendent shall represent the **Contractor**, and communications given to the superintendent shall be as binding as if given to the **Contractor**. The **Contractor** shall not replace the superintendent without written notice to the **City** and the **Design Professional**.

**5.6.3. Registered Professional Engineer or Registered Land Surveyor.** The **Contractor** shall retain a competent Registered Professional Engineer or Registered Land

Surveyor, acceptable to the **Engineer**, who shall establish the exterior lines and required elevations of all buildings and structures to be erected on the site and shall establish sufficient lines and grades for the construction of associated Work such as, but not limited to, roads, utilities, and site grading. The Engineer or Land Surveyor shall certify as to the actual location of the constructed facilities in relation to property lines, building lines, easements, and other restrictive boundaries.

**5.6.4. Building Grades, Lines, Etc.;** The **Contractor** shall establish the building grades; lines; levels; and column, wall and partition lines required by the various Subcontractors in laying out their Work.

**5.6.5. Coordination and Supervision.** The **Contractor** shall coordinate and supervise the Work performed by Subcontractors to the end that the Work is carried out without conflict between trades and so that no trade, at any time, causes delay to the general progress of the Work. The **Contractor** and all Subcontractors shall at all times afford each trade, any separate contractor, or the **City**, every reasonable opportunity for the installation of Work and the storage of materials.

**5.6.6. Job Meetings.** There shall be job meetings held on a weekly basis, or more often if required by the **City**. The **Contractor** shall arrange for and attend weekly job meetings with the **Design Professional** and such other persons as the **Design Professional** may from time to time wish to have present. The **Contractor** shall be represented by a principal, project manager, general superintendent or other authorized main office representative, as well as by the **Contractor's** own superintendent. An authorized representative of any Subcontractor or Sub-subcontractor shall attend such meetings if the representative's presence is requested by the **Design Professional**. Such representatives shall be empowered to make binding commitments on all matters to be discussed at such meetings, including costs, payments, Change Orders, time schedules and workforce power. Any notices required under the Contract may be served on such representatives.

**5.7. Materials, Labor, Equipment, Etc.**

**5.7.1. Provision of.** Unless otherwise provided in the Contract Documents, the **Contractor** shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up, and completion of the Work.

**5.7.2. Quality and Use of.** All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by the **Design Professional**, the **Contractor** shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.

**5.7.3. Discrepancies or Defects.** If the **Contractor** is unable to perform its Work because of discrepancies or defects in the work of the **City's** own forces or of a separate contractor, the **Contractor** shall immediately notify the **Design Professional** and the **City** in writing of the conditions that render unable to so perform. Failure to notify the **Design Professional** constitutes an acknowledgment and acceptance of the other work as being fit and proper for integration with the **Contractor's** Work except for latent or non-apparent defects and deficiencies in the other work.

**5.8. Contractor's Management and Financial Statement Requirements. (Reference: M.G.L. c. 30, §39R)**

**5.8.1.** The words defined herein shall have the meaning stated below whenever they appear in this Paragraph:

**5.8.1.1.** “Contractor” means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to M.G.L. c.149, §44A-H or M.G.L. c. 30, §39M, inclusive.

**5.8.1.2.** “Contract” means any contract awarded or executed pursuant to M.G.L. c. 149, §44A-H or M.G.L. c. 30, §39M, which is for an amount or estimate amount that exceed the dollar amount set forth in M.G.L. c. 30, §39R.

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

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

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

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

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

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

**5.8.2.** The Contractor shall make, and keep for at least six (6) years after final payment, books, Records, and accounts that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Contractor.

**5.8.3.** Until the expiration of six (6) years after final payment, the Office of the Inspector General, and the Deputy Commissioner of the Division of Capital Asset Management shall have the right to examine any books, documents, papers or Records of the Contractor or of its Subcontractors that directly pertain to, and involve transactions relating to, the Contractor or its Subcontractors.

**5.8.4.** The Contractor shall describe any change in the method of maintaining Records or recording transactions which materially affect any statements filed with the **City**, including in its description the date of the change and reasons therefore, and shall accompany said description with a letter from the Contractor’s Independent Certified Public Accountant approving or otherwise commenting on the changes.

**5.8.5.** The Contractor shall file a Statement of Management on internal accounting controls as set forth below prior to the execution of the Contract.

**5.8.6.** The Contractor shall file prior to the execution of the contract and shall continue to file annually, an Audited Financial Statement for the most recent completed fiscal year as set forth below.

**5.8.7.** The Contractor shall file with the **City** a Statement of Management as to whether

the system of internal accounting controls of the Contractor and its subsidiaries reasonably assures that:

**5.8.7.1.** transactions are executed in accordance with Management's general and specific authorization;

**5.8.7.2.** transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles, and to maintain accountability for assets;

**5.8.7.3.** access to assets is permitted only in accordance with Management's general or specific authorization; and

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

**5.8.7.5.** The Contractor shall also file with the **City** a statement prepared and signed by an Independent Certified Public Accountant stating that s/he has examined the Statement of Management on internal accounting controls, and expressing an opinion as to:

**5.8.7.5.1.** whether the representation of Management in response to this paragraph and paragraphs 5.8.2. through 5.8.6 above are consistent with the result of Management's evaluation of the system of internal accounting controls; and

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

**5.8.8.** The Contractor shall annually file with the Commissioner of the Division of Capital Asset Management during the term of the contract a financial statement prepared by an Independent Certified Public Accountant on the basis of an Audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report. Such statements shall be made available to the **City** upon request.

**5.9. Taxes.**

**5.9.1** The **Contractor** shall pay all sales, consumer, use, and other similar taxes for the Work or portions thereof which are provided by the **Contractor** which are legally enacted when bids are received, whether or not yet effective or merely scheduled to go into effect. However, the **Contractor** shall not pay, and the **City** shall not reimburse or pay the **Contractor** for, any

sales taxes for building supplies or materials for which an exemption is provided in M.G.L. c. 64H, §6(f). The **City's** tax exemption number to be used by the **Contractor** in this regard is E04-600-1414.

**5.10. Permits, Licenses, and Fees.**

**5.10.1** Unless otherwise provided, the **Contractor** shall obtain and pay the fees for all permits, licenses, and inspections that are necessary for the proper execution and completion of the Work and which are customarily secured after execution of the Contract and which are legally required. All fees for permits, and inspections required by any **City** department shall be waived. Fees for licenses (e.g. drainlayer's license) are not waived. In addition the contractor shall pay for water meters and water usage. The contractor is responsible for obtaining NSTAR work orders and paying all costs and fees associated with NSTAR work.

**5.11. Notices Required By Statutes, Ordinances, Codes, Rules, Regulations, and Orders of the City.**

**5.11.1** The **Contractor** shall give notices required by statutes, ordinances, codes, rules, regulations, and orders of the **City** bearing on performance of the Work.

**5.12. Additional Information from Design Professional.**

**5.12.1.** The **Contractor** shall perform the Work in accordance with the Contract Documents and submittals approved pursuant to Article 4.

**5.12.2.** The **Contractor** shall give the **Design Professional** timely notice of any additional Plans, Specifications, or instructions required to define the Work in greater detail, or to permit the proper progress of the Work.

**5.12.3.** The **Contractor** shall not proceed with any Work not clearly and consistently defined in detail in the Contract Documents, but shall request additional drawings or instructions from the **Design Professional** as provided in the previous Paragraph. If the **Contractor** proceeds with such Work without obtaining further drawings, Specifications, or instructions, the **Contractor** shall correct Work incorrectly done at the **Contractor's** own expense.

**5.13. "Or equal."**

**5.13.1. Requirements for Substitutions.** (*Reference: M.G.L. c. 30, §39M(b).*) Where products or materials are prescribed by manufacturer name, trade name, or catalog reference, the words "or approved equal" shall be understood to follow. An item shall be considered equal to the item so named or described if, in the opinion of the **Design Professional**:

**5.13.1.1.** it is at least equal in quality, durability, appearance, strength, and design;

**5.13.1.2.** it performs at least equally the function imposed by the general design for the Work;

**5.13.1.3.** it conforms substantially, even with deviations, to the detailed requirements for the items as indicated by the Specifications.

**5.13.2. Net Savings.** No proposed substitution will be permitted unless the **Contractor** certifies that the proposed substitution will yield a net savings to the **City** and will not extend the Contract Time.

**5.13.3. Contractor's Expense.** Any structural or mechanical changes made necessary to accommodate substituted equipment under this paragraph (including but not limited to engineering fees) shall be at the expense of the **Contractor** or **Subcontractor** responsible for the Work item.

**5.13.3.1.** Any additional cost, or any loss or damage arising from the substitution of any material or any method for those originally specified shall be borne by the **Contractor**, notwithstanding approval or acceptance of such substitution by the **City** or the **Design Professional**, unless such substitution was made at the written request or direction of the **City** or the **Design Professional**.

**5.13.3.2.** All data to be provided by the **Contractor** in support of any proposed "or equal" or substitute item will be at the **Contractor's** expense.

**5.13.4. Meeting Requirements.** The **Contractor** shall be responsible for determining that all materials furnished for the Work meet all requirements of the Contract Documents. The **Design Professional** may require the **Contractor** to produce reasonable evidence that a material meets such requirements, such as certified reports of past tests by qualified testing laboratories, reports of studies by qualified experts, or other evidence which, in the opinion of the **Design Professional**, would lead to a reasonable certainty that any material used, or proposed to be used, in the Work meets the requirements of the Contract Documents. All such data shall be furnished at the **Contractor's** expense. This provision shall not require the **Contractor** to pay for periodic testing of different batches of the same material, unless such testing is specifically required by the Contract Documents to be performed at the **Contractor's** expense.

**5.13.5. Named Manufacturer's Product.** In all cases in which a manufacturer's name, trade name, or other proprietary designation is used in connection with materials or articles to be furnished under this Contract, whether or not the phrase "or equal" is used after such name, the **Contractor** shall furnish the product of the name manufacturer(s) without substitution, unless a written request for a substitute has been submitted by the **Contractor** and approved in writing by the **Design Professional** as provided in the following paragraph.

**5.13.6. Deviations.** If the **Contractor** proposes to use a material which while suitable for the intended use, deviates in any way from the detailed requirements of the Contract Documents, the **Contractor** shall inform the **Design Professional** in writing of the nature of such deviations

at the time the material is submitted for approval and shall request written approval of the deviation from the requirements of the Contract Documents.

**5.13.7. Rejection of Deviations.** In requesting approval of deviations or substitutions, the **Contractor** shall provide, upon request, evidence leading to a reasonable certainty that the proposed substitution or deviation will provide a quality of result at least equal to that otherwise attainable. If, in the opinion of the **Design Professional**, the evidence presented by the **Contractor** does not provide a sufficient basis for such reasonable certainty, the **Design Professional** may reject such substitution or deviation without further investigation.

**5.13.8. Consistent Character and Quality of Design.** The Contract Documents are intended to produce a building of consistent character and quality of design. All components of the building including visible items of mechanical and electrical equipment have been selected to have a coordinated design in relation to the overall appearance of the Project. The **Design Professional** shall judge the design and appearance of proposed substitutes on the basis of their suitability in relation to the overall design of the Project, as well as for their intrinsic merits. The **Design Professional** will not approve as equal to materials specified proposed substitutes that, in the **Design Professional's** opinion, would be out of character, obtrusive, or otherwise inconsistent with the character or quality of design of the Project. In order to permit coordinated design of color and finishes the **Contractor** shall, if required by the **Design Professional**, furnish the substituted material in any color, finish, texture, or pattern which would have been available from the manufacturer originally specified, at no additional cost to the **City**.

**5.13.9. Warranty.** The warranties provided herein shall be in addition to and not in limitation of any other warranty required by the Contract Documents or otherwise prescribed by law.

**5.13.10. Design Professional's Approval.** The **Design Professional** will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed, or utilized without the **Design Professional's** prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. The **City** may require the **Contractor** to furnish at the **Contractor's** expense a special performance guarantee or other surety with respect to any "or equal" or substitute. The **Design Professional** will record the time required by the **Design Professional** and its consultants in evaluating substitutes proposed or submitted by the **Contractor** and in making changes in the Contract Documents (or in the provisions of any other direct contract with the **City** for work on the Project) occasioned thereby. Whether or not the **Design Professional** accepts a substitute item so proposed or submitted by the **Contractor**, the **Contractor** shall reimburse the **City** for the charges of the **Design Professional** and its consultants for evaluating each such proposed substitute item.

**5.14. Substitute Construction Methods or Procedures.**

**5.14.1** If a specific means, method, technique, sequence, or procedure of construction is

shown or indicated in and expressly required by the Contract Documents, the **Contractor** may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to the **Design Professional**. The **Contractor** shall submit sufficient information to allow the **Design Professional**, in the **Design Professional's** sole discretion, to determine whether the substitute proposed is equivalent to that expressly called for by the Contract Documents.

**5.15. Contractor's Progress Schedule.**

**5.15.1. Before Starting Construction.** Within ten (10) days after the date of the Notice to Proceed, the **Contractor** shall submit to the **Design Professional** for review:

**5.15.1.1.** a preliminary progress schedule indicating the times (number of days or dates) for starting and completing the various stages of the Work;

**5.15.1.2.** a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and

**5.15.1.3.** a refined schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Sum and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

**5.15.2. Review of Progress Schedule.** At least ten (10) days prior to the commencement of construction, the **Design Professional**, the **Contractor**, and any other appropriate persons will meet to review and discuss the acceptability to the **Design Professional** of the progress schedule. The **Contractor** will have an additional ten (10) days to make corrections and adjustments and to complete and resubmit the schedule. No progress payment shall be made to the **Contractor** until the schedule is submitted to and found acceptable by the **Design Professional** as provided below.

**5.15.3. Acceptability of Progress Schedule.** The progress schedule will be acceptable to the **Design Professional** if, according to the **Design Professional**, it provides an orderly progression of the Work to completion within any specified time frame, but such acceptance will neither impose on the **Design Professional** responsibility for the sequencing, scheduling, or progress of the Work nor interfere with or relieve the **Contractor** from the **Contractor's** full responsibility therefore. The **Contractor's** schedule of Submittals must be acceptable to the **Design Professional** in providing a workable arrangement for reviewing and processing the required Submittals. The **Contractor's** schedule of values must be acceptable to the **Design Professional** as to form and substance.

**5.15.4. Sepia and Copies.** After the **Design Professional** has approved the schedule, the

**Contractor** shall submit to the **Design Professional** one (1) sepia and four (4) copies bearing the **Contractor's** stamp of approval as a representation to the **City** that the **Contractor** has determined or verified all data on that progress schedule and that the **Contractor**, the Subcontractors and Suppliers have reviewed and coordinated the sequences in that progress schedule with the requirements of the Work.

**5.15.5. Adjustment of Schedule.** The **Contractor** shall adhere to the established progress schedule which may be adjusted from time to time as follows: the **Contractor** shall submit to the **Design Professional** for acceptance proposed adjustments in the progress schedule that will not change the Contract Time. Such adjustments will conform generally to the progress schedule then in effect and will comply with any provisions of the requirements applicable thereto.

**5.15.6. During Construction.** The **Contractor** shall submit monthly progress schedules to the **Design Professional**. The schedules shall stay current with the **Contractor's** approach to the Work remaining.

**5.15.7. Schedule of Submittals.** The **Contractor** shall prepare and keep current, for the **Design Professional's** approval, a schedule of Submittals that is coordinated with the **Contractor's** construction schedule and allows the **Design Professional** reasonable time to review Submittals.

## **5.16. Project Coordination.**

**5.16.1. In General.** The **Contractor** shall be responsible for the proper coordination of the Work of all of the trades.

**5.16.2. Coordination with Subcontractors.** The **Contractor** shall coordinate the work of each Subcontractor with the Work of every other Subcontractor whose Work affects the other.

**5.16.3. Coordination with the City's Own Forces or Separate Contractors.** The **Contractor** shall coordinate its operations with those of the **City's** own forces or separate contractors. The **Contractor** shall provide the **City's** own forces and separate contractors a reasonable opportunity for the handling, unloading and storage of their materials and equipment and execution of their work. The **Contractor** shall connect and coordinate its Work with theirs.

**5.16.4. Coordination with Utility Companies.** The **Contractor** shall coordinate its operations with all the appropriate utility companies to assure that the utilities required on the Project are available and functioning properly pursuant to the requirements of the Contract Documents.

## **5.17. Project Photographs.**

**5.17.1. In General.** The **Contractor** shall take, at its own expense, interior and exterior

photographs at the site, from different vantages as directed by the **Design Professional** or the **City**, before beginning any Work and thereafter, at a minimum, on the first work day of each month until final completion of the Work, including final Site photos. Photos shall be taken of any Work that will be buried or concealed while the Work is still exposed. The photographs shall be taken by a skilled commercial photographer. The number of photographs required shall be at the discretion of the **City** or the **Design Professional**. One aerial photo shall be required a) prior to commencement of the work and b) at the completion of the work. See Section 01320 – Construction Progress Documentation.

**5.17.2. Prints and Digital Media.** Within fourteen (14) days after the photographs have been taken, the **Contractor** shall cause prints to be made and delivered to the **City** and the **Design Professional**. All photographs shall be 8" x 10". Each print shall state the date of the photograph, the name of the Project, the description of the view and the name and address of the photographer. The **City** shall receive one glossy print of each photo as well as all prints in digital form on compact disc. The **Design Professional** shall receive one glossy print.

**5.17.3. Failure to Comply.** Should the **Contractor** fail to adhere to any requirement set forth in the previous two paragraphs, the **City** may have the photographs taken at the **Contractor's** expense or receive a set-off against the **Contractor's** next application for payment.

**5.18. Record Documents and Samples at the Site.**

**5.18.1** The **Contractor** shall maintain in a safe place at the site one record copy of all Plans, Specifications, Modifications, Change Orders, **Construction Change** Directives, Field Orders and written interpretations and clarifications in good order and annotated to show all changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to the **Design Professional** for reference. Upon completion of the Work, these record documents, Samples and Shop Drawings will be delivered by the **Contractor** to the **Design Professional** for the **City**.

**5.19. Submittals.**

**5.19.1. Purpose.** The purpose of Submittals is to demonstrate for those portions of the Work for which Submittals are required the way the **Contractor** proposes to conform to the information given and the design concept expressed in the Contract Documents.

**5.19.2. Submittal Procedure.** Within ten (10) days from the Notice to Proceed, the **Contractor** shall submit to the **Design Professional** a completed Submittals schedule. The **Contractor** shall review, approve, and submit to the **Design Professional** Submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the **City** or of separate contractors. Submittals made by the **Contractor** that are not required by the Contract Documents may be returned without action. The schedules shall be updated and resubmitted each month. All Submittals will be identified as the **Design Professional** may require and in the number specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions,

specified performance and design criteria, materials, and similar data to show the **Design Professional** the materials and equipment that the **Contractor** proposes to provide and to enable the **Design Professional** to review the information for the limited purposes stated below.

**5.19.3. Samples.** The **Contractor** shall also submit Samples to the **Design Professional** for review and approval in accordance with said accepted schedule of Submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which it is intended and otherwise as the **Design Professional** may require to enable the **Design Professional** to review the Submittal for the limited purposes stated below. The numbers of each Sample to be submitted will be as specified in the Specifications. Unless otherwise specified in the Specifications, three (3) specimens of each Sample shall be submitted.

**5.19.3.1.** The Samples shall be of sufficient size to permit proper evaluation of material. Where variations in color or other characteristics are to be expected, samples showing the minimum range of variation shall be submitted. Materials exceeding the range of variation of the approved Samples will not be approved on the Work.

**5.19.3.2.** All costs associated with delivery of Samples will be paid by the **Contractor**.

**5.19.4. Contractor's Verifications.** Before submitting each Submittal, the **Contractor** shall have determined and verified:

**5.19.4.1.** all field measurements, quantities, dimensions specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

**5.19.4.2.** all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

**5.19.4.3.** all information relative to the **Contractor's** sole responsibilities in respect of means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto.

**5.19.5. Contractor's Representations.** By approving and providing Submittals, the **Contractor** thereby represents that the **Contractor** has determined and verified all dimensions, quantities, field dimensions, relations to existing Work, coordination with Work to be installed later, coordination with information on previously accepted Submittals and verification of compliance with all the requirements of the Contract Documents. The accuracy of all such information is the responsibility of the **Contractor**. In reviewing Submittals, the **Design Professional** shall be entitled to rely upon the **Contractor's** representation that such information is correct and accurate.

**5.19.6. Coordination.** The **Contractor** shall also have reviewed and coordinated each Submittal with other Submittals and with the requirements of the Work and the Contract Documents.

**5.19.7. Stamp or Specific Written Indication.** Each Submittal will bear a stamp or specific written indication that the **Contractor** has satisfied the **Contractor's** obligations under the Contract Documents with respect to the **Contractor's** review and approval of that Submittal.

**5.19.8. Written Notice of Variations.** At the time of each Submittal, the **Contractor** shall give the **Design Professional** specific written notice of such variations, if any, that the Submittal may have from the requirements of the Contract Documents. Such notice is to be in a written communication separate from the Submittal. Moreover, the **Contractor** shall make a specific notation on each Submittal to the **Design Professional** for review and approval of each such variation.

**5.19.9. Review and Approval by the Design Professional.** The **Contractor** shall perform no portion of the Work requiring a Submittal until the respective Submittal has been approved by the **Design Professional**. Such Work shall be in accordance with approved Submittals.

**5.19.9.1.** The **Design Professional** will review and approve Submittals in accordance with the schedule of Submittals accepted by the **Design Professional** as required above. The **Design Professional's** review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. The **Design Professional's** review and approval will not extend to means, method, technique, sequences, or procedures of construction (except where a particular means, method, technique, sequences or procedures of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

**5.19.10. Deviations.** The **Contractor** shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the **Design Professional's** approval of Submittals unless the **Contractor** has specifically informed the **Design Professional** in writing of such deviation at the time of Submittal and the **Design Professional** has given written approval to the specific deviation. The **Contractor** shall not be relieved of responsibility for errors or omissions in Submittals by the **Design Professional's** approval thereof.

**5.19.11. Revisions.** The **Contractor** shall make corrections required by the **Design Professional** and shall return the required number of corrected copies of Submittals and submit as required new Submittals for review and approval. The **Contractor** shall direct

specific attention, in writing or on resubmitted Submittals, to revisions other than those requested by the **Design Professional** on previous Submittals. Unless such written notice has been given, the **Design Professional's** approval of a resubmitted Submittal shall not constitute approval of any changes not requested on the prior Submittal.

**5.19.12. Related Work.** Where a Submittal is required by the Contract Documents or the schedule of Submittals accepted by the **Design Professional**, any related Work performed prior to the **Design Professional's** review and approval of the pertinent Submittal will be at the sole expense and responsibility of the **Contractor**.

**5.19.13. Informational Submittals.** Informational Submittals upon which the **Design Professional** is not expected to take responsive action may be so identified in the Contract Documents.

**5.19.14. Certification.** When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the **City** shall be entitled to rely upon such certifications, and neither the **City** nor the **Design Professional** shall be expected to make any independent examination with respect thereto.

**5.20. Continuing the Work.**

**5.20.1.** The **Contractor** shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with the **City**. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as otherwise provided herein or as the **City** and the **Contractor** may agree in writing.

**5.21. Use of Site; Access to Work.**

**5.21.1.** The right of possession of the premises and the improvements made thereon by the **Contractor** shall remain at all times in the **City**. The **Contractor's** right to entry and use thereof arises solely from the permission granted by the **City** under the Contract Documents. The **Contractor** shall confine the **Contractor's** apparatus, the storage of materials, and the operations of the **Contractor's** workers to limits indicated by law, ordinance, the Contract Documents and permits and/or directions of the **Design Professional** and shall not unreasonably encumber the premises with the **Contractor's** materials. The **City** shall not be liable to the **Contractor**, the Subcontractors, Suppliers, or anyone else with respect to the conditions of the premises, except for a condition caused directly and solely by the negligence of the **City**.

**5.21.2.** At all times, the **City** and the **Design Professional** shall have access to the Work.

**5.22. Protection of Persons and Property.**

**5.22.1. In General.** The **Contractor** shall be responsible for initiating, maintaining, and supervising all health and safety precautions and programs in connection with the performance

of the Contract. The **Contractor** is responsible for the implementation of all Federal, State, and local health and safety requirements.

**5.22.2.** The **Contractor** shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

**5.22.2.1.** employees on the site and other persons who may be affected thereby;

**5.22.2.2.** the Work, materials, and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the **Contractor**, Subcontractors, or Sub-subcontractors;

**5.22.2.3.** other property at the site or adjacent or in close proximity thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction; and

**5.22.2.4.** any other property of the **City**, whether or not forming part of the Work, located at the site or adjacent thereto in areas to which the **Contractor** has access.

**5.22.3. Notices and Compliance.** The **Contractor** shall give notices and comply in all other respects with applicable laws, ordinances, rules, regulations, codes, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss. The **Contractor** shall notify owners of adjacent and nearby properties of underground facilities and utility owners when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

**5.22.4. Erection and Maintenance of Safeguards.** The **Contractor** shall erect and maintain, as required by existing conditions and the terms of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent and nearby sites and utilities.

**5.22.5. Hazardous Materials and Equipment.** When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the **Contractor** shall exercise utmost care and carry on such activities under the supervision of properly qualified personnel.

**5.22.6. Damage to Property.** The **Contractor** shall promptly remedy damage and loss to property referred to above. If the damage or loss is due in whole or in part to the **Contractor's** failure to take the precautions required herein, the **Contractor** shall bear the cost, subject to any reimbursement to which the **Contractor** is entitled under property insurance

required by the Contract Documents. The **Contractor** shall be fully and solely responsible for all Work and other operations carried out on adjacent properties. The insurance required under Article 8 shall cover such Work or operations, and the **Contractor** shall indemnify and defend the **City**, the **Design Professional**, and the owners of such adjacent or nearby properties from and against all claims, suits, losses, or costs arising out of such Work or operations.

**5.22.7. Fire Protection Equipment and Services.** The **Contractor** shall provide and maintain in good operating condition suitable and adequate fire protection equipment and services and shall comply with all reasonable recommendations regarding fire protection made by the representatives of the fire insurance company carrying insurance on the Work or by the local fire chief or fire marshal. The area within the site limits shall be kept orderly and clean and all combustible rubbish shall be promptly removed from the site.

**5.22.8. Protection of Excavations, Trenches, etc.** The **Contractor** shall at all times protect excavations, trenches, buildings and materials from rain water, ground water, backup or leakage of sewers, drains and other piping, and from water of any other origin and shall remove promptly any accumulation of water. The **Contractor** shall provide and operate all pumps, piping, and other equipment necessary to this end.

**5.22.9. Snow and Ice Removal.** The **Contractor** shall remove snow and ice that might result in damage or delay.

**5.22.10. Safety Representative.** The **Contractor** shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

**5.22.11. Weather Protection.** (*Reference: M.G.L. c. 149, §44F(1).*) The **Contractor** shall install weather protection and furnish adequate heat in the protected area from November 1 through March 31.

**5.22.12. Security.** The **Contractor** shall provide, within the Contract Sum, a sufficient number of security personnel at the Site at all times when the **Contractor's** personnel are not present, from commencement of the Work until Substantial Completion to assure that the Site, the facility, and the Work, and all materials and equipment stored at the Site are fully and completely protected against loss or damage due to vandalism, theft, or malicious mischief. If the **Contractor** elects, in addition, to use guard dogs for this purpose, each dog shall at all times be accompanied by an adult handler. If the **Contractor** fails to comply with the requirements of this paragraph, then the **City** may provide appropriate security and charge the cost thereof to the **Contractor**. The **City's** provision of such security, or failure to do so, shall not relieve the **Contractor** of its responsibility to pay for loss or damage due to vandalism, theft, or malicious mischief at the Site.

**5.22.13. Hazard Communication Programs.** The **Contractor** shall be

responsible for coordinating any exchange of material safety data sheets or other hazard communications information required to be made available to or exchanged between or among employers at the site in accordance with laws, codes and regulations.

**5.22.14. Noise Pollution Control.** The **Contractor** shall comply with all applicable provisions of Somerville Municipal Code §9-109.

**5.23. Cutting and Patching.**

**5.23.1. In General.** Unless otherwise provided in the Contract Documents, the **Contractor** shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly, including the work of the City or of separate contractors.

**5.23.2. Damage to Work of City or of Separate Contractor.** The **Contractor** shall not damage or endanger a portion of the Work or fully or partially completed construction of the **City** or separate contractors by cutting, patching, or otherwise altering such construction, or by excavation. The **Contractor** shall not cut or otherwise alter such construction by the **City** or a separate contractor except with prior written consent of the **City** and of such separate contractor; such consent shall not be unreasonably withheld. The **Contractor** shall not unreasonably withhold from the **City** or a separate contractor the **Contractor's** consent to cutting or otherwise altering the Work.

**5.23.3. Damage Caused by Contractor.** Should the **Contractor** cause damage to the work or property of any separate contractor at the Site, or should any claim arising out of the **Contractor's** performance of Work at the Site be made by any separate contractor against the **Contractor**, the **City**, the **Design Professional**, or any of the **Design Professional's** consultants, the **Contractor** shall promptly attempt to settle with such other contractor by agreement, or to otherwise resolve the dispute by arbitration or at law. The **Contractor** shall, to the fullest extent permitted by laws and regulations, indemnify and hold harmless the **City**, the **Design Professional**, and the **Design Professional's** consultants from and against all claims, damages, losses and expenses (including, but not limited to, fees of the Design Professional, the Design Professional's consultants, attorneys, and other professionals, and court and arbitration or mediation costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any separate contractor against the **City**, the **Design Professional**, or any of the **Design Professional's** consultants, to the extent based on a claim arising out of the **Contractor's** performance of the Work. Should a separate contractor cause damage to the Work or property of the **Contractor** or should the performance of work by any separate contractor at the site give rise to any other claim, the **Contractor** shall not institute any action, legal or equitable, against the **City**, the **Design Professional**, or any of the **Design Professional's** consultants, or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from the **City**, the **Design Professional**, or any of the **Design Professional's** consultants, on account of any such damage or claim. If the **Contractor** delays at any time in performing or furnishing Work by any act or neglect of a separate contractor and the City and the

Contractor are unable to agree as to the extent of any adjustment in the Contract Time attributable thereto, the **Contractor** may make a claim for an extension of time in accordance with Article 16. An extension of the Contract Time shall be the **Contractor's** exclusive remedy with respect to the **City**, the **Design Professional**, and the **Design Professional's** consultants, for any delay, disruption, interference, or hindrance caused by any separate contractor.

#### **5.24. Cleaning Up.**

**5.24.1.** During the progress of the Work, the **Contractor** shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract or other debris. At the completion of the Work, the **Contractor** shall remove from and about the Project all waste materials, rubbish, and debris, and the **Contractor's** tools, construction equipment, machinery, and surplus materials. Surplus materials to be provided to the **City** by specifications shall be stored in a clean, safe and secure area as directed by the **City**. The **Contractor** shall leave the site clean and ready for occupancy by the **City** at Substantial Completion of the Work. Immediately prior to the **Design Professional's** inspection for Substantial Completion, the **Contractor** shall completely clean the premises. Concrete and ceramic surfaces shall be cleaned and washed. Resilient coverings shall be cleaned, waxed and buffed. Woodwork shall be dusted and cleaned. Sash, fixtures and equipment shall be thoroughly cleaned. Stains, spots, dust, marks and smears shall be removed from all surfaces. Hardware and all metal surfaces shall be cleaned and polished. Glass and plastic surfaces shall be thoroughly cleaned by professional window cleaners. All damaged, broken or scratched glass or plastic shall be replaced by the **Contractor** at the **Contractor's** expense. The **Contractor** shall restore to original condition all property not designated for alteration by the Contract Documents.

**5.24.2.** If the **Contractor** fails to clean up as provided herein, the **City** may do so and charge the cost thereof to the **Contractor**.

#### **5.25. Royalties and Patents.**

**5.25.1** The **Contractor** shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. To the fullest extent permitted by law, the **Contractor** shall indemnify and hold harmless the **City** and the **Design Professional** from and against all claims, costs, losses, and damages arising out of or resulting from any infringement of patent rights or copyrights incident to the use in the performance of the work or resulting from the incorporation in the work of any invention, design, process, product, or device not specified in the Contract Documents.

#### **5.26. Contractor's Obligation to Perform.**

**5.26.1.** The **Contractor's** obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of the **Contractor's**

obligation to perform the Work in accordance with the Contract Documents:

- 5.26.1.1. observations by the **Design Professional**;
- 5.26.1.2. recommendation of any progress or final payment by the **Design Professional**;
- 5.26.1.3. the issuance of a certificate of Substantial Completion or any payment by the **City** to the **Contractor** under the Contract Documents;
- 5.26.1.4. use or occupancy of the Work, Project, or Site, or any part thereof, by the **City**;
- 5.26.1.5. any acceptance by the **City** or any failure to do so;
- 5.26.1.6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptance by the **Design Professional**;
- 5.26.1.7. any inspection, test, or approval by others; or
- 5.26.1.8. any correction of defective Work by the **City**.

**5.27. Indemnification; and Covenant Not To Sue.**

**5.27.1.** To the fullest extent permitted by law, the **Contractor** shall assume the defense of, indemnify and hold harmless the **City**, the **Design Professional**, the **Design Professional's** consultants, and agents and employees of any of them, from and against claims, damages, losses, and expenses, including, but not limited, to attorneys' fee, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting there from, caused in whole or in part by alleged negligent acts or omissions of the **Contractor**, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this paragraph.

**5.27.2.** In claims against any person or entity indemnified under the foregoing paragraph by an employee of the **Contractor**, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under the foregoing paragraph shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the **Contractor** or a Subcontractor under Workers' Compensation laws, disability benefit acts or other employee benefit acts.

**5.27.3.** The obligations of the **Contractor** in this Article shall not extend to the liability of the **Design Professional**, the **Design Professional's** consultants, and agents or employees of any of them arising out of (1) the preparation of maps, Plans, opinions, reports, surveys, Change Orders, designs, or Specifications, or (2) directions or instructions given by the **Design Professional**, the **Design Professional's** consultants and agents or employees of any of them, provided such instructions or directions are the primary cause of the injury or damage.

**5.27.4.** The **Contractor**, or any successor, assign, or subrogee of the **Contractor** agrees not to bring any civil suit, action, or other proceeding in law, equity or arbitration against the **Design Professional**, or the officers, employees, agents, or consultants of the **Design Professional**, for the enforcement of any action which the **Contractor** may have arising out of or in any manner connected with the Work. The **Contractor** shall assure that this covenant not to sue is contained in all subcontracts and sub-subcontracts of every tier and shall assure its enforcement. The **Design Professional**, its officers, employees, agents, and consultants are intended third-party beneficiaries of this covenant not to sue, and are entitled to enforce this covenant in law or equity.

**5.28. Survival of Obligations.**

**5.28.1** All representations, indemnifications, warranties, and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the Work and termination or completion of the Contract.

**ARTICLE 6: SUBCONTRACTORS**

**6.1 Use of Subcontractors.**

**6.1.1** The **Contractor** shall use the Subcontractors named in the **Contractor's** Bid.

**6.2 Substitution of Subcontractors.**

**6.2.1** The **Contractor** shall not substitute another Subcontractor therefore without notice to the **City** and the **City's** prior written consent of such substitution.

**6.3 Names of Subcontractors.**

**6.3.1** Upon execution of the Contract with the **City**, the **Contractor** shall provide in writing to the **City**, through the **Design Professional**, the names, addresses, telephone numbers, and fax numbers of all persons proposed for each principal portion of the Work.

**6.4. Objections to Subcontractors.**

**6.4.1** The **Contractor** shall not use any Subcontractor against whom the **City** has a reasonable objection. The **Contractor** shall not be required to contract with any person or entity against whom it has a reasonable objection.

**6.5. Form of the Subcontract.**

**6.5.1** All Work performed by a Subcontractor shall be through an appropriate

subcontract. The form of subcontract shall be submitted to the **City's Law Department** for its approval, which shall not be unreasonably withheld or delayed.

**6.6. Content of the Subcontract.**

**6.6.1.** In addition to all statutorily mandated provisions and provisions required elsewhere in the Contract Documents, each subcontract shall expressly provide that:

**6.6.1.1.** Each subcontract agreement for a portion of the Work is assigned by the **Contractor** to the **City** provided that:

**6.6.1.1.1.** the assignment is effective only after termination of the Contract by the **City** or the **Contractor** and only for those subcontract agreements which the **City** accepts by notifying the Subcontractor in writing; and

**6.6.1.1.2.** the assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

**6.6.1.2.** Each Subcontractor is bound by the requirements of the Contract Documents for the express benefit of the **City**.

**6.6.1.3.** Each Subcontractor shall assume toward the **Contractor** all the obligations that the **Contractor** assumes toward the **City** and the **Design Professional**, unless otherwise provided by law.

## **ARTICLE 7: PERFORMANCE AND PAYMENT BONDS**

**7.1. Form of Bonds.**

**7.1.1** The performance and labor and material or payment bonds shall be in the form required by the **City**, copies of which are included in the Project Manual. The **City** reserves the right to reject any bond that does not conform to the **City's** requirements.

**7.2. Furnished by the Contractor.** (*Reference: M.G.L. c. 30, §39M(c);, M.G.L. c. 149, §29).*

**7.2.1** The **Contractor** shall furnish a performance bond and a labor and materials or payment bond, each with a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the **City** and each in the sum of the Contract Sum, the premiums for which are to be paid by the **Contractor** and are included in the Contract Sum. The bonds shall remain in effect until final payment is made. The sum of the performance bond shall increase each time the Contract Sum is increased as a result of a Change Order.

**7.3. Submission to the City.**

**7.3.1** The **Contractor** must submit the performance and a labor and materials or payment bonds to the **City** upon the **Contractor's** execution of the Agreement.

## ARTICLE 8: INSURANCE REQUIREMENTS

### 8.1 Insurance Certificates.

**8.1.1** Prior to starting work on this project, the contractor shall deposit with the **City**, certificates from insurers clearly stating that the required insurance policies have been issued to the **Contractor** and will remain in effect during the time period required to complete this contract. ACCORD forms will not be accepted. The certificates must be in a form satisfactory to the **City**. The insurance shall include all major divisions of coverage, and shall be on a comprehensive general basis including: Premises and Operations (including X-C-U), Owners and Contractors Protective, Products and Completed Operations, Owned, Non-owned or Hired and/or Leased Motor Vehicles. Such insurance shall be written for not less than any limits of liability, required by law or the following limits, whichever are greater.

**8.2 Minimum Coverages.** The **Contractor** shall possess and maintain throughout the contract period/project, insurance in the kinds and amounts as provided in Appendix D. The **Contractor** may purchase and maintain excess liability insurance in the in the umbrella form in order to satisfy the limits of liability required for the insurance to be purchased and maintained in accordance with the required requirements set forth above (in addition to the umbrella limits required). Evidence of such excess liability shall be delivered to the **City** in the form of a certificate and the certificate indicating the policy numbers and limits of liability of all underlying insurance.

**8.3 Additional Insured.** The **City** shall be named as an additional insured on each certificate, and the certificate must have the endorsement of the insurance agency.

**8.4 Notice.** Each certificate shall contain a notation that the insurer will give 30 days notice to the **City** prior to cancellation, change or non-renewal of policy.

**8.5 Carrier Rating.** Insurance carriers MUST have an A.M. Best rating of "A" or better.

**8.6 Material Breach.** Failure of the contractor to provide and continue in force such insurance shall be deemed a material breach of contract and shall operate as immediate termination thereof.

## ARTICLE 9: TESTS AND INSPECTIONS

### 9.1 Access.

**9.1.1** The **City**, the **Design Professional**, and all other persons designated by the **City** shall have access to the Work at reasonable times for observing, inspecting, and testing. The **Contractor** shall provide them with proper and safe conditions for such access and advise them of the **Contractor's** site safety procedures and programs so that they may comply therewith as applicable.

### 9.2 Tests and Inspections.

**9.2.1.** The **Contractor** shall give the **Design Professional** timely notice of readiness of

the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

**9.2.2.** Unless otherwise provided, the **Contractor** shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the **City**, or with the appropriate public authority and shall bear all related costs of tests, inspections, and approvals. If the laws or regulations of any public body having jurisdiction require any Work or part thereof specifically to be inspected, tested, or approved by an employee or other representative of such public body, the **Contractor** shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith and furnish the **Design Professional** with the required certificates of inspection, testing, or approval.

**9.2.3.** The **Contractor** shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for the **Design Professional's** acceptance of materials or equipment to be incorporated into the Work, or of materials, mix designs, or equipment submitted for approval prior to the **Contractor's** purchase thereof for incorporation into the Work.

**9.2.4.** If any Work that is to be inspected, tested, or approved is covered by the **Contractor**, Subcontractor, or Sub-subcontractor without the prior written consent of the **Design Professional**, it must be uncovered for observation, inspection, testing, or approval, if requested by the **Design Professional**. The **Contractor** must recover the Work at its own expense.

**9.2.5.** The **Contractor** shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the **Design Professional** in the **Design Professional's** administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the **Contractor**.

## ARTICLE 10

### UNCOVERING AND CORRECTING WORK

#### 10.1. Uncovering Work.

**10.1.1.** If a portion of the Work is covered contrary to the **Design Professional's** request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the **Design Professional**, be uncovered for the **Design Professional's** observation and be replaced, both at the **Contractor's** expense and without change in the Contract Time.

**10.1.2.** If a portion of the Work has been covered which the **Design Professional** has not specifically requested to observe prior to its being covered, the **Design Professional** may request to see such Work, and it shall be uncovered by the **Contractor**. If it is found that such Work is in accordance with the Contract Documents, costs of uncovering and replacing shall, by

appropriate Change Order, be charged to the **City**. If it is found that such Work is defective or not in accordance with the Contract Documents, the **Contractor** shall pay all claims, costs, losses, and damages caused by, arising out of or resulting from such uncovering, exposure, observation, inspection, and testing and of satisfactory replacement of reconstruction (including, but not limited to, all costs of repair or replacement of work of others); and the **City** shall be entitled to an appropriate decrease in the Contract Sum. The **City** may take such decrease by reducing the then current application for payment accordingly or subsequent applications, if necessary, until the decrease is paid in full.

## **10.2. Correcting Work.**

**10.2.1.** The **Contractor** shall promptly correct Work rejected by the **Design Professional** or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. The **Contractor** shall bear all costs of correcting such rejected Work including additional testing and inspections and compensation for the **Design Professional's** services and expenses made necessary thereby and any cost, loss, or damages to the **City** resulting from such failure or defect.

**10.2.2.** If, within one (1) year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established in Article 15, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the **City** to do so, unless the **City** has previously given the **Contractor** a written acceptance of such condition. This period of one (1) year shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation to correct under this paragraph shall survive acceptance of the Work under the Contract and termination of the Contract. The **City** shall give such notice promptly after discovery of the condition.

**10.2.3.** The **Contractor** shall correct, remove, or replace portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the **Contractor** nor accepted by the **City**.

**10.2.4.** If the **Contractor** fails within a reasonable time to correct nonconforming Work, or to remove and replace rejected Work, or fails to perform the Work in accordance with the Contract Documents, the **City** may correct it in accordance with the provisions herein. If the **Contractor** does not proceed with correction, removal, or replacement of such nonconforming Work within seven (7) days from the date of written notice from the **Design Professional**, the **City** may correct it and store any salvageable materials or equipment at the **Contractor's** expense. If the **Contractor** does not pay costs of any such removal and storage within ten (10) days after written notice, the **City** may upon ten (10) additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof,

after deducting costs and damages that should have been borne by the **Contractor**, including compensation for the **Design Professional's** services and expenses made necessary thereby. If such proceeds of sale do not cover all the costs that the **Contractor** should have born, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the **Contractor** are not sufficient to cover such amount, the **Contractor** shall pay the difference to the **City**.

**10.2.5.** The **Contractor** shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the **City** or separate contractors caused by the **Contractor's** correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

**10.2.6.** Nothing contained in this paragraph shall be construed to establish a period of limitation with respect to other obligations that the **Contractor** might have under the Contract Documents. Establishment of the time period of one (1) year as described in the above paragraph related only to the specific obligation of the **Contractor** to correct the Work and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced nor to the time within which proceedings may be commenced to establish the **Contractor's** liability with respect to the **Contractor's** obligations other than specifically to correct the Work.

### **10.3. Acceptance of Nonconforming Work.**

**10.3.1** If, instead of requiring correction or removal and replacement of defective or nonconforming Work, the **City** prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the **City** may do so instead of requiring its removal and correction, in which case the **Contractor** shall pay all claims, costs, losses, and damages attributable to the **City's** evaluation of and determination to accept such defective or nonconforming Work. The Contract Sum will be reduced as appropriate. Such adjustment shall be effected whether or not final payment has been made.

## **ARTICLE 11:CHANGES IN THE WORK**

### **11.1. In General.**

**11.1.1.** The Contract Sum constitutes the total compensation (subject to authorized adjustments) payable to the **Contractor** for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the **Contractor** shall be at the **Contractor's** expense without any change in the Contract Sum.

**11.1.2.** Without invalidating the Contract and without notice to any surety, the **City** may, at any time or from time to time, order additions to, deletions from, or revisions in the Work. Such additions, deletions, or revisions will be authorized by a Change Order, a Modification or a **Construction Change Directive**. Upon receipt of any such document, the **Contractor** shall promptly proceed with the Work involved that will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

**11.1.3.** The **Contractor** shall not be entitled to an increase in the Contract Sum or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified, or supplemented, except as otherwise provided herein.

**11.2. Change Orders.**

**11.2.1.** (*Reference: M.G.L. c. 30, §39I;*). The **Contractor** shall perform all the Work required by this Contract in conformity with the Plans and Specifications contained herein. No willful and substantial deviation from said Plans and Specifications shall be made unless authorized in writing by the **City** and the **Design Professional** in charge of the Work who is duly authorized by the **City** to approve such deviations. In order to avoid delays in the prosecution of the Work required by such Contract, such deviation from the Plans or Specifications may be authorized by a written order of the **City** or the **Design Professional** so authorized to approve such deviation. Within thirty (30) days thereafter, such written order shall be confirmed by a certificate of the **City** stating: (1) If such deviation involves any substitution or elimination of materials, fixtures or equipment, the reasons why such materials, fixtures, or equipment were included in the first instance and the reasons for substitution or elimination, and, if the deviation is of any other nature, the reasons for such deviation, giving justification therefore; (2) that the specified deviation does not materially injure the Project as a whole; (3) that either the work substituted for the Work specified is of the same cost and quality, or that an equitable adjustment has been agreed upon between the **City** and the **Contractor** and the amount in dollars of said adjustment; and (4) that the deviation is in the best interest of the **City**.

**11.3. Construction Change Directive.**

**11.3.1.** A **Construction Change Directive** shall be used in the absence of total agreement on the terms of a Change Order.

**11.3.2.** Upon request of the **City** or the **Design Professional**, the **Contractor** shall without cost to the **City** submit to the **Design Professional** in such form as the **Design Professional** may require, an accurate written estimate of the cost of any proposed extra work or change. The estimate shall indicate the quantity and unit cost of each item of materials, and the number of hours of work and hourly rate for each class of labor, as well as the description and amounts of all other costs chargeable under the terms of this Article. Unit labor costs for the installation of each item of materials shall be shown if required by the **Design Professional**. If required by the **Design Professional**, in order to establish the exact cost of new Work added or of previously required Work omitted, the **Contractor** shall obtain and furnish to the **Design Professional** bona fide proposals from recognized Suppliers for furnishing any material included in such Work. Such estimates shall be furnished promptly so as to occasion no delay in the Work, and shall be furnished at the **Contractor's** expense.

**11.3.3.** The **Contractor** shall state in the estimate any extension of time required for the completion of the Work if the change or extra Work is ordered. The **Contractor** shall document,

through a critical path analysis, or some other clearly delineated explanation, how the proposed change affects other aspects of the Work, and why it would require an extension of time. The **Contractor** shall promptly revise and resubmit such estimate if the **Design Professional** determines that it is not in compliance with the requirements of this Article, or that it contains errors of fact or mathematical errors.

**11.3.4.** If the **Construction Change** Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods, as selected by the **City**, selection of which does not require the consent of the **Contractor**:

**11.3.4.1.** by unit prices stated in the Contract Documents or otherwise mutually agreed upon; or

**11.3.4.2.** by Cost and Percentages estimated by the **Contractor** as provided herein and accepted by the **City**, whereupon the **Contractor's** estimate shall become a fixed price which shall not be changed by any variation in the actual cost of executing the Work covered by the change; or

**11.3.4.3.** by actual Cost determined after the Work covered by the change is completed, plus Percentage; or

**11.3.4.4.** by submission to arbitration or a court, which shall determine the fair value of the Work covered by the change.

**11.3.5.** “Cost” shall mean the estimated or actual net increase or decrease in cost to the **Contractor**, Subcontractor, or Sub-subcontractor for performing the Work covered by the change, including actual payments for materials, equipment rentals, expendable items, wages, and associated benefits to the workers and to supervisors employed full time at the Site, insurance, bonds, and other provable direct costs, but not including any administrative, accounting or expediting costs, or other indirect or overhead costs, or any wages or benefits of supervisory personnel not assigned full time to the Site, or any amount for profit or fee to the **Contractor**, Subcontractor, or Sub-subcontractor.

**11.3.6.** “Percentage” shall mean an allowance to be added to or subtracted from the Cost in lieu of overhead and profit and of any other expense that is not included in the Cost of the Work covered by the change, as defined above. Percentage for a Sub-subcontractor shall be 8% of any net increase or decrease of Cost of any Work performed by the Sub-subcontractor’s own forces plus 4% of any net increase or decrease in Cost of any Work performed for the Sub-subcontractor by lower tier Sub-subcontractors. Percentage for a Subcontractor shall be 12% of any net increase or decrease of Cost of any Work performed by the Subcontractor’s own forces plus 4% of the Cost of Work performed by Sub-subcontractors. Percentage for the **Contractor** shall be 15% of any net increase or decrease of Cost of any Work performed by the **Contractor's** own forces plus 5% of any net increase or decrease in the Cost for all other Work

covered by the change. When the **Contractor** is also performing Work as a Subcontractor or Sub-subcontractor, the **Contractor** shall only be entitled to a total of no more than 15% of any net increase or decrease of Cost of any Work.

**11.3.7.** When in the reasonable judgment of the **Design Professional** a series of **Construction Change** Directives or Change Orders effect a single change, Percentage shall be calculated on the cumulative net increase or decrease in Cost, if any.

**11.3.8.** If unit prices are stated in the Contract Documents or are subsequently agreed upon, and if quantities originally contemplated are so changed in a Proposed Change Order or **Construction Change** Directive that the application of such unit prices to quantities of Work proposed will cause substantial inequity to the **City** or the **Contractor**, the applicable unit prices shall be equitably adjusted.

**11.3.9.** If the **City** elects to determine the Cost of the Work as provided in method (11.3.4.1) using unit prices stated in the Contract Documents or subsequently agreed upon, the unit prices shall be subject to the prior paragraph. Notwithstanding the inclusion of unit prices in the Contract Documents, it shall be the **City's** option to require the Cost of any given change to be determined by one of the other methods stated in 11.3.4. If the **City** elected to determine the Cost of the change by unit prices and the nature of the work is such that its extent cannot readily be measured after the completion of such work or any subsequent Work, the **Contractor** shall keep daily records, available at all times to the **Design Professional** for inspection, of the actual quantities of such Work put in place, and delivery receipts or other adequate evidence, acceptable to the **Design Professional**, indicating the quantities of materials delivered to the Site for use in such unit price Work, and distinguishing such from other similar material delivered for use in Work include in the base Contract Sum. If so required by the **Design Professional**, materials for use in unit price Work shall be stored apart from all other materials on the Project.

**11.3.10.** If the **City** elects to determine the Cost of the Work as provided in methods 11.3.4.3. or 11.3.4.4. or if the method of determining the Cost has not been established before the Work is begun, the **Contractor** shall keep detailed daily records of labor and material costs applicable to the Work.

**11.3.11.** Upon receipt of a **Construction Change** Directive, the **Contractor** shall promptly proceed with the change in the Work involved and advise the **Design Professional** in writing of the **Contractor's** agreement or disagreement with the method, if any, provided in the **Construction Change** Directive for determining the proposed adjustment in the Contract Time.

**11.3.12.** A **Construction Change** Directive signed by the **Contractor** indicates the agreement of the **Contractor** therewith, including adjustment in the Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

**11.3.13.** If the **Design Professional** and the **Contractor** do not agree with the adjustment in the Contract Time or the method for determining it, the adjustment or the method shall be referred to the **Design Professional** for determination.

#### **11.4. Minor Changes in the Work.**

**11.4.1.** The **Design Professional** has the authority to order minor changes in the Work. “Minor changes” as used in this paragraph mean changes which are so insignificant as to not affect the Contract Sum or the Contract Time and which are not inconsistent with the intent of the Contract Documents. Any minor change shall be committed to a written order which shall be binding on both the **City** and the **Contractor** and which shall be promptly carried out by the **Contractor**.

**11.5. Certificate of Appropriations.** (*Reference: M.G.L. c. 44, §31C;*). This Contract shall not be deemed to have been made until the **City's** auditor has certified thereon that an appropriation in the amount of this Contract is available therefor and that an officer or agent of the **City** has been authorized to execute said Contract and approve all requisitions and change orders. No order to the **Contractor** for a change in or addition to the Work, whether in the form of a drawing, plan, detail or any other written instruction, unless it is an order which the **Contractor** is willing to perform without any increase to the Contract price, shall be deemed to be given until the auditor has certified thereon that an appropriation in the amount of such order is available therefore; but such certificate shall not be construed as an admission by the **City** of its liability to pay for such work. The certificate of the auditor that an appropriation in the amount of this Contract or in the amount of such order is available shall bar any defense by the **City** on the grounds of insufficient appropriation.

### **ARTICLE 12: CHANGE IN THE CONTRACT TIME**

#### **12.1. Date of Commencement.**

**12.1.1** The date of commencement of the Work is the date established in the Notice to Proceed. The date shall not be postponed by the failure to act of the **Contractor** or persons or entities for whom the **Contractor** is responsible.

#### **12.2. Progress and Completion.**

**12.2.1.** Time is of the essence; all time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the **Contractor** confirms that the Contract Time is a reasonable period for performing the Work.

**12.2.2.** The **Contractor** shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

**12.2.3.** Within five (5) working days of award of contract, the **Contractor** shall submit to the **Design Professional** a progress schedule showing for each class of Work included in the schedule of values, the percentage of completion to be obtained and the total dollar value of

Work to be completed as of the first of each month until Substantial Completion. All calculations shall be on the basis of Work in place, but may include, at the **Design Professional's** discretion, the value of materials delivered but not in place.

**12.2.4.** The progress schedule shall be based on an orderly progression of the Work, allowing adequate time for each operation (including adequate time for submission and review of submittals), and leading to a reasonable certainty of Substantial Completion by the date established in the Agreement. The progress schedule will be reviewed by the **Design Professional** for compliance with the requirements of this Article and will be accepted by the **Design Professional** or returned to the **Contractor** for revision and resubmittal. Unless specifically required by law, no payment under this Contract shall be due until the progress schedule has been approved by the **Design Professional**. The **Design Professional's** review of the progress schedule shall not impose any duty on the **Design Professional** or the **City** with respect to the timing, planning, scheduling, or execution of the Work. In particular, if the **Contractor** proposes a progress schedule indicating a date of Substantial Completion which is earlier than the Contract Time, the **Contractor** shall not be entitled to additional payment or compensation of any kind if, for any reason, the full Contract Time is required to achieve Substantial Completion of the Work.

**12.2.5.** If in any Application for Payment, the total value of the completed Work in place, as certified by the **Design Professional**, is less than 90% of the total value of the Work in place estimated in the progress schedule, the **City** may, at the **City's** option, require the **Contractor** to accelerate the progress of the Work without cost to the **City** by increasing the workforce or hours or Work or by other reasonable means approved by the **Design Professional**.

**12.2.6.** If each of three successive applications, as certified by the **Design Professional**, indicate that the actual Work completed is less than 90% of the values estimated in the progress schedule to be completed by the respective dates, the **City** may at the **City's** option, treat the **Contractor's** delinquency as a default justifying the action permitted under Article 18.

**12.2.7.** If the **Design Professional** has determined that the **Contractor** should be permitted to extend the time for completion as provided below, the calendar dates in the progress schedule shall be adjusted accordingly to retain their same relationship to the adjusted date of Substantial Completion, and the dollar value of the Work to be completed as of the first of each month shall be adjusted pro rata.

**12.2.8.** If the **Contractor** fails to submit any application for payment in any month, the **Design Professional** shall, for the purpose of this evaluation of progress, certify separately to the actual value of the Work in place completed as of the first of the month to the best of the **Design Professional's** knowledge.

**12.2.9.** Nothing herein shall limit the **City's** right to liquidated or other damages for delays by the **Contractor** or to any other remedy which the **City** may be entitled or may possess

under other provisions of the Contract Documents or by law.

**12.3. Delays and Extensions of Time.**

**12.3.1.** If the **Contractor** is delayed at any time in the progress of the Work by an act or neglect of the **City** or the **Design Professional**, or of an employee of either, or of a separate contractor employed by the **City**, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, or other causes (except weather) beyond the **Contractor's** control, or by delay authorized by the **City**, or by other causes which the **Design Professional** determines may justify delay, then the Contract Time shall be extended by Change Order or **Construction Change Directive** for such reasonable time as the **Design Professional** may determine.

**12.3.2.** Claims relating to time shall be made in accordance with applicable provisions of Article 16.

**12.3.3.** No claim for extension of time shall be allowed on account of failure of the **Design Professional** to furnish Plans, Specifications or instructions or to return Shop Drawings or Samples until fifteen (15) days after receipt by the **Design Professional** by registered or certified mail of written demand for such instructions, Plans, Specifications, or Samples, and then not unless such claim is reasonable.

**12.3.4.** No extensions of time shall be granted because of seasonal or abnormal variations in temperature, humidity or precipitation, which conditions shall be wholly at the risk of the **Contractor**, whether occurring within the time originally scheduled for completion or within the period of any extension granted. There shall be no increase in the Contract Sum on account of any additional costs of operations or conditions resulting therefrom.

**12.3.5.** The **Contractor** hereby agrees that the **Contractor** shall have no claim for damages of any kind against the **City** or the **Design Professional** on account of any delay in the commencement of the Work and/or any hindrance, delay, or suspension of any portion of the Work, whether such delay is caused by the **City**, the **Design Professional**, or otherwise, except as and to the extent expressly provided under M.G.L. c. 30, §39O, in the case of written orders by the **City**. The **Contractor** acknowledges that the **Contractor's** sole remedy for any such delay and/or suspension will be an extension of time as provided in this Article.

**12.3.6.** (*Reference: M.G.L. c. 30, §39O;*). (a) The **City** may order the **Contractor** in writing to suspend, delay, or interrupt all or any part of the Work for such period of time as it may determine to be appropriate for the convenience of the **City**, provided however that if there is a suspension, delay, or interruption for fifteen (15) days or more due to a failure of the **City** to act within the time specified in this Contract, the **City** shall make an adjustment in the Contract prices for any increase in the cost of performance of this Contract under this provision for any suspension, delay, interruption, or failure to act to the extent that such is due to any cause for which this Contract provides for an equitable adjustment of the Contract price under any other

Contract provisions.

(b) The **Contractor** must submit the amount of a claim under provision (a) to the **City** in writing as soon as practicable after the end of the suspension, delay, interruption, or failure to act and, in any event, not later than the date of final payment under this Contract and, except for costs due to a suspension order, the **City** shall not approve any costs in the claim incurred more than twenty (20) days before the **Contractor** notified the **City** in writing of the act or a failure to act involved in the Claim.

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

#### **12.4. Liquidated Damages.**

**12.4.1.** If the **Contractor** shall fail to achieve Substantial Completion within the Contract Time, it shall be liable to pay the **City** the daily amount specified in the Agreement, not as a penalty, but as a fixed and agreed upon damages for breach of contract. The said amount is fixed and agreed upon because of the difficulty of ascertaining the **City's** actual damages. It is mutually understood that the said amount is a reasonable approximation or estimate thereof as of the date of the Agreement. The **City** may elect to withhold said amount from periodic or final payments due to the **Contractor**, in addition to retainage and other back charges.

#### **12.5. Changes in the Contract Time.**

**12.5.1. In Writing.** The Contract Time may only be changed by a Change Order or a Modification. Any claim for an adjustment of the Contract Time shall be based on a written notice delivered to the party making the claim to the other party and to the **Design Professional** promptly (but in no event later than seven (7) days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within thirty (30) days after such occurrence and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by the **Design Professional** in accordance with Article 16. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this paragraph.

**12.5.2. Early Completion.** The Contract Time shall not be changed due to a delay in the **Contractor's** early completion date.

## ARTICLE 13: PAYMENTS

### 13.1. Schedule of Values.

**13.1.1.** The **Contractor** shall submit to the **Design Professional** a schedule of values which shall subdivide the Work into its component parts and shall include quantities, direct craft labor worker hours, labor cost and material/equipment cost. Labor cost shall include an appropriate amount of construction equipment costs, supplemental costs, administrative expenses, contingencies, and profit. The **Contractor** shall prepare the schedule of values in such form and supported by such data to substantiate its accuracy as the **Design Professional** may require and shall be revised if later found by the **Design Professional** to be inaccurate. This schedule, unless objected to by the **Design Professional**, shall be used as a basis for reviewing the **Contractor's** applications for payment.

### 13.2. Content and Submission of Applications for Payment.

**13.2.1.** At least ten (10) days before the date established for each progress payment, the **Contractor** shall submit to the **Design Professional** six (6) copies of an itemized application for payment for Work completed in accordance with the schedule of values. Such application shall be in a form or format established or approved by the **Design Professional** and shall be supported by documentation substantiating the **Contractor's** right to payment.

**13.2.2.** When **Construction Change** Directives have set forth an adjustment to the Contract Sum but have not yet been included in Change Orders, the value established by the **City** may be included in the application.

**13.2.3.** Applications covering Work of Subcontractors or Suppliers shall not include requests for payments of amounts the **Contractor** does not intend to pay to a Subcontractor or Supplier because of a dispute or other reason. The **Contractor** shall not be paid for any Work performed by a Subcontractor unless and until the **City** receives for that Subcontractor a certificate of insurance that conforms to the requirements of the Contract Documents .

**13.2.4.** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the Site for subsequent incorporation in the Work. If approved in advance by the **City**, payment may similarly be made for materials and equipment suitably stored off the Site at a location agreed upon in writing. Payment for materials and equipment stored on or off the Site shall be conditioned upon the application for payment being accompanied by a bill of sale, an invoice, or other documentation warranting that the **City** has received the materials and equipment free and clear of all liens, claims, security interests, or encumbrances, hereinafter collectively referred to as “liens,” and evidence that the materials and equipment are covered by appropriate insurance and other arrangements to protect the **City's** interest therein.

**13.2.5.** Each application for payment or periodic estimate requesting payment shall be accompanied by, at the **City's** option, a certificate from each Subcontractor stating that the Subcontractor has been paid all amounts due the Subcontractor on the basis of the previous

periodic payment to the **Contractor**, or else stating the amount not so paid and the reason for the discrepancy. In the event of any such discrepancy, the **Contractor** shall furnish the **Contractor's** own written explanation to the **City** through the **Design Professional**. Such waiver or certificate shall be in a form acceptable to the **City**.

**13.3. False Applications for Payment.**

**13.3.1.** (*Reference: M.G.L. c. 266, §§67B*). Any person who makes or presents to any claim upon or against any employee or department of the **City**, knowing such claim to be false, fictitious, or fraudulent shall be punished by a fine or not ore than ten thousand dollars (\$10,000) or by imprisonment in the state prison for not more than five (5) years, or in the house of correction for not more than two and one-half years, or both.

**13.4. Review of Applications for Payment.**

**13.4.1.** The **Design Professional** shall review each application for payment and will reject any application that (1) is not accompanied by the required documentation or (2) contains errors, mathematical or otherwise.

**13.4.2.** Within five (5) business days after receipt of an application for payment, the **Design Professional** will either (1) return the application to the **Contractor** with a written explanation as to why it was rejected or (2) issue to the **City** a certificate for payment, with a copy to the **Contractor**, for such amount as the **Design Professional** determines is properly due. In the event an application is returned to the **Contractor**, the date of receipt of the application shall be the date of receipt of the corrected application.

**13.4.3.** The **Design Professional** or the **City** may make changes to any application submitted by the **Contractor**.

**13.4.4.** By recommending any payment, the **Design Professional** will not thereby be deemed to have represented that: (1) exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to the **Design Professional** in the Contract Documents or (2) that there may not be other matters or issues between the parties that might entitle the **Contractor** to be paid additionally by the **City** or entitle the **City** to withhold payment to the **Contractor**. The **Design Professional's** approval of the application for payment and the accompanying documentation shall indicate that to the best of the **Design Professional's** knowledge, information, and belief, the Work has progressed to the point indicated by the **Contractor**, and that the quality of the Work is in accordance with the Contract Documents, subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests specified in the Contract Documents, final determination of quantities and classifications for unit price work and any other qualifications so stated.

**13.4.5.** The **Design Professional's** recommendation of any payment shall not mean that

the **Design Professional** is responsible for the **Contractor's** means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the **Contractor** to comply with laws and regulations applicable to the furnishing or performance of Work, or for any failure of the **Contractor** to perform or furnish Work in accordance with the Contract Documents.

**13.4.6.** No certificate given or payment made shall be evidence of the performance of this Contract, either wholly or in part and no payment, whether made upon the final certificate or otherwise, shall be construed as an acceptance of defective work or materials.

**13.5. Decisions to Withhold Certification.**

**13.5.1.** The **Design Professional** may refuse to recommend the whole or any part of any payment if, in the **Design Professional's** opinion, it would be incorrect to make the representations to the **City** referred to above.

**13.5.2.** If the **Contractor** and the **Design Professional** cannot agree on a revised amount, the **Design Professional** will promptly approve a certificate for payment for the amount for which the **Design Professional** is able to make such representations to the **City**. The **Design Professional** may also decide not to certify payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a certificate for payment previously issued, to such extent as may be necessary in the **Design Professional's** opinion to protect the **City** from loss because of:

**13.5.2.1.** defective Work not remedied;

**13.5.2.2.** third party claims filed or reasonable evidence indicating probable filing of such claims;

**13.5.2.3.** failure of the **Contractor** to make payments properly to Subcontractors or for labor, materials or equipment;

**13.5.2.4.** reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;

**13.5.2.5.** damage to the **City** or another contractor;

**13.5.2.6.** reasonable evidence that the Work will not be completed within the Contract Time, and that retainage currently held by the **City** would not be adequate to cover actual or liquidated damage for the anticipated delay;

**13.5.2.7.** persistent failure to carry out the Work in accordance with the Contract Documents; or

**13.5.2.8.** failure of mechanical trade or electrical trade subcontractors to comply with mandatory requirements for maintaining record drawings. The **Contractor** shall check record drawings each month. Written confirmation that the record drawings are current will be required by the **Design Professional** before approval of the **Contractor's** monthly payment requisition.

**13.5.3.** When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

### **13.6. Progress Payments.**

**13.6.1.** After the **Design Professional** has issued a certificate for payment, the **City** shall make payment in the manner and within the time provided in the Contract Documents.

**13.6.2.** (*Reference: M.G.L. c. 30, §39G;*). The **City** shall pay the amount due pursuant to any periodic, Substantial Completion or final estimate within thirty-five (35) days after receipt of written acceptance for such estimate from the **Contractor**. In the case of periodic payments, the **City** may deduct from its payment a retention based on its estimate of the fair value of its claims against the **Contractor**, a retention for direct payments to Subcontractors based on demands for same in accordance with M.G.L. c. 30, §39F; and a retention to secure satisfactory performance of the contractual work, not exceeding five percent (5%) of the approved amount of any periodic payment, and the same right to retention shall apply to bonded Subcontractors entitled to direct payment under M.G.L. c. 30, §39F; provided, that a five percent (5%) value of all items that are planted in the ground shall be deducted from the periodic payments until final acceptance.

**13.6.3.** No periodic, Substantial Completion or final estimate or acceptance or payment thereof shall bar the **Contractor** from reserving all rights to dispute the quantity and amount of, or the failure of the **City** to approve a quantity and amount of, all or part of any Work item or extra Work item.

### **13.7. Final Payment.**

**13.7.1.** After final inspection and after the **Contractor** has completed all the required corrections to the satisfaction of the **Design Professional** and the **City** and delivered in accordance with the Contract Documents all maintenance and operating instructions, schedules, guarantees, bonds, certificates, or other evidence of insurance, certificates of inspection, marked-up record documents, and all other documents called for in the Contract Documents, as well as any surplus materials requested by the **City**, the **Contractor** may make an application for final payment as provided below.

**13.7.2.** (*Reference: M.G.L. c. 30, §39G;*). Within thirty (30) days after receipt by the **City** of a notice from the **Contractor** stating that all of the Work required by the Contract has

been completed, the **City** shall prepare and forthwith send to the **Contractor** for acceptance a final estimate for the quantity and price of the Work done and all retainage on the Work less all payments made to date, unless the **City's** inspection shows that Work required by the Contract remains incomplete or unsatisfactory, or that documentation required by the Contract has not been completed.

**13.7.3.** The making and acceptance of final payment will constitute a waiver of all claims by the **Contractor** against the **City** other than those previously made in writing and still unsettled.

**13.8. Payments to Subcontractors.**

**13.8.1.** Neither the **City** nor the **Design Professional** shall have an obligation to pay or see to the payment of money to a Subcontractor, Sub-subcontractor, or Supplier except as may otherwise be required by law.

**13.8.2.** (*Reference: M.G.L. c. 30, §39F;*) (1)(a) Forthwith after the **Contractor** receives payment on account of a periodic estimate, the **Contractor** shall pay to each Subcontractor the amount paid for the labor performed and the materials furnished by that Subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the **Contractor**.

(b) Not later than the sixty-fifth day after each Subcontractor substantially completes its Work in accordance with the Plans and Specifications, the entire balance due under the subcontract, less amounts retained by the **City** as the estimated cost of completing the incomplete and unsatisfactory items of Work, shall be due the Subcontractor; and the **City** shall pay that amount to the **Contractor**. The **Contractor** shall forthwith pay to the Subcontractor the full amount received from the **City** less any amount specified in any court proceeding barring such payment and also less any amount claimed due from the Subcontractor by the **Contractor**.

(c) Each payment made by the **City** to the **Contractor** pursuant to paragraphs (a) and (b) of M.G.L. c. 30, §39F(1);, for the labor performed and the materials furnished by a Subcontractor shall be made to the **Contractor** for the account of that Subcontractor; and the **City** shall take reasonable steps to compel the **Contractor** to make each such payment to each such Subcontractor. If the **City** has received a demand for direct payment from a Subcontractor for any amount which has already been included in a payment to the **Contractor** or which is to be include in a payment to the **Contractor** for payment to the Subcontractor as provided in paragraphs (a) and (b) of M.G.L. c. 30, §39F(1), the **City** shall act upon the demand as provided in M.G.L. c. 30, §39F.

(d) If, within seventy (70) days after the Subcontractor has substantially

completed the subcontract Work, the Subcontractor has not received from the **Contractor** the balance due under the subcontract including any amount due for extra labor and materials furnished to the **Contractor**, less any amount retained by the **City** as the estimated cost of completing the incomplete and unsatisfactory items of Work, the Subcontractor may demand direct payment of that balance from the **City**. The demand shall be by a sworn statement delivered to or sent by certified mail to the **City**, and a copy shall be delivered to or sent by certified mail to the **Contractor** at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract Work. [The demand letter shall indicate the certified mail number assigned by the postal service or the date of delivery to the **Contractor**.] Any demand made after substantial completion of the subcontract Work shall be valid even if delivered or mailed prior to the seventieth day after the Subcontractor has substantially completed the subcontract Work. Within ten (10) days after the Subcontractor has delivered or so mailed the demand to the **City** and delivered or so mailed a copy to the **Contractor**, the **Contractor** may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the **City**, and a copy shall be delivered to or sent by certified mail to the Subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the **Contractor** and of the amount due for each claim made by the **Contractor** against the Subcontractor.

(e) Within fifteen (15) days after receipt of the demand by the **City**, but in no event prior to the seventieth day after substantial completion of the subcontract Work, the **City** shall make direct payment to the Subcontractor of the balance due under the subcontract, including any amount due for extra labor and materials furnished to the **Contractor**, less any amount (i) retained by the **City** as the estimated cost of completing the incomplete or unsatisfactory items of Work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the **Contractor** in the sworn reply; provided that the **City** shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to or for which the sworn reply does not contain the detailed breakdown required by the previous paragraph. The **City** shall make further direct payments to the Subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this paragraph.

(f) The **City** shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of the previous paragraph in an interest-bearing joint account in the names of the **Contractor** and the Subcontractor in a bank in Massachusetts selected by the **City** or agreed upon by the **Contractor** and the Subcontractor and shall notify the **Contractor** and the Subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the **Contractor** and the Subcontractor or as determined by decree of a court of competent jurisdiction.

(g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to the previous paragraph shall be made out of amounts payable to the **Contractor** at the time of receipt of a demand for direct payment from a Subcontractor and out of amounts which later become payable to the **Contractor** and in the order of receipt of such demands from Subcontractors. All direct payments shall discharge the obligation of the **City** to the **Contractor** to the extent of such payment.

(h) The **City** shall deduct from payments to a **Contractor** amounts that, together with the deposits in interest-bearing accounts pursuant to paragraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from Subcontractors. All such amounts shall be earmarked for such direct payments, and the Subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the **Contractor**.

(i) If the Subcontractor does not receive payment as provided in paragraph (a) or if the **Contractor** does not submit a periodic estimate for the value of the labor or materials performed or furnished by the Subcontractor and the Subcontractor does not receive payment for same when due less the deductions provided for in paragraph (a), the Subcontractor may demand direct payment by following the procedure in paragraph (d) and the **Contractor** may file a sworn reply as provided in that same paragraph. A demand made after the first day of the month following that for which the Subcontractor performed or furnished the labor and materials for which the Subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the **Contractor**. Thereafter the **City** shall proceed as provided in paragraphs (e), (f), (g), and (h). "Subcontractor" as used in this paragraph (1)(i) shall mean a person approved by the **City** in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the **Contractor**.

(2) Any assignment by a Subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of M.G.L. c. 149, §29; shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the **City** or which are on deposit pursuant to paragraph (g) shall be subordinate to the rights of all Subcontractors who are entitled to be paid under this section and who have not been paid in full.

(3) A **Contractor** or a Subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposited as provided in herein by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A Subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in paragraph (f) by a petition in equity in the superior court against the **City** and the **Contractor** shall not be a necessary party. Upon motion of any party

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

(4) In any petition to collect any claim for which a Subcontractor has filed a demand for direct payment the court shall, upon motion of the **Contractor**, reduce by the amount of any deposit of a disputed amount by the **City** as provided in part (iii) of paragraph (e) and in paragraph (f) any amount held under a trustee writ or pursuant to a restraining order or injunction.

## ARTICLE 14: SUBSTANTIAL COMPLETION

### 14.1. Substantial Completion.

14.1.1. Upon Substantial Completion of the Work, the **Contractor** shall present in writing to the **City** its certification that the Work has been substantially completed and include in its certification (1) a list of items to be completed or corrected, (2) all special warranties required by the Contract Documents, endorsed by the **Contractor** and in a form reasonably acceptable to the **Design Professional** and (3) the permits and certificates referred to in 13.7.1., or elsewhere. The failure to include any item on the list mentioned in the preceding sentence does not alter the responsibility of the **Contractor** to complete all Work in accordance with the Contract Documents. When the **Design Professional** on the basis of an inspection determines that the Work or designed portion thereof is substantially complete and the other conditions have been met, the **Design Professional** will then prepare a certificate of Substantial Completion which shall establish the date of Substantial Completion, shall state the responsibilities of the **City** and the **Contractor** for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the **Contractor** shall complete the items listed therein. The certificate of Substantial Completion shall be submitted to the **City** and the **Contractor** for their

written acceptance of the responsibilities assigned to them in such certificate.

**14.1.2.** Within twenty-one (21) days after receipt of the certification from the **Contractor**, the **City** shall present to the **Contractor** either a written declaration that the Work has been substantially completed or an itemized list of incomplete or unsatisfactory work items required by the Contract sufficient to demonstrate that the Work has not been substantially completed. The **City** may include with such list a notice setting forth a reasonable time within which the **Contractor** must achieve Substantial Completion of the Work. If the **City** fails to respond, by presentation of a written declaration or itemized list as aforesaid, to the **Contractor's** certification within the twenty-one (21) day period, the **Contractor's** certification shall take effect as the **City's** declaration that the Work has been substantially completed.

**14.2. Partial Use or Occupancy of the Premises.**

**14.2.1.** The **City** may occupy or use any completed or partially completed portion of the Work at any stage. Such partial occupancy or use may begin whether or not the portion is substantially complete, provided that the respective responsibilities of the **City** and the **Contractor** with respect to payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work, insurance, correction of the Work, and warranties shall be established by agreement of the **City** and the **Contractor** or, absent such agreement, shall be determined by the **Design Professional** subject to the right of either party to contest such determination as provided in Article 16.

**14.2.2.** Immediately prior to such partial occupancy or use, the **City**, the **Contractor** and the **Design Professional** shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

**14.2.3.** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

**14.2.4.** (*Reference: M.G.L. c. 30, §39G;*). Within sixty-five (65) days after the effective date of a declaration of Substantial Completion, the **City** shall prepare and send to the **Contractor** for acceptance a Substantial Completion estimate for the quantity and price of the Work done and all but one percent (1%) retainage on that Work, including the quantity, price and all but one percent (1%) retainage for the undisputed part of each item and extra work item in dispute, but excluding the disputed part thereof, less the estimated cost of completing all incomplete and unsatisfactory items and less the total periodic payments made to date for the Work. The **City** shall also deduct from the Substantial Completion estimate an amount equal to the sum of all demands for direct payment filed by Subcontractors and not yet paid to Subcontractors or deposited in joint accounts pursuant to M.G.L. c. 30, §39F.

**14.2.5.** (*Reference: M.G.L. c. 30, §39G*). If the **City** fails to prepare and send to the **Contractor** any Substantial Completion estimate required by the provisions herein on or before

the date specified, the **City** shall pay to the **Contractor** interest on the amount which would have been due to the **Contractor** pursuant to such Substantial Completion estimate at the rate of three (3) percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston from such date to the date on which the **City** sends that Substantial Completion estimate to the **Contractor** for acceptance or to the date of payment therefor, whichever occurs first. The **City** shall include the amount of such interest in the Substantial Completion estimate.

**14.2.6.** (*Reference: M.G.L. c. 30, §39G*). Within fifteen (15) days after the effective date of the declaration of Substantial Completion, the **City** shall send to the **Contractor** by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory items, and unless delayed by causes beyond its control, the **Contractor** shall complete all such items within forty-five (45) days after the receipt of such list or before the date for final payment and acceptance, whichever is later. If the **Contractor** fails to complete such Work within such time, the **City** may, subsequent to seven (7) days' written notice to the **Contractor** by certified mail, return receipt requested, terminate the Contract and complete the incomplete or unsatisfactory items and charge the cost of same to the **Contractor**.

#### **14.3. Final Inspection.**

**14.3.1.** Upon written notice from the **Contractor** that the entire Work or an agreed portion thereof is complete, the **Design Professional** will make a final inspection with the **City** and the **Contractor** and will notify the **Contractor** in writing of all particulars which this inspection reveals that the Work is incomplete or defective. The **Contractor** shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

### **ARTICLE 15: GUARANTEES AND WARRANTIES**

#### **15.1. In General.**

**15.1.1.** All guarantees and warranties specifically called for by the Specifications shall expressly run to the benefit of the **City**.

#### **15.2. Warranties.**

**15.2.1.** Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof, unless otherwise provided in the certificate of Substantial Completion.

**15.2.2.** The **Contractor** warrants that the materials and equipment furnished under the Contract will be new and of recent manufacture unless otherwise specified, and that all Work will be of good quality, free from faults and defects, and in conformance with the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The **Contractor's** warranty excludes remedy for damage or defect caused by abuse, Modifications not executed by the **Contractor**, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the **Design Professional**, the **Contractor** shall furnish satisfactory

evidence as to the kind and quality of material and equipment.

**15.2.3.** The **Contractor** warrants that title to all Work covered by an application for payment will pass to the **City** either by incorporation in the construction or upon the receipt of payment by the **Contractor**, whichever occurs first, free and clear of all liens. The **Contractor** further agrees that the submission of any application for payment shall conclusively be deemed to waive all liens with respect to said Work to which the **Contractor** may then be entitled, provided that such waiver of the lien rights shall not waive the **Contractor's** right to payment for such Work.

**15.2.4.** The **Contractor** warrants and guarantees that title to all Work, materials, and equipment covered by any application for payment, whether incorporated in the Project or not, will pass to the **City** no later than the time of payment free and clear of all liens.

**15.2.5.** No materials or supplies for the Work shall be purchased by the **Contractor** or Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The **Contractor** warrants that it has good title to all materials and supplies used by it in the Work, free from all liens.

**15.2.6.** The **Contractor** shall indemnify and hold the **City** harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workers, mechanics, material persons, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this Contract. The **Contractor** shall at the **City's** request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the **Contractor** fails to do so, then the **City** may, after having served written notice on the **Contractor** either pay unpaid bills, of which the **City** has written notice, direct, or withhold from the **Contractor's** unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the **Contractor** shall be resumed, in accordance with the terms of this

Contract, but in no event shall the provisions of this sentence be construed to impose any obligations on the **City** to either the **Contractor** or its surety. In paying any unpaid bills of the **Contractor**, the **City** shall be deemed the agent of the **Contractor** and any payment so made by the **City** shall be considered as payment made under the Contract by the **City** to the **Contractor** and the **City** shall not be liable to the **Contractor** for any such payment made in good faith.

### **15.3. Extended Warranties and Guarantees.**

**15.3.1.** Any defective Work that is either corrected or replaced will be warranted and guaranteed for a period of three (3) years from the date of such correction or replacement.

## ARTICLE 16: CLAIMS

### 16.1. In General.

**16.1.1. Written Notice.** A Claim must be made by written notice to the other party.

**16.1.2. Content of Notice.** The notice must include all written supporting data.

**16.1.3. Burden of Proof.** The party making the Claim must substantiate the Claim.

### 16.2. Time Limits on Claims.

**16.2.1.** Unless otherwise provided, all Claims must be made within twenty-one (21) days after the occurrence of the event giving rise to such Claim or within twenty-one (21) days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Any change or addition to a previously made Claim shall be made by a written notice within the twenty-one-day period in order to be valid.

### 16.3. Continuing Contract Performance.

**16.3.1.** Pending final resolution of a Claim including arbitration, unless otherwise agreed in writing, the **Contractor** shall proceed diligently with performance of the Contract and the **City** shall continue to make payments in accordance with the Contract Documents.

### 16.4. Types of Claims.

**16.4.1. Claims for Differing Subsurface or Latent Physical Conditions.** (*Reference: M.G.L. c. 30, §39N;*). If, during the progress of the Work, the **Contractor** or the **City** discovers that the actual subsurface or latent physical conditions encountered at the Site differ substantially or materially from those shown on the Plans or indicated in the Contract Documents, either the **Contractor** or the **City** may request an equitable adjustment in the Contract Sum of the Contract applying to Work affected by the differing Site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a **Contractor**, or upon its own initiative, the **City** shall make an investigation of such physical conditions, and if they differ substantially or materially from those shown on the Plans or indicated in the Contract Documents or from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Plans and Contract Documents and are of such a nature as to cause an increase or decrease in the cost of performance of the Work or a change in the construction methods required for the performance of the Work which results in an increase or decrease in the cost of the Work, the **City** shall make an equitable adjustment in the Contract Sum and the Contract shall be modified in writing accordingly.

**16.4.2. Claims for Additional Cost.** If the **Contractor** claims that any acts or omissions of the **City** or the **Design Professional**, including any instructions or orders, whether oral, written, by drawings, or otherwise, involve extra cost or time, and the **Contractor** has not received a written acknowledgment by the **City** or the **Design Professional** that extra payment will be made or time extended on account thereof, the **Contractor** shall promptly so notify the

**Design Professional** in writing of such Claim and shall proceed with the Work relating to such Claim and all rights of both parties with respect to such Claim shall be deemed to have been reserved. No Claim by the **Contractor** on account of such acts, omissions, instructions, or orders shall be valid unless the **Contractor** has so notified the **Design Professional** before proceeding.

**16.4.2.1.** Under no circumstances shall a Claim be made for additional cost where adverse weather conditions are the basis for the Claim.

**16.4.3. Claims for Additional Time.** If the **Contractor** wishes to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. The **Contractor** shall have the burden of demonstrating the effect of the claimed delay on the Contract Time and shall furnish the **Design Professional** with such documentation relating thereto as the **Design Professional** may reasonably require. Under no circumstances shall the **Contractor** make a Claim for an increase in the Contract Time due to a change in the **Contractor's** early completion date. If the increase in the Contract Time extends beyond the Contract Time established by the **City**, only the time that so extends beyond the Contract Time shall be reviewed and considered. In the case of a continuing delay, only one Claim is necessary.

**16.4.3.1.** Under no circumstances shall a Claim be made for additional time where adverse weather conditions are the basis for the Claim.

**16.4.4. Claims for Injury to Person or Damage to Property.** Should either party to the Contract suffer injury to person or damage to property because of any error, omission, or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, a Claim will be made in writing to the other party within twenty-one (21) days of the occurrence of the act giving rise to the injury or damage.

## **16.5. Review of Claims.**

**16.5.1. Initial Referral.** All Claims, the bases of which arise prior to final payment or the earlier termination of the Contract, shall be referred initially to the **Design Professional** for action as provided herein.

**16.5.2. Time Period and Action.** The **Design Professional** shall review Claims and shall do one of the following within fourteen (14) days of receipt of the Claim:

**16.5.2.1.** defer any action with respect to all or any part of a Claim for the purpose of requesting and receiving additional information from either party;

**16.5.2.2.** decline in writing to render a decision for any reason which it deems appropriate (including, but not limited to, the fact that the Claim involves allegations of fault on the part of the **Design Professional**); or

**16.5.2.3.** render a decision on all or a part of the Claim.

**16.5.3.** If the **Design Professional** requests additional information, the **Design Professional** shall take action with respect to the Claim no later than fourteen (14) days after receipt of the additional information. The **Design Professional** shall notify the parties in writing of its disposition of such Claim. If the **Design Professional** renders a decision or declines to render a decision, either party may proceed in accordance with paragraph 16.7.

## **16.6. Decisions.**

**16.6.1. Decisions by the City or the Design Professional.** (*Reference: M.G.L. c. 30, §39P;*). In every case in which this Contract requires the **City**, any official, or its **Design Professional** to make a decision on interpretation of the Specifications, approval of equipment, material or any other approval, or progress of the Work, the decision shall be made promptly and, in any event, no later than fourteen (14) days after the written submission for decision; but if such decision requires extended investigation and study, the **City**, the official, or the **Design Professional** shall, within fourteen (14) days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty-day period and the date by which the decision will be made.

**16.6.2. When Decision of the Design Professional is Final and Binding.** The decision of the **Design Professional** shall be final and binding on the parties, unless a party files suit or a demand for arbitration within thirty (30) days after the date of the decision.

**16.6.3. When Decision of the Design Professional is Not Final and Binding.** (*Reference: M.G.L. c. 30, §39J*). Notwithstanding any contrary provision of this Contract, no decision by the **City** or by the **Design Professional** on a dispute, whether of fact or of law, arising under said Contract shall be final or conclusive if such decision is made in bad faith, fraudulently, capriciously, arbitrarily, is unsupported by substantial evidence, or is based upon error of law.

**16.6.4. Resolved Claims.** If a Claim is resolved, the **Design Professional** shall obtain or prepare the appropriate documentation and provide the **City** and the **Contractor** with a copy of same.

## **16.7. Arbitration.**

**16.7.1. Controversies and Claims Subject to Arbitration.** Any controversy or Claim arising out of or related to the Contract, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator or arbitrators may be entered in any court having jurisdiction thereof, except controversies or Claims relating to aesthetic effect, subject to the provisions of paragraph 16.7.7. In any such arbitration in which the amount stated in the demand is \$100,000 or less, the American Arbitration Association shall

appoint a single arbitrator in accordance with such Rules, who shall be a lawyer. In any such arbitration in which the amount stated in the demand is in excess of \$100,000, the demand shall include the name of an arbitrator appointed by the claimant. The respondent shall appoint a second arbitrator and shall notify the claimant in writing of such appointment within thirty (30) days of receipt of the demand, failing which the matter shall be decided by the arbitrator named in the claimant's demand. Within thirty (30) days after the claimant's receipt of notice of the appointment of the second arbitrator, the two arbitrators shall appoint a neutral arbitrator and shall notify the parties in writing of such appointment, failing which either party may apply to the American Arbitration Association to appoint such neutral arbitrator. If such neutral arbitrator is appointed by the American Arbitration Association, he or she shall be a lawyer.

**16.7.2. Rules for Arbitration.** If the neutral arbitrator is appointed by the American Arbitration Association, the said Association shall administer the arbitration and its Construction Industry Arbitration Rules shall govern all aspects of the proceeding including the enforcement of any award. If the neutral arbitrator is not appointed by the American Arbitration Association, then the panel of arbitrators shall act as the administrator of the arbitration but the Construction Industry Arbitration Rules of the Association shall nonetheless govern all aspects of the proceeding, including the enforcement of any award, provided however that the arbitration panel shall have all of the powers and duties conferred on the Association pursuant to said rules. In addition, the following rules shall govern the selection of arbitrators and the proceedings:

**16.7.2.1.** Neither party may appoint as arbitrator an employee or an owner of that party, nor the parent, spouse, or child of an employee or owner of that party.

**16.7.2.2.** After the neutral arbitrator has been appointed, neither party may engage in *ex parte* communication with any arbitrator.

**16.7.3. When Arbitration May Be Demanded.** Demand for arbitration of any Claim, the basis of which arises prior to final payment or the earlier termination of the Contract may not be made before the earlier of (1) the date on which the **Design Professional** has rendered a written decision on the Claim or has notified the parties in writing that such decision will not be rendered or (2) forty-five (45) days following receipt by the **Design Professional** of a written request for a decision sent by registered or certified mail to both the **Design Professional** and the other party to this Contract.

**16.7.3.1.** In no event shall a demand for arbitration be made after the date when the institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations.

**16.7.4. Limitation on Consolidation or Joinder.** No arbitration arising out of or relating to the Contract Documents shall include, by consolidation or joinder or in any other manner, the **Design Professional**, the **Design Professional's** employees or consultants, except by written consent containing specific reference to the Contract and signed by the **Design**

**Professional**, the **City**, the **Contractor**, and any other person or entity sought to be joined. No arbitration shall include, by consolidation or joinder or in any other manner, parties other than the **City**, the **Contractor**, a separate contractor, and other persons substantially involved in a common question of fact or law whose presence is required if complete relief is to be accorded in arbitration. No person or entity other than the **City**, the **Contractor**, or a separate contractor shall be included as an original third party or additional third party to an arbitration whose interest or responsibility is insubstantial. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a dispute not described therein or with a person or entity so named or described herein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Contract shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

**16.7.5. Claims and Timely Assertion of Claims.** A party who files a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded. When a party fails to include a Claim through oversight, inadvertence, or excusable neglect, or when a Claim has matured or been acquired subsequently, the arbitrator or arbitrators may permit amendment.

**16.7.6. Award Final.** The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

**16.7.7. The City's Reservation of Rights.** Notwithstanding any provision contained in this Article 16 or elsewhere in the Contract Documents, the **City** reserves the following rights in connection with Claims between the **City** and the **Contractor**, which rights may be exercised by the **City** unilaterally, in the **City's** sole discretion, and without the consent of the **Contractor**:

**16.7.7.1.** the right to institute legal action against the **Contractor** in any court of competent jurisdiction in lieu of demanding arbitration, in which case the dispute or disputes which are the subject of such action shall be decided by such court, and not by arbitration;

**16.7.7.2.** the right to obtain from any court of competent jurisdiction a stay of any arbitration instituted by the **Contractor**, provided that the application for such stay is made before the appointment of the neutral arbitrator in such arbitration, in which case the dispute or disputes which are the subject of such arbitration shall be decided by such court and not by arbitration;

**16.7.7.3.** the right to require the **Contractor** to join as a party in any arbitration between the **City** and the **Design Professional** relating to the Project, in which case the **Contractor** agrees to be bound by the decision of the arbitrator or arbitrators in such arbitration.

**16.7.8.** In case the **City** elects to proceed in accordance with 16.7.7.1. or 16.7.7.2. above, the word “litigation” shall be deemed to replace the word “arbitration” wherever the latter word appears in the Contract Documents.

## **ARTICLE 17: EMERGENCIES**

**17.1.** In an emergency affecting the health and safety of persons or property, the **Contractor** shall act to prevent threatened damage, injury, or loss.

**17.2.** In emergencies affecting the health, safety, or protection of persons, the Work or property at the Site or adjacent thereto, the **Contractor**, without special instruction or authorization from the **City** or the **Design Professional**, is obligated to act to prevent threatened damage, injury, or loss. The **Contractor** shall give the **Design Professional** prompt written notice if the **Contractor** believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If the **Design Professional** determines that a change in the Contract Documents is required because of the action taken by the **Contractor** in response to such an emergency, a **Construction Change** Directive or Change Order will be issued to document the consequences of such action.

## **ARTICLE 18: TERMINATION OR SUSPENSION OF THE CONTRACT**

**18.1. Suspension by the City.**

**18.1.1.** At any time and without cause, the **City** may suspend the Work or any portion thereof for a period of not more than ninety (90) days by notice in writing to the **Contractor** and the **Design Professional** that will fix the date on which Work will be resumed. The **Contractor** shall resume Work on the date so fixed. The **Contractor** shall be allowed an adjustment in the Contract Sum or an extension of the Contract Time, or both, directly attributable to any such suspension if the **Contractor** makes an approved Claim therefor.

**18.1.2.** If the Work is defective, if the **Contractor** fails to provide a sufficient number of skilled workers or suitable materials or equipment, or if the **Contractor** defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the **City** to begin and prosecute correction of such default or neglect with diligence and promptness, the **City** may correct such deficiencies, without prejudice to other remedies the **City** may have. In such case, an appropriate **Construction Change** Directive shall be issued deducting from payments then or thereafter due to the **Contractor** the cost of correcting such deficiencies including compensation for the **Design Professional's** additional services and expenses made necessary by such default, neglect, or failure and any and all direct, indirect, or consequential costs associated with the order to stop the Work. If such payments then or thereafter due the **Contractor** are not sufficient to cover such amounts, the **Contractor** shall immediately pay the difference to the **City**. The **Contractor** shall remain responsible for maintaining progress and shall not be entitled to any increase in the Contract Time or the Contract Sum.

## **18.2. Termination by the Contractor.**

**18.2.1.** If, through no act or fault of the **Contractor**, a Subcontractor, or a Sub-subcontractor, the Work is suspended for a period of more than ninety (90) days by the **City**, or under an order of court or other public authority, or the **Design Professional** fails to act on any application for payment within thirty (30) days after it is submitted in proper form and content or the **City** fails for thirty (30) days to pay the **Contractor** any sum finally determined to be due, then the **Contractor** may terminate the Contract upon seven (7) days' written notice to the **City**, provided that the **City** does not remedy such suspension or failure within that time.

## **18.3. Termination by the City.**

**18.3.1.** If the **Contractor** is adjudged a bankrupt, or if the **Contractor** makes a general assignment for the benefit of the **Contractor's** creditors, or if a receiver is appointed on account of the **Contractor's** insolvency, or if the **Contractor** persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or if the **Contractor** fails to make prompt payment to Subcontractors or for materials or labor, or persistently disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction or disregards an instruction, order, or decision of the **Design Professional**, or otherwise is guilty of substantial violation of any provision of the Contract, then the **Contractor** shall be in default, and the **City** may, without prejudice to any other right or remedy and upon written notice to the **Contractor**, take possession of all materials, tools, appliances, equipment, construction equipment and machinery and vehicles, offices and other facilities on the Project Site, and all materials intended for the Work, wherever stored, and, seven (7) days after such notice, may terminate the employment of the **Contractor**, accept assignment of any or all subcontracts pursuant to Paragraph \_\_, and finish the Work by whatever method the **City** may deem expedient. The **City** shall be entitled to collect from the **Contractor** all direct, indirect, and consequential damages suffered by the **City** on account of the **Contractor's** default, including without limitation additional services and expenses of the **Design Professional** made necessary thereby. The **City** shall be entitled to hold all amounts due to the **Contractor** at the date of termination until all of the **City's** damages have been established, and to apply such amounts to such damages.

**18.3.2.** (*Reference:* Somerville Municipal Code Chapter 2.117, Section 2.117.110C). In the event the **Contractor** or any of its agents or employees violates any provision of Somerville Municipal Code Chapter 2.117 that is applicable to **City** contractors in connection with the awarding, administration, or performance of the Contract, the **City** may terminate the Contract.

## **ARTICLE 19: AMERICANS WITH DISABILITIES ACT; (42 U.S. 12131)**

**19.1.** On July 26, 1994, the Americans with Disabilities Act ("the Act") became effective for employers of fifteen or more employees.

**19.2.** The Act protects against discrimination on the basis of "disability," which is defined as a physical or mental impairment that substantially limits at least one "major life activity;" or

discrimination against an individual who has a record of such impairment; or discrimination against an individual being regarded - even if inaccurately - as having such impairment. The Act also expressly prohibits job discrimination that is based on any individual's relationship or association with a disabled person.

**19.3.** If the **Contractor** is subject to the Act, it must comply with its provisions.

## **ARTICLE 20: WRITTEN NOTICE TO THE PARTIES**

### **20.1. In General.**

**20.1.1.** All written communications from the **Design Professional** to the **Contractor** shall be copied to the **City**. All written communications from the **Contractor** to the **Design Professional** shall be copied to the **City**. All written communications from the **Contractor** to the **City** shall be copied to the **Design Professional**.

### **20.2. Addresses.**

**20.2.1. To the City.** Written notice to the **City** shall be sent or hand-delivered to:

Purchasing Director  
City of Somerville  
93 Highland Avenue  
Somerville, MA 02143

City Solicitor  
Law Department  
93 Highland Avenue  
Somerville, MA 02143

Executive Director  
Office of Strategic Planning & Community Development 93  
Highland Avenue  
Somerville, MA 02143

**20.2.2. To the Contractor.** Both the address given on the bid form upon which the Agreement is founded and the **Contractor's** office at or near the Site of the Work are hereby designated as places to either of which notices, letters, and other communications to the **Contractor** shall be certified, mailed, or delivered. Delivery of any notice, letter, or other communication to the **Contractor** at or depositing same in a postpaid wrapper directed to either place shall be deemed sufficient service thereof upon the **Contractor**. Written notice shall be deemed to have been duly served on the **Contractor** if it is sent or hand-delivered to any member or officer of the **Contractor**. The date of said service shall be the date of such delivery or mailing. The address may be changed at any time by an instrument in writing, executed and acknowledged by the **Contractor** and delivered to the **City** and to the **Design Professional**. Nothing herein contained shall be deemed to preclude or render inoperative the service of any

notice, letter, or other communication upon the **Contractor** personally. Moreover, any notice, letter, or other communication required under the Contract may be served on the **Contractor's** representative at job meetings. The **Contractor** shall provide the **City** with its change of address seven (7) days prior to its effective date.

**20.2.3. To the Design Professional.** Written notice to the **Design Professional** shall be sent or hand-delivered to the address appearing on the Project Manual. Written notice shall be deemed to have been duly served on the **Design Professional** if it is sent or hand-delivered to any member or officer of the **Design Professional**.

## **ARTICLE 21: MISCELLANEOUS PROVISIONS**

### **21.1. Governing Law.**

**21.1.1.** This Contract shall be governed by the laws of the Commonwealth of Massachusetts.

### **21.2. Venue.**

**21.2.1.** Venue for any court action or proceeding shall be Middlesex County in the Commonwealth of Massachusetts only. The **Contractor**, all Subcontractors, and Suppliers waive any and all jurisdictional and venue defenses.

### **21.3. Successors and Assigns.**

**21.3.1.** The **Contractor** shall not assign, in whole or in part, its rights and obligations under the Contract Documents without prior written consent of the **City**. An assignment without the prior written consent of the **City** shall not relieve the **Contractor** of its obligations thereunder.

**21.3.2.** The **City** and the **Contractor** respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents.

### **21.4. Statutory Limitation Period.**

**21.4.1.** It is expressly agreed that the obligations of the **Contractor** hereunder arise out of contractual duties, and that the failure of the **Contractor** to comply with the requirements of the Contract Documents shall constitute a breach of contract, not a tort, for the purpose of applicable statutes of limitations and repose. Any cause of action which the **City** may have on account of such failure shall be deemed to accrue only when the **City** has obtained actual knowledge of such failure, not before.

### **21.5. Rights and Remedies.**

**Part 1, Section 4: OTHER BID DOCUMENTS**

**21.5.1.** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

**21.5.2.** No action or failure to act by the **City**, the **Design Professional**, or the **Contractor** shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

# **PART 2 - SAMPLE CONSTRUCTION CONTRACT**

## **IMPORTANT INFORMATION REGARDING CERTIFICATE OF GOOD STANDING**

- Sample Contract
- Certificate of Authority
- Appendix A – Scope of Work (including Technical Specifications)
- Appendix B – Contractor's Bid Price; Form for General Bid (From Bid Book)
- Appendix C – General Terms and Conditions
- Appendix D – Insurance Requirements
- Appendix E – Wage Rates and Living Wage (From Bid Book)
- Appendix F – Certificate of Good Standing (for corporations; from Bid Book)
- Appendix G – Procurement documentation (Advertisements and Notice to Bidders)
- Appendix H – Statement of Management
- Appendix I – Performance Bond and Payment Bond, if contract over \$2000

S A M P L E C O N T R A C T

\_\_\_\_\_  
**CONTRACT NUMBER**

A-  
\_\_\_\_\_  
**PURCHASE ORDER # AND AMOUNT**

\_\_\_\_\_  
**BID NUMBER**

OSPCD  
\_\_\_\_\_  
**ISSUING DEPARTMENT**

\_\_\_\_\_  
**FUNDING DEPARTMENT (Division)**

\_\_\_\_\_  
**CONTRACT PERIOD**

CITY OF SOMERVILLE  
MAYOR'S OFFICE OF STRATEGIC PLANNING AND COMMUNITY DEVELOPMENT

**PUBLIC CONSTRUCTION CONTRACT**

**FOR:**      **Marshall Street Park**

**CONTRACTOR:**    Vendor  
                         Address  
                         Townname, Ma

**ACCORDING TO SPECIFICATIONS CONTAINED HEREIN**

**CITY OF SOMERVILLE  
OWNER-CONTRACTOR PUBLIC CONSTRUCTION AGREEMENT**

AGREEMENT made this --- day of \_\_\_\_\_, by and between the City of Somerville, a Massachusetts municipal corporation, acting by and through its Purchasing Department, with a usual address of 93 Highland Ave., Somerville, MA 02143 ("City", "Owner" or "Awarding Authority") and the following General Contractor ("Contractor" or "General Contractor"):

**GENERAL CONTRACTOR:**

Name:

Address:

Telephone:

Fax:

E-Mail:

PROJECT: ADA Ramps (12) at Four Locations

The work consists of the construction of twelve (12) Wheelchair Ramps to Massachusetts Architectural Access Board (AAB) standards (521 MR 21.00, effective January 27, 2006); hiring a design professional to verify that all AAB requirements have been fulfilled; and resetting crosswalk signs. Substantial completion of work shall be by September 1, 2009.

**PROJECT MANAGER:**

Name: Luisa Oliveira

Address: City Hall, 3<sup>rd</sup> floor, 93 Highland Avenue, Somerville, MA 02143

Telephone: 617-625-6600, x.2529 Fax: 617-625-0722

E-Mail: [afranzen@somervillema.gov](mailto:afranzen@somervillema.gov)

**DESIGN PROFESSIONAL:**

Name: **Leonard Design Associates**

Address: **95 Ronald Road  
Arlington, MA 02474**

Contact: Andrew Leonard

Phone: 781-641-0750

[aleonard@leonarddesign.info](mailto:aleonard@leonarddesign.info)

Profession: Architect [ ] Landscape Architect [X] Engineer [ ]

**FUNDING SOURCE:** Federal [ ] State [ ] City [ X ]

THIS CONTRACT IS A:

X  Public Works Contract estimated to cost more than \$10,000 subject to

Sample Contract

**Part 1, Section 4: OTHER BID DOCUMENTS**

the bidding requirements of G.L. c. 30, § 39M

- Public Building Contract estimated to cost under \$10,000, subject to the price quote requirements of G.L. c. 149 §44A (2)(A)
- Public Building Contract estimated to cost more than \$10,000 but less than \$25,000, subject to the written response requirements of G.L. c. 149, §44A(2)(B) of the General Laws
- Public Building Contract estimated to cost more than \$25,000 but less than \$100,000, subject to the bidding requirements of G.L. c. 149, §44A(2)(C) and G.L. c. 30, § 39M
- Public Building Contract estimated to cost more than \$100,000, subject to the bidding requirements of G.L. c. 149, §44A(D).

**Section 1: CONTRACT DOCUMENTS/APPENDICES**

The Contract Documents consist of this Agreement; the notice of award of the Contract; the Notice to Proceed; the entire Project Manual; Change Orders; Construction Change Directives; the Contractor's Bid and all accompanying documents; and the Design Professional's written interpretations and clarifications issued on or after the issuance of the Notice to Proceed. Shop Drawing submittals and reports or drawings utilized by the Design Professional in preparing the Contract Documents are not Contract Documents.

The following Appendices are hereby incorporated by reference as part of this Agreement.

- X Certificate of Authority
- \* Appendix A - Scope of Services - Misc. Bid Documents: includes a brief description of the Project, the Plans and Technical Specifications (Plans on File) and Addenda issued during the bid process
- X Appendix B - Contractor's Bid Price; Form for General Bid
- X\*\* Appendix C - General Conditions
- X\*\* Appendix D - Insurance Requirements with Contractor's Insurance Certificate(s)
- X Appendix E - Wage Rates; Living Wage
- X Appendix F - Certificate of Good Standing (for corporations)

Part 1, Section 4: OTHER BID DOCUMENTS

- X Appendix G - Procurement Documentation (includes Advertisement; Notice to Bidders)
- X Appendix H - Statement of Management (over \$100,000)
- X Appendix I - Performance Bond and Payment Bond, if contract is over \$2,000
- X Appendix J - Section 3 Requirements
- X Appendix K – Laws Applicable to Federally Funded Contracts

X = Attached

\* = Included in the Project Manual and incorporated herein by reference

\*\* = Attached and also duplicated in the Project Manual

Section 2: THE CONTRACTOR'S WORK.

The Contractor's "Work" refers to the services and the entire completed construction or the various separately identifiable parts thereof required by the Contract Documents, including all labor, materials, and equipment furnished, furnished and incorporated into the Project, or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

Section 3: PROJECT DATES.

(a) Contract Period: The Contract shall begin on September 1, 2014 and end on June 1, 2015.

(b) Date of Commencement of Work: The Date of Commencement of the Work shall be stipulated by a written Notice to Proceed given by the City to the Contractor.

(c) Date of Substantial Completion: The Contractor shall achieve Substantial Completion of the Work on or before \_\_\_\_\_ or --- calendar days after the Date of Commencement of the Work, time being of the essence. Substantial Completion means that the Work has been completed and the Site or the facility is opened for full and intended public use, except for minor incomplete or unsatisfactory items that do not materially impair the usefulness of the Work. The Design Professional shall decide what constitutes "minor," "incomplete," "unsatisfactory," and "materially" and the Design Professional's decision shall be final.

(d) Date of Final Completion:  
**The Date of Final Completion shall be \_\_\_\_\_.**

## Section 4. CONTRACT SUM/LIQUIDATED DAMAGES

- (a) Contract Sum: The Contract Sum shall be \$\_\_\_\_\_ .
- (b) Liquidated Damages: The Contractor and the City agree to a Liquidated Damages sum of \$250.00 per calendar day.

SIGNATURE PAGE FOLLOWS

Part 1, Section 4: OTHER BID DOCUMENTS

IN WITNESS WHEREOF, the City and the Contractor have executed this Contract as a sealed instrument as of the date first written above.

CITY OF SOMERVILLE

I hereby certify that an unencumbered balance of \$\_\_\_\_\_ is available for this Contract and I further certify that the sum of \$\_\_\_\_\_ is hereby encumbered against the appropriate account for the purposes of this contract.

\_\_\_\_\_  
Edward Bean, City Auditor

\_\_\_\_\_  
Joseph A. Curtatone  
Mayor

\_\_\_\_\_  
Michael F. Glavin, OSPCD  
Executive Director

\_\_\_\_\_  
Angela M. Allen, Purchasing Director

Approved as to form:

\_\_\_\_\_  
Francis X. Wright, Jr., City Solicitor

VENDOR:

\_\_\_\_\_  
Signature of Authorized Agent of Vendor

Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Vendor Address: \_\_\_\_\_  
\_\_\_\_\_

Federal Tax ID: # \_\_\_\_\_

FOR CORPORATIONS ONLY:

\_\_\_\_\_  
Clerk's Signature

\_\_\_\_\_  
Clerk's Name

## SAMPLE CERTIFICATE OF AUTHORITY

\_\_\_\_, 2014.  
(Contract Date)

At a meeting of the directors of \_\_\_\_\_ duly  
(Name of Corporation)  
called and held at \_\_\_\_\_ on \_\_\_\_\_, 2010.  
(Address) (Date)

which a quorum was present and acting, it was voted that \_\_\_\_\_  
(Name)

the \_\_\_\_\_ of this corporation is hereby authorized and empowered to  
(Office)

make, enter into, sign, seal and deliver on behalf of this corporation a contract for

\_\_\_\_\_ with the City of Somerville, Mayor's (Describe Service)

Office of Strategic Planning and Community Development. I do hereby certify that the above  
is a true and correct copy of the record that said vote has not been amended or repealed and is in  
full force and in effect at of this date, and that \_\_\_\_\_ is duly elected  
(Name)

\_\_\_\_\_ of this corporation.  
(Office)

\_\_\_\_\_  
(Clerk) (Secretary) of the Corporation

Attest:

(Affix Corporation Seal Here)

## **APPENDIX A**

### **Scope of Services – Miscellaneous Bid Documents**

Includes a brief description of the project  
The Plans and Technical Specifications (Plans on File)  
And all addenda issued during the bid process.

**APPENDIX B**  
**Contractor's Bid Price - Form for General Bid**  
**(From Bid Book)**

**APPENDIX C**  
**General Conditions**  
**(From Bid Book)**

**APPENDIX D  
INSURANCE REQUIREMENTS**

**APPENDIX D - INSURANCE REQUIREMENTS  
INSURANCE SPECIFICATIONS**

**INSURANCE REQUIREMENTS FOR AWARDED VENDOR ONLY:**

Prior to commencing performance of any work or supplying materials or equipment covered by these specifications, the contractor shall furnish to the Office of the Purchasing Director a Certificate of Insurance evidencing the following:

**A. GENERAL LIABILITY - Comprehensive Form**

Bodily Injury Liability.....\$ Two Million

Property Damage Liability.....\$ Two Million

**B. COVERAGE FOR PAYMENT OF WORKER'S COMPENSATION BENEFIT  
PURSUANT TO CHAPTER 152 OF THE MASSACHUSETTS GENERAL LAWS  
IN THE AMOUNT AS LISTED BELOW:**

WORKER'S COMPENSATION.....\$ Statutory

EMPLOYERS' LIABILITY.....\$ Statutory

**C. AUTOMOBILE LIABILITY INSURANCE AS LISTED BELOW:**

AGGREGATE.....\$ One Million

1. A contract will not be executed unless a certificate (s) of insurance evidencing above-described coverage is attached.

2. Failure to have the above-described coverage in effect during the entire period of the contract shall be deemed to be a breach of the contract.

3. All applicable insurance policies shall read:

**"CITY OF SOMERVILLE" as a certificate holder and as an additional insured** for general liability only along with a description of operation in the space provided on the certificate.

**Certificate Should Be Made Out To:**

**City Of Somerville**

**Purchasing Department**

**93 Highland Avenue**

**Somerville, Ma. 02143**

**Note: If your insurance expires during the life of this contract, you shall be responsible to submit a new certificate(s) covering the period of the contract. No payment will be made on a contract with an expired insurance certificate.**

**APPENDIX E**  
**PREVAILING WAGE RATES**  
**DAVIS BACON WAGE RATES**  
**AND LIVING WAGE FORM**

**DAVIS BACON AND PREVAILING WAGE RATES**

*INSERT MANUALLY*



## **SOMERVILLE LIVING WAGE ORDINANCE CERTIFICATION FORM**

### **CITY OF SOMERVILLE CODE OF ORDINANCES SECTION 2-397 et seq<sup>2</sup>.**

**Instructions:** This form shall be included in all Invitations for Bids and Requests for Proposals which involve the furnishing of labor, time or effort (with no end product other than reports) by vendors contracting or subcontracting with the City of Somerville, where the contract price meets or exceeds the following dollar threshold: \$10,000. If the undersigned is selected, this form will be attached to the contract or subcontract and the certifications made herein shall be incorporated as part of such contract or subcontract. **Complete this form and sign and date where indicated below on page 2.**

**Purpose:** The purpose of this form is to ensure that such vendors pay a "Living Wage" (defined below) to all covered employees (i.e., all employees except individuals in a city, state or federally funded youth program). In the case of bids, the City will award the contract to the lowest responsive and responsible bidder paying a Living Wage. In the case of RFP's, the City will select the most advantageous proposal from a responsive and responsible offeror paying a Living Wage. In neither case, however, shall the City be under any obligation to select a bid or proposal that exceeds the funds available for the contract.

**Definition of "Living Wage":** For this contract or subcontract, as of **7/1/2014** "Living Wage" shall be deemed to be an hourly wage of no less than **\$12.05** per hour. From time to time, the Living Wage may be upwardly adjusted and amendments, if any, to the contract or subcontract may require the payment of a higher hourly rate if a higher rate is then in effect.

### **CERTIFICATIONS**

1. The undersigned shall pay no less than the Living Wage to all covered employees who directly expend their time on the contract or subcontract with the City of Somerville.
2. The undersigned shall post a notice, (copy enclosed), to be furnished by the contracting City Department, informing covered employees of the protections and obligations provided for in the Somerville Living Wage Ordinance, and that for assistance and information, including copies of the Ordinance, employees should contact the contracting City Department. Such notice shall be posted in each location where services are performed by covered employees, in a conspicuous place where notices to employees are customarily posted.
3. The undersigned shall maintain payrolls for all covered employees and basic records relating hereto and shall preserve them for a period of three years. The records shall contain the name and

---

<sup>2</sup>Copies of the Ordinance are available upon request to the Purchasing Department.

**Part 1, Section 4: OTHER BID DOCUMENTS**

address of each employee, the number of hours worked, the gross wages, a copy of the social security returns, and evidence of payment thereof and such other data as may be required by the contracting City Department from time to time.

4. The undersigned shall submit payroll records to the City upon request and, if the City receives information of possible noncompliance with the provisions the Somerville Living Wage Ordinance, the undersigned shall permit City representatives to observe work being performed at the work site, to interview employees, and to examine the books and records relating to the payrolls being investigated to determine payment of wages.

5. The undersigned shall not fund wage increases required by the Somerville Living Wage Ordinance by reducing the health insurance benefits of any of its employees.

6. The undersigned agrees that the penalties and relief set forth in the Somerville Living Wage Ordinance shall be in addition to the rights and remedies set forth in the contract and/or subcontract.

**CERTIFIED BY:**

**Signature:** \_\_\_\_\_  
(Duly Authorized Representative of Vendor)

**Title:** \_\_\_\_\_

**Name of Vendor:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**INSTRUCTIONS: PLEASE POST**

**NOTICE TO ALL EMPLOYEES  
REGARDING PAYMENT OF LIVING WAGE**

Under the Somerville, Massachusetts' Living Wage Ordinance (Ordinance No. 1999-1), any person or entity who has entered into a contract with the City of Somerville is required to pay its employees who are involved in providing services to the City of Somerville no less than a "Living Wage".

The Living Wage as of **7/1/2013** is **\$11.89** per hour. The only employees who are not covered by the Living Wage Ordinance are individuals in a Youth Program. "Youth Program" as defined in the Ordinance, "means any city, state or federally funded program which employs youth, as defined by city, state or federal guidelines, during the summer, or as part of a school to work program, or in any other related seasonal or part-time program."

For assistance and information regarding the protections and obligations provided for in the Living Wage Ordinance and/or a copy of the Living Wage Ordinance, all employees should contact the City of Somerville's Purchasing Department directly.

**APPENDIX F**  
**CERTIFICATE OF GOOD STANDING**  
**(FOR CORPORATIONS)**

**INSERT DOCUMENT FROM BID BOOK HERE**

Certificate of Good Standing: If the bidder is a corporation, a Certificate of Good Standing should accompany the bid. Certificate of Good Standing available online at:  
[http://corp.sec.state.ma.us/corp/Certificates/Certificate\\_Request.asp](http://corp.sec.state.ma.us/corp/Certificates/Certificate_Request.asp)  
or call Tel: (617) 727-9640 for more information.

## CERTIFICATE OF GOOD STANDING

TO: Vendor

FROM: Purchasing Department

RE: **CERTIFICATE OF GOOD STANDING**

The **Awarded Vendor** must comply with our request for a **CURRENT “Certificate of Good Standing”**.

If you require information on how to obtain the “Certificate of Good Standing” or Certificate of Registration (Foreign Corporations) from the Commonwealth of Massachusetts, please call the Secretary of State’s Office at (617) 727-2850 (Press #1) located at One (1) Ashburton Place, 17<sup>th</sup> Floor, Boston, MA 02133 or you may access their web site at: [www.MA.GOV/SEC/COR](http://www.MA.GOV/SEC/COR)

If your company is incorporated outside of Massachusetts and therefore is a “foreign corporation”, but is registered to do business in Massachusetts, please comply with our request for the Certificate of Registration from the Commonwealth of Massachusetts. If your company is a foreign corporation, but is not registered to do business in Massachusetts, please provide the Certificate of Good Standing from your state of incorporation.

Please note that without the above certificate (s), the City of Somerville cannot execute your contract.

## IMPORTANT NOTICE

Requests for Certificates of Good Standing by mail may take a substantial amount of time. A certificate may be obtained immediately in person at the Secretary’s Office at the address above. Also, at this time, the Secretary of State’s Office may not have your current annual report recorded. If this is the case, and you are therefore unable to obtain the Certificate of Good Standing, please forward a copy of your annual report filing fee check with your signed contracts. Please forward your original Certificate of Good Standing to the Purchasing Department upon receipt.

Thank You,

Purchasing Director

**APPENDIX G**  
**PROCUREMENT DOCUMENTATION**  
*ADVERTISEMENTS, NOTICE TO BIDDERS, ETC.*

**Part 1, Section 4: OTHER BID DOCUMENTS**

Sample Contract

**APPENDIX H**  
**STATEMENT OF MANAGEMENT**  
**FOR CONTRACTS OVER \$100,000**

**STATEMENT OF MANAGEMENT**

**In accordance with M.G.L. Chapter 30, Section 39R, the undersigned successful bidder states that its system of internal accounting controls and that of its subsidiaries reasonably assure (1) that transactions are executed in accordance with management's general and specific authorization; (2) that transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles, and to maintain accountability for assets; (3) that access to assets is permitted only in accordance with management's general or specific authorization, and (4) that the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.**

Executed this \_\_\_\_\_ day of \_\_\_\_\_ 2014

On behalf of \_\_\_\_\_  
(Successful bidder name)

\_\_\_\_\_  
(Address and telephone of successful bidder)

\_\_\_\_\_  
(Name and title of person signing statement)

By: \_\_\_\_\_  
(Signature)

**CERTIFIED PUBLIC ACCOUNTANT STATEMENT**

In accordance with M.G.L. 30, Section 39R I, \_\_\_\_\_  
a certified public accountant, state that I have examined the above Statement of Management on internal accounting controls, and that in my opinion (1) the representations of management are consistent with the result of management's evaluation of the system of internal accounting controls; and (2) that such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the above referenced successful bidder's financial statements.

\_\_\_\_\_  
(Signature)

**Part 1, Section 4: OTHER BID DOCUMENTS**

(Business name, address and telephone number)

Sample Contract

**APPENDIX I**  
**PERFORMANCE BOND AND PAYMENT BOND**  
**FOR CONTRACTS OVER \$2000**

## PERFORMANCE BOND

We, the undersigned,

\_\_\_\_\_,  
(Name of Contractor)

\_\_\_\_\_,  
(Address of Contractor)

\_\_\_\_\_, hereinafter called Principal, and  
(Corporation, Partnership, or Individual)

\_\_\_\_\_,  
(Name of Surety)

\_\_\_\_\_, (Address of Surety)

hereinafter called Surety, are held and firmly bound unto CITY OF SOMERVILLE, 93

Highland Avenue Avenue, Somerville, MA 02139, hereinafter called Owner, in the penal

sum of \_\_\_\_\_ Dollars

(\$\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to

be made. We hereby jointly and severally bind ourselves, our heirs, executors,

administrators, successors, and assigns.

The condition of this obligation is such that the Principal entered into a certain contract with the Owner, dated the \_\_\_\_ day of \_\_\_\_, 20\_\_, a copy of which is attached hereto and made a part hereof, for the project known as Zero New Washington Street Community Park and Off-Leash Recreation Area and the Principal and Surety bind themselves to the Owner for the performance of the contract.

Now, therefore, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the

Sample Contract

**Part 1, Section 4: OTHER BID DOCUMENTS**

original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety and during the guaranty period set forth in the contract, and if it shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by a reason of failure to do so, and shall reimburse and repay the Owner all outlay and expenses which the Owner may incur in making good any default, then this obligation shall be void; otherwise, this bond shall remain in full force and effect; provided, further, that the said Surety for value received hereby agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder of the specifications accompanying the same shall in any wise affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications. Provided, further, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed on this \_\_\_\_day of \_\_\_\_,2014.

CONTRACTOR AS PRINCIPAL

SURETY

\_\_\_\_\_  
(Signature)  
Name and Title:

\_\_\_\_\_  
(Signature)  
Name and Title:

SEAL

SEAL

## Payment Bond

We, the undersigned,

\_\_\_\_\_,  
(Name of Contractor)

\_\_\_\_\_,  
(Address of Contractor)

\_\_\_\_\_, hereinafter called Principal, and  
(Corporation, Partnership, or Individual)

\_\_\_\_\_,  
(Name of Surety)

\_\_\_\_\_, (Address of Surety)

hereinafter called Surety, are held and firmly bound unto CITY OF SOMERVILLE, 93  
Highland Avenue, Somerville, MA 02139, hereinafter called Owner, in the penal sum of  
Dollars

(\$\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to  
be made. We hereby jointly and severally bind ourselves, our heirs, executors,  
administrators, successors, and assigns.

The condition of this obligation is such that the Principal entered into a certain  
contract with the Owner, dated the \_\_\_\_ day of \_\_\_\_, 20\_\_, a copy of which is attached  
hereto and made a part hereof, for the project known as Zero New Washington Street  
Community Park and Off-Leash Recreation Area.

Now, therefore, if the Principal shall promptly make payment to all persons, firms,  
subcontractors, and corporations furnishing materials for or performing labor in the  
prosecution of the work provided for in such contract, and any authorized extension or

**Part 1, Section 4: OTHER BID DOCUMENTS**

modification thereof, including all amounts due for materials used in connection with the work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise this bond is remain in full force and effect. Provided, further, that the said Surety for value received hereby agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder of the Specifications accompanying the same shall in any wise affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

Provided, further, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed on this \_\_ day of \_\_, 2014.

CONTRACTOR AS PRINCIPAL

SURETY

-----

-----

(Signature)

(Signature)

Name and Title:

Name and Title:

SEAL

SEAL

## MEETING OF THE BOARD OF DIRECTORS

### CERTIFICATE OF AUTHORITY

\_\_\_\_20

At a meeting of the Directors of the  
\_\_\_\_\_ duly called and held at \_\_\_\_\_ on the \_\_ day of \_\_\_\_20\_\_, at which a quorum  
was present and acting, it was

#### VOTED THAT

the \_\_\_\_\_ of this corporation is hereby authorized and empowered to make, enter into, sign,  
seal and deliver, in behalf of this corporation, a Contract for Site Improvements at Perry Park  
and Stone Place Park with the City of Somerville, and performance and payment bonds (each  
in the full amount of the Contract) in connection with such Contract.

I DO HEREBY CERTIFY that the above is a true and correct copy of the record, that  
said vote has not been amended or repealed and is in full force and effect on this date, and  
that \_\_\_\_\_ is duly elected \_\_\_\_ of this corporation.

ATTEST:

\_\_\_\_\_

Clerk or Secretary of the Corporation

(Affix Corporate Seal Here)

**Part 1, Section 4: OTHER BID DOCUMENTS**

Sample Contract

## **PART 3: TECHNICAL SPECIFICATIONS**

<b>DOCUMENT TITLE</b>	<b>SECTION</b>
<b>DIVISION 1 - General Requirements</b>	

01039	Coordination and Meetings	01039
01100	Special Conditions	01100
01230	Alternates	01230
01300	Submittals	
01330	Permits	01350
01400	Quality Control	01400
01500	Temporary Facilities	01500
01570	Environmental Protections	01570
01577	Rodent Control	01577

### **DIVISION 2 – Site Work**

02000	Site Work	02000
02100	Site Preparation	02100
02200	Earthwork	02200
02510	Bituminous Concrete Pavement	02510
02515	Concrete Walks and Paving	02515
02525	Stone Dust Pavement	02525
02550	Playground Safety Surfacing	02550
02730	Site Drainage	02730
02870	Site Furnishings	02870
02872	Renovation of Play Equipment	02872
02875	Fencing	02875
02950	Trees, Plants, and Groundcovers	02950
04200	Precast Concrete Unit Retaining Wall	04200
04400	Stone Masonry	04400

## **PART 4 – CONSTRUCTION DRAWING LIST**

<u>Drawing #</u>	<u>Drawing Title</u>
L.1	Existing Conditions and Site Preparation
L.2	Layout and Materials Plan
L.3	Site Details
L.4	Site Details

**END OF SECTION**

**Marshall Street Playground Renovation  
Somerville, MA**

Table of Contents

**DIVISION 1: GENERAL REQUIREMENTS**

01039	Coordination and Meetings	01039-1 – 01039-5
01100	Special Conditions	01100-1 – 01100-9
01230	Alternates	01230-1 - 01230-3
01300	Submittals	01300-1 – 01300-2
01350	Permits	01350-1
01400	Quality Control	01400-1 – 01400-2
01500	Temporary Facilities	01500-1 – 01500-3
01570	Environmental Protection	01570-1 – 01570-5
01577	Rodent Control	01577-1 – 01577-2

**DIVISION 2: SITE WORK**

02000	Site Work	02000-1 - 02000-2
02100	Site Preparation	02100-1 - 02100-5
02200	Earthwork	02200-1 - 02200-7
02510	Bituminous Concrete Pavement	02510-1 – 02510-4
02515	Concrete Walks and Paving	02505-1 – 02505-8
02525	Stone Dust Pavement	02525-1 – 02525-3
02550	Playground Safety Surfacing	02550-1 – 02550-4
02730	Site Drainage	02730-1 - 02730-7
02870	Site Furnishings	02870-1 – 02870-3
02872	Renovation of Play Equipment	02872-1 – 02872-6 02872A 1-18 Equip. Report
02875	Fencing	02875-1 – 02875-5
02950	Trees, Plants, and Groundcovers	02950-1 – 02950-9
04200	Precast Concrete Unit Retaining Wall	04200-1 – 04200-3
04400	Stone Masonry	04400-1 – 04400-4

**PART 4 – CONSTRUCTION DRAWING LIST**

<u>Drawing #</u>	<u>Drawing Title</u>
L.1	Existing Conditions and Site Preparation
L.2	Layout and Materials Plan
L.3	Site Details
L.4	Site Details

## **SECTION 01039**

### **COORDINATION AND MEETINGS**

#### **PART 1 - GENERAL**

##### **1.1 SUMMARY**

- A. This Section is Supplemental to the General Conditions
- B. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Coordination.
  - 2. Field Engineering.
  - 3. Alteration Project Procedures.
  - 4. Cutting and Patching.
  - 5. Submittals.
  - 6. Pre-Construction Conference
  - 7. Pre Installation Meetings.
  - 8. Project Progress Meetings.
  - 9. Requests for Interpretation (RFIs).
- C. See appropriate Division 1 Sections for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

##### **1.2 DEFINITIONS**

- A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

##### **1.3 COORDINATION**

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
  - 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

5. Verify that utility requirement characteristics of operating equipment are compatible with existing utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
  6. In finished areas (except as otherwise indicated), conceal pipes within the construction.
  7. Coordinate completion and clean up of work of separate sections in preparation for Substantial Completion.
  8. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Contractor's Construction Schedule.
  2. Preparation of the Schedule of Values.
  3. Installation and removal of temporary facilities and controls.
  4. Delivery and processing of submittals.
  5. Progress meetings.
  6. Preinstallation conferences.
  7. Project closeout activities.
  8. Startup and adjustment of systems.
  9. Project closeout activities.
- 1.4 FIELD ENGINEERING
- A. Contractor to locate and protect survey control and reference points.
  - B. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.
- 1.5 ALTERATION PROJECT PROCEDURES
- A. Contractor Materials: As specified in product Sections; match existing products and work for patching and extending work.
  - B. Close openings in exterior surfaces to protect existing work from weather and extreme temperature and humidity.
  - C. Remove, cut and patch work in a manner to minimize damage and to provide a means of restoring products and finishes to specified condition.
  - D. Refinish visible existing surfaces to remain to specified conditions for each material, with a neat transition to adjacent finishes.

- E. Where new work abuts or aligns with existing, perform a smooth and even transition. Patched work to match existing adjacent work in texture and appearance.
- F. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Landscape Architect review.
- G. Where a change of plane of 1/4 inch (6mm) or more occurs, submit recommendation for providing a smooth transition for Landscape Architect/Engineer review.
- H. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- I. Finish surfaces as specified in individual project Section.

#### 1.6 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Execute cutting, fitting, and patching including excavation and fill to complete work and to:
  - 1. Fit the several parts together, to integrate with other work
  - 2. Uncover work to install or correct ill-timed work
  - 3. Remove and replace defective and non-conforming work
  - 4. Provide openings in elements of work for penetrations of mechanical and electrical work.
- C. Execute work by methods which will avoid damage to other work, and provide proper surfaces to receive patching and finishing.
- D. Cut rigid materials using masonry saw or core drill.
- E. Restore work with new products in accordance with requirements of Contract Documents.
- F. Fit work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- G. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection.

#### 1.7 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings as required by individual specification sections, and if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
  - 1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:
    - a. Indicate functional and spatial relationships of components of landscape architectural, structural, civil, irrigation, and electrical systems.
    - b. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Landscape Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

2. Sheet Size: At least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
3. Number of Copies: Submit three (3) opaque copies of each submittal. Landscape Architect will return one copy.
4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.

#### 1.8 PRECONSTRUCTION CONFERENCE

- A. Preconstruction Conference: Owner will schedule a conference after Notice of Award before starting construction, at a time convenient to the Owner and Landscape Architect, but no later than 10 days after execution of the Agreement. The conference will be held at the Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
1. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
  2. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
  3. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

#### 1.9 PROJECT PROGRESS MEETINGS

- A. General: Schedule and conduct weekly progress meetings and conferences at Project site, unless otherwise indicated.
1. Attendees: Inform participants such as the Job Superintendent, subcontractors and suppliers and individuals whose presence is required, of date and time of each meeting. Notify Owner and Landscape Architect of scheduled meeting dates and times.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Landscape Architect, within three days of the meeting.

#### 1.10 REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
  2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

3. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
  4. Landscape Architect's action may include a request for additional information, in which case Landscape Architect's time for response will start again.
- B. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly.

PART 2      PRODUCTS (Not Used)

PART 3      EXECUTION (Not Used)

END OF SECTION

## SECTION 01100

### SPECIAL CONDITIONS

#### 1.1 DEFINITIONS

- A. General: Except as specifically defined otherwise, the following definitions supplement definitions of the Contract, General Conditions, Special Conditions, Technical Specifications and other general contract documents, and apply generally to the work.
1. Owner: City of Somerville, Massachusetts, Office of Strategic Planning and Community Development.
  2. City Representative: Also referred to in the Contract Documents as Owner's Representative shall mean Luisa Oliviera, Senior Planner for Landscape Design, City of Somerville, MA. (617) 625-6600 x2529.
  3. Landscape Architect: Also referred to in Contract Documents as Landscape Architect, Project Representative or Engineer shall mean Andrew Leonard of Leonard Design Associates, Arlington, MA (781) 641-0750.
  4. Indicated: Shown on drawings by notes, graphics or schedules, or written into other portions of contract documents. Terms such as "shown," "noted," "scheduled" and "specified" have same meaning as "indicated" and are used to assist the reader in locating particular information.
  5. Directed, Requested, Approved, Accepted, etc.: These terms imply, "by the Landscape Architect," unless otherwise indicated.
  6. Approved by Landscape Architect: In no case releases Contractor from responsibility to fulfill requirements of contract documents.
  7. Project Site: Space available to Contractor at location of project, either exclusively or to be shared with separate contractors, for performance of the work.
  8. Furnish: Supply and deliver to project site, ready for unloading, unpacking, assembly, installation and similar subsequent requirements.
  9. Install: Operations at project site including: unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar requirements.
  10. Provide: Furnish and install, complete and ready for intended use.
  11. Remove: Complete removal, loading, transporting, permits, and legal disposal off-site by the Contractor of all designated materials in accordance with local, state and federal regulations, at the Contractor's expense.

12. Installer: Entity (firm or person) engaged to install work, by Contractor, subcontractor or sub-contractor. Installers are required to be skilled experts in work they are engaged to install.
13. Specification Text Format: Underscoring facilitates scan reading, no meaning. Imperative language is directed at Contractor, unless otherwise noted.
14. Overlapping/Conflicting Requirements: Most stringent (generally) language written directly into contract documents clearly indicates that a less stringent requirement is acceptable. Refer uncertainties to Landscape Architect for decision before proceeding.
15. Where optional requirements are specified in a parallel manner, option is intended to be Contractor's unless otherwise indicated.
16. Minimum Requirements: Indicated requirements are for a specific minimum acceptable level of quality/quantity, as recognized in the industry. Actual work must comply (within specified tolerances), or may exceed minimums within reasonable limits. Refer uncertainties to Landscape Architect for decision before proceeding.
17. Abbreviations, Plural Words: Abbreviations, where not defined in contract documents, will be interpreted to mean the normal construction industry terminology, determined by recognized grammatical rules, by the Landscape Architect. Plural words will be interpreted as singular and singular works will be interpreted as plural where applicable for context of contract documents.

## 1.2 PROJECT SITE

- A. Marshall Street Park is located on Marshall Street at the Corner of Mortimer Place in the Winter Hill neighborhood.

## 1.3 LIQUIDATED DAMAGES

- A. As actual damages for any completion of the work which the Contractor is required to perform under this Contract, the Contractor and his Sureties shall be liable for and shall pay to the Owner the sum of two hundred and fifty dollars (\$250) as fixed and agreed, as liquidate damages for each calendar day of delay from the date stipulated for completion, or as modified in accordance with the General and Special Conditions.

## 1.4 OWNER'S TAX EXEMPTION

- A. The Awarding Authority, as a department of a corporate municipality in the Commonwealth is exempt from the taxes listed below. Contractor shall notify all suppliers of the following current certificates:
  1. Federal Excise Taxes as applied to articles taxable under Chapter 32 of the Internal Revenue Code of 1954, as amended, City of Somerville Excise Tax Exemption Certificate is not required.

2. From Sales and Use Tax imposed by the Commonwealth of Massachusetts under Chapter 14, Acts of 1966, the City of Somerville has been assigned exemption certificate No. 046-001-414 with respect to leases, rental, or purchases of "Tangible Personal Property".

#### 1.5 RESPONSIBILITIES OF CONTRACTOR

- A. Except as otherwise specifically stated in the Contract Documents and Technical Specification, the Contractor shall provide and pay for all materials, tools, labor, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fee or other expenses, permits and back charges and all other services and facilities of every nature whatsoever necessary for the performance of the Contract and to deliver all improvements embraced in this Contract for Site Preparation completed in every respect within the specified time.
- B. Unless otherwise specified herein all materials, workmanship, methods, and practices shall conform to the current Standards of the appropriate Department of the City of Somerville.
- C. The Contractor shall be responsible for detailed layout, all stake-out and grade control, and shall follow standard engineering practice in all such activities.
- D. The Contractor shall verify dimensions and utility locations shown on the plans and if any inconsistencies or discrepancies should be noted on the Drawings, or between the Drawings and actual field conditions, or between the Drawings and the Specifications he shall immediately notify the Owner. The Contractor will be held responsible for any errors resulting from his failure to exercise the aforementioned precaution. Such information shall be marked on copies of the drawings and submitted to the Engineer for incorporation into Record Drawings.
- E. The Contractor shall employ a suitable superintendent and foreman to represent him/her at all the several parts of the work and they shall be present at all times while the work entrusted to them is in progress and shall be informed thoroughly regarding it. The foreman, mechanics, and others employed by the Contractor shall be skilled and experienced in the particular work that is given them to do.
- F. As soon as the Contract is executed, the Contractor shall order materials, submit construction schedules as hereinafter specified, and otherwise anticipate the Notice to Proceed. When the Owner gives the Notice to Proceed, the work of construction shall begin at the time stipulated therein and shall be completed within the Time for Completion specified.
- G. It is the Contractor's responsibility to make his/her own investigation and related assumptions and to satisfy him/herself as to subsurface conditions and to ensure that these are reflected in the general and unit prices bid.
- H. The Contractor's attention is called to the necessity of obtaining permits. See Section 01350, Permits.

1. All persons desiring to use water from a hydrant or any other appurtenance shall apply for a "Hydrant Permit" at the city of Somerville.

## 1.6 COMMUNICATIONS

- A. All notices, demands, requests, instructions, approvals, proposals and claims must be in writing and must be presented to the Engineer in person or by e-mail or mail to the Engineer, with a copy to the Owner.
- B. Any notice to or demand upon the Contractor shall be considered sufficiently given if delivered at the office or field office of the Contractor stated on the signature page of the Agreement (or at such other office as the Contractor may from time to time designate in writing to the Owner), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or sent by e-mail to the Contractor's customary address.
- C. All papers required to be delivered to the Owner shall, unless otherwise specified in writing to the Contractor, be delivered to the Office of Housing and Community Development, City of Somerville, 93 Highland Avenue, and any notice to or demand upon the Owner shall be sufficiently given if so delivered, or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said Owner at such address, or to such other representatives of the Owner or to such other address as the Owner may subsequently specify in writing to the Contractor for such purpose.
- D. Any such notice shall be deemed to have been given as of the time of actual delivery or (in case of mailing) when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt, as the case may be.
- E. Contractor shall maintain a standard e-mail address for the purposes of communication, and shall monitor the e-mail mailbox regularly to ensure prompt and rapid communication.

## 1.7 LAYOUT WORK

- A. Dimensional layout work shown on Drawings for existing construction is based upon best available information from existing drawings and field measurements. The Contractor is hereby required to verify the layouts from referenced fixed elements such as existing exterior walls and other points that serve as reference points of layout work. Carefully verify Contract Drawing layout feasibility. The Contractor shall report to the Landscape Architect any conditions that are found to be in conflict with Contract Documents. The Landscape Architect will advance decisions as to necessary adjustment to dimensions and will promptly disseminate revised drawings and/or corrections that shall serve as the basis for advancement of the work.
- B. Lines and grade work in accordance with Drawings and Specifications shall be laid out in accordance with standard engineering practice. The Contractor may employ a registered Civil Engineer or Surveyor for this purpose. The Contractor shall maintain all established bounds and bench marks and replace, as directed, any which may be disturbed or destroyed. The selection of a registered Civil Engineer or Surveyor shall be

subject to the Landscape Architect's approval. The General Contractor shall pay all costs of the services of Civil Engineer or Surveyor.

- C. The Contractor shall check all Drawings and shall report any errors in them to the Landscape Architect, who will make or approve the necessary corrections. Any discrepancies not reported prior to construction shall not be the basis for claims for extra compensation.

1.8

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#### ARTIAL USE OF SITE IMPROVEMENTS

- A. The Owner, at its election, may give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected and can be accepted as complying with the Technical Specifications and if, in its opinion, each such section is reasonably safe, fit and convenient for the use and accommodation for which it was intended, provided:
  - 1. The use of such sections of the improvements shall in no way impede the completion of the remainder of the work by the Contractor.
  - 2. The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.
  - 3. The use of such sections shall in no way relieve the Contractor of his liability due to having used defective materials or due to poor workmanship.
  - 4. The period of guarantee stipulated in the specifications shall not begin to run until the date of the final acceptance of all work which the Contractor is required to construct under this Contract.

#### 1.9 CONTRACT DOCUMENTS AND DRAWINGS

- A. The Owner will furnish the Contractor, without charge, 6 copies of the Contract Documents including drawings. Additional copies requested by the Contractor will be furnished at cost.
- B. Manufacturer's product information provided in the specifications is for the Contractor's information only, and does not in any way relieve the Contractor of the responsibility to provide complete submittals of all required information and shop drawings as specified. In the case of discrepancy between the product information and the specifications, the written specifications shall govern.

#### 1.10 HISTORICAL, ARCHAEOLOGICAL OR ANTIQUE ITEMS

- A. The Contractor during his excavation, site clearance and other operations may come upon, uncover or otherwise discover items of historical, archaeological or antique nature. The Contractor shall immediately stop operations at the particular site of the discovery and notify the Owner so that a proper evaluation may be made of its im-

portance. The Owner shall arrange for the evaluation in a manner that shall not unduly interfere with the Contractor's operations.

- B. All such items, if designated by competent authority to be historical, archaeological or antique nature shall not become the property of the Contractor but shall be placed in the custody of the Owner for disposition.
- C. The Contractor shall be required to remove with care or to assist in the removal of any such item or items and to transport the same to a place of safe keeping within the City of Somerville. The costs for so assisting shall be reimbursed to the Contractor if approved by the Engineer.

#### 1.11 FIRE PROTECTION AND PREVENTION

- A. The Contractor shall keep the site free of rubbish and construction debris at all times.
  - 1. He shall provide sufficient metal barrels or dumpsters into which all refuse and garbage shall be deposited. All containers shall have tight fitting covers. These shall be secured overnight or removed daily.
  - 2. At the end of each work week, the Contractor shall thoroughly clean premises of rubbish and debris of any nature, and remove such from the premises.

#### 1.12 SITE MAINTENANCE

- A. During the full period of construction the contractor shall be responsible for all routine maintenance responsibilities including regular mowing of lawns, watering as required during drought periods and litter collection and removal on at least a weekly basis.

#### 1.13 RECORD DRAWINGS

- A. The Contractor shall cooperate with the Landscape Architect and shall prepare and maintain a set of drawings on which shall be recorded accurately, as the work progresses, the actual "as built" locations and dimensions of all his work, indicating thereon all variations from the Contract Drawings. This record of "as built" conditions shall include the work of all subcontractors and shall be submitted, upon final acceptance of all work, to the Landscape Architect.
- B. Upon completion and acceptance of the work, deliver to the Owner 3 reproducible copies of all record drawings.

#### 1.14 CONSTRUCTION SCHEDULES AND PAYMENT ESTIMATES

- A. The Contractor must submit a construction schedule to the Owner indicating the general sequence of all work under his contract. This schedule must be submitted within 10 days of the date of Contract execution and shall be revised if required to the Satisfaction of the Owner.
- B. Within 10 days after date of Owner/Contractor Agreement, the Contractor shall submit to the Landscape Architect and the Owner a refined Schedule of Values in duplicate of

the various portions of the work including quantities when requested, aggregating the total contract sum, and divided so as to facilitate payments for work under each section. The schedule shall be prepared in such form as specified or as the Landscape Architect or the Owner may approve, and it shall include data to substantiate its accuracy. Each item in the Schedule of Values shall include its proper share of overhead and profit. This schedule requires the approval of the Owner and Landscape Architect prior to the Contractor's submitting the first application for payment, and shall be used only as a basis for the Contractor's requests for payment. (Please refer to Construction Contract Appendix C, General Conditions, Article 5 for further clarification.)

- C. The established breakdown of items, categories and values shall be utilized to prepare the monthly pay requisition forms. It is recommended that the Contractor submit a draft pay - requisition to the Engineer for approval, the last week of every month. The Engineer shall review and edit this copy to indicate the amount of payment to be approved and return this to the Contractor after field review. The Contractor shall then submit formal five (5) copies of the pay requisition, conforming to the Engineer's approval, for payment by the Owner.

#### 1.15 UTILITIES

- A. The Contractor shall obtain and pay for all licenses and/or permits which are required by the City of Somerville or any other agencies which may be involved; he shall comply with all codes, regulations and standards of the City of Somerville.
- B. The City of Somerville and all private companies or any agencies whose utilities are in the construction shall be notified by the Contractor at least 48 hours prior to the start of any excavation. The Contractor will be required to cooperate with the utility companies involved in order to assure completion of all work with the least amount of delay.

#### 1.16 SHOP AND WORK DRAWINGS

- A. If it is the intent of the Contractor to furnish and install appurtenances and elements as specified and detailed on the plans, and where shop drawings are requested, a letter to the Engineer indicating that these will be ordered and installed as specified shall suffice. In the instance of any discrepancies in the plans and the actual dimensions or size of materials, the Contractor shall be responsible to make any and all adjustments necessary to install the materials as set forth in the Contract Documents.
- B. The Contractor shall furnish six (6) copies of any shop drawings that may be required.
- C. The Contractor shall be responsible for the prompt submission of all shop working drawings so that there will be no delay in the work.
- D. The Approval of shop and working drawings will be general and shall not relieve the Contractor from the responsibility for details of design, dimensions, etc., necessary for fittings and construction of the work as required by the Contract and to ensure the safety of the public.
- E. Refer to Section 01300 - Submittals of the General Requirements.

#### 1.17 PROVISIONS FOR TRAFFIC

- A. The Contractor shall not close or obstruct any portion of a street without obtaining permits therefore from the proper municipal authorities. If any street or private way shall be rendered unsafe by the Contractor's operations, he shall make such repairs or provide such temporary ways or guards as shall be acceptable to the Owner.
- B. Streets, roads, private ways, and walks shall be maintained passable by the Contractor at his expense, and the Contractor shall assume full responsibility for the adequacy and safety of provisions made. He shall conduct his construction operations such that interference with the flow of traffic will be held to a minimum.
- C. The Contractor shall cooperate in every way possible with the municipal authorities maintaining a flow of traffic through the site. The Contractor shall notify the Somerville Fire Department when any street is to be closed regardless of the length of time or time of day.
- D. All detours shall be signed and lighted as directed by the Engineer.

#### 1.18 SITE INSPECTION

- A. It shall be contingent upon the Contractor to inspect the site as an aid to determining the extent of his work under the various contract items prior to submission of his bid.

#### 1.19 SAMPLING AND TESTING OF MATERIALS AND COMPACTION

- A. All sampling and tests ordered by the Engineer to ensure that the material are as specified and that compaction of all materials conforms to the necessary requirements shall be taken and completed by representatives of a Massachusetts certified testing laboratory satisfactory to the Engineer, and shall be paid for the Contractor regardless of their results. These Special Conditions shall take precedence over any technical specifications included herein.

#### 1.20 PROTECTION OF EXISTING STRUCTURES

- A. All existing walks, pipes, conduits, poles, fences, stairways, curbing, walls, buildings, trees and other structures which are to remain in place shall be carefully supported and protected from injury by the Contractor without additional compensation and in case of injury they shall be restored by him without compensation therefore to as good condition as that in which they were found. The value of any trees damaged shall be determined in accordance with established practices of the American Association of Nurserymen or a Registered or Certified Arborist selected by the Engineer. Limits of liability shall not be limited to the replacement with new and immature trees.
- B. The value of any trees damaged shall be determined in accordance with established practices of the American Association of Nurserymen or a Registered or Certified Arborist selected by the Engineer. Limits of liability shall not be limited to the replacement with new and immature trees. Please refer to specifications 01510 for Protection, and 02231 for Tree Protection for additional information.

- C. The Contractor shall, at his own expense, provide suitable and safe bridges and other crossings, where required for accommodation of travel and to provide access to private property during construction, and shall remove said structures thereafter.
- D. Utility lines shown are located from the best information available. Services may not be shown. The existence of utilities which are normally located in the streets and not shown on the plans shall not be considered as an unusual obstacle, and the Contractor shall not be entitled to extra compensation for maintaining, protecting, or restoring utilities which he disturbs.

1.21 AMEND ITEM 62 "CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT"  
BY ADDING THE FOLLOWING:

- A. All pertinent rules and regulations issued under and pursuant to the National Environmental Policy Act of 1969 as amended (P.L. 90-190) (42 USC 4321); the National Historic Preservation Act of 1966 (80 Stat. 915, 16 USC 470); the Wild and Scenic Rivers Act P.L. 90-542 as amended, and Executive Order No 11593 of May 31, 1971.
- B. Flood insurance requirements, pursuant to the Flood Disaster Protection Act of 1973 (P.L. 93-234, 87 Stat. 975), as amended, and any regulations issued thereunder by the U.S. Department of Housing and Urban Development and/or the Economic Development Administration.
- C. Parts 3, 5 and 5a, Subtitle A, Title 29, Code of Federal Regulations, as amended, which shall be applicable to every invitation for bids and to every negotiation, request for proposals, or request for quotations, for a construction contract and to every such contract entered into on the basis of such invitation or negotiation. Part 5a 3, Subtitle A., Title 29, Code Federal Regulations shall constitute the conditions of each contract in excess of \$10,000, and each Grantee and contractor shall include these conditions or provide for their inclusion, in each such contract. Parts 5a. 4 5a. 5, 5a. 6 and 5a. 7 shall also be included in each such contract for the information of the contractor. Apprentices and trainees shall be hired in accordance with the requirements of Part 5a.

1.22 SPECIAL REQUIREMENTS

- A. The Contractor shall be aware that it is his responsibility to maintain the conditions of the park, within the limit of work, that are not under construction at any specific time. This maintenance shall include but is not limited to lawn mowing and trash removal.

END OF SECTION

## **SECTION 01230**

### **ALTERNATES**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. All of the Contract Documents, including the General and Supplementary Conditions and Division 0 – Bidding Documents, Contract Forms, and Conditions of the Contract and Division 1 – General Requirements, apply to the work of this Section.
- B. Carefully examine all the Contract Documents for requirements that affect the work of this Section. The exact scope of this Section cannot be determined without a thorough review of all specification sections and other Contract Documents.

##### **1.02 SUMMARY**

- A. The Schedule of Alternates included in this Section lists all the Alternates that appear in the Contract Documents, and the primary Specification Sections which are affected by each Alternate. Completion of the work of each alternate may require work described in other specification sections. Contractor is responsible for fully examining the scope of work of each alternate and including all work required for the full completion of each alternate in their price.
- B. For each of the alternates scheduled at the end of this Section, state the amount in the proposal to be added to or deducted from the Contract Sum for the work in the appropriate place on the Alternate Bid Form.
- C. Consult the individual Specification Sections for detailed requirements of each Alternate.

##### **1.03 GENERAL INSTRUCTIONS**

- A. Each Bidder shall be held fully responsible for examining the scope of the Alternates generally defined herein and for recognizing any modifications to his work caused by any Alternate.
- B. The Bid Alternate Price shall be complete cost, including overhead, profit, bonds, insurance, transportation, and all other costs connected with, or incidental to the work described.

- C. Alternates listed below in the Schedule of Alternates are listed in order. The Contract will be awarded on the basis of the Base Bid only or the Base Bid plus Alternates taken in order of 1-6.

#### 1.04 ALTERNATES

- A. Definition: "Alternates" are alternate products, materials, equipment, systems, methods, units of work or major elements of the construction, which may, at the Authority's option and under the terms established by the Contract or Agreement, be selected for the work in lieu of the corresponding requirements of the Contract Documents.
- B. Alternate Requirements: A Schedule of Alternates is included at the end of this Section. Each alternate is defined using abbreviated language, recognizing that the Contract Documents define the requirements. Coordinate related work to ensure that work affected by each alternate is complete and properly interfaced with work of each selected alternate.
- C. Provide written proposals for each alternate on the Bid Form for Authority's consideration. Each proposal amount shall include the entire cost of the alternate portion of the work including overhead, profit, and other costs including cost of interfacing and coordinating the alternate with related and adjacent work.

#### 1.05 SCHEDULE OF ALTERNATES

- A. Alternate No. 1 – Cul-tec Chamber
  - 1. Work: Provide and install the cul-tec chamber, piping and drain inlet and related work as shown in the Contract Documents.
  - 2. Refer to the following Specification Sections for the work of Alternate No. 1:
    - a) Section 02730 – Site Drainage.
- B. Alternate No. 2 – Granite Bollards
  - 1. Work: Provide and install the granite bollards at the entry plaza as indicated in the Contract Documents.
  - 2. Refer to the following Specification Sections for the work of Alternate No. 2:
    - a) Section 02515 –Concrete and Sidewalks.
    - b) Section 04400 - Masonry
- C. Alternate No. 3 – Metal Benches at Entry Plaza
  - 1. Work:

- a) Remove the 3 existing benches at the entry plaza.
  - b) Install 3 new benches at the entry plaza as indicated on the drawings. Benches will be provided by the City
2. Refer to the following Specification Sections for the work of Alternate No. 3:
- a) Section 02100 – Site Preparation
  - b) Section 02870 – Site Furnishings

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

Not Used.

--- END OF SECTION ---

## SECTION 01300

### SUBMITTALS

#### A. GENERAL

1. Submittal Log is provided as a convenience for Contractor. Contractor is required to provide all submittals as listed in documents and specifications whether or not listed here.
2. Required Product Samples may be delivered to site and will be reviewed there.
3. Record Drawings may be combined, provided all data is legible.
4. See other Submittal requirements in the Contract.

Submittal #	Description	Issued by Contractor	Reviewed by LA	Received by Contractor
01039.01	Construction Schedule			
01039.02	Schedule of Values			
01039.03	Names, Contact Info for Contractor(s)			
01100.01	As-Built Drawings			
01300.01	Copy of Required Permits			
01500.01	Construction Fence and Operations Plan			
01570.01	Environmental Control Plan			
01577.01	Rodent Control Measures/Exterminator			
02510.01	Pavement Marking Product Data			
02515.01	Concrete Materials/Accessories Product Data			
02515.02	Concrete Mix Designs			
02515.03	Concrete Delivery Tickets			
02515.04	Concrete Test Reports			
02550.01	Play Area Safety Surface Product Data			
02550.02	Play Area Safety Surface Sample			
02550.03	Play Area Safety Surface Certification			
02550.04	Play Area Safety Surface Sample Panel			
02730.01	Site Drainage Materials and Product Data			
02730.02	Site Drainage Record Drawings			
02872.01	Playground Renovation Shop Drawings			
02870.02	Playground Renovations Materials and Product Data			
02870.03	Playground Inspection Report			

02875.01	Fencing Materials and Product Data.			
02950.01	Plant Materials Sources			
02950.02	Topsoil Test Reports			
02950.03	Plant Accessories Product and Materials Data			
04200.01	Retaining Wall Product and Materials Data			
04200.02	Retaining Wall Design Shop Drawing			
04200.03	Retaining Wall Materials Samples			
04400.01	Stone Masonry Materials Data			
04400.02	Stone Masonry Materials Samples			

## **SECTION 01350**

### **PERMITS**

#### **PART I - GENERAL**

##### **1.01 SCOPE OF WORK**

- A. The Contractor shall be responsible for obtaining and all permits including building permits, utility permits and the like, required to complete the work of this contract, to provide all coordination and furnish all bonds, assurances and required warranties. As applicable, the Contractor shall be responsible for any/all fees associated with the securing of permits necessary for the execution of the work of this contract. Should any street work be required, an approved City contractor shall perform it.

##### **1.02 GENERAL REQUIREMENTS**

- A. Contractor shall prepare permit application and obtain the permit after contract is awarded, bearing all expenses.
- B. The Contractor shall perform the work in accordance with the Contract Documents, and any applicable municipal requirements.
- C. Note that all work in the public right of way, including water and sewer connections, must be performed by a City of Somerville certified contractor. A list of certified contractors is available from the Department of Public works. Alternatively, the contractor may apply for certification. Forms, including a Drain Layers License Application, are available at the City Clerk's office and the process requires a \$200 application fee.

##### **1.03 DIGSAFE**

- A. Contact Digsafe seventy-two (72) hours prior to initiating work at telephone # 1-888-344-7233.

--- END OF SECTION ---

**SECTION 01400  
QUALITY CONTROL**

**PART I - GENERAL**

**1.01 SUMMARY**

- A. Examine all drawings and all other specification sections for requirements related to this section.
- B. These general requirements apply to all work operations. Refer to other Division specification sections for specific general, product, and execution requirements.

**1.02 SECTION INCLUDES**

- A. Quality assurance and control of installation
- B. References
- C. Field samples
- D. Inspection and testing laboratory services

**1.03 QUALITY ASSURANCE/CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, notify the Landscape Architect.
- D. Perform work by persons qualified to produce workmanship of specified quality.
- E. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

**1.04 REFERENCES**

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Obtain copies of standards when required by Contract Documents.

1.05 FIELD SAMPLES/MOCK UPS

- A. Install field samples/mock-ups at the site as required by individual specification Sections for review.
- B. Acceptable samples/mock-ups represent a quality level for the Work.
- C. Where field samples/mock-ups are specified in individual Sections to be removed, clear area after field sample has been accepted by Landscape Architect.

1.06 INSPECTION AND TESTING LABORATORY SERVICES

- A. Contractor shall employ services of an independent firm to perform inspection and testing. Contractor shall be required to pay for all services required.
- B. The independent firm will perform inspections, tests, and other service specified in the individual specification Sections and as required by the Landscape Architect.
- C. Reports will be submitted by the independent firm to the Landscape Architect, in duplicate indicating observations and results of tests and indicating compliance or non-compliance with the Contract Documents.
- D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, and provide storage and assistance as required.
- E. Make arrangements with independent firm and pay for additional samples and tests required for contractor's use.
- F. Notify Landscape Architect and independent firm 24 hours prior to expected time of operations requiring services.
- G. The location for all testing to be performed shall be determined by the Landscape Architect. The schedule for all testing shall be approved by the Landscape Architect.
- H. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the Landscape Architect/Engineer. Payment for retesting will be charged to the Contractor.

END OF SECTION

**SECTION 01500**  
**TEMPORARY FACILITIES**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Examine all drawings and all other specification sections for requirements related to this section.

**1.2 GENERAL REQUIREMENTS**

- A. The Contractor shall be responsible for providing and maintaining all temporary facilities until Substantial Completion. Removal of such prior to Substantial Completion must be with the concurrence of the Landscape Architect. The Contractor bears full responsibility for re-providing any facility removed prior to Substantial Completion
- B. Construction fencing shall be in place prior to the start of demolition, or the delivery of any materials and shall remain in place until the last day of the contract. Removal of fencing prior to the contract termination date must be requested in writing and the approval must also be in writing by the City Project Manager.
- C. The Contractor must comply with all safety laws and regulations of the Commonwealth of Massachusetts, the United States Government, and local government agencies applicable to Work under this contract. The Contractor's attention is directed to the Commonwealth of Massachusetts, Department of Labor and Industries Regulation 454 CMR.

**1.3 FIELD OFFICES**

- A. No enclosed building space will be available to the Contractor for storage.

**1.4 TEMPORARY TELEPHONES (NA)**

**1.5 TEMPORARY TOILETS**

- A. The Contractor shall provide and maintain in good order from the commencement to final completion of the work, suitable temporary toilet facilities for use by all workers employed under this contract. Place toilets in a location approved by the Landscape Architect. Toilets shall be rented from and serviced by an approved company and shall be kept clean, sanitary and secured at all times. The type of toilets proposed for use is as recommended by the Department of Labor.

**1.6 TEMPORARY CONSTRUCTION FENCE**

- A. The Contractor shall be responsible for providing and maintaining temporary fencing or barricades around the construction as may be necessary to assure the safety of all persons authorized or unauthorized. Such protective measures shall be located and constructed as required by local, state, and federal ordinances, laws, codes, or regulations. Construction Fence shall be Chain Link, shall be 6 foot high, and shall be approved by the City representative before it is installed.
- B. Construction fencing shall be in place prior to the start of demolition, or the delivery of any materials and shall remain in place until the last day of the contract, or earlier, if that removal is authorized in writing by an approved by the City SPCD Project Manager.

**1.7 TEMPORARY STRUCTURES AND MATERIAL HANDLING**

- A. The Contractor shall provide such storage sheds, temporary buildings, or trailers as required for the performance of the Contract. Subcontractors shall provide their own temporary buildings and trailers.
- B. Materials shall be handled, stored, installed, cleaned, and protected in accordance with the best practice in the industry and, except where otherwise specified in the Contract Documents, in accordance with manufacturer's specifications and directions.
- C. The Contractor must obtain the permission of the Owner for the use of any storage facilities available on site, but the Owner assumes no responsibility for articles stored.

1.8 TEMPORARY STAGING, STAIRS, CHUTES

- A. (not applicable)

1.9 HOISTING FACILITIES

- A. (not applicable)

1.10 TEMPORARY USE OF ELEVATOR

- A. (not applicable)

1.11 TEMPORARY WATER

- A. There is no existing source of water on the site. Contractor may make use of hydrant water with the permission of the Somerville water department. Obtain necessary permits for such use.
- B. The Contractor shall provide all necessary piping and hoses to utilize the available sources of water.
- C. The Contractor shall provide an adequate supply of cool drinking water with individual drinking cups for personnel on the job.

1.12 TEMPORARY ELECTRICITY

- A. There is no existing power source at Marshall Street Park. Contractor will be responsible for providing their own power through portable generators or a temporary feed from the Nstar power poles until a permanent power connection can be completed as part of this project scope.
- B. Temporary security lighting system is not required, except as the contractor may desire as part of their responsibility for securing the site. Any such lighting system to be approved by city electrical inspector.
- C. Temporary electrical Work shall be performed under the direct supervision of at least one master electrician, who will be present on the project at all times when such work is being performed.
- D. The Contractor shall furnish, install, and maintain lamps in operating condition. The Contractor, and each Subcontractor, shall furnish their own extension cords and additional lamps as may be required for their work. Temporary work of a special nature, not otherwise specified hereunder, shall be provided, maintained, and paid for the trade requiring same.
- E. All lamps installed in permanent lighting fixtures and used as temporary lights during the construction period shall be removed and replaced shortly before Substantial Completion by the set of lamps required to be provided under the Electrical section of the specifications.
- F. All temporary work shall be provided in conformity with the National Electric Code, State laws, and requirements of the power company. Particular attention is called to Commonwealth of Massachusetts, Department of Labor and Industries Regulation, 454 CMR.

1.12 WEATHER PROTECTION

- A. The Contractor shall provide temporary enclosures and heat to permit work to be carried on during the months of November through March in compliance with MGL c.149 §44G (d). These specifications are not to be construed as requiring enclosures or heat for operations that are not economically feasible in the opinion of the Owner. Without limitation this includes such items as excavation, pile driving, steel erection, erection of certain exterior wall panels, roofing, and similar operations.
- B. "Weather Protection" means the temporary protection of that Work adversely affected by moisture, wind, and cold by covering, enclosing, and/or heating. This protection shall provide adequate working areas during the months of November through March as determined by the Owner and consistent with the construction schedule to permit the continuous progress of all Work necessary to maintain an orderly and efficient sequence of construction operations. The Contractor shall furnish and install "Weather Protection" material and be responsible for all costs, including heating required to maintain a minimum of 40 degrees F. at the working surface. This provision does not supersede any specific requirements for methods of construction, curing of materials, or the applicable conditions set forth in the Contract Documents with added regard to performance obligations of the Contractor.
- C. Within 30 calendar days after award of the Contract, the Contractor shall submit in writing, to the Landscape Architect for approval, three (3) copies of the proposed methods for "Weather Protection".
- D. The Contractor shall assume the entire responsibility for weather protection during construction (until Substantial Completion), and shall be liable for any damage to any Work caused by failure to supply proper weather protection and proper ventilation.
- E. Work damaged by frost shall be removed and replaced by and at the Contractor's expense and as directed by the Landscape Architect.
- F. It is to be specifically understood that the Contractor shall do no work under any conditions deemed unsuitable by the Contractor to the execution of the Work. This provision shall not constitute any waiver, release, or lessening of the Contractor's obligation to bring the Work to Substantial Completion within the period of time set forth in the Contract Documents.

1.13 TEMPORARY HEAT

- A. (not applicable)

1.14 PROJECT SIGN (s)

- A. (not applicable)

End of Section.

## **SECTION 01570**

### **ENVIRONMENTAL PROTECTION**

1. Description: The work covered by this section of the specifications consists of furnishing all labor, materials, tools and equipment and performing all work required for the prevention of environmental pollution during and as a result of construction operations under this contract.

2. Notification

The OWNER'S REPRESENTATIVE will notify the CONTRACTOR in writing of any non-compliance with the foregoing provisions. The CONTRACTOR shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the CONTRACTOR or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the CONTRACTOR fails to act promptly, the OWNER'S REPRESENTATIVE may order stoppage of all or part of the work until satisfactory corrective action has been taken. No claim for an extension of time or for excess costs or damage incurred by the CONTRACTOR as a result of time lost due to any stop work orders shall be made unless it was later determined that the CONTRACTOR was in compliance.

3. Implementation

- A. Prior to commencement of work, the CONTRACTOR shall meet with the OWNER'S REPRESENTATIVE to develop mutual understandings relative to compliance of the environmental protection program.
- B. The CONTRACTOR shall submit for approval three copies of their program, fully describing environmental protection methods to be employed in carrying out construction activities.

4. Area of Construction Activity

Insofar as possible, the CONTRACTOR shall confine his construction activities to those areas defined by the Contract Drawings and Specifications. All land resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their present condition or be restored to a condition after completion of construction at least equal to that, which existed prior to work under this contract. The CONTRACTOR shall keep the active access driveway into the site from New Washington Street clear of debris, equipment and vehicles at all times for Fire Department access. All Contractor vehicles to be parked on the job site, unless authorized by Owner's Representative and Department of Traffic and Parking.

5. Protection of Water Resources

- A. The CONTRACTOR shall not pollute streams, lakes or reservoirs with fuels, oils, bitumens, calcium chloride, acids or other harmful materials. The CONTRACTOR shall also prevent the transport of soil, dirt, and salt to surface

streams, wetlands, and/or catch basins. It is the CONTRACTOR 's responsibility to comply with all applicable Federal, State, County and Municipal laws regarding pollution of rivers and streams.

- B. Special measures should be taken to insure against spillage of any pollutants into public waters, and run-off of demolition site sediments into stormwater collection systems. Measures shall include silt fence, placement of haybales and filter fabric around catchbasins and along temporary construction fencing, as indicated on Drawing L.1 – Existing Conditions and Site Preparation Plan.

6. Protecting and Minimizing Exposed Areas

- A. The CONTRACTOR shall limit the area of land which is exposed and free from vegetation during construction. In areas where the period of exposure will be greater than two (2) months, temporary vegetation, mulching or other protective measures shall be provided as specified.
- B. The CONTRACTOR shall take account of the conditions of the soil where temporary cover crop will be used to insure that materials used for temporary vegetation are adaptive to the sediment control. Materials to be used for temporary vegetation shall be approved by the Owner's Representative.

7. Location of Storage Areas

- A. The location of the CONTRACTOR 's storage areas for equipment and/or materials shall be upon cleared portions of the job site or areas to be cleared as a part of this project, and shall require written approval of the OWNER'S REPRESENTATIVE. Plans showing storage facilities for equipment and materials shall be submitted for approval of the Owner's Representative.
- B. No excavated materials or materials used in backfill operations shall be deposited within a minimum distance of one hundred (100) feet of any watercourse or any drainage facility. Adequate measures for erosion and sediment control such as the placement of baled hay or straw around the downstream perimeter of stockpiles shall be employed to protect any downstream areas from siltation.
- C. There shall be no storage of equipment or materials in areas designated on the Contract Drawings as the 100-foot wetlands buffer zone.
- D. The OWNER'S REPRESENTATIVE may designate a particular area or areas where the CONTRACTOR may store materials used in his operations. Temporary storage trailers shall be installed at Contractor's cost.
- E. Storage areas in cross-country locations shall be restored to pre-construction conditions with the planting of native species of trees and shrubs.

8. Clearing and Grubbing

- A. The Contractor shall clear and grub only on the Owner's land or the Owner's easements, and only the area required for demolition operations, as approved by the Owner's Representative.

9. Discharge of Dewatering Operations

- A. Any water that is pumped and discharged from the trench and/or excavation as part of the CONTRACTOR's water handling shall be filtered by an approved method prior to its discharge into a receiving water or drainage system.
- B. The pumped water shall be filtered through baled hay, a vegetative filter strip or a vegetated channel to trap sediment occurring as a result of the construction operations. The vegetated channel shall be constructed such that the discharge flow rate shall not exceed a velocity of more than 1 foot per second. Accumulated sediment shall be cleared from the channel periodically.
- C. Contaminated dewatering effluent shall be handled, and if necessary, disposed of in accordance with applicable regulations and permits. Any required monitoring and analysis of the effluent shall be performed by the CONTRACTOR and the laboratory results shall be submitted to the Owner's Representative.
- D. Water pumped or drained from excavations, water courses, or other structures encountered in the work shall be disposed of in strict compliance with pertinent federal, state and local environmental regulations. Any damage caused by or resulting from dewatering operations shall be the sole responsibility of the CONTRACTOR.

11. Dust Monitoring and Control

- A. The CONTRACTOR is responsible for monitoring all site activities for the presence of dust. General dust monitoring shall be conducted at all times for the visual presence of dust.
- B. Dust control measures shall be implemented as necessary and as directed by the Owner's Representative in accordance with Section 02000. Dust control requirements shall be strictly enforced by the City.
- C. The Owner's Representative may require additional monitoring in accordance with Section 02000.
- D. During the progress of the work, the CONTRACTOR shall conduct his operations and maintain the area of his activities, including sweeping and sprinkling of streets as necessary, to minimize creation and dispersion of dust.

12. Separation and Replacement of Topsoil

Topsoil shall be carefully removed from areas where excavations are to be made, and separately stored to be used again as directed. The topsoil shall be stored in an area acceptable to the Owner's Representative and adequate measures shall be employed to prevent erosion of said material.

13. Baled Hay or Straw

To trap sediment and to prevent sediment from clogging drainage systems, baled hay or straw shall be used where shown on Demolition Plan. Care shall be taken to keep the bales from breaking apart. The bales should be securely staked to prevent overturning, flotation, or displacement. All deposited sediment shall be removed periodically.

14. Filter Fabric

A. Where indicated on the drawings or where directed by the Owner's Representative, the CONTRACTOR shall install filter fabric. The filter fabric shall be used specifically to contain sediment from runoff water and to minimize environmental damage caused by construction.

B. The silt fence shall consist of a 3-foot wide continuous length sediment control fabric, stitched to a 22-foot wide, continuous length support netting, and stapled to preweathered oak posts installed as shown on the drawings. The oak posts shall be 1½-inches by 1½-inches (Minimum Dimension) by 48 inches and shall be tapered. The support netting shall be industrial strength polypropylene. The bottom edge of the sediment control fabric shall be buried as shown on the drawings. The sediment control fabric shall conform to the following properties:

	Property	Value	Test Method
1.	Grab Strength (lbs.)	124	ASTM D-4632
2.	Elongation (%)	15%	ASTM D-4632
3.	Puncture Strength (lbs.)	65	ASTM D-4833
4.	Burst Strength (psi)	300	ASTM D-3786
5.	Trapezoid Tear (lbs.)	60	ASTM D-4533
6.	Equivalent Opening Size (U.S. Sieve) No. 30		ASTM D-4571-1
7.	Permittivity (sec)	0.10	ASTM D-4491
8.	Water Flow Rate (gal/min/sf.)	10	ASTM D-4491
9.	UV Resistance (%)	70	ASTM D-4355

C. The silt fence shall be Mirafi Envirofence manufactured by Mirafi, Inc. or approved equal.

D. Install filter fabric under drain grates where indicated.

15. Noise Control

A. The Contractor shall adhere to the City ordinances for Noise Control, (Article VII, Division 2), throughout the construction period. Noise control will be strictly enforced by the City.

- B. No construction shall occur between 7pm-7am Monday through Saturday, or any time on Sunday or Holidays. Any exemption to prohibited construction hours must be authorized by a City representative.
- C. Contractor shall not permit engine idling on the job site. This shall be enforced through random, unannounced periodic inspections by City Officials.

- - - END OF SECTION - - -

## **SECTION 01577**

### **RODENT CONTROL**

#### **PART 1 - GENERAL**

##### **1.01 WORK INCLUDED:**

- A. This section specifies requirements for rodent control activities by the Contractor at all work and lay-down (or staging) areas in connection with this Contract.
- B. The Contractor shall retain the services of a licensed rodent exterminator to conduct an inspection of the work and lay-down areas and report on the presence of rodents and take any necessary measures to eliminate existing rodent populations prior to start of work. All rodent control to be in place and approved prior to any equipment delivery or demolition.

##### **1.02 SUBMITTALS:** in accordance with requirements of general Specifications, submit the following:

- A. Within ten days after Notice to Proceed, submit to the Engineer a written description of rodent control measures to be used and the areas to be included in the program.
- B. Provide the name and background of the licensed rodent exterminator retained to provide any necessary rodent eradication measures prior to start of work. City Director of Inspectional Services must approve the licensed rodent exterminator.

#### **PART 2 - PRODUCTS**

- 2.01 **CONTAINERS:** Use metal or heavy-duty plastic refuse containers with tight-fitting lids for disposal of all garbage, or trash associated with food. These containers shall not have openings that allow access by rodents.

#### **PART 3 - EXECUTION**

##### **3.01 WORK AND LAYDOWN AREAS WITHIN THE CONTRACT AREA:**

- A. Before mobilization begins, obtain written verification from the rodent exterminator that rodent populations have been effectively controlled in areas to be occupied.
- B. Following site clearing and before demolition, excavation, or construction, inspect work and lay-down areas and remove all remaining trash, debris, and weeds.

- C. Maintain work and lay-down areas free of trash, garbage, weeds, and debris. Provide and enforce proper use of refuse containers to ensure that rodents and other pests are not harbored or attracted.
- D. Designate specific locations as lunch and coffee break areas to prevent random disposal of garbage and trash. Keep those areas free of litter and garbage, and provide refuse containers as described in 2.01 of this section. Keep refuse containers upright with their lids shut tight.
- E. Have all refuse containers emptied daily to maintain site sanitation.
- F. Notify the Owner's Representative within 24 hours whenever rodents (rats or mice) or signs of rodent activity (burrows or droppings) are observed in work or lay-down areas. Take appropriate action to locate and control the rodents.

3.02 LAYDOWN AREAS OUTSIDE THE CONTRACT AREA:

- A. Implement pest control at all lay-down areas that are not areas of this Contract, but that are used by the Contractor in connection with this Contract. Undertake rodent control at least two weeks prior to use of the area and with time to ensure that the site is free of rodent populations (rats and mice) prior to site occupancy. Maintain the site free of rodents throughout the duration of its use.
- B. Clear lay-down areas of trash, debris, and weeds prior to occupancy. Initiate those actions only after rodent populations have been effectively controlled.
- C. Maintain lay-down areas free of trash, garbage, weeds, and debris. Provide and enforce proper use of refuse containers to ensure that rodents and other pests are not harbored or attracted.
- D. Dispose of all garbage or trash associated with food in refuse containers with tight-fitting lids as described in 2.01 of this Section. Have refuse containers emptied daily to maintain site sanitation.

- - - END OF SECTION - - -

## **SECTION 02000**

### **SITE WORK**

#### **PART 1 GENERAL**

##### **1.01 DESCRIPTION**

- A. These general site work requirements apply to all site work operations. Refer to Division 2 specification sections for specific general, product, and execution requirements.

##### **1.02 QUALITY ASSURANCE**

- A. Comply with all applicable local, state, and federal requirements regarding materials, methods of work, and disposal of excess and waste materials.
- B. Obtain and pay for all required permissions, inspections, permits, and fees (including utility companies, e.g. NStar and National Grid ). Provide notices required by governmental authorities.

##### **1.03 PROJECT CONDITIONS**

- A. Locate and identify existing underground and overhead services and utilities within contract limit work areas. Provide adequate means of protection of utilities and services designated to remain. Repair utilities damaged during site work operations at Contractor's expense.
- B. Arrange for disconnection, disconnect and seal or cap all utilities and services designated to be removed before start of site work operations. Perform all work in accordance with the requirements of the applicable utility company or agency involved.
- C. When uncharted or incorrectly charted underground piping or other utilities and services are encountered during site work operations, notify the applicable utility company immediately to obtain procedure directions. Cooperate with the applicable utility company in maintaining active services in operation.
- D. Locate, protect, and maintain bench marks, monuments, control points and project engineering reference points. Re-establish disturbed or destroyed items at Contractor's expense.
- E. Perform site work operations and the removal of debris and waste materials to assure minimum interference with streets, walks, and other adjacent facilities.
- F. Obtain governing authorities written permission when required to close or obstruct street, walks and adjacent facilities. Provide alternate routes around closed or obstruct street, walks and adjacent facilities. Provide alternate routes around closed or obstructed traffic ways when required by governing authorities.

- G. Dust Control: The site shall remain dust-free to the greatest extent possible. Dust control must be implemented during all demolition, earthwork and grading operations until suitable groundcover or pavement is established. Dust control measures shall be implemented as necessary and as directed by the Owner's Representative. Dampen surfaces as required. Calcium chloride shall not be used. Comply with pollution control regulations of governing authorities
- H. Protect existing buildings, paving, and other services or facilities on site and adjacent to the site from damage caused by site work operations. Cost of repair and restoration of damaged items at Contractor's expense.
- I. Protect and maintain street lights, utility poles and services, traffic signal control boxes, curb boxes, valves and other services, except items designated for removal. Remove or coordinate the removal of traffic signs, parking meters and postal mail boxes with the applicable governmental agency. Provide for temporary relocation when required to maintain facilities and services in operation during construction work.

## PART 2 PRODUCTS

### 2.01 MATERIALS AND EQUIPMENT

- A. Materials and equipment: As selected by Contractor, except as indicated.

## PART 3 EXECUTION

### 3.01 PREPARATION

- A. Examine the areas and conditions under which site work is performed. Do not proceed with the work until unsatisfactory conditions are corrected.
- B. Consult the records and drawings of adjacent work and of existing services and utilities which may affect site work operations.

END OF SECTION

**SECTION 02100**  
**SITE PREPARATION**

**PART 1 GENERAL**

**1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

**1.02 SCOPE OF WORK**

- A. Perform site preparation work as shown and specified. The work includes:
  - 1. Removing trees and other vegetation.
  - 2. Removing and stockpiling designated site improvements for re-installation.
  - 3. Removing and disposing of designated site improvements.
  - 4. Construction Fence.
  - 5. Tree protection for existing trees to remain.

**1.03 QUALITY ASSURANCE**

- A. Comply with Section 02000 requirements.

**1.04 PROJECT CONDITIONS**

- A. Perform site preparation work before commencing site construction.
- B. Locate, protect, and maintain active utilities and site improvements to remain.
- C. Provide necessary barricades, coverings, and protection to prevent damage to existing improvements indicated to remain.
- D. Restore to original grades and conditions, areas adjacent to site disturbed or damaged as a result of site preparation work.

**1.05 SUBMITTALS**

- A. Submit written description of construction fencing plan. Include methods that will be used to ensure safety and enclosure of the site when working in any public way. Such plan shall be acceptable to the Somerville Traffic and Safety departments.

## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Construction Fence: 6' high chain link fence. Knuckled Selvages. Used fencing is acceptable provided that it is free from torn or exposed fabric and wire ends or other dangerous conditions. Maximum 10' o.c. post spacing. Existing perimeter fencing may form part of the construction fence enclosure, or the materials reused for construction fencing. Existing fencing will become the property of the contractor and shall be removed after the completion of the project.
- B. Plastic construction fence: 4' Orange plastic construction fence, with 2x2 or metal 'C' section posts, 6' o.c.
- C. Other Materials and equipment: As selected by the Contractor, except as indicated.

## PART 3 EXECUTION

### 3.01 CONSTRUCTION FENCE

- A. Install a fence to completely enclose and secure portions of the site that are under construction. Maintain fence in place for the duration of construction, until acceptance of the project. Any and all gates shall be locked. Provide combination or multiple keys to Owner's representative. Fence shall remain in place until completion of grow-in period. Contractor shall return to the site and remove the fence when directed by the City. Contractor shall repair any holes or damage caused by the removal of the fence in accordance with the specifications.
- B. Erect temporary fencing before commencing site preparation work. Maintain fencing until completion of grow-in period.
- C. During construction and until substantial completion of the Project the Contractor shall be responsible for securing the site within the contract limit line as shown on the Drawings. Open excavation, installation of equipment not completed or any other condition unsafe for children or adults shall be corrected at the completion of each day's work and the site shall be secured after each day's work.
- D. Work within the right-of-way of Marshall Street and Mortimer Place must be fully coordinated with the City of Somerville DPW, Traffic and Police Departments. Maintain traffic routes as required. Location of Construction Fence may have to be adjusted to accommodate various stages of the work and as required by the City.

### 3.02 CLEARING

- A. Locate and suitably identify trees and improvements indicated to remain.
- B. Clear and grub areas within contract limits as required for site access and execution of the work.
- C. Remove trees, plants, undergrowth, other vegetation, and debris, except items indicated to remain. Strip weeds and grass.
  - 1. Fell trees in a manner to prevent injury to adjacent facilities and to trees scheduled to remain.
  - 2. Use hand methods for grubbing inside the drip line of trees to remain. Strip grass materials to a maximum depth of 1" under tree canopies. Carefully till or scarify existing grade to a depth of 1".
  - 3. Remove stumps and roots to a clear depth of 36" below subgrades. Remove stumps and roots to their full depth within 5'-0" of underground structures, utility lines, footings, and paved areas.
- D. Protect existing trees scheduled to remain against injury or damage, including cutting, breaking, or skinning of roots, trunks or branches; smothering by stockpiled construction materials, excavated materials or vehicular traffic within branch spread.
  - 1. Install tree protection fencing and tree trunk protection as detailed and where shown on the drawings.
  - 2. Interfering branches of trees scheduled to remain may be removed when acceptable to the Landscape Architect.
  - 3. Repair trees scheduled to remain and damaged by construction operations in a manner acceptable to the Landscape Architect. Repair damaged trees promptly to prevent progressive deterioration caused by damage.
  - 4. Replace trees scheduled to remain and damaged beyond repair by construction operations, as determined by the Landscape Architect, with trees of similar size and species. Cost for tree replacement shall be determined in accordance with the Tree Evaluation Formula as described in "A Guide to the Professional Evaluation of Landscape Trees, Specimen Shrubs, and Evergreens", published by the International Society of Arboriculture.,
  - 5. Repair and replacement of trees scheduled to remain and damaged by construction operations or lack of adequate protection during construction operations shall be at Contractor's expense.

### 3.03 STRIPPING TOPSOIL

- A. Strip topsoil to its full depth at building areas, and all areas to be regraded, resurfaced, or paved within contract limit work area.

- B. Stockpile topsoil in a location acceptable to the Landscape Architect, for use in finish grading and preparation of lawns and planting beds.
  - 1. Stockpiled topsoil shall be free from trash, brush, stones over 1/2" diameter, and other extraneous matter.
  - 2. Grade and slope stockpiles for proper drainage and to prevent erosion.
  - 3. No topsoil shall be removed from the site.
- C. Protect all areas which are not to be resurfaced or regraded, and adjacent areas outside of the contract limits from damage due to site preparation work.

#### 3.04 SITE IMPROVEMENTS

- A. Remove existing site improvements within contract limits as indicated on the drawings. Removal shall include removal of footings, unless otherwise indicated. Backfill footing excavations with approved fill materials and compact.
- B. Remove and stockpile for reinstallation as indicated on the plans the following items:
  - 1. Granite curbing.
  - 2. Curved granite slab steps.
  - 3. Store, and handle masonry materials to prevent damage and soiling.
  - 4. Stack masonry units off the ground on wood pallets or platforms. Exercise particular care in the storage, handling, and installation of masonry units. Exposed masonry is utilized as a "finish material." Do not build soiled or damaged masonry units into the work.
- C. Existing Utilities:
  - 1. Information on the drawings relating to existing utility lines and services is from the best sources presently available. All such information is furnished only for information and is not guaranteed. Excavate test pits as required to determine exact locations of existing utilities.
  - 2. Perform work and provide necessary materials to disconnect or relocate existing utilities as indicated. Record existing utility termination points before disconnecting.
  - 3. Fill abandoned piping with an 8" thick concrete plug or mortar jointed masonry bulkhead.
  - 4. Remove abandoned utility poles within contract limits.
- D. Remove existing sidewalks, curbs, and paving, including all base material, as required to

accommodate new construction. Cut existing sidewalks, curbs, and paving in neat, straight lines to provide uniform, even transition from new to adjacent existing work. Cut back existing paving a sufficient distance to permit forming and installation of new work..

3.05 DISPOSAL OF WASTE MATERIALS

- A. Stockpile, haul from site, and legally dispose of waste materials and debris. Accumulation is not permitted.
- B. Maintain disposal routes clear, clean, and free of debris.
- C. On-site burning of combustible cleared materials is not permitted.

3.06 CLEANING

- A. Upon completion of site preparation work, clean areas within contract limits, remove tools, and equipment, including tree protection. Provide site clear, clean, and free of materials and debris and suitable for site work operations.

3.07 SALVAGED MATERIALS

- A. Materials, items, and equipment not scheduled for reinstallation or salvaged for the Owner's use are the property of the Contractor. Remove cleared materials from the site as the work progresses. Storage and sale of Contractor's salvage items on site is not permitted.

END OF SECTION

## **SECTION 02200**

### **EARTHWORK**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 DESCRIPTION**

- A. Perform earthwork as shown and specified. The work includes:
  - 1. Site grading and filling to indicated elevations, profiles and contours.
  - 2. Excavating and backfilling structure footings and foundations.
  - 3. Subgrade preparation for structure slabs, curbs, walks and paving.
  - 4. Topsoil distribution and finish grading.
  - 5. Granular base under structure slabs-on-grade.

##### **1.03 QUALITY ASSURANCE**

- A. Comply with requirements of Sections 01580, 02000, and 02210, as well as other sections as applicable.
- B. Materials and methods of construction shall comply with the following standards:
  - 1. Massachusetts Department of Public Works, Standard Specifications for Highways and Bridges, most recent edition, (Standard Specifications).
  - 2. American Society for Testing and Materials, (ASTM).
  - 3. American Association of State Highway and Transportation Officials, (AASHTO).
  - 4. National Fire Protection Association, (NFPA).
  - 5. City of Somerville Department of Public Works (DPW)

##### **1.04 PROJECT CONDITIONS**

- A. Known underground and surface utility lines are indicated on the drawing.

- B. Protect existing features designated to remain as part of the landscaping work.
- C. Protect excavations by shoring, bracing, sheeting, underpinning, or other methods, as required to prevent cave-ins or loose dirt from entering excavations. Barricade open excavations and post warning lights at work adjacent to public streets and walks.
- D. Underpin adjacent structure(s), including utility service lines, which may be damaged by excavation operations.
- E. Promptly repair damage to adjacent facilities caused by earthwork operations. Cost of repair at Contractor's expense.
- F. Promptly notify the Landscape Architect of unexpected sub-surface conditions.
- G. Protect bottoms of excavations and soil beneath and around foundation from frost and freezing.
- H. Grade at excavations to prevent surface water draining into excavated areas.
- I. Pay for and obtain topsoil testing.

## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. All fill material is subject to testing and inspection.
- B. Fill materials: Inert subsoil material free of organic matter, rubbish, debris, and rocks greater than 6" diameter and meeting the following requirements.
  - 1. Plastic index of not more than 30 - ASTM D424.
  - 2. Minimum laboratory dry weight at optimum moisture content of 110 pounds per cu. ft.
  - 3. Provide imported fill material as required to complete the work. Obtain rights and pay all cost for imported materials.
  - 4. Proposed fill material shall be inspected prior to use in the work.
  - 5. Suitable excavated materials removed to accommodate new construction may be used as fill material subject to Engineer's inspection and approval.
- C. Granular base: Dense-Graded Aggregate, M 2.01.7 of the Standard Specifications.
- D. Graded crushed stone:  $\frac{3}{4}$ " Crushed Stone, M2.01.4 of the Standard Specifications.
- D. Topsoil: Natural, friable, fertile soil characteristic of productive soil in the vicinity,

reasonably free of stones, clay lumps, roots, and other foreign matter, USDA classification Loamy Sand or Sandy Loam, screened to 1" maximum particle size.

1. Suitable existing material removed to accommodate new construction may be used as topsoil provided it meets the requirements for new topsoil.
  2. Provide imported topsoil material if and as required to complete the work. Obtain rights and pay all costs for imported materials.
  3. Provide topsoil test reports, including suitability for intended use, test for heavy metals and other common contaminants (eg lead), and recommendation for supplements, fertilizers, etc. Cost for all supplements and fertilizers to be included in base bid.
- E. Other materials required for proper completion of work: As selected by Contractor and acceptable to Landscape Architect.

### PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Verify existing conditions. Establish extent of grading and excavation by area and elevation. Designate and identify datum elevation and project engineering reference points. Set required lines, levels, and elevations.
- B. Do not cover or enclose work of this Section before obtaining required inspections, tests, approvals, and location recording.

#### 3.02 EXISTING UTILITIES

- A. Before starting grading and excavation, establish the location and extent of underground utilities in the work area. Exercise care to protect existing utilities during earthwork operations. Perform excavation work near utilities by hand and provide necessary shoring, sheeting, and supports as the work progresses.
- B. Maintain, protect, relocate, or extend as required existing utility lines to remain which pass through the work area. Pay costs for this work, except as covered by the applicable utility companies.
- C. Protect active utility services uncovered by excavation.
- D. Remove abandoned utility service lines from areas of excavation. Cap, plug, or seal abandoned lines and identify termination points at grade level with markers.
- E. Accurately locate and record abandoned and active utility lines rerouted or extended on project record documents.

#### 3.03 SITE GRADING

- A. Perform grading within contract limits, including adjacent transition areas, to new

elevations, levels, profiles, and contours indicated. Provide subgrade surfaces parallel to finished surface grades. Provide uniform levels and slopes between new elevations and existing grades.

- B. Grade surfaces to assure areas drain away from structures and to prevent ponding and pockets of surface drainage. Provide subgrade surfaces free from irregular surface changes and as follows:
1. Rough grading: Plus or minus 0.10 ft. subgrade tolerance. Finish required will be that ordinarily obtained from either blade-grader or scraper operations.
  2. Provide subgrade surface free of exposed boulders or stones exceeding 4" in greatest dimension in paved areas; 2" lawn and planting areas.
  3. Lawn and planting areas: Allow for 4" average depth of topsoil at lawn areas, and 12" depth at planting areas, except as otherwise indicated on the drawings.
  4. Paved areas: Shape surface of subgrade areas to line, grade, and cross-section indicated. Provide compacted subgrade suitable to receive paving base materials. Subgrade tolerance plus 0, minus 1/2".
  5. Granular base: Grade subgrade surface smooth and even, free of voids to the required subgrade elevation. Provide compacted subgrade suitable to receive granular base materials. Tolerance 1/2" in 10'-0".
  6. Provide earth mounding where indicated.

### 3.04 EXCAVATING

- A. Excavate for structures to elevations and dimensions shown. Extend excavation a sufficient distance from foundations to permit placing and removal of formwork, installation of materials, services, and inspection. Hand trim foundation excavations to final grade just before concrete is placed. Remove loose, soft materials, and all organic matter. Footings shall bear on approved undisturbed bearing soil.
- B. Obtain inspection and testing of foundation excavations by Engineer before concrete is placed.
- C. Excavate for curbs, walks, and paving to cross-sections, elevations, and grades indicated. Allow for base material.
- D. Earth excavation shall include the satisfactory removal and disposal of all materials encountered, regardless of the nature of the materials, the condition of the materials at the time they are excavated, or the manner in which they were excavated, except materials classified as rock excavation.
- E. Extra excavation: Excavate unsatisfactory soil materials extending below required elevations to depth as directed. Such extra excavation will be paid for as a change in work. Obtain Landscape Architect's written authorization before performing extra excavation

work.

- F. Unauthorized excavation: Backfill and fill all overexcavation to proper grades. Fill overexcavation at footings with 1,500 psi concrete. Additional labor and material for unauthorized excavation and remedial work at Contractor's expense.
- G. Shore, sheet, or brace excavations as required to maintain them secure. Remove shoring and bracing as backfilling progresses, when banks are safe against caving.
- H. Do not excavate footings or slabs to the full depth when freezing temperature may be expected, unless footings or slabs are placed immediately after the excavation has been completed. Protect excavation bottoms from freezing when the placing of concrete is delayed.
- J. Rock excavating:
  - 1. Rock: Material which cannot be removed with 3/4 cu. yd. capacity power shovel without drilling or blasting or solid boulders with a volume of more than 1/2 cu. yd.
  - 2. Rock excavation: Material excavation of buried boulders and rock in excess of 1/2 cu. yd. that require continuous and systematic drilling and blasting or continuous use of ripper or other special equipment. All other excavation shall be classified as earth excavation.
  - 3. Contractor will be paid cost of rock excavation as a change in work. Obtain Landscape Architect's written authorization prior to performing rock excavation work.
  - 4. The use of explosives is not permitted.

### 3.05 DRAINAGE

- A. Provide necessary pumps and drainage lines and maintain excavations, including footings and pits, free from water, ice and snow during excavating and subsequent work operations.
- B. Provide drainage of the working area at all times.

### 3.06 FILLING, BACKFILLING, AND COMPACTING

- A. Obtain inspection and approval of subgrade surfaces by Engineer prior to filling operations. Scarify, dry, and compact soft and wet areas; remove and replace unsuitable subgrade materials with an approved compacted fill material. Take corrective measures before placing fill materials.
  - 1. Topsoil not permitted as fill or backfill material within structure or under paved areas.
- B. Soil stabilization: When exposed subgrade surfaces become spongy during construction operations and soil stabilization is required, stabilize subgrade materials as directed by the

Soils Engineer. Soil stabilization will be paid for as a change in work. Obtain Landscape Architect's written authorization before performing soil stabilization work.

- C. Spread approved fill material uniformly in layers not greater than 8" of loose thickness over entire fill area.
  - 1. Lift thickness requirements may be modified by Soil Engineer to suit equipment and materials or other conditions when required to assure satisfactory compaction.
  - 2. Moisture-condition fill material by aerating or watering and thoroughly mix material to obtain moisture content permitting proper compaction.
  - 3. Place and compact each layer of fill to indicated density before placing additional fill material. Repeat filling until proposed grade, profile, or contour is attained.
  - 4. Suspend fill operations when satisfactory results cannot be obtained because of environmental or other unsatisfactory site conditions. Do not use muddy or frozen subgrade surface. Do not place fill material on muddy or frozen subgrade surface.
  - 5. Maintain surface conditions which permit adequate drainage of rain water and prevent ponding of surface water in pockets. When fill placement is interrupted by rain, remove wet surface materials or permit to dry before placing additional fill material.
- D. Place backfill materials in uniform layers not greater than 8" loose thickness over entire backfill area.
  - 1. Use hand tampers or vibrating compactors at foundation walls, retaining walls, and similar locations. Do not use large rolling equipment adjacent to foundation walls and retaining walls.
  - 2. Do not backfill against foundation walls or retaining walls until walls for bearing surfaces have reached design strength or are properly braced, and backfilling operations approved. Provide clean backfill materials, except where granular materials are indicated. Compact in maximum 8" layers.
- E. Fill all areas of settlement to proper grade before subsequent construction operations are performed.
- G. Compaction:
  - 1. Compact top 12" of subgrade and each layer of fill or backfill material at foundations, slabs-on-grade retaining walls, and paved areas to 100% of maximum dry density at optimum moisture content in accordance with ASTM D698 Standard Proctor Method. Extend compaction at least 5'-0" at both sides of foundations and retaining walls and at least 1'-0" beyond slabs-on-grade and paving.
  - 2. Compact top 6" of subgrade and each layer of fill material at OLRA surfacing, lawns and unpaved areas to 90% of maximum dry density at optimum moisture content in

accordance with ASTM D698 Standard Proctor Method.

3. Water settling, puddling, and jetting of fill and backfill materials as a compaction method are not acceptable.
  4. Maintain moisture content of materials, during compaction operations within required moisture range to obtain indicated compaction density.
  5. Provide adequate equipment to achieve consistent compaction of backfill materials.
- H. Provide depths as shown of granular base under footings, concrete, paving and walks. Refer to Section 02513 for asphaltic concrete paving base and Section 02515 for concrete walks, and paving base.

### 3.07 FINISH GRADING

- A. Uniformly distribute and spread stockpiled topsoil. Provide 4" average depth at lawn areas, 12" at planting areas. Provide additional imported topsoil as required to complete the work. Use loose, dry topsoil. Do not use frozen or muddy topsoil. Place during dry weather.
- B. Fine grade topsoil eliminating rough and low areas to ensure positive drainage. Maintain levels, profiles, and contours of subgrades.
- C. Remove stones, roots, weeds, and debris while spreading topsoil materials. Rake surface clean of stones 1/2" or larger in any dimension and all debris. Provide surfaces suitable for soil preparation provided under lawn and planting work.
- D. Maintenance:
  1. Protect finish graded areas from traffic and erosion. Keep free of trash and debris. Repair and reestablish grades in settled, eroded, and damaged areas.
  2. Where completed areas are disturbed by construction operations or adverse weather, scarify, re-shape, and compact to required density.

### 3.08 DISPOSAL OF WASTE MATERIALS

- A. Stockpile, haul from site, and legally dispose of waste materials, including excess excavated materials, rock, trash, and debris.
- B. Maintain disposal route clear, clean, and free of debris.

### 3.09 CLEANING

- A. Upon completion of earthwork operations, clean areas within contract limits, remove tools, and equipment. Provide site clear, clean, free of debris, and suitable for site work operation.

END OF SECTION

## **SECTION 02510**

### **BITUMINOUS CONCRETE PAVING**

#### **PART I GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 DESCRIPTION**

- A. Provide site paving as shown and specified. The work includes:
  - 1. Bituminous concrete paving.
  - 2. Granular base for paving.
  - 3. Marking of lines for 'big-wheels' track.

##### **1.03 QUALITY ASSURANCE**

- A. Comply with Section 02000 requirements.
- B. Materials and methods of construction shall comply with the following standards:
  - 1. Massachusetts Department of Public Works, Standard Specifications for Highways and Bridges (Standard Specifications).
  - 2. American Society for Testing and Materials, (ASTM).
  - 3. American Association of State Highway and Transportation Officials, latest edition, (AASHTO).
  - 4. City of Somerville Department of Public Works standards and requirements.
- C. Installation: Performed only by skilled workmen with satisfactory record of performance on completed projects of comparable size and quality.
- D. The minimum pitch on all paved surfaces shall be 1% or 1/8" per foot pitch unless indicated as less on the Drawings. Confirm with the Landscape Architect any pitch of less than 1%.

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

- A. Deliver all materials in manufacturer's unopened and undamaged containers with labels intact and legible. Store off the ground and protect from weather damage and deterioration.
- B. Store loose granular materials in a well drained area on a solid surface to prevent mixing with foreign materials.

1.05 PROJECT CONDITIONS

- A. Work notification: Notify Landscape Architect at least 24 hours prior to beginning any phase of paving work.
- B. Establish and maintain required levels and grade elevations. Review installation procedures and coordinate paving work with other work affected by the paving work.
- D. Do not install paving over wet, saturated, muddy, or frozen subgrade.
- E. Do not install paving when air temperature is below 40 degrees F.
- F. Provide temporary barricades and warning lights as required for protection of project work and public safety.
- G. Protect adjacent work from damage, soiling, and staining during paving operations.

PART II PRODUCTS

2.01 GRANULAR BASE FOR PAVING

- A. Granular Base: Standard Specifications, Dense Graded Crushed stone, M2.01.7.

2.02 BITUMINOUS CONCRETE PAVEMENTS

- A. Provide bituminous concrete paving in accordance with Mass. DPW Standard Specifications M3.11.03, and as drawn and detailed.
  - 1. Wearing course: Class I Bit. Conc. Top Course
  - 2. Base Course: Class I Bit. Conc. Base Course
- B. Equipment:
  - 1. Paving equipment: Spreading, self-propelled asphalt paving machines capable of maintaining line, grade, and thickness shown.
  - 2. Compacting equipment: Self-propelled rollers, minimum 10 ton weight.
  - 3. Hand tools: Rakes, shovels, tampers, and other miscellaneous equipment required to complete the work.

- C. Pavement marking paint: Factory-mixed, quick-drying, non-bleeding paint specifically formulated for marking bituminous concrete surfaces, white color.

### PART III EXECUTION

#### 3.01 INSPECTION

- A. Examine subgrades and installation conditions. Do not start bituminous concrete paving work until unsatisfactory conditions are corrected.

#### 3.02 PREPARATION

- A. Proof roll the subgrade and do all necessary rolling and compacting to obtain firm, even subgrade surface. Fill and consolidate depressed areas. Remove non-compactible materials, replace with clean fill, and compact to 100% of the maximum dry density in accordance with ASTM D698 Standard Proctor Method.
- B. Frame adjustments:
  - 1. Verify frames for manholes, catch basins, spray features, and other such units, within areas to be paved, are at their proper elevation.
  - 2. Adjust frames as required to match paving. Provide temporary closures over openings until completion of rolling operations. Remove closures at completion of the work. Set covers to grade, flush with the surface of adjoining pavement surface.
- C. Field verify extent and location of paving scheduled for replacement, repair, and resurfacing. The work includes:
  - 1. Removal and replacement of existing bituminous concrete pavement surface and base materials where indicated.
  - 2. Filling trenches in existing paving, repairing pavement seams and providing pavement butt type joint paving where indicated.
  - 3. Overlay of existing pavement surfaces where indicated.
  - 4. Removal of existing bituminous concrete curbs and installation of new bituminous concrete curbs where indicated.
- D. Coordinate junction of new and existing pavement. Saw cut existing pavement to provide a uniform straight line transition. Meet existing surface levels and maintain drainage slopes. Feathering of transitions is not acceptable. Apply tack coat to contact surfaces of existing pavement, curbs, and structures abutting pavement.

#### 3.03 INSTALLATION - BITUMINOUS CONCRETE PAVING

- A. Base Materials: Install aggregate base materials in maximum lifts of 6", total compacted

depth as scheduled.

- B. Compact aggregate base materials to 100% of ASTM D698 maximum dry density until a uniformly-smooth, hard surface, complying with the lines, grades, elevations, and cross-sections shown has been established. Moisture may be added at job site to aid compaction.
- C. Paving in all areas requiring bituminous concrete paving shall be laid in two (2) courses. The thickness of each course shall be as shown on the Drawings and measured in place after rolling. First course shall be 'Base Course' and second course shall be 'Top Course' as defined in 'Table A' of Section M3.11.03, 'Job Mix Formulae' of the 'Standard Specifications'.
- D. All installation of bituminous concrete paving to be in accordance with Section 460, Class I Bituminous Concrete Pavements, of the Standard Specifications.
- E. Check for correct elevation and position of any footings and/or similar structures located within the areas to be paved and make, or have made any necessary adjustments in such structures to bring them to the correct grade shown on the Drawings.
- F. Install bituminous joint sealer at all areas where new bituminous concrete pavement abuts existing pavement.

#### 3.04 PAVEMENT MARKING

- A. Thoroughly clean surface of dirt and loose material before application of sealing materials.
- B. Apply two coats of marking paint, at manufacturer's recommendation rates, with mechanical equipment. Provide uniform lines with straight edges, 2" width.

#### 3.05 PROTECTION

- A. Restrict traffic from all paving surfaces during installation and for at least 24 hours after installation.
- B. Protect paving work from damage due to construction and vehicular traffic until final acceptance.

#### 3.06 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from paving operations.
- B. Sweep sidewalks and pavement, wash free of stains, discoloration, dirt, and other foreign material immediately prior to final acceptance.

END OF SECTION

## **SECTION 02515**

### **SITE CONCRETE AND WALKS**

#### **PART 1 GENERAL**

##### **1.01 GENERAL PROVISIONS**

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 1 - GENERAL REQUIREMENTS, which are hereby made a part of this Section of the Specifications.

##### **1.02 DESCRIPTION OF WORK**

- A. The work of this section consists of the provision of all materials, labor and equipment and the like necessary and or required for the complete execution of all exterior concrete paving work for this project as required by the schedules, keynotes, and drawings, including, but not limited to the following:
  - 1. Concrete walk pavements, including base preparation.
  - 2. Expansion joints.
  - 3. Site concrete for footings.
  - 4. Obtain permits required for items of work if authorities and/or utilities require them.
- B. Alternates: None.
- C. Items To Be Installed Only: Not Applicable.
- D. Items To Be Furnished Only: Not Applicable.

##### **1.03 RELATED WORK**

- A. Carefully examine all of the Contract Documents for requirements which affect the work of this section.

##### **1.04 INTENT**

- A. A major intent of the work of this section is to provide concrete pavement for walkways and plaza areas, as well as concrete where needed for footings and site furnishings. Provide only products that comply with applicable codes and requirements of authorities having jurisdiction.

##### **1.05 QUALITY ASSURANCE**

- A. All work shown on drawings is intended to be approximately correct to scale, but figures, dimensions and detailed drawings are to be followed in every case.

- B. Maintain field records of time, date of placing, curing, and removal of forms of concrete in each portion of work.
- C. Contractor shall inspect all subgrades prior to commencement of work.
- D. Sample panel: Before installing concrete work, provide a sample panel, minimum 10' x 10', using specified materials. Show color, texture, pattern, edging, and joint treatments. Correct and rebuild sample panel until Landscape Architect's acceptance of the work. Retain panel during construction as a standard for completed concrete paving work.
  - 1. The approved sample panel may be a portion of the work and remain in place. Location as directed by the Landscape Architect.
  - 2. Provide a sample panel for each type of exposed aggregate/colored concrete work required.
- E. Do not change source or brands of cement and aggregate materials during course of the work.

#### 1.06 COOPERATION AND COORDINATION WITH OTHER TRADES

- A. The work shall be so preformed that the progress of the entire project construction, including all other trades, shall not be delayed and not interfered with. Materials and apparatus shall be installed as fast as conditions will permit and must be installed promptly when and as directed by Designer.
- B. All work shall be coordinated with other trades. The work in this section shall at no time interrupt the normal operations of the campus.

#### 1.07 REGULATORY REQUIREMENTS

- A. Conform to all applicable codes. Including those that may be required by State and Local Building Codes.

#### 1.08 REFERENCE STANDARDS

- A. Mass Highway Department (MHD) Standard Specifications
- B. American Society for Testing and Materials, (ASTM).
- C. American Concrete Institute, (ACI).

#### 1.09 SUBMITTALS

- A. At least thirty (30) days prior to ordering materials, the Contractor shall submit to the Designer representative samples, certifications, manufacturer's literature and certified test results for materials as specified below. No materials shall be ordered or delivered until the required submittals have been reviewed and approved by the Designer. Delivered materials shall closely match the approved samples. Approval shall not constitute final acceptance. The

Designer reserves the right to reject, on or after delivery, any material which does not meet these specifications.

B. Submit concrete mix designs. Obtain approval before placing concrete.

C. Product data:

1. Submit complete materials list of items proposed for the work. Identify materials source.
2. Submit admixture, curing compound, retarder, and accessory item product data.
3. Submit material certificates for aggregates, reinforcing, and joint fillers.

D. Submit concrete delivery tickets. Show the following:

1. Batch number.
2. Mix by class or sack content with maximum size aggregate.
3. Admixtures.
4. Air content.
5. Slump.
6. Time of loading.

E. Submit Test results.

#### 1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver curing materials, admixtures, and retarders in manufacturer's standard unopened containers with labels legible and intact. Store and protect from freezing and damage.

#### 1.10 PROJECT CONDITIONS

- A. Work notification: Notify Landscape Architect at least 24 hours prior to installation of concrete.
- B. Establish and maintain required lines and grade elevations.
- C. Do not install concrete work over wet, saturated, muddy, or frozen subgrade.
- D. Do not install concrete when air temperature is below 40 degrees F. Use of calcium chloride, salt, or any other admixture to prevent concrete from freezing is prohibited.
- E. Protect adjacent work.

- F. Provide temporary barricades and warning lights as required for protection of project work and public safety.

#### 1.11 SAMPLING AND TESTING

- A. Provide/Obtain samples and test concrete for quality control during placement. Sample fresh concrete for testing in accordance with ASTM C172/C172M. Make six test cylinders.
- B. Test concrete for compressive strength at 7 and 28 days for each design mix and for every 77 cubic meters 100 cubic yards of concrete. Test two cylinders at 7 days; two cylinders at 28 days; and hold two cylinders in reserve. Conform test specimens to ASTM C31/C31M. Perform compressive strength testing conforming to ASTM C39/C39M.
- C. Test slump at the [plant] [site of discharge] for each design mix in accordance with ASTM C143/C143M. Check slump [once] [twice] during each shift that concrete is produced [for each strength of concrete required].
- D. Test air content for air-entrained concrete in accordance with ASTM C231/C231M. Test concrete using lightweight or extremely porous aggregates in accordance with ASTM C173/C173M. Check air content at least [once] [twice] during each shift that concrete is placed [for each strength of concrete required].
- E. Determine temperature of concrete at time of placement in accordance with ASTM C1064/C1064M. Check concrete temperature at least [once] [twice] during each shift that concrete is placed [for each strength of concrete required].

### PART 2 PRODUCTS

#### 2.01 CONCRETE FOR PAVING AND FOOTINGS

- A. Portland cement: ASTM C150, Type II, natural color.
- B. Aggregate: Provide AASHTO M43 Grading #57 clean, uncoated crushed stone or gravel coarse aggregate free of materials which cause staining or rust spots; fine aggregate shall be clean natural sand.
- C. Water: Clean, fresh, and potable.
- D. Air-entraining admixture: ASTM C260
- E. Water-reducing admixture: ASTM C494

#### 2.02 MIXES

- A. Provide ASTM C94 ready-mixed concrete. Batch mixing at site not acceptable.
  - 1. Strength: 3,500 psi minimum at 28 days.
  - 2. Slump range: 2" to 4" maximum.

- B. Provide an approved water-reducing admixture in all concrete.
- C. Provide an air-entraining admixture in all concrete. Air content 5% to 7%.
- D. Indicate water added to mix at job site on each delivery ticket. Show quantity of water added. Site water tempered mixes exceeding specified slump range will be rejected as not complying with specification requirements.

## 2.03 ACCESSORIES

- A. Granular Base: AASHTO M43, #6 (3/8" to 3/4") uniformly graded, clean crushed stone or gravel.
- B. Forms: Wood or metal of sufficient strength to resist concrete placement pressure and to maintain horizontal and vertical alignment during concrete placement. Provide forms straight, free of defects, and distortion, and height equal to full depth of concrete work.
  - 1. Provide 2" nominal thickness, surfaced plank wood forms for straight sections. Use flexible metal, 1" lumber or plywood forms to form radius bends.
- C. Joint filler: ASTM D1751, premolded non-extruding asphalt-impregnated fiberboard, thickness indicated.
- D. Curing compound: ASTM C309, non-yellowing, non-staining liquid membrane-forming type containing a fugitive dye. Chlorinated rubber compounds not acceptable for exterior use.
- E. Joint sealants: Two-component polysulfide or polyurethane elastomeric type complying with FS TT-S-00227, self-leveling, designed for foot traffic..
- F. Reinforcing steel: ASTM A615, A616, or A617, Grade 40, new domestic deformed steel bars.
- G. Weld wire fabrics: ASTM A185, welded plain cold-drawn steel wire fabric, 6" x 6" - w 1.4 x w 1.4, or as indicated.
- H. Form release agent: Non-staining chemical form release agent free of oils, waxes, and other materials harmful to concrete.

## PART 3 EXECUTION

### 3.01 INSPECTION

- A. Examine subgrades and installation conditions. Do not start concrete work until unsatisfactory conditions are corrected.

### 3.02 PREPARATION

- A. Proof roll the subgrade and do all necessary rolling and compacting to obtain firm, even subgrade surface. Fill and consolidate depressed areas. Remove non-compactable materials, replace with clean fill and compact to 100% of the maximum dry density in accordance with ASTM D698 Standard Proctor Method.
- B. Provide minimum 8" depth of compacted granular base material at walks and minimum 10" depth at paving. Compact granular base to 95% of the maximum dry density in accordance with ASTM D698 Standard Proctor Method.
- C. Remove loose material and debris from base surface before placing concrete.
- D. Install, align, and level forms. Stake and brace forms in place. Maintain following grade and alignment tolerances.
  - 1. Top of form: Maximum 1/8" in 10'-0".
  - 2. Vertical face: Maximum 1/4" in 10'-0".
- E. Coat form surfaces in contact with concrete with form release agent. Clean forms after each use and coat with form release agent as necessary to assure separation from concrete without damage.
- F. Locate, place, and support reinforcement as indicated.
  - 1. Provide a single layer of welded wire fabric in all concrete slabs-on-grade. Provide #4 re-bar 12" o.c. both ways at compactor slab.
  - 2. Provide reinforcing bars at curbs, steps, and other locations indicated, adequately supported and secured to prevent displacement.
- G. Install, set, and build-in items furnished by other trades. Provide adequate notification for installation of necessary items.

### 3.03 INSTALLATION

- A. Concrete Placement:
  - 1. Comply with ACI 304 "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete", and as specified.
  - 2. Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placing and curing. In cold weather comply with ACI 306, "Recommended Practice for Cold Weather Concreting". In hot weather comply with ACI 305, "Recommended Practice for Hot Weather Concreting".
  - 3. Moisten base to provide a uniform dampened condition at the time concrete is

placed. Verify manholes or other structures are at required finish elevation and alignment before placing concrete.

4. Place and spread concrete to the full depth of the forms. Use only square-end shovels or concrete rakes for hand-spreading and consolidating concrete. Exercise care during spreading and consolidating operations to prevent segregation of aggregate and dislocation of reinforcement.
  5. Place concrete in a continuous operation between expansion joints. Provide construction joints when sections cannot be placed continuously.
  6. Place concrete in one course, monolithic construction, for the full width and depth of concrete work. Provide minimum 4" thick walks and 6" thick paving at compactor slab, except as otherwise indicated.
  7. Strike-off and bull-float concrete after consolidating. Level ridges and fill voids. Check surface with a 10'-0" straightedge. Fill depressions and refloat repaired areas. Darby the concrete surface to provide a smooth level surface ready for finishing.
- B. Joints:
1. Construct control, expansion, and construction joints properly aligned with face perpendicular to concrete surface.
  2. Provide saw-cut control joints, sectioning concrete into areas indicated. Cut joints to depth equal to not less than one-fifth (1/5) of the concrete thickness. Cut control joints in pattern and at spacing indicated. When not indicated, provide spacing equal to slab width and not greater than 10'- 0" on center.
  3. Provide standard keyed-section construction joints where indicated.
  4. Provide expansion joints using premolded joint filler at concrete work abutting curbs, walls, structures, walks, and other fixed objects.
    - a. Locate expansion joints as indicated. When not indicated, provide joints at maximum 30'- 0" on center for curbs and walks. Align expansion joints in abutting curbs and walks.
    - b. Install joints fillers full-width and depth of joint. Recess top edge below finished where joint sealants are indicated.
    - c. Provide joint fillers in single lengths for the full slab width, whenever possible. Fasten joint filler sections together when multiple lengths are required.
    - d. Protect the top edge of the joint filler during concrete placement.

C. Concrete finishing:

1. Perform concrete finishing using mechanical or hand methods as required.
2. Upon completion of floating, and after bleed water has disappeared and concrete can sustain foot pressure with nominal indentation, cut concrete away from forms. Work edges with an edging tool. Round edges to 1/2" radius.
3. Install control joints at indicated locations during edging operations.
4. Complete surface finish as follows:
  - a. Provide sidewalk surfaces with broom finishes as indicated on drawings. Edge outside edges and all expansion joints with a radius edging tool.

D. Joint sealants:

1. Install joint sealants where indicated in accordance with manufacturer's installation instructions. Clean and prime joints. Remove dirt and loose coatings.
2. Apply sealants in continuous beads, without open joints, voids, or air pockets. Hand tool and finish all joints.
3. Confine materials to joint areas with masking tape or other precautions.
4. Remove excess compound promptly as work progresses and clean adjoining surfaces.
5. In rough surfaces or joints of uneven widths, install joint sealant well back into joints.

3.04 PROTECTION

- A. Protect concrete work from damage due to construction and vehicular traffic until final acceptance. Exclude construction and vehicular traffic from concrete pavements for at least 14 days.

3.05 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from concrete operations.
- B. Sweep concrete sidewalks and pavement, wash free of stains, discoloration, dirt, and other foreign material immediately prior to final acceptance.

END OF SECTION

**SECTION 02525**  
**STONE DUST PAVEMENT**

**PART I GENERAL**

**1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

**1.02 SCOPE OF WORK**

- A. Provide Stone Dust pavement as shown and specified. The work includes:
  - 1. Stone Dust Paving.
  - 2. Granular Base for Paving.

**1.03 QUALITY ASSURANCE**

- A. Comply with Section 02000 requirements.
- B. Materials and methods of construction shall comply with the following standards:
  - 1. Massachusetts Department of Public Works, Standard Specifications for Highways and Bridges (Standard Specifications).
  - 2. American Society for Testing and Materials, (ASTM).
  - 3. American Association of State Highway and Transportation Officials, latest edition, (AASHTO).
- C. Installation: Performed only by skilled workmen with satisfactory record of performance on completed projects of comparable size and quality.
- D. The minimum pitch on all paved surfaces shall be 2% or 1/4" per foot pitch unless indicated as less on the Drawings. Confirm with the Landscape Architect any pitch of less than 2%.
- E. Sample panel: Before starting paving, provide sample panels using materials, patterns, and joints indicated for project work. Build panels at the site of full thickness and minimum of 10' length. Provide the range of color, texture, and workmanship, proposed for the work. Correct and rebuild sample panel until Landscape Architect's acceptance of the work. Retain panel during construction as a standard for completed paving. The approved

sample panel may be a portion of the work and remain in place. Location as directed by the Landscape Architect.

1.03 SUBMITTALS

- A. Submit min. 1 lb samples of available stone dust colors for approval.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all materials in manufacturer's unopened and undamaged containers with labels intact and legible. Store off the ground and protect from weather damage and deterioration.
- B. Store loose granular materials in a well drained area on a solid surface to prevent mixing with foreign materials.

1.05 PROJECT CONDITIONS

- A. Work notification: Notify Landscape Architect at least 24 hours prior to beginning any phase of paving work.
- B. Establish and maintain required levels and grade elevations. Review installation procedures and coordinate paving work with other work affected by the paving work.
- D. Do not install paving over wet, saturated, muddy, or frozen subgrade.
- E. Do not install paving when air temperature is below 40 degrees F.
- F. Provide temporary barricades and warning lights as required for protection of project work and public safety.
- G. Protect adjacent work from damage, soiling, and staining during paving operations.

PART II PRODUCTS

2.01 GRANULAR BASE FOR PAVING

- A. Granular Base: Dense Graded Crushed stone, M2.01.7.

2.02 STONE DUST MATERIALS

- A. Stone Dust: Standard Specifications M2.05.0 Stone Screenings.

PART III EXECUTION

3.01 INSTALLATION - GENERAL

- A. Examine subgrades and installation conditions. Do not start paving work until

unsatisfactory conditions are corrected.

### 3.02 INSTALLATION – STONE DUST PAVING

- A. Excavate subgrade to allow for installation of base material and stone dust. Remove rocks greater than 2" diameter from subgrade. Avoid damaging existing tree roots greater than 1" in size. Lightly compact subgrade.
- B. Installation of subbase material under Section 02200 Earthwork.
- C. Spread Stone Dust evenly over area indicated to the dimensions shown. Top of stone dust surface to be level with adjacent grade. Compact stone dust with vibratory plate compactor or equal. Regrade surface and re-compact as necessary to provide smooth, firm stone dust surface.

### 3.05 PROTECTION

- A. Restrict traffic from all paving surfaces during installation and for at least 24 hours after installation.
- B. Protect paving work from damage due to construction and vehicular traffic until final acceptance.

### 3.06 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from concrete operations.
- B. Sweep sidewalks and pavement, wash free of stains, discoloration, dirt, and other foreign material immediately prior to final acceptance.

END OF SECTION

## **SECTION 02550**

### **PLAY AREA SURFACING**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 DESCRIPTION**

- A. Performance Requirements: Provide a 2 layer rubber-urethane playground surfacing system which has been designed, manufactured and installed to meet the following criteria:
  - 1. Shock Attenuation (ASTM F1292):
    - a. Gmax: Less than 200.
    - b. Head Injury Criteria: Less than 1000.
  - 2. Flammability (ASTM D2859): Pass.
  - 3. Tensile Strength (ASTM D412): 60 psi (413 kPa).
  - 4. Tear Resistance (ASTM D624): 140%.
  - 5. Water Permeability: 0.4 gal/yd<sup>2</sup>/second.
  - 6. Accessibility: Comply with requirements of ASTM F1951.

##### **1.03 QUALITY ASSURANCE**

- A. Comply with Section 02000 requirements.
- B. Materials and methods of construction shall comply with the following standards:
  - 1. Massachusetts Dept. of Public Works, Standard Specifications for Highways and Bridges, (Standard Specifications).
  - 2. American Society for Testing and Materials, (ASTM).

- a. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
  - b. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
  - c. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
  - d. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
  - e. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.
  - f. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
  - g. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
- 3. American Association of State Highway and Transportation Officials, (AASHTO).
  - 4. ADA: Americans with Disabilities Act.
  - 5. United States Consumer Products Safety Commission, (CPSC).
  - 6. MAAB: Massachusetts Architectural Accessibility Board.
- C. Installation: Performed only by experienced installers with satisfactory record of performance on complete projects of comparable size and quality.
- D. Sample panel: Before starting edging work, provide a sample panel using materials, bond, and joint tooling indicated for the project work. Build panel at the site of full thickness and approximately 10' in length. Provide the range of color, texture, and workmanship proposed for the work. Include typical joints between curbing, with mortar. Correct and rebuild sample panel until Landscape Architect's acceptance of the work. Retain panel during construction as a standard for completed Playground Edging work. The approved sample panel may be a portion of the work and remain in place. Location as directed by the Landscape Architect.

#### 1.04 SUBMITTALS

- A. Submit manufacturer's product data for each type of material required, including catalog sheets, specifications, warranties and installation instructions.
- B. Submit the following material samples.

1. Poured in Place safety surfacing, 4" sq.

C. Submit manufacturer's test results for play surfacing.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle site improvements to prevent damage and deterioration.

1.06 PROJECT CONDITIONS

A. Build-in footings and other items required before final grading and surfacing is completed. Do not begin final installation of play area surfacing before completion of final grading or surfacing.

PART 2 PRODUCTS

2.01 POURED IN PLACE PLAY SAFETY SURFACE

A. Play surface shall be poured in place synthetic rubber safety surface as manufactured by Vitriturf, a division of Hanover Specialties Inc., 35 Feldland St, Bohemia, NY 11716 (800) 899-8703, or by Surface America (Playbound Poured in Place), PO Box 157, Williamsville, NY 14231, 800-999-0555, or approved equal. Alternate surface systems providing substantially the same type of surface and fall protection may be acceptable. Color to be a 50/50 black/color, to be selected from the manufacturer's standard color ranges.

B. Technical requirements – See above.

C. Play surface must have a minimum 3-year warranty.

D. Play surface manufacturer must have \$10 million dollars in product liability insurance.

2.04 ACCESSORIES

A. Gravel Base: Dense Graded Aggregate, Standard Specifications M2.01.7, Dense-Graded Stone Aggregate for Sub-base.

PART 3 EXECUTION

3.01 INSPECTION

A. Examine subgrade, finished surfaces, and installation conditions. Do not start site improvements work until unsatisfactory conditions are corrected.

3.02 PREPARATION

A. Remove loose material and debris from base surface before placing site improvements.

- B. Locate and layout all site improvements. Obtain Landscape Architect's acceptance of layout prior to installation.

3.04 INSTALLATION OF PLAY SURFACING

- A. Install graded gravel base as detailed and in accordance with Earthwork specification, Section 02200.

3.05 INSTALLATION OF POURED-IN-PLACE PLAY SURFACING

- A. Install poured-in-place synthetic rubber play area surfacing to depth, lines and levels shown, in accordance with manufacturer's recommendations. See attached specifications following this section, page 02550-a1.
- B. Provide thickness of surfacing as recommended by manufacturer for the fall height of each individual piece of equipment. Adjust sub-base depth to allow for consistent thickness of aggregate base, and appropriate thickness of play surface.

3.06 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from site improvements work.

END OF SECTION

## **SECTION 02730**

### **SITE DRAINAGE**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 SCOPE OF WORK**

- A. Provide site drainage as shown and specified. The work includes:
  - 1. Drainage and utility structures.
  - 2. Drainage and sub-drainage pipe.
  - 3. Drainage fill.

##### **1.03 QUALITY ASSURANCE**

- A. Comply with Section 02000 requirements.
- B. Materials and methods of construction shall comply with the following standards:
  - 1. Massachusetts Department of Public Works, Standard Specifications for Highways and Bridges, most recent edition (Standard Specifications).
  - 2. American Society for Testing and Materials, (ASTM).
  - 3. American Association of State Highway and Transportation Officials, (AASHTO).
  - 4. American National Standards Institute (ANSI).
  - 5. City of Somerville, MA DPW standards.
- C. Excavating, backfilling, and compacting operations: Comply with Section 02200 requirements and as specified.
- D. Obtain Owner's acceptance of installed and tested storm drainage prior to installing backfill materials.

1.04 SUBMITTALS

A. Product data:

1. Submit complete materials list of items proposed for the work.
2. Submit piping and sewer structures product data.

B. Provide site drainage record drawings:

1. Legibly mark drawings to record actual construction.
2. Indicate horizontal and vertical locations, reference to permanent surface improvements.
3. Identify field changes of dimension and detail and changes made by change order.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle piping and accessories to prevent damage and deterioration.

1.06 PROJECT CONDITIONS

- A. Examine project record drawings to ascertain locations of underground and surface utility lines.
- B. All work under this Section shall be installed in accordance with the Laws, Ordinances, Rules and Regulations of all Local State and Federal authorities having jurisdiction, the Rules and Regulations of the National Board of Fire Underwriters, and the Public Utility Companies.
- C. Notify all municipal departments and/or public utility owners concerned, of the time and location of any work which may affect them. Cooperate and coordinate with them in the protection and/or repair of any utilities.
- D. Protect existing trees, plants, lawns, and other features designated to remain as part of the landscape work.
- E. Protect excavations by shoring, bracing, sheeting, underpinning, or other methods, as required to prevent cave-ins or loose dirt from entering excavations. Barricade open excavations and post warning lights at work adjacent to public streets and walks.
- D. Underpin adjacent structure(s), including utility service lines, which may be damaged by excavation operations.
- E. Promptly repair damage to adjacent facilities caused by site drainage earthwork

operations. Cost of repair at Contractor's expense.

- F. Promptly notify the Owner of unexpected sub-surface conditions.

## PART 2 PRODUCTS

### 2.01 GENERAL

- A. Drawings and specifications are intended to supplement and explain each other. Materials not specifically mentioned in the specifications shall be as indicated on the drawings. Where conflicts occur between the drawings and/or specifications or within either document itself, the item or arrangement of better quality, greater quantity or higher cost shall be included in the Contractor's bid. Where no specific kind of quality of material is given, a first-class standard article shall be furnished.

### 2.02 PIPE AND FITTINGS

- A. Site drainage piping: Provide types and sizes indicated. Provide matching fittings, and accessory components to ensure continuity of the site drainage system.
1. Polyvinyl chloride (PVC) sewer pipe and fittings: ASTM D3034-SDR35 with ASTM C443 rubber gaskets.
- B. Sub-drainage piping: Provide types and sizes indicated. Provide matching fittings, and accessory components to ensure continuity of the site drainage system.
1. Perforated Polyvinyl chloride (PVC) sewer pipe and fittings: ASTM D3034-SDR35 with ASTM C443 rubber gaskets.

### 2.03 DRAINAGE RECHARGE STRUCTURES

- A. Structures shall be H-20 Cultec Recharger 330 XLHD Chamber System, or approved equal. See drawings for additional specifications and requirements.

### 2.04 ACCESSORY MATERIALS

- A. Concrete: 3,500 psi air entrained concrete complying with the Standard Specifications.
- B. Drainage fill (Around Cultec Systems): Clean granular sand complying with M1.04.0 Type a, Sand Borrow
- C. Trap Rock: Clean, angular rock, 1-1/2" – 2" in size.
- D. Earth fill: Natural sandy-clay subsoil, soil-rock mixtures or approved excavated materials, free of foreign matter, organic material, and debris. Excavated materials removed in earthwork excavation operations may be used as backfill when acceptable to the Owner.

- E. Soil Separator: Rot resistant polypropylene filter fabric, water permeable and unaffected by freezing and thawing.
- F. Other Materials: As proposed by the contractor and acceptable to the Owner.
- G.

### PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Lay out site drainage work and establish extent of excavation by area and elevation. Designate and identify datum elevation and project engineering reference points. Set required lines, levels, and elevations.
- B. Do not cover or enclose work of this Section before obtaining required inspections, test, approvals, and location recording.
- C. Remove existing paving, including base material, as required to accommodate site drainage work. Saw cut existing paving to provide uniform straight transition at new to existing paving.

#### 3.02 EXISTING UTILITIES

- A. Before starting excavation, establish the location and extent of underground utilities in the work area. Exercise care to protect existing utilities during earthwork operations. Perform excavation work near utilities by hand and provide necessary shoring, sheeting, and supports as work progresses.
- B. Protect active utility services covered by excavation.

#### 3.03 INSTALLATION

- A. Perform excavating and backfilling as required to install site drainage work.
- B. Provide trench wall support and pumping of surface and ground water as required to provide suitable conditions for performing the work.
- C. Excavate trenches to accommodate indicated bedding conditions and material. Trim and shape trench bottoms to proper line and grade, free of irregularities. Remove unstable material and replace with compacted fill.
- D. Install site drainage system true to grade and alignment indicated.
  - 1. Provide necessary equipment for lowering pipe safely into trenches. Handle pipe and accessories to prevent damage. Damaged materials replaced at Contractor's expense.
  - 2. Do not place pipe in water, nor when trench or weather is unsuitable for site

drainage work.

3. Remove all dirt and foreign material from pipe before installation. Provide bulkheads as required to prevent entrance of dirt or water after installation.
  4. Lay and fit pipe sections to provide a smooth, uniform invert, with sealed joints and full bearing in bedding material. Provide continuous fall in flow direction.
  5. Excavate bell holes under each bell to ensure uniform bedding for all types of bell and spigot piping.
  6. Install pipe joint gaskets in accordance with manufacturer's recommendations. For pipe connections requiring mortared joints, the pipe bell shall be caulked with jute or oakum and the remainder of the joint grouted full with cement mortar.
  7. Cut pipe ends entering structures flush with inner face of structures.
  8. Extend site drainage system to outfall indicated and make required connection.
  9. Obtain required inspections and perform testing prior to backfilling. Remove obstructions, replace damaged components, and retest as required. Provide a satisfactory free flowing site drainage system.
- E. Backfill trenches with an approved backfill material, free from large clods, stones, and debris.
1. Backfill trenches in 8" compacted layers until there is a cover of not less than 24" over piping. Place remaining backfill material in 12" compacted layers.
  2. Backfill evenly on both sides of piping for its full depth. Provide thorough compaction of fill under pipe haunches.
  3. Provide granular backfill at all paved areas.
- F. Mechanically compact backfill in accordance with Section 02200 requirements. Water settling, puddling, and jetting as a compaction method are not acceptable.
- G. Fill, compact, and restore to original level and condition all settlement.
- H. Replace paving, lawns, and finished surfaces removed to accommodate the site drainage system, except where new surfaces are provided as part of the work.
- I. Construct clean-outs and other structures as indicated.
- J. Install Drain Inlets in accordance with Manufacturer's recommendations.

#### 3.04 INSTALLATION- SUBDRAIN

- A. Provide a compacted earth base. Hand trim excavations to required elevation. Place and compact earth fill as required to fill low areas and provide a positive drainage flow.
- B. Place filter fabric in excavation to completely surround drainage fill as indicated on drawings.
- C. Install minimum 8" layer of drainage fill over compacted earth base for bedding drainage pipe.
- D. Lay drain pipe with perforations down, joints closed, and firmly bedded in drainage fill material. Provide full bearing for each pipe section. Provide continuous slope in the direction of flow.
  - 1. Provide collars and couplings for all in-line joints and all, elbow, or bend sections for all corners and changes in directions.
  - 2. Provide recesses to receive bell and spigot ends.
  - 3. Provide non-perforated run out pipe. Extend drainage system to out fall indicated and make connection.
- E. Obtain required inspections and perform testing before backfilling. Remove obstructions, replace damaged components, and retest system as required. Provide a satisfactory free flowing subdrainage system.
- F. Place drainage fill over drain piping after satisfactory testing and acceptance. Compact drainage fill in layers not exceeding 3" in loose depth. Exercise care to avoid damage or displacement of installed piping.
  - 1. Completely cover drain lines to width of at least 6" on each side of pipe and above top of pipe to finish grade.
  - 2. Provide soil separator over granular backfill.

### 3.05 INSTALLATION OF RECHARGE CHAMBERS

- A. Install recharge chambers as in accordance with manufacturer's instructions and as shown on the drawings.

### 3.06 DISPOSAL OF WASTE MATERIALS

- A. Stockpile, haul from site, and legally dispose of waste materials, including excess excavated materials, rock, trash, and debris.
- B. Maintain disposal route clear, clean, and free of debris.

### 3.07 CLEANING

- A. Maintain site drainage piping and structures in a clean workable condition during construction operations.
- B. Flush site drainage system with water in sufficient volume to obtain free flow through each line. Remove all silt, trash, and debris just prior to acceptance of work.
- C. Upon completion of site drainage work, remove tools and equipment. Provide site clear, clean, free of debris, and suitable for site work operations.

3.08 FAULTY CONSTRUCTION

- A. Any pipe or structure showing settlement after laying or which is not in true alignment or is otherwise unsatisfactory before final acceptance of the work shall be taken up and re-laid at no additional cost to the Owner.

END OF SECTION

**SECTION 02870**  
**SITE FURNISHINGS**

**PART 1 GENERAL**

**1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

**1.02 SCOPE OF WORK**

- A. Install site furnishings to be supplied by the City as shown and specified. The work includes:
  - 1. Benches. (3 under Base Bid, 3 under alternate # 3.)
  - 2. Picnic and Café Tables.

**1.03 QUALITY ASSURANCE**

- A. Comply with Section 02000 requirements.
- B. Materials and methods of construction shall comply with the following standards:
  - 1. Massachusetts Dept. of Public Works, Standard Specifications for Highways and Bridges, (Standard Specifications).
  - 2. American Society for Testing and Materials, (ASTM).
  - 3. American Association of State Highway and Transportation Officials, (AASHTO).
  - 4. ADA: Americans with Disabilities Act.

**1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Handle and store material to prevent damage and deterioration.

**1.05 PROJECT CONDITIONS**

- A. Build-in footings and other items required before final grading and surfacing is completed. Do not begin final installation of site improvements before completion of final grading or surfacing.

## PART 2 PRODUCTS

### 2.01 MATERIALS (to be supplied by the City)

- A. Bench with back: Model #58-60 -6' long bench all steel with back, black powdercoat finish, surface mount, as manufactured by Dumor, Inc., local representative M.E. O'Brien & Sons, Medfield, MA, (508) 359-4200, or approved equal.
- B. Picnic Tables: Model # 443-558-1, 8' table with 2 benches, black powdercoat finish, ADA accessible model, with S-1 embedment option, as manufactured by Dumor, Inc., local representative M.E. O'Brien & Sons, Medfield, MA, (508) 359-4200, or approved equal.
- C. Regular Café Table: Model #448-34/S-1, 35 ½" square Café Table with 4 seats. Embed mount, black powdercoat finish, as manufactured by Dumor, Inc., local representative M.E. O'Brien & Sons, Medfield, MA, (508) 359-4200, or approved equal.
- D. Accessible Café Table: Model #448-33/S-1, 35 ½" square Café Table with 3 seats. Embed mount, black powdercoat finish, as manufactured by Dumor, Inc., local representative M.E. O'Brien & Sons, Medfield, MA, (508) 359-4200, or approved equal.

### 2.02 ACCESSORIES

- A. Grout shall be non-shrink, non-metallic, non-staining, such as 'Por-rok' or approved equal.
- B. Concrete for footings shall be 3,000 psi concrete as specified under Section M4 of the Standard Specifications, unless otherwise noted on the Drawings or in these Specifications.
- C. Filter Fabric shall be Mirafi HP 270 manufactured by TC Mirafi, Pendergrass, GA, (888) 795-0808, or approved equal.
- D. Other Materials: As selected by the Contractor and approved by the Landscape Architect.

## PART 3 EXECUTION

### 3.01 PREPARATION

- A. Examine subgrades, finished surfaces, and installation conditions. Do not start site improvements work until unsatisfactory conditions are corrected.
- B. Locate and layout all site improvements. Obtain Landscape Architect's acceptance of layout prior to installation.

### 3.02 INSTALLATION OF SITE IMPROVEMENTS.

- A. Locate site improvements equipment at the lines and grades shown on the Drawings and according to the specifications of the manufacturer of the equipment. All minimum

dimensions shall be met. If minimum dimensions are not met by the Contractor, they shall remove and relocate any or all equipment at no additional cost to the Owner. Assemble and install equipment in accordance with manufacturer's recommendations.

- B. Install equipment in concrete foundations as shown and as recommended by manufacturer. Place foundation concrete and tamp for consolidation. Align posts both vertically and laterally. Hold in position during concrete placement and finishing operations. Finish surface of concrete 3" below surrounding surface of paving or finished grade, or as noted on drawings.

### 3.03 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all debris and equipment. Repair all damage resulting from site improvements installation.

END OF SECTION

## **SECTION 02872**

### **RENOVATION OF PLAY EQUIPMENT**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 DESCRIPTION**

- A. Provide site improvements as shown and specified. The work includes:
  - 1. Renovation and rehabilitation of existing play structures and swings.
- B. All references to products by manufacturer, trade name or performance specifications bearing the connotation "or Approved Equal" shall be as determined by the Landscape Architect and the City, per MGL c. 30 s. 39M, part b, criteria 1.
- C. The City has obtained a full inspection and report on the existing play structures and swings. The contractor will completely renovate the play structures to bring them into compliance with the current codes and the recommendations of the report. The report follows this section.
- D. The City will provide the following elements for installation. The contractor will be responsible for the installation of these elements and will design, furnish and install all other renovation and replacement elements as required by the playground inspection report to bring the structures up to current codes and standards.
  - 1. Age 5-12 Structure: New curved slide, access deck and panels; new straight slide; and new ladder climbing element.
  - 2. Age 2-5 Structure: New curved slide; new double straight slide; and new chain ladder climbing element (using existing footings).

##### **1.03 QUALITY ASSURANCE**

- A. Comply with Section 02000 requirements.
- B. Materials and methods of construction shall comply with the following standards:

1. Massachusetts Dept. of Public Works, Standard Specifications for Highways and Bridges, (Standard Specifications).
2. American Society for Testing and Materials, (ASTM).
3. American Association of State Highway and Transportation Officials, (AASHTO).
4. ADA: Americans with Disabilities Act.
5. United States Consumer Products Safety Commission, (CPSC).

C. Manufacturer and Installer Requirements.

1. Playground Equipment Manufacturer for Replacement Parts: The Playground Equipment Replacements specified herein and indicated on the drawings shall be manufactured by a firm who can furnish supporting evidence of experience to perform this work.
2. Qualifications of the manufacturer and installer shall be subject to the review of the Landscape Architect.
3. The manufacturer of the Playground Equipment shall maintain and have in effect at the time of completed installation an insurance policy covering completed operations (Product Liability) with a minimum limit of \$2,000,000.00 (Two Million Dollars) for each occurrence. A certificate of insurance shall be provided for the Owner upon request.
4. A representative of the manufacturer shall be available for consultation during the installation of the equipment.

D. It is the responsibility of the manufacturer to indicate on the shop drawings in writing any and all variations from the following specifications, standards, and codes which shall hereby form a part of this specification:

1. Latest edition of the Handbook for Public Playground Safety of the US Consumer Product Safety Commission.
2. ASTM, 1487 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use
3. Standards for Welding: American Welding Society (AWS), latest edition.
4. Standards for Structural Steel: American Steel Institute, latest edition.
5. American Society for Testing Materials, latest edition, Standards A-120, VA 569, and A-500 and F 1292 and F 1487.
6. Standard Steel Composition.

7. Society of American Engineers.

- E. Compatibility of Replacement Parts: The existing Play Structure was manufactured by Playground Environments, Inc. circa 1995. The proposed manufacturer/fabricator of all replacement parts shall provide written certification of compatibility with the existing playstructure.
- F. Design of Replacement Parts will be by I D Fabrications, Inc., 1556 West Main Street, Riverhead, NY 11901, 631.325.1484. [idfabrication@verizon.net](mailto:idfabrication@verizon.net), representative Bob Thorne, or approved equal.
- G. Fabrication shall be by AZA, Inc. of 1556 West Main Street, Riverhead, NY 11901, 631.325.1484 or Approved Equal.
- H. Replacement Playground Equipment Product Warranty: The manufacturer of all replacement parts shall warrant, at a minimum, the following:
  - 1. 2 years- All workmanship and materials.
  - 2. 2 years- Limited warranty on powder coated surfaces against corrosion or peeling.
  - 3. 2 years- Limited warranty on all plastic components, molded rubber products, and all moving parts and connections.
  - 4. 15 years- Limited warranty on steel posts and steel components against structural failure due to corrosion excluding moving parts.
  - 5. 15 years- Limited warranty on Dimensional Material against structural failure due to decay.

1.03 SUBMITTALS

- A. Submit manufacturer's information for all replacement parts.
- B. Shop Drawings and Samples: Provide complete Shop Drawings and/or samples and catalog cuts for all items called for on the Drawings and the playground inspection report and as specified and in accordance with applicable requirements under Division 1.
- C. Provide a copy of the inspection certificate from a Certified Playground Safety Inspector confirming that the Play Equipment (after refurbishment and addition of play elements), including the Swings, is in compliance with the latest editions of ASTM F-1487 and the CPSC Public Playground Safety Handbook, and all other applicable standards and regulations.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle site improvements to prevent damage and deterioration.

## 1.05 PROJECT CONDITIONS

- A. Prior to any removal, the Contractor, the contractor's CPSI, the Manufacturer's Representative for replacement parts, the Landscape Architect, and the Owner's Representative shall meet on the site to review the proposed removals, replacements, and refurbishments.
- B. Build-in footings and other items required before final grading and surfacing is completed. Do not begin final installation of site improvements before completion of final grading or surfacing.

## PART 2 PRODUCTS

### 2.01 REPAIRS AND REFURBISHMENT OF EXISTING COMPOSITE PLAYSTRUCTURES

- A. Scope of Refurbishment: The existing play equipment has been inspected by a Certified Playground Safety Inspector retained by the City to determine compliance and any parts which require replacement.
- B. Replacements shall include all parts which have been identified as broken or pose a safety hazard in the judgment of the CPSI, including all rusting chains.
- C. Painting: The existing play structures shall be thoroughly cleaned in order to determine which metal components that shall remain have damaged paint and need to be repainted. All metal components which are rusting or have damaged paint shall be cleaned to bare white metal and repainted using a galvanizing primer and a two-coat finish epoxy system; see below.

### 2.02 REFURBISHMENT OF EXISTING SWING SET

- A. The existing swing set shall be refurbished as noted below. Replacements shall include (these categories may overlap):
  - 1. All parts which are broken or pose a safety hazard in the judgment of the CPSI;
  - 2. All bearings, swing chains, belt swings, and bucket swings. Swing belts and toddler bucket swings shall be submitted for approval by Landscape Architect and Owner; a range of colors shall be available. Swing chains shall be of at least equal grade to the replaced existing chains, and shall be in accordance with ASTM 1487.

### 2.03 ACCESSORIES

- A. Drainage fill: AASHTO M43 #6 (3/8" to 3/4") clean uniformly graded stone or gravel.
- B. Weed control barrier: Rot resistant polypropylene fabric, water, and air permeable.
- C. Grout shall be non-shrink, non-metallic, non-staining, such as 'Por-rok' or approved equal.

- D. Concrete for footings shall be 3,500 psi concrete. See concrete section.

## 2.04 AGE-APPROPRIATENESS SIGNAGE FOR ALL PLAY AND FITNESS ELEMENTS

- A. All Renovated and New Playground Equipment Equipment shall be furnished with Age Appropriate Signage and all other recommended safety signage, as per the Drawings and as per the recommendations of ASTM 1487 and CPSC.

## PART 3 EXECUTION

### 3.01 INSPECTION

- A. Examine subgrade, finished surfaces, and installation conditions. Do not start site improvements work until unsatisfactory conditions are corrected.

### 3.02 PREPARATION

- A. Remove loose material and debris from base surface before placing site improvements.
- B. Locate and layout all site improvements before installing playground edging. Verify that all required safety zones are met. Obtain Landscape Architect's acceptance of layout prior to installation.

### 3.03 REPAIRS AND REFURBISHMENT OF EXISTING COMPOSITE PLAYSTRUCTURE

- A. Play structures and Play equipment.
  - 1. All replacement parts shall be assembled and installed per approved shop drawings and manufacturers recommendations, and in compliance with all applicable standards.
  - 2. Locate the structures to as shown on the approved Shop Drawings and according to the specifications of the manufacturer of the equipment. All minimum dimensions shall be met. If minimum dimensions are not met by the Contractor, they shall remove and relocate any or all equipment at no additional cost to the Owner.
  - 3. The equipment shall be located and brought to the grades as shown in the approved Shop Drawings. Vertical and horizontal members shall be set plumb and braced in place. Pour concrete around supporting pieces of the equipment according the manufacturer's specifications. Top of all footings shall be a minimum of 3.5" below finish grade.
  - 4. After the specified cure period of the concrete has passed the bracing may be removed.
  - 5. All metal new or replacement elements necessary for complete refurbishment shall

be factory powder coated and touched up on site after reinstallation.

B. Existing Elements to Remain:

1. Avoid damage to all components which are not removed.
2. All rust or damaged paint shall be removed to bare white metal, and all exposed spots shall be primed and repainted.
3. The finished painted surfaces shall be free of foreign materials, and shall be a smooth even surface without visible brush marks. Finishes shall be subject to the approval of the Landscape Architect and Owner.
4. Contractor to touch up any scratches and all mars to surfaces and finishes.

C. Contractor shall submit written certification from Manufacturer's Representative that all replacement components have been installed in accordance with their prescribed standards.

D. A Certified Playground Safety Inspector shall inspect and approve the completed repairs. The play equipment will not be accepted by the Landscape Architect or the Owner until they are satisfied with the installation of all new elements, and the repairs to existing elements. No additional compensation will be given for any necessary corrective work required to attain CPSI approval.

3.04 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from site improvements work.

END OF SECTION

# **REALE ASSOCIATES INC PLAYGROUND SAFETY REVIEW**

**Date:** July 31, 2014

**Location:** Marshall Street Playground

**Evaluator:** Jody Reale

**Age Appropriateness:** 2-5 yr  
5-12 yr

**Equipment Manufacturer(s):** Playground Environments- Structure & Swings

**Surfacing:** Engineered Wood Fibers

## **Definitions Playground Hazard Priority Category, PHP**

**Priority 1 - Any condition that is life threatening, or can cause permanent disability, loss of vision, speech, or limb**

**Priority 2- Any condition that can cause serious but non-disabling injury**

**Priority 3- Any condition of the playground which can cause minor injury, OR any condition that does not meet the CPSC guidelines for Public Playground Safety or ASTM F 1487-11**

## **Notes:**

**The subjects are older 2-5 yr & 5-12 yr structures and swings by Playground Environments.**

**The structures show head entrapments throughout the barriers and the decks; both structures show missing roofs. Further; the 5-12 yr spiral slide shows cracks at the entrance and at section 6. The 5-12 yr Horizontal Rings show open S Hooks and rusted chains. The 5-12 Yr Horizontal ladder show rung distances well over 15", further the openings between the**

**rungs/upper frame do not pass the entrapment test. Please be advised that the ASTM/CPSC standards and guidelines have been updated since the installation of the structures. The swings show mixed use; belt/tot at the first bay, open upper hangers and SHooks, and insufficient use zones; front and rear.**

<u>Composite Play Structure</u>	<u>Quantity</u>	
	2-5 structure	5-12 structure
Stairways and Step Ladders	2	3
Vertical Rung Ladders		1
Rigid Climbers	1	2
Flexible Climbers	1	1
Decks and Platforms	3	5
Play Panels	6	4
Slides	2	2
Sliding Pole		
Horizontal Ladder		
Horizontal Rings		2
Track Ride		1
Crawl Tunnel		
Clatter Bridge/Bridges	1- arched	1
Ramps		
Transfer Stations	1	1
Roofs	missing	missing
Other:		
Other:		

<u>Free Standing Equipment</u>		
Swings (to-fro) 1- 2 Bay	1	3
Seesaws		
Slides		
Ridgid Climbers		
Flexible Climbers		
Upper Body Equipment		
Rocking Equipment		
Sand Play Area		
Backhoe Digger		
Play Panels		
Other:		
Other:		
Other:		

Comments**ENVIRONMENTAL CONCERNS**

The playground can be accessed safely by a sidewalk that is free of standing water, sand, pea gravel & low hanging branches.	Yes		
Playground border concerns within 100' of playground edge. Such as railroad tracks, heavily traveled roadways, water, ponds, etc.	NO		
If needed, a suitable barrier (fence) is provided for border concerns within 100' of playground edge. <i>See above for a list of possible border concerns</i> (CSPC 6.1)	Yes		
Seating (benches, outdoor tables, etc) is in good condition (free of splinters, missing hardware or slats, protruding bolts, etc).	No, the benches and tables show chipping paint,	3	Remove/replace or repair
Signs give information about regulations on the use of the playground (hours, pets, specific rules, etc), name of playground with 911 number included	There is no 911 signage	1--2	Provide signage for emergency preparedness
Signs on all bordering roads that advise motorists of a nearby playground.	Yes		Marshall Street only
Trash receptacles are provided and located outside of play area.	Yes		
Poisonous plants are removed from play area.	Yes		
Shaded area is provided.	No		
The play area is visible to deter inappropriate behavior (CPSC 6.2)	Yes		
The play area is free from lead in paint (maximum 0.5% lead by dry weight targeted for lead hazard control)(CPSC 8.1), SEE COMMENTS	Yes		There is wood edging at the play area perimeters; Reale makes no statement

**DESIGN APPROPRIATENESS****Age/Appropriateness Design**

	<u>Condition</u>	<u>Priority</u>	<u>Recommendations</u>
Vertical rung ladder, net, chain, arch or tire climbers are not the sole means to access play equipment for 2-5 yr. old users (ASTM 7.2.2.1)	Yes		
Play equipment not recommended for 2-5 yr. old users: chain or cable walks, free standing arch climbers, free standing climbing events with flexible components, fulcrum seesaws, log rolls, long spiral slides >360 degrees, overhead rings, parallel bars, swinging gates, track rides and vertical sliding poles (CPSC 6.3)	The 2-5 yr structure has flexible and rigid climbers which are not recommended for	1	Potential fall hazard: adult supervision is recommended
The play area has signs that inform users of intended user age group (CPSC 6.3).	No	1--2	Provide signage to identify to the the public

## SURFACING & USE ZONES

### Playground Protective Surface

All elevated play equipment (slides, swings, bridges, seesaws, climbing apparatus, etc) has proper depth of impact-absorbing material underneath the structure. Refer to CPSC and ASTM specifications on conforming protective surface type, critical fall heights and how far surfacing should extend from structure (CPSC Section 4).

<u>Condition</u>	<u>Priority</u>	<u>Recommendations</u>
The EWF is aprox 4-6" low	ONE	Rerake and install sufficient , CPSC/ASTM compliant safety surfacing. The swing area shows exposed tree roots which create additional trip/fall hazards

Surfaces are inspected in season at least weekly and raked to prevent them from becoming packed down and to remove hidden hazards (e.g. litter, sharp objects, animal feces). (Daily = 0 pts, weekly = 1 pt, monthly = 5 pts, seasonally = 10 pts) (CPSC 7.2)

No	1	See above
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Loose materials are inspected and replenished as recommended to maintain adequate depth and coverage annually. (CPSC 7.2)

No	1	See above
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Is there standing water is found within the use zones (CPSC 6.1)

No
----

There are labels that identify the manufacturer, provide information on the age appropriateness of the structure, issue warning that equipment must be installed over impact absorbing surface, that surfacng and surfaces can become hot and should be checked prior to playing, that helmets, ~~drawstrings, scarves and other accessories around the necks~~

None
------

1--2
------

Provide labels to advise the public of the age appropriateness of the structures, to provide warnings on hot, hard surfaces, and to advise

Footings for equipment are stable and are buried below ground level or surfacing materials. CPSC 9.7

Yes
-----

There is no corrossion or visible rotting at points where the equipment comes into contat with the ground surface. CPSC 7.2,8.1 ASTM 4.2

Yes
-----

### Use Zone

<u>Condition</u>	<u>Priority</u>	<u>Recommendations</u>
------------------	-----------------	------------------------

There is a minimum use zone of 6' in all directions for all stationary equipment. Use zones for adjacent pieces of play equipment may overlap if the adjacent designated play surfaces are less than 30" above the protective surface. If either adjacent structure exceed 30", the minimum distance between the structures should be 9'. Rocking/springing equipment intended for users to stand upon is no less than 7'. ASTM 9.1

5-12 yr- there is < 6' from the spiral slide to the wall.
---

1
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Potential Fall Hazard
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Swings, slide exits, merry-go-rounds and moving equipment other than rocking equipment less than 30" high shall not overlap use zones and be located along the playground perimeter away from high traffic areas. (CPSC Section 5, ASTM Section 9) Special note: *exception ASTM 9.3.4, 9.2.1, w/9.8.1.*

Yes
-----

Swings with enclosed bucket swing seat use zone to the front and to the rear shall be a minimum distance of 2W, where W equals the distance from the top of the occupant's sitting surface to the pivot-point on the swing (CSPC 5.1.3, ASTM 9.4.1.2).

Yes
-----

Belt swings' use zone to the front and to the rear shall be a minimum distance of 2X, where X equals the distance from the top of the protective surface to the pivot-point on the swing (CPSC 5.1.3, ASTM 9.4.1.1).	No, x= 8'1". There is < 16'2" in the front left and rear right corners	1	Potential Fall Hazard
Slides have adequate space from other equipment at the exit (height of slide or 6' from edge of slide, whichever is greater, but not more than 8'). (ASTM 9.6.2)	Yes		
The use zone for a rotating swing (tire on swing) shall be a minimum of 6' in all directions of the support structure plus a minimum horizontal distance in all directions equal to the distance between the pivot point to the top of seat plus 6' (CPSC 5.1.4, ASTM 9.4.2)	N/A		
Barriers between equipment or for containment of surfacing material are installed so as not to create a trip hazard and are free of protrusions, splinters, sharp edges, etc. and are outside equipment use zone (CPSC 9.7)	The perimeter asphalt shows heaving and broken edges; the existing curbing	1--2	Eliminate the trip/fall hazards
Equipment use zone is free of litter and debris. (CSPC 7.2)	Yes		
Are there overhanging branches within 84" of the use zone ASTM 9.8.4.1	Yes	3	There are overhanging branches, , < 84", in the 2-5 yr area right and

## ACCESSIBILITY

This section was not reviewed for the audit

**NOTE:** The purpose of this audit form, with regard to accessibility, is to allow the audit inspector to determine compliance of the play area with ASTM F 1487-01. The goal of the inspector is to determine if a person with a disability has access to, on and through the equipment and play area. This audit form is not intended to assess design compliance. The auditor shall indicate in the comments column and audit summary report, in your opinion, whether or not the playground is accessible per this simple three part question. Does the user have safe access to, through, and onto the playground equipment?

### Accessibility

	<u>Condition</u>	<u>Priority</u>	<u>Recommendation</u>
The playground has an accessible route with a maximum horizontal slope of 1:20 (greater than 1:20 would be considered a ramp) and a maximum cross-slope of 1:50 (access to and around the playground area is at least 60" wide (play areas <1,000 sq ft) may be 36" wide)(ASTM 10.1.3).	N/A		
Ramps are 36" wide minimum; with a slope between 1:20 and 1:12 and maximum horizontal run of 12 feet (ASTM 10.2.2.1-2).	N/A		
Landings are 60" minimum diameter at bottom and top of each run; landings with play components shall have area 30"x48" to park wheelchair while not reducing adjacent circulation path to less than 36" (ASTM 10.2.2.4).	N/A		
For ramps, with 2 rails or no rails or barriers beyond the edge of the ramp or barriers not extending to within 1" of the ramp surface must have a curb > 2" or equal above the ramp surface (ASTM 10.2.2.8).	N/A		

For ramps higher than 30" (designed for 2-5 yr olds) or higher than 48" (designed for 5-12 yr. olds) barriers are provided (ASTM 7.4.4, 10.2.2.5).	N/A		
For ramps > 30"H (designed for 2-5 yr olds) or > 48" H (designed for 5-12 yr olds) where protective barrier is required, one handrail is provided on each side of a ramp at a height between 26-28". For ramps less than or equal to 30"H and 48"H (for 2-5 and 5-12 yr olds, respectively) where a guardrail is required, two handrails are provided on each side that are between 12-16" H and 26-28" H (ASTM 7.4.3, 10.2.2.6-7)	N/A		
Transfer point height is between 11"-18" with a clear width of minimum 24" and depth of no less than 14". Transfer point steps are a maximum of 8" high with handholds (ASTM 10.2.3.1-3)	5-12 yr- the step is > 8" and the transfer point is > 18"	1	Install sufficient safety surfacing
Transfer points have; wheelchair turning space at base of transfer point; a clear space area of 60" minimum. T-shaped area in accordance with ASTM Fig. A1-39a (ASTM 10.2.4.1).	Yes		
Accessible routes of travel within a use zone shall have an accessible safety surface.	Yes		
Accesible restroom facilities, accessible seating, accessible drinking fountain are located in or near the play area.	No		
Wheelchair accessible platforms: single wheelchair passage 36"; two wheelchair passage 60"; single wheelchair and 1 able bodied user 44"; openings between deck not greater than 0.50" (ASTM 10.2.5.1-4)	N/A		
Elevated wheelchair accessible play opportunities designed with different access and egress points, such as slides, allow the user to return unassisted to access the original transfer point (ASTM 10.3.2.1). Openings at those access/egress points are 1.5".	N/A		
Vertical leg clearance is not less than 24" for equipment that requires a wheelchair user to pull partially under, such as sand tables, with a top playing surface of not greater than 30" (ASTM 10.3.2.2).	Yes		
Wheelchair accessible upper body equipment, such as horizontal ladders and rings, are less than or equal to 54" high (ASTM 10.3.2.3).	N/A		
Wheelchair accessible manipulative equipment, such as interactive panels, are between 9"-48" H for side reach and 20"-36"H for front reach from the accessible surface (ASTM 10.3.2.4-5).	Yes		

## EQUIPMENT & STRUCTURES

Equipment is free of rust and chipping paint. CPSC 8.1, ASTM 4.1, 4.2, 4.3, 4.4	The structure shows some rust, rust and chipping paint is evident at the swings	3	Consistently monitor the p
Handgrips/Handrails are between .95" and 1.55" diameter CPSC 10.2.1 ASTM 7.1, 4.4	Yes		

### Slides

	<u>Condition</u>	<u>Priority</u>	<u>Recommendations</u>
Slides are accessed by stairs, step ladders, or platforms which are evenly spaced no greater than 9" (2-5), less than or equal to 12" (5-12) apart, and pass the entrapment test. Refer to ASTM F 1487 Table 2 (CPSC 12.4.2).	Yes		
There is a flat surface the width of the slide bed at the top of the slide to help position the child for sliding (min. 14" deep going back from the slide bedway and min. 12" wide for 2-5 yr. old users and a min. 16" for 5-12 yr. old users) (ASTM 8.5.2.2-3, 8.5.4.3)	2-5 yr - the curved slide fails	1---2	Remove & replace
There are sufficient safety barriers at the top of the slide to prevent falls, with hand holds to assist standing to sitting transition and a means to channel the user to the sitting position before slide entry. (CPSC 12.4.3., ASTM 7.4, 8.5.3)	Yes		
Sides of bedways are at least 4" high (CPSC 12.4.3, ASTM 8.5.4.4).	Yes		
No portion of the angle of the sliding surface exceeds 50 degrees with the average angle of 30 degrees or less (CPSC 12.4.4, ASTM 8.5.4.1-2)	Yes		
A flat sliding surface (run out zone) at the bottom of the slide is a min. of 11" long at transition point angle less than 5 degrees from the horizontal plane (CPSC 12.4.5, ASTM 8.5.5.1-2)	Yes		
For slides greater than 4' high, the slide exit height is between 7" and 15" above the protective surfacing material (CPSC 12.4.5, ASTM 8.5.5.3).	5-12 yr- the exit at the spiral slide is 21"	1	Install sufficient safety surfacing
For slides 4' high or less the slide exit height does not exceed 11" above the protective surfacing material (CPSC 12.4.5, ASTM 8.5.5.3).	5-12 yr- the exit at the single slide is 14"	1	See Above
Tube slides have a minimum diameter equal to or greater than 23" outside surface should be textured or barriers provided to prevent sliding on the outside (CPSC 5.3.6.3.5 ASTM 8.5.4.7).	N/A		
Only short spiral slides, with one turn or less (less than or equal to 360 degrees), are recommended for 2-5 yr. old users (CPSC 12.4.7).	Yes		

A clear area, height of 60" along slide chute and width of 21" from inside edge of siderail including the transition platform. Where no protrusions project more than 1/8" perpendicular to the plane of the initial surface. Underside of slide bedway is exempt (CPSC 9.4, ASTM 8.5.6.1 & 6.4.1, figures A1.14-A1.26).	Yes		
On roller slides, no opening allows a 3/16" rod to enter (ASTM 8.9.2.1).	N/A		
If the slide is made in several pieces, the sliding surface has no gaps or rough edges at the top of the slide or as section seams which could entangle clothing or trap foreign material (CPSC 12.4.3-4, ASTM 6.4.1.2).	2-5 yr slides; both show gaps at the slide /deck. 5-12 yr- the single slide	1	Potential Entanglement, see above regarding proper warning labels
The sliding surface faces away from sun or is located in the shade and isn't made of wood or fiberglass (CPSC 12.4.4).	All slides have exposure to the sun	2--3	See above regarding warning labels
<b>Sharp, Crush and Shear Points (CPSC 9.1, 9.5, ASTM 6.2, 6.5):</b> Equipment is free of sharp edges. There are no open holes in the equipment forming traps (e.g. at the ends of the tubes). There are no crush or shear points.	2-5 yr- there is an open hole on the outside of the curved slide bed.	1--2	Plug the hole; the concern here is bee and insect infestation, the allergic child and the very serious anaphylactic shock.
<b>Protrusions (CPSC 9.2, ASTM 6.3):</b> No components fail protrusion test. Nuts, bolts and screws are recessed, covered or sanded smooth and level.	5-12 yr- there is > 2 at the spiral slide deck	One	Potential Entanglement/protrusion . Cut /file smooth to the proper length or cap
<b>Entanglements (CPSC 9.4, ASTM 6.4.2):</b> No obstacles or protrusions project upwards from a horizontal plane extending more than 1/8" perpendicular to the plane of the initial surface. No more than two threads of the fastener protrude through any nut.  No protrusion increase in diameter from its initial surface (ASTM 6.4.4).	2-5 yr- there is > 2 at the DBL slide footer, access is difficult. 5-12 yr- See above	1	See above
<b>Head Entrapments (CPSC 9.4, ASTM 6.4.2):</b> No components fail the entrapment test. There are no failures of the partially bounded opening test. See Figs A1.5-A1.9 in ASTM F 1487.	2-5 yr- the curved and double slide fail the partial bound test. 5-12 yr- the spiral slide	1	Potential head entrapment.
<b>Hardware/General Concerns:</b> Nuts and bolts are tight and not able to be loosened without tools. Upon close inspection, they show no loose play or excessive wear (CPSC 8.2, ASTM 4.2).	5-12yr- there is loose hardware at the spiral deck & hood.	2--3	Retighten the hardware
Equipment is free of sharp edges, splinters or rough surfaces and shows no excessive wear (CPSC 9.1, ASTM 6.2).	5-12 yr- there are cracks at the spiral	1--2	Remove & replace
Equipment has not shifted or become bent (CPSC 8.1)	Yes		
No components are missing. All parts of the equipment are present and in good working order with no loose play or excessive wear in moving parts (CPSC 7.2, 8.1, ASTM 4.2).	2-5 yr- the DBL slide shows missing hardware at the footer and	1--3	2-5 yr- replace the missing hardware. 5-12yr - remove and replace the spiral slide

Climbers refer to arch climbers, sliding poles, net climbers, dome climbers, parallel bars, balance beams, cable walks, suspension bridges (clatter bridges), spiral climbers, and composite structures with linked platforms.

<b><u>Climbing Equipment</u></b>	<b><u>Condition</u></b>	<b><u>Priority</u></b>	<b><u>Recommendations</u></b>
Handholds stay in place when grasped and do not rotate on its axis (CPSC 10.4, ASTM 8.2.1).	Yes		
Flexible access equipment anchoring devices are below level of playing surface (CPSC 12.1.3, ASTM 7.2.2.2).	5-12yr- the cargo net anchoring device is exposed	1	Potential fall hazard, install sufficient safety surfacing
Flexible climbing devices used as access for use by 2-5 yr. olds, readily allows users to bring feet to the same level before ascending to the next level 12" (ASTM 7.2.2.4).	Yes		
Climbers don't have climbing bars or other structural components in the interior of the structure onto which a child may fall from a height of greater than 18" (CPSC 12.1.2).	Yes		
Accesses which don't have side handrails, such as rung ladders, arch or flexible climbers, are to have alternate hand-gripping support at transition. The maximum horizontal opening must be 15" unless it has a top rail of a guardrail (CPSC 10.4, ASTM 7.4.3.2).	5-12 yr- the rigid climbers have openings > 15" and have no top rail, the space is 16"	1--2	Potential fall hazard
Rung ladders, arch and flexible climbers used as access, are not above the designated play surface it serves (to trip hazard) (ASTM 7.3.3).	Yes		
Balance beam maximum height from the playing surface is 12: for 2-5 yr. old users and 16" for 5-12 yr old users (CPSC 12.1.8, ASTM 8.1.1).	N/A		
No accessible components or hardware protrusions project upwards from a horizontal plane extending more than a 1/8" perpendicular to the plane of the initial surface (CPSC 9.4, ASTM 6.4.2).	Yes		
All components of crawl through tunnels are secure and firmly fixed. The tunnel has two safe, clear exits and is designate to drain freely.	N/A		
Roofs that are less than 84" above the underlying play surface shall contain no designated play surfaces. ASTM 8.14 SEE	N/A		The roofs at both structures are missing
<b><u>COMMENTS</u></b>			
<b>Sharp, Crush and Shear Points (CPSC 9.1, 9.5, ASTM 6.2, 6.5):</b>	Both structures show missing roofs which has created open holes from the missing hardware. 5-12 yr- the hardware at	1--2	Plug the open holes ; see above Replace the hardware
Equipment is free of sharp edges.			
There are no open holes in the equipment forming traps (e.g. at the ends of the tubes).			
There are no crush or shear points.			
<b>Protrusions (CPSC 9.2, ASTM 6.2):</b>	5-12 yr- the hardware at the clatterbridge /deck fails the protrusion test	1	Potential protrusion
No components fail protrusion test.			
Nuts, bolts and screws are recessed, covered or sanded smooth and level.			
No more than two threads extend beyond nut.			

**Entanglements (CPSC 9.4, ASTM 6.4.2):**

No obstacles or protrusions project upwards from a horizontal plane extending more than 1/8" perpendicular to the plane of the initial surface. No more than two threads of the fastener protrude through any nut.

Yes

No protrusion increases in diameter from its initial surface (ASTM 6.4.4).

**Head Entrapments (CPSC 9.6, ASTM 6.1):**

No components fail entrapment test.

There are no failures of the partially bounded opening test. See Figs. A1.5-A1.9, ASTM F 1487.

2-5 yr -There are head entrapments at the rigid climber and arch

1

Potential head entrapment; install infills where and if able

**Hardware/General Concerns:**

Nuts and bolts are tight and not able to be loosened without tools. Upon close inspection, they show no loose play or excessive wear (CPSC 8.2, ASTM 4.2).

Yes

Equipment is free of sharp edges, splinters or rough surfaces and shows no excessive wear (CPSC 9.1, ASTM 6.2).

5-12 yr- the cargo net barrier shows signs of

3

Remove & replace

Ropes, chains and cables have not frayed or worn out (CPSC 7.2, ASTM 4.2.3.1).

Yes, chain wear at both structures is

Equipment has not shifted or become bent (CPSC 8.1)

Yes

No components are missing. All parts of the equipment are present and in good working order with no loose play or excessive wear in moving parts (CPSC 7.2, 8.1, ASTM 4.2).

Both structures show missing roofs, while some of the brackets

2--3

2-3 Replace the missing hardware; 3 -Replace the missing roofs and the cargo net barrier

**Upper Body Equipment 5-12 yr only**

Upper body equipment, other than turning bars, not recommended for 2-3 yr old users.

**Condition****Priority****Recommendations**

Yes

Upper body climbing equipment maximum height is 84" for 5-12 yr. old users, 60" for 2-5 yr. old users. (CPSC 12.1.5, ASTM 8.3.3).

Yes

Maximum distance between rungs for upper body equipment is 15" and openings pass the entrapment test, 12" equal spacing for 4-5 yr. olds. (CPSC 9.6, 12.1.5, ASTM 8.3.2).

The Horizontal ladder show distances > 15" at the rear rungs.

1

Potential Fall & head entrapment hazard

Overhead swinging rings pass the entrapment test and chain is maximum length of 12" (CPSC 9.6, 12.1.5).

Horizontal Rings- The chain length

1

Remove & replace

Climbing ropes are secured at both ends and are not capable of being looped back on itself creating a loop with an inside perimeter of greater than 5" (CPSC 12.1.7, ASTM 6.5.1).

N/A

Horizontal take-off distance from landing structure to first handhold of upper body equipment is no greater than 10"; if access and egress is by rungs, horizontal distance to first rung is at least 8", but no greater than 10" (ASTM 8.3.2).

N/A

Ground level

Maximum height of take off/landing for upper body equipment is 36" for 5-12 year old users, 18" for 2-5 yr old users. (ASTM 8.3.4).

N/A

Ground Level

There are no single non-rigid components (Cable, rope wire, or similar component) suspended between play units or from the ground to the play unit withing 45 degrees of horizontal, unless it is above 7 ft. from the playground surface and is a minimum of 1" at its widest cross-section dimension. It is recommended that the suspended components be brightly colored or contrast with surrounding equipment (CPSC 9.8, ASTM 6.6).	N/A		
Sliding pole clearance from structures is between 18" and 20" (CPSC 12.1.6, ASTM 8.4.1),	N/A		
Sliding pole is a minimum of 60" above the access platform (CPSC 12.1.6, ASTM 8.4.1).	N/A		
Sliding pole is a maximum 1.9" in diameter and continuous with no protruding welds or joints or abrupt changes in direction within sliding areas (CPSC 12.1.6, ASTM 8.4.4-5).	N/A		
Track rides; the lowest portion of the hand gripping component is a minimum 64" above protective surface with maximum height of 78" (ASTM 8.13.2).	The track ride handle is missing, however from the		
Elevated landing platforms may not exceed 36" and must include a landing space with a minimum length of 36" and width of 32" (ASTM 13.3) <i>5% 5 yr. old verticle grip reach is 45" (ASTM 8.13.3).</i>	N/A		Ground Level
An unobstructed clearance zone throughout the length of travel of handgripping component (ASTM 8.13.5) <i>Center to distance between adjacent track rides 48" (ASTM 8.13.6)</i> <i>NOTE: Roller portion of handgripping component exempt of crush and shear requirement when enclosed in track (ASTM 8.13.7).</i>	Yes		
<b>Sharp, Crush and Shear Points (CPSC 9.1, 9.5, ASTM 6.2, 6.5):</b> Equipment is free of sharp edges. There are no open holes in the equipment forming traps (e.g. at the ends of the tubes). There are no crush or shear points.	Yes		
<b>Protrusions (CPSC 9.2, ASTM 6.2):</b> No components fail protrusion test. Nuts, bolts and screws are recessed, covered or sanded smooth and level. No more than two threads extend beyond nut.	The track ride shows hardware that fails the test	1	Potential protrusion
<b>Entanglements (CPSC 9.4, ASTM 6.4.2):</b> No obstacles or protrusions project upwards from a horizontal plane extending more than 1/8" perpendicular to the plane of the initial surface. No more than two threads of the fastener protrude through any nut.  No protrusion increases in diameter from its initial surface (ASTM 6.4.4).	The Horizontal Rings show open S Hooks which create additional entanglement hazards	1	Potential Entanglement, properly close or remove and replace with clevis's.
<b>Head Entrapments (CPSC 9.6, ASTM 6.1):</b> No components fail entrapment test. There are no failures of the partially bounded opening test. See Figs. A1.5-A1.9, ASTM F 1487.	See above; The Horizontal Ladder shows head entrapment at the	1	Remove & replace

<b>Hardware/General Concerns:</b>				
Nuts and bolts are tight and not able to be loosened without tools. Upon close inspection, they show no loose play or excessive wear (CPSC 8.2, ASTM 4.2).	The Horizontal rings, although repainted, indicate heavy rust	3	Remove & replace	
Equipment is free of sharp edges, splinters or rough surfaces and shows no excessive wear (CPSC 9.1, ASTM 6.2).	See above			
Ropes, chains and cables have not frayed or worn out (CPSC 7.2, ASTM 4.2.3.1).	Yes, wear at the chains and Shooks			
Equipment has not shifted or become bent (CPSC 8.1)	Yes			
No components are missing. All parts of the equipment are present and in good working order with no loose play or excessive wear in moving parts (CPSC 7.2, 8.1, ASTM 4.2).	The track ride handle is missing	3	Replace the handle	
<b><u>Stairways and Ladders</u></b>	<b><u>Condition</u></b>	<b><u>Priority</u></b>	<b><u>Recommendations</u></b>	
Continuous handrails on both sides for stairways greater than one tread, an alternate means of hand support or handrail present. Handrail height is between 22" and 38" beginning at first step (CPSC 10.3.1, ASTM 7.1.4).	Yes			
Children can descend equipment when they reach the top. (via platform, stairway, or step ladder)(CPSC 12.1.2).	Yes			
Steps and rungs do not allow for accumulation of water and debris (CPSC 10.2, ASTM 7.1.2).	Yes			
Steps and rungs are evenly spaced within a tolerance of +/- 0.25" and horizontal within a tolerance of +/- 2 degrees. This includes the spacing between the top step or rung and the surface of the platform. (ASTM 7.1.1).	Yes			
Openings between steps or rungs and between the top step or rung and underside of a platform pass the testing requirements for head entrapment (CPSC 9.6.1, 10.2, ASTM 6.1)	Yes			
All stairways, step ladders and rung ladders, as it relates to the intended users, conform with access slope; tread, rung, and ramp width; tread depth; and vertical rise specifications as per ASTM F 1487 Table 2 (CSPC 10.2).	Yes			
<b>Sharp, Crush and Shear Points (CPSC 9.1, 9.5, ASTM 6.2, 6.5):</b>				
Equipment is free of sharp edges.	Yes			
There are no open holes in the equipment forming traps (e.g. at the ends of the tubes).				
There are no crush or shear points.				
<b>Protrusions (CPSC 9.2, ASTM 6.2):</b>				
No components fail protrusion test.	Yes			
Nuts, bolts and screws are recessed, covered or sanded smooth and level.				
No more than two threads extend beyond nut.				

**Entanglements (CPSC 9.4, ASTM 6.4.2):**

No obstacles or protrusions project upwards from a horizontal plane extending more than 1/8" perpendicular to  
 No protrusion increases in diameter from its initial surface (ASTM 6.4.4).

Yes

**Head Entrapments (CPSC 9.6, ASTM 6.1):**

No components fail entrapment test.  
 There are no failures of the partially bounded opening test. See Figs. A1.5-A1.9, ASTM F 1487.

5-12 yr - There are head entrapments at the step and vertical

1

Potential head entrapment. Install infills if able

**Hardware/General Concerns:**

Nuts and bolts are tight and not able to be loosened without tools. Upon close inspection, they show no loose play or excessive wear (CPSC 8.2, ASTM 4.2).

Yes

Equipment is free of sharp edges, splinters or rough surfaces and shows no excessive wear (CPSC 9.1, ASTM 6.2).

Yes

Ropes, chains and cables have not frayed or worn out (CPSC 7.2, ASTM 4.2.3.1).

N/A

Equipment has not shifted or become bent (CPSC 8.1)

Yes

No components are missing. All parts of the equipment are present and in good working order with no loose play or excessive wear in moving parts (CPSC 7.2, 8.1, ASTM 4.2).

5-12 yr- the step and vertical ladder barriers have openings &gt; 15"

1--2

Potential fall hazard

**Decks and Platforms**

Unless an alternate means of access is provided, the maximum difference in height between stepped platforms for 2-5 yr. olds is 12" and for 5-12 yr. olds is 18" (CPSC 11.7, ASTM 7.4.5.1).

Yes

There is a 29" high (min.) protective perimeter barrier around 2-5 yr. old users' equipment that is more than 30" above the underlying surface (CPSC 11.5, ASTM 7.4.4.1, 7.4.4.3).

Yes

There is a 38" high (min.) protective perimeter barrier on all elevated surfaces 48" above the underlying surface for 5-12 yr. old users' equipment (CPSC 11.5, ASTM 7.4.4.1, 7.4.4.3).

Yes

The space between slats of protective barriers and guardrails is not between 3-1/2" and 9" and passes the entrapment test (CPSC 9.6, ASTM 6.1).

2-5 yr-There are head entrapments at the following

1

Potential head entrapments, install infills if possible

Guardrails or protective barriers are present on all elevated surfaces greater than 20" above the underlying surface for 2-5 yr. old users' equipment (29" top edge, 23" lower edge)(CPSC 11.4, ASTM 7.4.3.1-4).

Yes

Guardrails or protective barriers are present on all elevated surfaces 30" above the underlying surface for 5-12 yr. old users' equipment (CPSC 11.4, ASTM 7.4.3.1-4)

Yes

No partially bounded openings are projecting upwards from the horizontal plane that are greater than 1-7/8" or less than 9" and fail the test method for partially bounded openings. <i>See ASTM F 1487 Figures A1.5-A1.9 (ASTM 6.1.4).</i>	Yes		
<b>Sharp, Crush and Shear Points (CPSC 9.1, 9.5, ASTM 6.2, 6.5):</b>			
Equipment is free of sharp edges.	Yes		
There are no open holes in the equipment forming traps (e.g. at the ends of the tubes).			
There are no crush or shear points.			
<b>Protrusions (CPSC 9.2, ASTM 6.2):</b>			
No components fail protrusion test.	2-5 yr	The upper steering wheel shows > 2	Potential entanglement; cut/file smooth to the proper length or cap
Nuts, bolts and screws are recessed, covered or sanded smooth and level.			
No more than two threads extend beyond nut.			
<b>Entanglements (CPSC 9.4, ASTM 6.4.2):</b>			
No obstacles or protrusions project upwards from a horizontal plane extending more than 1/8" perpendicular to the plane of the initial surface. No more than two threads of the fastener protrude through any nut.	see above		
No protrusion increases in diameter from its initial surface (ASTM 6.4.4).			
<b>Head Entrapments (CPSC 9.6, ASTM 6.1):</b>			
No components fail entrapment test.	2-5 yr-	There are head entrapments between the all of the half decks, and the steps/infill	Potential head entrapments, install infills if possible
There are no failures of the partially bounded opening test. See Figs. A1.5-A1.9, ASTM F 1487.			
<b>Hardware/General Concerns:</b>			
Nuts and bolts are tight and not able to be loosened without tools. Upon close inspection, they show no loose play or excessive wear (CPSC 8.2, ASTM 4.2).	5-12 yr-	the infill between the 67/80" deck is loose	Retighten
Equipment is free of sharp edges, splinters or rough surfaces and shows no excessive wear (CPSC 9.1, ASTM 6.2).		Some of the hardware at both structures show	Consistently monitor
Equipment has not shifted or become bent (CPSC 8.1)	Yes		
No components are missing. All parts of the equipment are present and in good working order with no loose play or excessive wear in moving parts (CPSC 7.2, 8.1, ASTM 4.2).	5-12 yr-	there is missing hardware beneath the 30" deck.	Install the missing hardware
<b>Swings</b>			
All swings, to and fro and rotating are not attached to main structure and support structure discourages climbing and has no designated play surface (CPSC 12.6.2, ASTM 8.6.1.1-2)	Condition	Priority	Recommendations
	Yes		
Swing seats meet entrapment criteria (CPSC 12.6.3).	Yes		
There are no open "S" hooks (no openings greater than or equal to 0.04") (CPSC 12.6.1, ASTM 6.4.5).	There are open Shooks	1	Potential entanglement, properly close or
Infant bucket type swing seats should be mounted greater than 24" above the surface (CPSC).	Yes		

There are no more than two swings, evenly spaced, in any individual swing bay (CPSC 12.6.2, ASTM 8.6.1.3). Swing seat shall be of the same type in each bay. (CPSC 12.6.3)	There is mixed use at the 1st bay; belt & tot seats	2--3	Install the same type seats in the same bay
Swings are at least 24" from each other and 30" away from the frame. See ASTM Figs. A1.23-A.1.24 (CPSC Fig. 22, ASTM 8.6.1.5).	Yes		
Vertical distance is at least 12" between underside of occupied seat and protective surface 2-5, (16" 5-12)(CPSC 12.6.2, ASTM 8.6.1(5)).	Yes		
Swing hangers are spaced wider than seats, not less than 20" (CPSC 12.6.2, ASTM 8.6.1(4)).	Yes		
For tire swings, there is at least a 30" clearance zone from the top of the seating surface to crossbeam support structure at the farthest extensions of the swing, and a minimum clearance of 12" from the bottom of the tire to the protective surface (CPSC 12.6.4, ASTM 8.6.2.5(2)).	N/A		
Swing tires have adequate drainage (CPSC 12.6.4).	N/A		
Tire swings shall weigh no more than 35 lbs. with smoothly finished or blunt surfaces (CPSC 12.6.4, ASTM 8.6.2.3).	N/A		
To and fro swings and tire swings are located away from circulation paths (a distance at least equal to the equipment use zone and an additional safety factor for circulation, with this area free of any obstructions) and near the periphery of the playground (CPSC 6.2, ASTM 8.6.1.1, 8.6.2.1).	Yes		
<b>Sharp, Crush and Shear Points (CPSC 9.1, 9.5, ASTM 6.2, 6.5):</b>			
Equipment is free of sharp edges. There are no open holes in the equipment forming traps (e.g. at the ends of the tubes). There are no crush or shear points.	The tot seat shows sharp edges at the seat frame	3	Remove & replace
<b>Protrusions (CPSC 9.2, ASTM 6.2):</b>			
No components fail protrusion test. Nuts, bolts and screws are recessed, covered or sanded smooth and level. No more than two threads extend beyond nut.	Yes		
<b>Entanglements (CPSC 9.4, ASTM 6.4.2):</b>			
No obstacles or protrusions project upwards from a horizontal plane extending more than 1/8" perpendicular to the plane of the initial surface. No more than two threads of the fastener protrude through any nut.  No protrusion increases in diameter from its initial surface (ASTM 6.4.4).	The hardware at the upper middle beam and the swing hangers shows > 2. Further the upper hangers are open which creates additional	1	Retighten the hangers to close as tight or remove & replace. Cut/file smooth to the proper size all of the > 2 hardware, or remove/replace.
<b>Head Entrapments (CPSC 9.6, ASTM 6.1):</b>			
No components fail entrapment test. There are no failures of the partially bounded opening test. See Figs. A1.5-A1.9, ASTM F 1487.	Yes		
<b>Hardware/General Concerns:</b>			
Nuts and bolts are tight and not able to be loosened without tools. Upon close inspection, they show no loose play or excessive wear (CPSC 8.2, ASTM 4.2).	Yes		

Equipment is free of sharp edges, splinters or rough surfaces and shows no excessive wear (CPSC 9.1, ASTM 6.2).	The frame and parts show age, chipping paint,	3	Consistently monitor the progression to prevent failure or injury
Ropes, chains and cables have not frayed or worn out (CPSC 7.2, ASTM 4.2.3.1).	Chain wear is aprox >50%.		
Equipment has not shifted or become bent (CPSC 8.1)	Yes		
No components are missing. All parts of the equipment are present and in good working order with no loose play or excessive wear in moving parts (CPSC 7.2, 8.1, ASTM 4.2).	The upper hangers, lower clevis's, and swing seat frames show	Three	Consistently monitor the progression to prevent failure or injury

<b><u>Rotating and Rocking Equipment</u></b> <b>NONE</b>	<b><u>Condition</u></b>	<b><u>Priority</u></b>	<b><u>Recommendations</u></b>
The seesaws seating surface does not reach more than 5' above the underlying surface or exceed a 25 degree angle. (CPSC 12.3, ASTM 8.10.6).	N/A		
The seesaw fulcrum is fixed, enclosed or designed to prevent crushing/shearing (CSPC 12.3, ASTM 8.10.3). (Fulcrum seesaw is not used for preschool) (No footrest unless spring centering device (ASTM 8.10.5))	N/A		
Seesaw handgrips intended to be gripped by one hand have a minimum length of 3" and 2-hands a minimum of 6", do not turn, do not protrude beyond the sides of the seating surface, and pass the protrusion test (CPSC 12.3, ASTM 8.10.4.1).	N/A		
A rubber segment is buried in the surfacing under the seesaw seats unless seesaw uses a spring centering device (CPSC 12.3, ASTM 8.10.2).	N/A		
Log rolls (not recommended for 2-5 yr. old users) have maximum ht. of 18" above the protective surface for 5-12 yr. old users and provide handgripping devices for support (ASTM 8.12.2-3).	N/A		
Spring rocking equipment seat height is between 14" and 28" (CPSC 12.5, ASTM 8.11.5).	N/A		
There are no equipment parts that could cause a crushing or shearing injury on spring rocking equipment. Exemption is the attachment area of heavy duty coil springs to the body and base of spring rocking equipment (CPSC 12.5, ASTM 6.5.1.3 [2], 8.11.4).	N/A		
3" Handholds stay in place when grasped and pass the protrusion test (CPSC 12.5, ASTM 8.11.2).	N/A		
3-1/2" Footrests stay in place and pass the protrusion test (CPSC 12.5, ASTM 8.11.3).	N/A		
<b>Sharp, Crush and Shear Points (CPSC 9.1, 9.5, ASTM 6.2, 6.5):</b>			
Equipment is free of sharp edges.	N/A		
There are no open holes in the equipment forming traps (e.g. at the ends of the tubes).			
There are no crush or shear points.			
<b>Protrusions (CPSC 9.2, ASTM 6.2):</b>			
No components fail protrusion test.			

Nuts, bolts and screws are recessed, covered or sanded smooth and level.	N/A
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No more than two threads extend beyond nut.

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**Entanglements (CPSC 9.4, ASTM 6.4.2):**

No obstacles or protrusions project upwards from a horizontal plane extending more than 1/8" perpendicular to the plane of the initial surface. No more than two threads of	N/A
---	-----

No protrusion increases in diameter from its initial surface (ASTM 6.4.4).

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**Head Entrapments (CPSC 9.6, ASTM 6.1):**

No components fail entrapment test.

There are no failures of the partially bounded opening test. See Figs. A1.5-A1.9, ASTM F 1487.	N/A
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**Hardware/General Concerns:**

Nuts and bolts are tight and not able to be loosened without tools. Upon close inspection, they show no loose play or excessive wear (CPSC 8.2, ASTM 4.2).	N/A
--	-----

Equipment is free of sharp edges, splinters or rough surfaces and shows no excessive wear (CPSC 9.1, ASTM 6.2).	N/A
---	-----

Equipment has not shifted or become bent (CPSC 8.1)	N/A
---	-----

No components are missing. All parts of the equipment are present and in good working order with no loose play or excessive wear in moving parts (CPSC 7.2, 8.1, ASTM 4.2).	N/A
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**NOTE:** This section is only applicable to sand box areas designed for play. Ground level sand boxes and activity walls require a child to be at ground level. Such ground level activities are excluded from the recommendations for protective surfacing under and around playground equipment. (CPSC 4.4, ASTM 9.3.4, 9.8.1)

<b>Sand Play Area</b> NONE	<u>Condition</u>	<u>Priority</u>	<u>Recommendations</u>
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Sand play is located in a partially shaded area.

The sand play area is inspected and raked at least every week for debris and to provide exposure to air and sun.	N/A
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If the sand play area is in a box, it is covered at night to prevent animal excrement contamination.	N/A
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The sand play area does not have standing water 24 hours after a rainfall event.	N/A
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Elevated sand boxes have appropriate use zone with proper impact absorbing material (CPSC 4.4).	N/A
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<b>Specific Equipment</b>	<u>Condition</u>	<u>Priority</u>	<u>Recommendations</u>
<b>Equipment/Component Name</b> NONE			

**Sharp, Crush and Shear Points (CPSC 9.1, 9.5, ASTM 6.2, 6.5):**

Equipment is free of sharp edges.

There are no open holes in the equipment forming traps (e.g. at the ends of the tubes).	N/A
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There are no crush or shear points.

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**Protrusions (CPSC 9.2, ASTM 6.2):**

No components fail protrusion test.	
Nuts, bolts and screws are recessed, covered or sanded smooth and level.	N/A
No more than two threads extend beyond nut.	
<b>Entanglements (CPSC 9.4, ASTM 6.4.2):</b>	
No obstacles or protrusions project upwards from a horizontal plane extending more than 1/8" perpendicular to the plane of the initial surface. No more than two threads of	N/A
No protrusion increases in diameter from its initial surface (ASTM 6.4.4).	
<b>Head Entrapments (CPSC 9.6, ASTM 6.1):</b>	
No components fail entrapment test.	
There are no failures of the partially bounded opening test. See Figs. A1.5-A1.9, ASTM F 1487.	N/A
<b>Hardware/General Concerns:</b>	
Nuts and bolts are tight and not able to be loosened without tools. Upon close inspection, they show no loose play or excessive wear (CPSC 8.2, ASTM 4.2).	N/A
Equipment is free of sharp edges, splinters or rough surfaces and shows no excessive wear (CPSC 9.1, ASTM 6.2).	N/A
Ropes, chains and cables have not frayed or worn out (CPSC 7.2, ASTM 4.2.3.1).	N/A
Equipment has not shifted or become bent (CPSC 8.1)	N/A
No components are missing. All parts of the equipment are present and in good working order with no loose play or excessive wear in moving parts (CPSC 7.2, 8.1, ASTM 4.2).	N/A

## **SECTION 02875**

### **FENCING**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 SCOPE OF WORK**

- A. Provide fencing as shown and specified. The work includes:
  - 1. Renovation of existing black vinyl clad chain link fencing system.
  - 2. Commercial grade aluminum picket fencing system, including gates.

##### **1.03 QUALITY ASSURANCE**

- A. Comply with Section 02000 requirements.
- B. Provide fences as complete units produced by a single manufacturer, including necessary erection accessories, fittings, and fastenings.
- C. Installation: Performed only by the manufacturer or an experienced fence installer approved by manufacturer.
- D. Materials and installation shall comply with the following standards:
  - 1. American Society for Testing and Materials, (ASTM).
  - 2. Chain Link Manufacturers Institute, (CLMI).
- E. Renovated Fencing shall meet all standards and specifications for new fencing as shown on the drawings and contained in these specifications.

##### **1.04 SUBMITTALS**

- A. Submit manufacturer's product data for each type of fencing, components, and finish required, including all gate hardware.

##### **1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver fence materials in the manufacturer's original packaging with tags and labels intact and legible.
- B. Handle and store material to prevent damage and deterioration.

#### 1.06 PROJECT CONDITIONS

- A. Do not begin fencing installation before completion of final grading.

### PART 2 PRODUCTS

#### 2.01 CHAIN LINK FENCE MATERIALS

- A. Chain link fabric: One piece width, full height up to 12'-0", 2" mesh, 6 gauge (0.192") steel wire. Top and bottom selvages knuckled.
- B. Framework: Provide manufacturer's standard round pipe, except as otherwise indicated.
- C. Hardware and accessories: Provide manufacture's standard cast heavy-duty hardware and accessories, except as otherwise indicated.
- D. Finish: All fabric, posts, frames and components to be: Polyvinyl chloride (PVC), plastic resin finish over galvanized steel wire, not less than 7 nor more than 20 mils thick. Coated before fabric fabrication. Color: Black.
- E. Acceptable Manufacturers/Suppliers:
  - 1. Anchor Fence by Master-Halco, Inc. Boston Area Office: 63 Manley St., W. Bridgewater, MA 02379, (508) 583-7474, (800) 969-1669, <http://masterhalco.com>.
  - 2. Ameristar Color-coated Chain Link Fencing: Boston Area Office: 1150 Providence Highway, Sharon, MA 02067, 888-333-3422, [www.ameristar.com](http://www.ameristar.com).
  - 3. Other manufacturers offering comparable products may be acceptable with approval.

#### 2.02 CHAIN LINK FENCE COMPONENTS

- A. End, corner, and pull posts: 2.375" OD steel pipe, 3.65 lbs. per lineal foot.
- B. Line posts: 1.90" OD steel pipe, 2.72 lbs. per lineal foot.
- C. Top, bottom and brace rails: 1.66" OD steel pipe, 2.27 lbs. per lineal foot.
- D. Provide continuous rails in manufacturer's longest lengths, with couplings for each joint. Provide necessary hardware for attaching rails to each post.

- E. Post braces: Provide bracing assemblies at each end posts and at both sides of corner and pull posts.
  - 1. Locate horizontal brace at mid-height of fabric.
  - 2. Use 1.660" OD steel pipe, for horizontal brace and 0.375" diameter rod with turnbuckle for diagonal truss.

## 2.03 CHAIN LINK FENCE ACCESSORIES

- A. Tubular post tops: Rounded, weather tight closure caps, 1 top for each post. Provide tops with openings to accommodate top rails. Finish matching framework finish.
- B. Sleeves, stretcher bars, stretcher bar bands, clips, ties, rail ends, fasteners, fittings, and accessories: Provide manufacturer's standard complying with CLMI specifications, except as noted below. Finish matching framework finish.
  - 1. Rail clamps shall be standard clamps (boulevard clamps) furnished complete with fasteners with ASTM Designation A153.
  - 2. Fabric Bands for Tying Fabric: A-58 self-locking "Bandit Ties" as manufactured by Page Aluminum Steel Corp., Monessan, PA or an approved equal. Fabric bands shall match vinyl color.
- C. Concrete: ASTM C94 ready-mixed concrete, minimum 28-day compressive strength of 3,000 psi, air-entrained 2% to 4%.

## 2.04 METAL PICKET FENCES

- A: Flat Top Aluminum picket fence, 3-rail, commercial grade with flat post tops, 48" high, as manufactured by Master Halco, Elite Fence, Specrail, Anchor fence, , or approved equal. Color: black. Max spacing of pickets: 4" o.c.
- B. Provide double gate where shown with locking pin anchor for one leaf. Provide heavy-duty gate hardware and latches. Gate latch shall be ADA compatible.

## PART 3 EXECUTION

### 3.01 INSPECTION

- A. Examine final grades and installation conditions. Do not start fence system work until unsatisfactory conditions are corrected.

### 3.02 PREPARATION

- A. Lay out complete fence lines. Locate and mark post positions. Space line posts Aas shown on drawings
- B. Provide corner posts at positions where fence changes direction more than 10 degrees.

Provide end posts at both sides of all openings.

### 3.03 INSTALLATION OF CHAIN LINK FENCES

- A. Install the chain link fence system in accordance with the manufacturer's installation instructions and complying with CLMI specifications.
- B. Provide a rigid, plumb, finished fence structure with fabric tight and in tension; of the height indicated on the drawings.
- C. Drill post holes into firm, undisturbed, or compacted earth.
  - 1. Hole diameter: Minimum 3 times the post diameter.
  - 2. Hole depth: Minimum 3" deeper than the post setting depth. Total depth as noted above.
  - 3. Post depth: Minimum of 36" depth.
  - 4. Gate post depth: In accordance with manufacturer's recommendations for gate size indicated, minimum of 48" depth.
  - 5. Remove excavated post hole soil from the site.
- D. Install end, corner, pull, and line posts in concrete foundations, minimum 48" depth.
- E. Place foundation concrete and tamp for consolidation. Align each post both vertically and laterally. Hold in position during concrete placement and finishing operation. Trowel finish tops of footings, and slope to direct water away from posts.
- F. Top rails: Install continuously through post caps or extension arms.
- G. Brace assemblies: Install brace assemblies where required.
- H. Tension wire: Install tension wires before stretching fabric and tie to each post with snap-ties.
- I. Stretch fabric tight between terminal posts. Install on security side of fence, and anchor securely to framework. Position bottom of fabric maximum of 2" above ground level at each post.
- J. Cut fabric to form continuous piece between terminal posts. Pull the fabric taut and snap-tie to posts, top rail, and bottom tension wire. Install fabric on the outside of the perimeter fence. Anchor to framework so that the fabric remains in tension after the pulling force is released. Bend wire ties to minimize hazard to persons.
- K. Peen bolt threads to prevent removal of nuts.

### 3.04 INSTALLATION - ALUMINUM FENCING

- A. Assemble and install metal fabrications in accordance with final shop drawings.
- B. Perform fitting required for installation. Set the work accurately in location, alignment, and elevation free of rack, measure from established lines and levels. Assembled metal fabrications shall be firm, rigid, free of rattle, and provide maximum protection against tampering and vandalism.
- C. Fit exposed connections accurately together to provide flush, tight hairline joints.
- D. Adjust fence before securing in place to ensure proper matching at butting joints and proper alignment throughout their length. Space posts as indicated. Plumb posts in each direction.
- E. Install locking cane bolt at double gate in concrete footing, 24" deep.
- F. Touch-up and nicked, abraded or otherwise unfinished areas with approved primer. Paint fence with two coats finish paint. Allow paint to dry completely between coats.

### 3.05 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all debris and equipment. Repair all damage resulting from fencing installation.

END OF SECTION

## **SECTION 02950**

### **TREES, PLANTS, AND GROUNDCOVERS**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 DESCRIPTION OF WORK**

- A. Provide labor, materials, and equipment necessary to complete the work of this Section as shown and specified. The work includes:
  - 1. Furnishing and installing all plants as indicated.
  - 2. Providing and installing all accessory materials.
  - 3. Pruning, mulching, and watering.
  - 4. Maintenance and 2-year warranty.

##### **1.03 SUBMITTALS AND WORKMANSHIP**

- A. Within 14 days of the execution of the Contract, submit a complete list of sources for all plant materials.
- B. Notify Landscape Architect prior to delivery of any materials to site, in accordance with the general conditions.
- C. Submit soil tests on topsoil, including physical structure, organic content, nutrients, and recommendations for amendment for use for planting. If off-site topsoil is to be used, submit tests on that material as well.
- D. The Landscape Architect reserves the right to test and reject for cause any materials not meeting material specifications by tests in accordance with methods adopted by the association of Official Agricultural Chemists.
- E. Submit product and materials information for all accessory materials.

##### **1.04 INSPECTION OF PLANTS**

- A. Plants will be inspected and approval given by the Landscape Architect upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during the progress of the work.
- B. The Landscape Architect reserves the right to inspect and/or select all trees at the place of growth. The Landscape Architect reserves the right to approve a representative sample of each type of shrub, perennial and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work. The Contractor or his representative shall be present for inspection and selection of plants.

## PART 2 PRODUCTS

### 2.01 PLANT MATERIALS

- A. Furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery grown under climactic conditions similar to those in the locality of the project, and shall conform also to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the American Standard of Nursery Stock, ANSI Z60.1- latest edition, obtainable from American Association of Nurserymen, 230 Southern Building, Washington DC 20005. All plants shall be legibly tagged with proper botanical name.
- B. Attention is called to the fact that the scientific and common names used for plants required under this contract are generally in conformity with the approved names given in the Standardized Plant Names published by the American Joint Committee on Horticultural Nomenclature. The names of varieties not included therein are generally in conformity with the names accepted in the nursery trade.
- C. All plants shall be freshly dug. No heeled-plants from cold storage shall be used. All plants shall be selected specimen quality, exceptionally heavy, symmetrical, tightly knit, so trained and favored in their development and appearance to be unquestionably and outstandingly superior in form, number of branches, compactness and symmetry, typical of their species or variety and shall have a normal habit of growth. Plants shall be sound, healthy, and vigorous, well branched and densely foliated when in leaf; shall be free of disease, insect pests, eggs of larvae; and shall have healthy, well developed root systems. All parts of the plant shall be moist and shall show active green cambium when cut.
- D. Container-grown stock including perennials and ferns shall have been grown in a container long enough for the root system to have developed sufficiently to hold its soil together, firm and whole. No plants shall be loose in the container.
- E. No substitutions of plants may be made without prior approval of the Landscape Architect, for any reason.
- F. Plants larger than those specified in the Plant List may be used if approved by the Landscape Architect but use of such plants shall not increase the contract Price. If the use of larger plants is approved, the spread of roots or ball of earth shall be increased in

proportion to the size of the plant.

- G. The height of the trees, measured from the crown of the roots to the top branch, shall not be less than the minimum size designated in the Plant List. Except when a clump is designated, the trunk of each tree shall be a single trunk growing from a single unmutilated crown of roots. No part of the trunk shall be conspicuously crooked as compared with normal trees of the same variety. The trunk shall be free from sun-scald, frost cracks, or wounds resulting from abrasions, fire, or other causes. No pruning wounds shall be present having a diameter of more than two inches and such wounds must show vigorous bark on all edges. Evergreen trees shall be branched to within one foot of the ground.
- H. Take caliper measurements 6 inches above ground on trees 4 inches or less, all others at 12 inches above ground.
- I. Shrubs, and small plants shall meet the requirements for spread and/or height stated in the Plant List. The measurements for height are to be taken from the ground level to the average height of the top of the shrub and not to the longest branch. Single stemmed or thin plants will not be accepted. The side branches must be generous, well-twigged, and the plant as a whole well-branched to the ground. The plants must be in a moist vigorous condition, free from dead wood, bruised or other root or branch injuries.
- J. Balled and Burlapped Plants: All plants furnished "B&B", shall be adequately balled with firm natural balls of earth of diameter and depth not less than that recommended by the American Standard for Nursery Stock. Balls shall be firmly wrapped with untreated burlap and natural rope. All plants which are 2 inches in caliper or over shall be drum-laced. All plants which are 6 inches in caliper or over shall be double burlapped. No balled plants shall be planted if the ball is cracked or broken either before or during the process of planting.

## 2.20 PLANTING MIXTURE

- A. Topsoil for Planting Beds and Planting soil: Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, screened 1/2", reasonably free from clay, lumps, coarse sands, stones, plants, roots, sticks, and other foreign materials, with acidity range of between pH 6.0 and 6.8. USDA soil classification: Sandy Loam. Provide topsoil free of substances harmful to the plants which will be grown in the soil.
- B. Topsoil Additives:
  - 1. Commercial Fertilizer: a complete fertilizer and shall be a standard product complying with State and United States Fertilizer Laws. Fertilizer shall be delivered to the site in the original unopened containers which shall bear the manufacturer's name and guaranteed statement of analysis. At least 50% by weight of the nitrogen content of the fertilizer shall be derived from organic materials. Fertilizer for lawn areas shall contain not less than 8% nitrogen, 16% phosphorous and 8% potash by weight of ingredients or as otherwise indicated by topsoil test results.

2. Superphosphate: a finely ground phosphate rock as commonly used for agricultural purposes and shall contain not less than 18% available phosphoric acid.
  3. Ground Limestone: containing not less than 85% of total carbonates and shall be ground to such fineness that 50% will pass through a 100-mesh sieve and 90% will pass through a 20-mesh sieve. Coarser material will be accepted provided the specified rates of application are increased proportionately on the basis of quantities passing the 100-mesh sieve.
  4. Compost: Compost shall be a well-rotted, natural material, min. 65% organic content by weight, all components passing a 1/2" screen, such as Earthlife compost as supplied by Earthlife, Falmouth, ME, (800) 933-6474, or approved equal.
  5. Bone Meal: Shall be commercial raw bone meal, finely ground, having a minimum analysis of 4% nitrogen and 20% phosphoric acid.
- C. Planting mixture for backfill in accordance with the planting details shall consist of 4 parts native soil to 1 part compost. All amendments shall be thoroughly incorporated into the mixture to assure uniform distribution. No soil shall be used until test required have been made. Soil shall not be delivered or worked in a muddy or frozen condition.

#### 2.03 ANTI-DESICCANT

- A. Anti-desiccant shall be "Wilt-Pruff", available from Nursery Specialty Products, Inc., New York, NY, or approved equal, delivered in manufacturer's containers and used according to the manufacturer's instructions.

#### 2.04 MULCH

- A. Mulch shall be one-year old, well-rotted, shredded bark, dark brown in color.

#### 2.05 WATER

- A. Install water tap and bring water into site prior to seeding or sodding. The Contractor shall be responsible for bringing water to any and all areas requiring watering under the scope of this contract. The Contractor shall furnish all hoses and equipment necessary for watering plant materials.

#### 2.06 ACCESSORY MATERIALS

- A. Stakes: Stakes for supporting trees shall be of round cedar, min. 2.5" dia., capable of standing in the ground for at least two years. Stakes shall be pointed at one end. Refer to the details for sizes.
- B. Supports: Webbed polypropylene strapping.

- C. Support for Vines (if vines are specified):
  - 1. Braided stainless steel wire, of a size sufficient to support vines until they grow onto trellis. Attach support to trellis and columns using screw eyes.

### PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Selection and Tagging: Plants may be subject to inspection and approval by the Landscape Architect at their place of growth and upon delivery for conformity to specification requirements. Such approval shall not impair the right of inspection and rejection during progress of the work. The Contractor shall have inspected and "flagged" all material for the Landscape Architect's inspection, if requested.
- B. Planting Contractor shall meet with the Landscape Architect and the Landscape Architect on site to review and schedule work and areas to be planted prior to beginning any construction operations.

#### 3.02 DIGGING, HANDLING, AND PROTECTION OF PLANTS.

- A. All balled and burlapped (B&B) plants shall be dug with firm natural balls of earth, of sufficient diameter and depth to include most of the fibrous roots and conforming to the standards of the American Nurserymen's Association. Wrap balls with untreated burlap and natural rope. No plant moved with a ball will be accepted if the ball is cracked or broken before or during planting operations.
- B. Immediately before digging, the Contractor may spray all evergreen or deciduous plant material in full leaf with anti-desiccant, applying an adequate film over trunks, branches, twigs, and/ or foliage.
- C. Plants shall be dug and prepared for shipment in a manner that will not cause damage to the branches, shape and future development of the plant after replanting. Plant material labels shall be securely attached by wire to all plant material delivered to the planting site, for purpose of inspection and plant identification.
- D. Roots or balls of all plants shall be damp and adequately protected at all times from sun and from drying winds.

#### 3.03 DELIVERY AND STORAGE

- A. All plants shall be covered when transported to the site. They shall not be stacked upon one another, unless racks clearing the maximum height of the plants are used. Great care shall be exercised not to break fronds or leaves during transportation or handling.
- B. Plants shall not remain unplanted for longer than 7 days after delivery. They shall be temporarily stored in a shady location and protected from the wind. They shall not be allowed to dry out at any time.

- C. Deliver materials to the site in original unopened packages, showing weight, manufacturer's name and guaranteed analysis.
- D. Store materials in such a manner that their effectiveness as approved by the Landscape Architect will not be impaired.
- E. The Landscape Architect reserves the right to reject any material which has become caked or otherwise damaged. Materials shall be uniform in composition, dry and free flowing.

#### 3.04 PLANTING SEASON

- A. Planting season: Unless otherwise shown on the plans or directed by the Landscape Architect the planting season shall be those indicated below. No planting shall be done in frozen ground or when snow covers the ground, or the soil is otherwise in an unsatisfactory condition for planting.
  - 1. Deciduous Material: Spring : March 1st to May 15th (inclusive) except for balled and burlapped material, the planting of which will terminate on May 30th. Fall: From October 15th until the ground freezes. Certain plant items, designated elsewhere in the contract documents, shall be planted in the Spring planting season only.
  - 2. Evergreen Material: Spring: March 1st to June 1st (inclusive). Fall: August 15th to October 1st (inclusive).
  - 3. The Contractor may elect to plant outside these planting periods, but shall advise the Landscape Architect before so doing. All plants installed under such conditions shall meet all conditions of the guarantee.

#### 3.05 INSTALLATION

- A. The Contractor shall exercise caution not to damage existing vegetation.
- B. Staking of areas to be planted: The location of each tree and shrub shall be marked by the Contractor with a stake showing the species and size of the plant material. Alternatively, plants may be placed in their approximate locations for approval by the Landscape Architect. The perimeter of beds of ground covers, perennials, and ferns shall be marked with stakes located not more than six feet apart. Color-code stakes to distinguish between deciduous trees, evergreen trees, and shrub materials. No plant pits shall be dug without the approval of the Landscape Architect. Notify Landscape Architect 48 hours in advance of required approval.
- C. Excavate plant pits in accordance with planting details.
  - 1. When excavation occurs in areas of heavily compacted earth, stones, concrete chunks or other foreign matter, pits shall be dug 1/2 times wider and 1/2 times deeper than normally required.

2. Notify Owner of any potential drainage problems encountered during excavation of plant pits.
  3. All excavated material shall be removed as pits are dug and stockpiled in an on-site borrow location as directed by the Landscape Architect.
  4. Tamp soil below ball to prevent settlement, before setting plants in pit. Set plants in pits plumb and straight. Plant at relative grades as shown on details.
  5. When balled and burlapped plants are set, planting mixture shall be lightly tamped around bases of balls to fill all voids. Remove all materials from the plant pit and root balls, including wire baskets.
- D. Bed preparation for Annuals and Herbaceous Perennials: Remove all soil to a depth of 12". Backfill beds with a mixture consisting of equal parts topsoil, sand, and compost. The beds shall be raked smooth before planting.
- E. Backfilling: Planting mixture shall be backfilled in layers of not more than six inches and each layer lightly tamped and free of voids before next layer is put in place.
- F. Wrapping, Guying, and Staking: Wrap trees below 4" only. Inspect trees for injury for trunks, evidence of insect infestation and improper pruning before wrapping. Wrap trunks of all trees spirally from bottom to top with material specified and adequately secure. The wrapping shall overlap and entirely cover the trunk from the ground to the height of the second branch and shall meet neat and snug. Overlap shall be approximately two inches. Stake and support trees as detailed immediately after planting. Guys shall be slightly loose, to allow for natural movement of trees. Stakes shall be plumb. Stakes shall be neat in appearance.
- G. Pruning and Mulching: Pruning shall only be done to remove broken or rubbing branches, sucker growth or air shoots. Pruning shall be done with clean, sharp tools. Mulch as per planting details. Herbaceous perennials and ferns shall be mulched by hand so that none of the crowns or foliage of the plants are covered by the mulch.
- H. Obstructions Below Ground: In the event that rock, underground construction work or obstructions are encountered in any plant pit excavation work under this Contract, alternate locations may be selected by the Landscape architect, at no additional cost to the Owner. Where locations cannot be changed, the obstruction shall be removed, subject to the Landscape Architect's approval, to a depth of not less than three feet below grade and no less than six inches below bottom of roots when plant is properly set at the required grade. Rock removal will be paid as an extra in accordance with the unit price schedule.
- I. Watering: Planting shall be flooded with water twice within the first twenty-four hours at the time of planting, and not less than twice per week until provisional acceptance. Water pit a surrounding area. Contractor shall take special care to monitor the condition of the herbaceous perennial and fern plantings and water as required as to maintain optimum growing conditions.

### 3.06 MAINTENANCE

- A. Maintenance shall begin immediately after each plant is planted, and continue until Provisional Acceptance. Plants shall be watered, mulched, weeded, pruned, sprayed, fertilized, cultivated, and otherwise maintained and protected as necessary. Stakes and trees shall be straightened as required. Replace any broken or defective stakes immediately. Defective work shall be corrected as soon as possible after it becomes apparent and weather and season permit. Settled plants shall be reset to proper grade and position, planting saucer restored and dead material removed.
- B. Upon completion of planting, and prior to provisional acceptance, remove from site excess soil and debris and repair all damage resulting from planting operations.

### 3.07 PROVISIONAL ACCEPTANCE

- A. Provisional acceptance is the completion of all planting installation for a particular area or season, and the Owner and Landscape Architect have agreed that the installation is complete and the guarantee period may begin.
- B. The Landscape Architect will observe all work submitted for provisional acceptance upon the written request of the Contractor to the Landscape Architect received at least five days before the anticipated date of inspection. The Contractor may request inspection for provisional acceptance for a portion of the work before completion of the entire installation.
- C. After the observation, the Landscape Architect will prepare a punch list of items to be corrected or replaced in order for provisional acceptance to be granted. All replacements shall be as specified in section 3.08, below. After necessary corrective work has been completed, the Landscape Architect will again observe all work and the Owner will indicate in writing to the Contractor the provisional acceptance of the planting.
- D. Unless otherwise agreed, the Owner will assume plant maintenance after Provisional Acceptance.

### 3.08 GUARANTEE PERIOD AND REPLACEMENTS

- A. All plants shall be guaranteed by the contractor for not less than two full years from time of provisional acceptance. During this time the Contractor shall inspect all plant materials to determine the adequacy of ongoing maintenance procedures. In addition, Contractor shall straighten stakes and trees as needed. Replace any broken or defective stakes immediately.
- B. By the end of the guarantee period at no additional cost to the Owner, the Contractor shall have replaced any trees and shrubs that are missing, not true to name or size as specified, that have died, that are, in the opinion of the Landscape Architect, unhealthy or unsightly condition, or that have lost natural shape due to dead branches, excessive pruning or poor health. In case of any question regarding the condition and satisfactory establishment of a rejected plant, the Landscape Architect may allow such a plant to

remain through another complete planting season after which time the rejected, if found to be dead, in an unhealthy or badly impaired condition, shall be replaced at once.

- C. All replacement planting shall be done during the next planting season that is correct for the species of plant indicated by the Landscape Architect as unacceptable. All replacements shall be plants of the same kind and size as specified in the Plant List. They shall be furnished and planted as specified herein. The cost of replacement shall be borne by the Contractor except where it can be definitely shown that loss resulted from vandalism or theft. All areas, including seeded areas, damaged or disturbed by replacement operations shall be fully restored to their original conditions.
- D. All replacements shall be guaranteed from one year from the date of their planting.
- E. All stakes, supports, and tree trunk wrapping shall be removed and disposed of by the Contractor off site at his expense at the end of the Guarantee Period or prior to that at the discretion of the Landscape Architect.

### 3.09 FINAL INSPECTION AND FINAL ACCEPTANCE

- A. At the end of the Guarantee Period, the Landscape Architect will observe all work for final acceptance upon the written request of the Contractor to the Landscape Architect received at least five days before the anticipated date of inspection.
- B. After the observation, the Owner and the Landscape Architect will prepare a punch list of items to be corrected or replaced in order for final acceptance to be granted. All replacements shall be as specified in section 3.08, above. After necessary corrective work has been completed, the Landscape Architect will again observe all work and the Owner will indicate in writing to the contractor the final acceptance of the planting.
- C. All replacements planted as conditions of final acceptance shall be guaranteed for one year from the date of provisional acceptance of those replacements, in accordance with Section 3.08, above.
- D. Contractor shall furnish full and complete written instructions (six copies) for maintenance of the planting to the Owner at the time final acceptance.

### 3.10 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, soils, debris, and equipment. Repair damage resulting from planting operations.

END OF SECTION

## **SECTION 04200**

### **CONCRETE UNIT MASONRY RETAINING WALLS**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 DESCRIPTION**

- A. Provide unit masonry work as shown and specified. The work includes:
  - 1. Dry-laid concrete unit masonry retaining walls.
  - 2. Unit masonry accessories.
  - 3. Gravel base.

##### **1.03 QUALITY ASSURANCE**

- A. Materials and methods of construction shall comply with the following standards:
  - 1. National Concrete Masonry Association, (NCMA): TEK Bulletins.
  - 2. The American Society for Testing and Materials, (ASTM).
- B. Comply with the applicable requirements of local governing authorities and American National Standards Institute (ANSI) A41.1, Building Code Requirements for Masonry, for the types of unit masonry construction indicated.
- C. Installation: Performed only by skilled masons with satisfactory record of performance on completed projects of comparable size and quality.
- D. Provide each type of masonry unit from one manufacturing source to ensure consistent texture and color.

##### **1.04 SUBMITTALS**

- A. Submit manufacturer's product data for each type of masonry unit, colored mortar, and accessory required.
- B. Submit fully engineered shop drawings of the proposed retaining wall system specific to this project. Drawing shall be prepared and stamped by a registered professional engineer.
- B. Submit (deliver to the site) a minimum of 5 full size samples of each type of masonry unit required. Provide the maximum color and texture variation range proposed for the work. Samples may remain on site and be incorporated into the work.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Unit masonry materials:
  - 1. Deliver, store, and handle masonry materials to prevent damage and soiling.
  - 2. Stack masonry units off the ground on wood pallets or platforms. Exercise particular care in the storage, handling, and installation of masonry units. Exposed masonry is utilized as a "finish material." Do not build soiled or damaged masonry units into the work.
- B. Masonry accessories: Deliver, store, and handle masonry accessories to prevent weather damage and deterioration.

#### 1.06 PROJECT CONDITIONS

- A. Protect partially-complete masonry work against weather damage and moisture, when work is not in progress. Cover tops of walls with strong, waterproof, non-staining membrane. Extend membrane at least 2'-0" down both sides of walls and hold securely in place.
- B. Protect adjacent work from damage, soiling, and staining during masonry work operations.

### PART 2 PRODUCTS

#### 2.01 PRECAST CONCRETE WALL UNITS AND STEPS

- A. Precast Concrete Wall Units and Steps shall be Unilock Concord Wall Retaining Wall System, local representative Dan Neviackas, 35 Commerce Dr., Uxbridge, MA 01569, 508 278 4536 ext.4067 or approved equal.

#### 2.02 ACCESSORY MATERIALS

- A. Aggregate Base: Aggregate base for walls shall be 1-1/2" clean crushed stone, M2.01.2 of the Standard Specifications.

- B. Drainage fill: 3/4" clean uniformly graded stone or gravel, M2.01.4 of the Standard Specifications.
- C. Filter Fabric shall be Mirafi HP 270 manufactured by TC Mirafi, Pendergrass, GA, (888) 795-0808, or approved equal.

### PART 3 EXECUTION

#### 3.01 INSPECTION

- A. Examine substrates and installation conditions. Do not start unit masonry work until unsatisfactory conditions are corrected.

#### 3.02 PREPARATION

- A. Establish lines, levels, and coursing. Layout walls and steps and obtain Landscape Architect's approval before beginning installation.

#### 3.03 INSTALLATION

- A. Layout walls in advance for accurate spacing of surface bond patterns, with uniform joint widths.
- B. Install precast concrete unit retaining wall system in accordance with manufacturer's recommendations and applicable codes and standards.
- C. Cut masonry units with masonry saws to provide clean, sharp, un-chipped edges. Cut units as required to provide pattern shown and to fit adjoining work. Where cutting is required, use the largest size units possible.
- D. Lay masonry plumb and true. Provide corners and angles square, with courses level, accurately spaced, and coordinated with other work.

#### 3.04 CLEANING

- A. Remove and replace masonry units which are loose, broken, stained, or otherwise damaged. Provide new matching units, install as specified and to eliminate evidence of replacement.
- B. Upon completion of the work, remove from site all excess materials, debris, tools, and equipment. Repair damage resulting from unit masonry work operations.

END OF SECTION

## **SECTION 04400**

### **STONE MASONRY**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. The General Documents, as listed in the Table of Contents, and applicable parts of Division 1, General Requirements shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.

##### **1.02 DESCRIPTION**

- A. Provide stone masonry as shown and specified. The work includes:
  - 1. Resetting existing granite curbing.
  - 2. Resetting existing granite steps
  - 3. New granite bollards (Alternate #2).
  - 4. Poured-in-place concrete footing.
  - 5. Gravel base for resetting steps.

##### **1.02 QUALITY ASSURANCE**

- A. Materials and methods of construction shall comply with the following standards and association recommendations:
  - 1. American Society for Testing and Materials, (ASTM).
- B. Comply with the applicable requirements of local governing authorities and American National Standards Institute (ANSI) A41.1, Building Code Requirements for Masonry, for the types of stone masonry construction indicated.
- C. Installation: Performed only by experienced stone masons with satisfactory record of performance on complete projects of comparable size and quality.
- D. Sample panel: Before starting stone masonry work provide a sample panel using materials, bond, and joint tooling indicated for the project work. Build panel at the site of full thickness and approximately 10 l.f. Provide the range of color, texture, and workmanship proposed for the work. Correct and rebuild sample panel until Landscape Architect's acceptance of the work. Retain panel during construction as a standard for completed stone masonry work.
  - 1. The approved sample panel may be a portion of the work and remain in place.

Location as directed by the Landscape Architect.

- E. Provide each type of stone from only one quarry or source ensure consistent color range and texture.
- F Do not change source or brands or mortar materials during the course of the work.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Stone masonry materials: Deliver, store, and handle rough stone materials to prevent soiling and damage. Stack rough stone materials off the ground.
- B. Masonry accessories: Deliver, store, and handle masonry accessories to prevent weather damage and deterioration.
- C. Mortar and grout materials:
  - 1. Deliver cement, lime, and admixture materials in manufacturer's unopened and undamaged containers with labels intact and legible. Store materials off the ground, under cover, and protect from weather damage and deterioration.
  - 2. Stockpile and handle aggregates to prevent mixing with foreign materials.

1.05 PROJECT CONDITIONS

- A. Do not use metal accessories with loose coatings, including ice, which will reduce bond.
- B. Protect partially - completed stone masonry work against weather damage and moisture, when work is not in progress. Cover tops of walls with strong, waterproof, non-staining membrane. Extend membrane at least 2'-0" down both sides of walls and hold securely in place.
- C. Brace unsupported and newly-laid masonry. Maintain bracing in place until walls reach design strength.
- D. Cold weather construction:
  - 1. Precondition masonry materials to maintain 50 degrees F. when installed.
  - 2. Do not install stone masonry work when the temperature of the outside air is below 40 degrees F. and falling unless suitable means acceptable to the Landscape Architect are provided to protect work from cold and frost and ensure that mortar will set without freezing. Comply with International Masonry Industry All-Weather Council cold weather construction and protection recommendations.
  - 3. No masonry work will be permitted when outside air temperature is below 25 degree F.
  - 4. Do not use frozen materials or materials mixed or coated with ice or frost.

5. Do not build on frozen work. Remove and replace masonry work damaged by frost or freezing.
  6. Do not use anti-freeze or calcium chloride in any mortar.
  7. Protect completed masonry work against freezing for not less than 4 days after laying.
- E. Protect adjacent work from damage, soiling, and staining during masonry work operations.

#### 1.06 SUBMITTALS

- A. Submit materials data for all stone masonry materials and accessories.
- B. Submit material sample of proposed granite bollard material showing matching characteristics.

### PART 2 PRODUCTS

#### 2.01 ROUGH STONE MATERIALS

- A. Stone Bollards: 8" x 8" x 6'-0" granite bollard, with rock face four sides, split top. Ease corners with torch or by hand to remove excessively sharp edges. Stone to be native New England Granite reasonably matching existing stone bollards.
- B. Natural variations in color and markings which are characteristics of the stone materials and do not impair strength or appearance are acceptable. Provide only sound stone, free from defects detrimental to appearance and durability.

#### 2.02 RE-USE STONE MATERIALS

- A. Re-use and re-set the existing granite curbing and steps as shown on the drawings.

#### 2.02 ACCESSORY MATERIALS

- A. Aggregate Base: Aggregate base for masonry shall be  $\frac{3}{4}$ " clean crushed stone, M2.01.4 of the Standard Specifications.
- B. Concrete: ASTM C94 ready-mixed concrete, minimum 28-day compressive strength of 3,500 psi, air-entrained 2% to 4%.
- C. Grout: Non-shrink, ferrous type, Super Por-Rok ([www.cgmbuildingproducts.com](http://www.cgmbuildingproducts.com)) or approved equal.

### PART 3 EXECUTION

#### 3.01 INSPECTION

- A. Examining substrates and installation conditions. Do not start stone masonry work until unsatisfactory conditions are corrected.

3.02 PREPARATION

- A. Establish lines, levels, and coursing.
- B. Install aggregate base as detailed and in accordance with Section 02200 Earthwork.

3.03 INSTALLATION: RE-USE GRANITE CURBING

- A. Clean re-used granite curbing before setting. Provide edges and surfaces free of dirt and foreign matter. Wet stone with clean water prior to setting.
- B. Do not use stone units with chips, cracks, voids, stains, or other visible defects.
- C. Set re-use granite curbing on compacted gravel base as shown on the plans and in accordance with drawing details. Provide concrete anchoring at joints and ends as details.
- D. Erect curbing plumb, accurately set in position.
- E. Mortar joints after installation. Finish mortar flush with surface of curbing.

3.04 INSTALLATION: RE-USE GRANITE STEPS

- A. Set re-use granite steps on compacted gravel base as shown on the plans and in accordance with drawing details.
- B. Install plumb and true with hand-tight joints and accurately aligned. Set steps with a 1/8" in 12" wash.

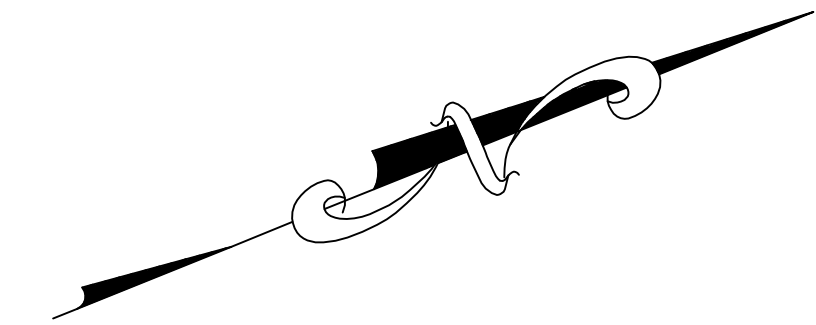
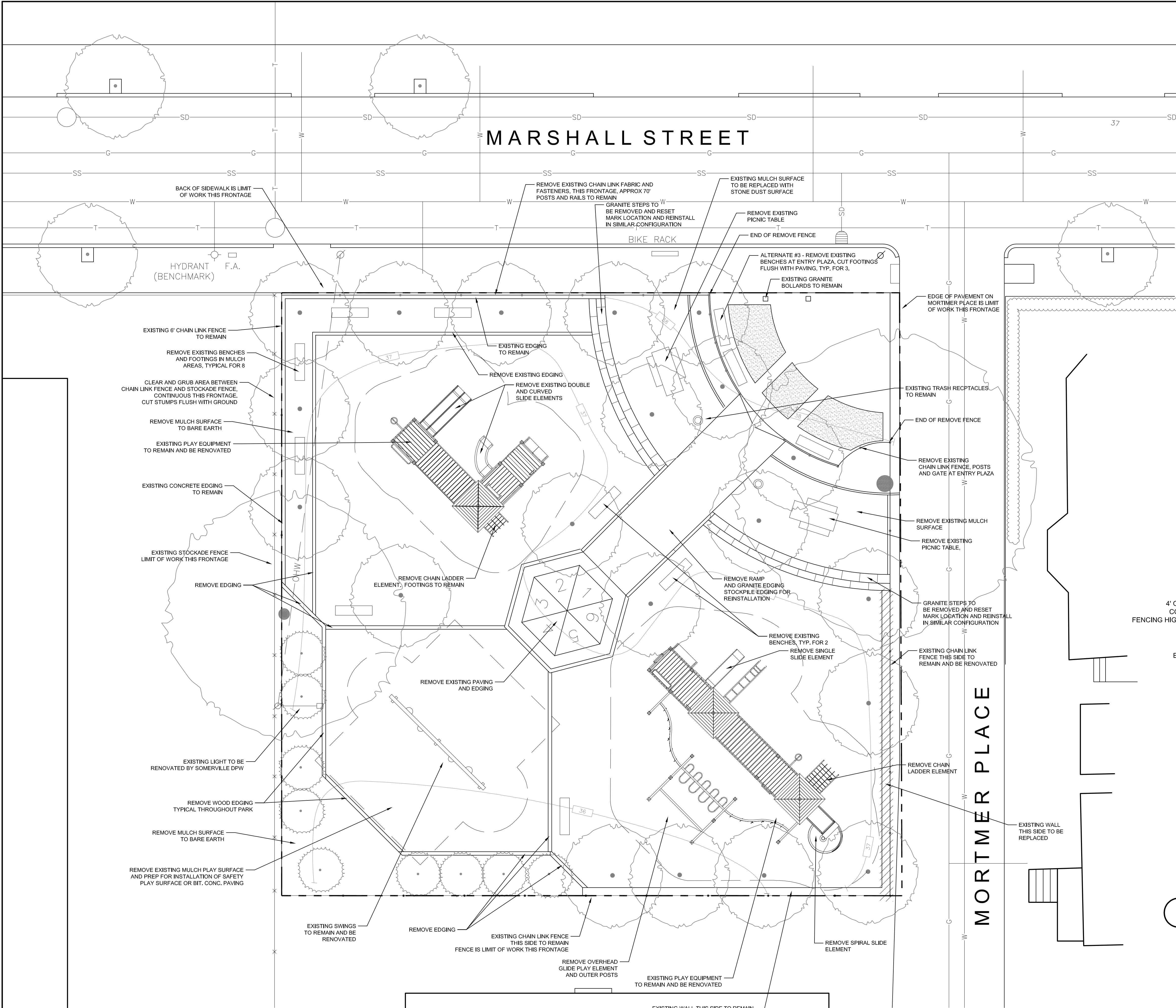
3.05 INSTALLATION: GRANITE BOLLARDS

- A. Set bollards in accordance with drawing details, plumb and true. Install concrete paving around concrete as detailed. Surface of concrete shall reasonably match existing plaza paving.

3.06 CLEANING

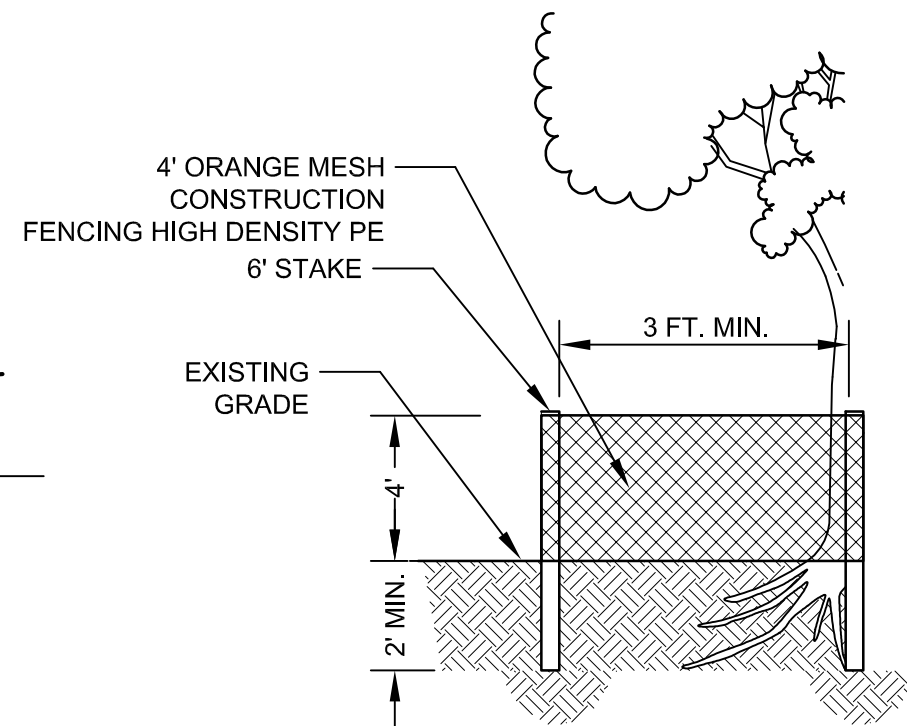
- A. Remove and replace stone units which are loose, broken, stained, or otherwise damaged. Provide new matching units, and install as specified.
- B. Clean stonework not less than 6 days after completion of work, using clean water and stiff-bristle brushes. Do not use wire brushes, acid type cleaning agents or other cleaning compounds with caustic or harsh fillers.
- C. Upon completion of the work, remove from site all excess materials, debris, tools, and equipment. Repair damage resulting from stone masonry work operations.

END OF SECTION



EXISTING CONDITIONS AND SITE PREPARATION NOTES

- EXISTING CONDITIONS ARE BASED ON PARK CONSTRUCTION DOCUMENTS FROM 1995 AND INFORMAL FIELD MEASUREMENTS. LOCATION OF ELEMENTS SHOWN AND GRADES ARE APPROXIMATE AND DO NOT REPRESENT A MEASURED SITE SURVEY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AS THEY MAY AFFECT THE WORK.
- PLAY EQUIPMENT CONFIGURATION IS TAKEN FROM EXISTING FIELD CONDITIONS AS MEASURED BY PLAY-ART-DESIGN OF SPEONK, NY. SEE PLAY EQUIPMENT DRAWINGS.
- REVIEW EXTENT OF DEMOLITION AND REMOVAL WITH LANDSCAPE ARCHITECT BEFORE COMMENCING SITE OPERATIONS.
- REPORT DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE DRAWINGS IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR RESOLUTION. DO NOT PROCEED WITH SITE PREPARATION IN AREAS OF DISCREPANCY UNTIL WRITTEN RESOLUTION IS OBTAINED.
- DO NOT SCALE DRAWINGS. IF DIMENSION OR EXTENT OF WORK IS UNCLEAR, OBTAIN CLARIFICATION FROM LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.
- INSTALL CONSTRUCTION FENCE, EROSION CONTROL AND TREE PROTECTION AS SPECIFIED BEFORE COMMENCING SITE OPERATIONS.
- CONSULT EXISTING DRAWINGS AND RECORDS FOR LOCATION AND EXTENT OF SITE UTILITIES. EXERCISE CARE TO PROTECT EXISTING UTILITIES TO REMAIN.
- TREE PROTECTION FENCE TO CONSIST OF 48" ORANGE PLASTIC CONSTRUCTION FENCE ATTACHED TO 2x2 OR METAL POSTS, 6'-0" O.C. MAX. MAINTAIN FENCE UNTIL COMPLETION OF PROJECT OR WHEN INSTRUCTED BY LANDSCAPE ARCHITECT.
- CONTACT DIG-SAFE TO MARK OUT EXISTING UTILITIES BEFORE COMMENCING CONSTRUCTION.
- ELEMENTS NOT INDICATED TO BE REMOVED, RELOCATED, OR RENOVATED ARE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. REPAIR OR REPLACE ANY ELEMENTS DAMAGED BY CONSTRUCTION TO PREVIOUSLY EXISTING CONDITION AT NO ADDITIONAL COST TO OWNER.



NOTE:

- PLACE BARRICADE AROUND ALL EXISTING TREES TO REMAIN PRIOR TO DEMOLITION, CLEARING, OR SITE WORK.
- NO VEHICULAR TRAFFIC, STAGING OF CONSTRUCTION MATERIALS OR ROOT COMPACTION WITHIN TREE BARRICADES.
- NO ROOT CUTTING, FILLING, TRENCHING, OR CORING ALLOWED WITHIN TREE BARRICADES WITHOUT APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO ACTIVITIES.

1 TREE PROTECTION BARRIER  
NOT TO SCALE

FOR BIDS ONLY

Leonard  
Design  
Associates  
*Site Planning/  
Landscape Architecture*

95 Ronald Road  
Arlington, MA 02474  
(781) 641-0750

OWNER/DEVELOPER:

CITY OF SOMERVILLE, MA  
Mayor's Office of Strategic Planning  
and Community Development  
93 Highland Ave  
Somerville, MA 02143  
617-625-6600 x2535

0	10/14/2014	Issued for Bid
No.	Date	Description

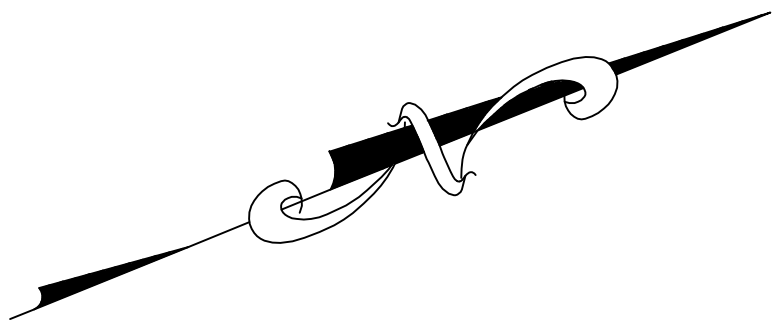
MARSHALL STREET  
PARK

Somerville,  
Massachusetts

EXISTING CONDITIONS/  
SITE PREPARATION  
PLAN

JOB NUMBER: 1413	DRAWN: ADL	DATE: October 14, 2014
FILE: Parks and Schools/ somerville/marshall st	CHECKED: ADL	SCALE: 1/8" = 1'-0"

L.1



Leonard  
Design  
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*Site Planning/  
Landscape Architecture*

95 Ronald Road  
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(781) 641-0750

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Mayor's Office of Strategic Planning  
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LAYOUT AND GRADING NOTES

1. LAYOUT ALL SITE ELEMENTS IN THE FIELD. OBTAIN LANDSCAPE ARCHITECT'S APPROVAL BEFORE PROCEEDING WITH CONSTRUCTION.
2. DO NOT SCALE DRAWINGS. IF EXTENT OF WORK IS UNCLEAR, OBTAIN CLARIFICATION FROM LANDSCAPE ARCHITECT BEFORE PROCEEDING.
3. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
4. REPORT ANY UNSATISFACTORY CONDITIONS IMMEDIATELY TO THE OWNER OR LANDSCAPE ARCHITECT FOR RESOLUTION. CONTRACTOR SHALL RECEIVE NO ADDITIONAL PAYMENT FOR UNSATISFACTORY CONDITIONS REPORTED AFTER THE FACT OR AFTER COMPLETION OF CONSTRUCTION.
5. ALL AREAS INDICATED TO REMAIN THAT ARE DISTURBED BY CONSTRUCTION TO BE REPAIRED OR RESTORED TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO OWNER.
6. INTENT OF GRADING IS TO RECREATE THE GENERAL PITCH AS SHOWN ON THE EXISTING CONDITIONS DRAWING (FROM THE 1995 ORIGINAL CONSTRUCTION.)
7. PROVIDE POSITIVE DRAINAGE ON ALL SURFACES. VERIFY WITH LANDSCAPE ARCHITECT ANY SURFACE WITH A SLOPE OF LESS THAN 1%.
8. PROVIDE ROUNDOFFS AT ALL CHANGES IN SLOPE. CREATE NO ABRUPT ANGLES OR CHANGES IN ANY SURFACE UNLESS SPECIFICALLY DETAILED OR SPECIFIED.
9. PROVIDE ADA COMPATIBLE FLUSH TRANSITIONS BETWEEN ADJACENT SURFACES UNLESS OTHERWISE DETAILED OR SPECIFIED.
10. EXISTING SPOT GRADES AND TOPOGRAPHY, WHERE PROVIDED, ARE BASED ON THE ORIGINAL CONTRACT DOCUMENTS CIRCA 1995. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING GRADES AS THEY MAY AFFECT THE WORK AND ESTABLISHING POSITIVE DRAINAGE ON ALL NEW PLAY AND WALKING SURFACES.

PLAY EQUIPMENT NOTES

1. CONTRACTOR/INSTALLER IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AS THEY MAY AFFECT THE WORK. RESOLVE ALL DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION.
2. SAFETY ZONES FOR PLAY EQUIPMENT ARE PROVIDED AS A GUIDE ONLY. CONTRACTOR IS RESPONSIBLE FOR LAYING OUT SAFETY ZONE IN CONFORMANCE WITH CSPC AND ASTM REQUIREMENTS BEFORE LAYING OUT SAFETY PLAY SURFACE. RESOLVE ALL DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION.
3. SET GRADES OF SAFETY PLAY SURFACE SO THAT PROPER DIMENSIONS ARE PROVIDED BETWEEN SURFACE AND PLAY EQUIPMENT
4. LAYOUT OF PLAYGROUND EQUIPMENT IS SHOWN FOR ILLUSTRATIVE AND COORDINATIVE PURPOSES ONLY. THE SUPPLIER OF THE PLAYGROUND EQUIPMENT AND RENOVATION IS RESPONSIBLE FOR ALL SPECIFIC LAYOUT AND CONSTRUCTION DETAILS AS THEY PERTAIN TO THE PLAYGROUND EQUIPMENT.
5. THE SUPPLIER OF THE PLAYGROUND EQUIPMENT IS RESPONSIBLE FOR MEETING ALL REQUIREMENTS OF THE ADA WITH REGARD TO ACCESSIBILITY OF THE PLAY EQUIPMENT AND THE INDIVIDUAL PLAY UNITS.
6. ALL FOOTINGS, INSTALLATION AND ASSEMBLY TO BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND CSPC STANDARDS.

DRAINAGE NOTES

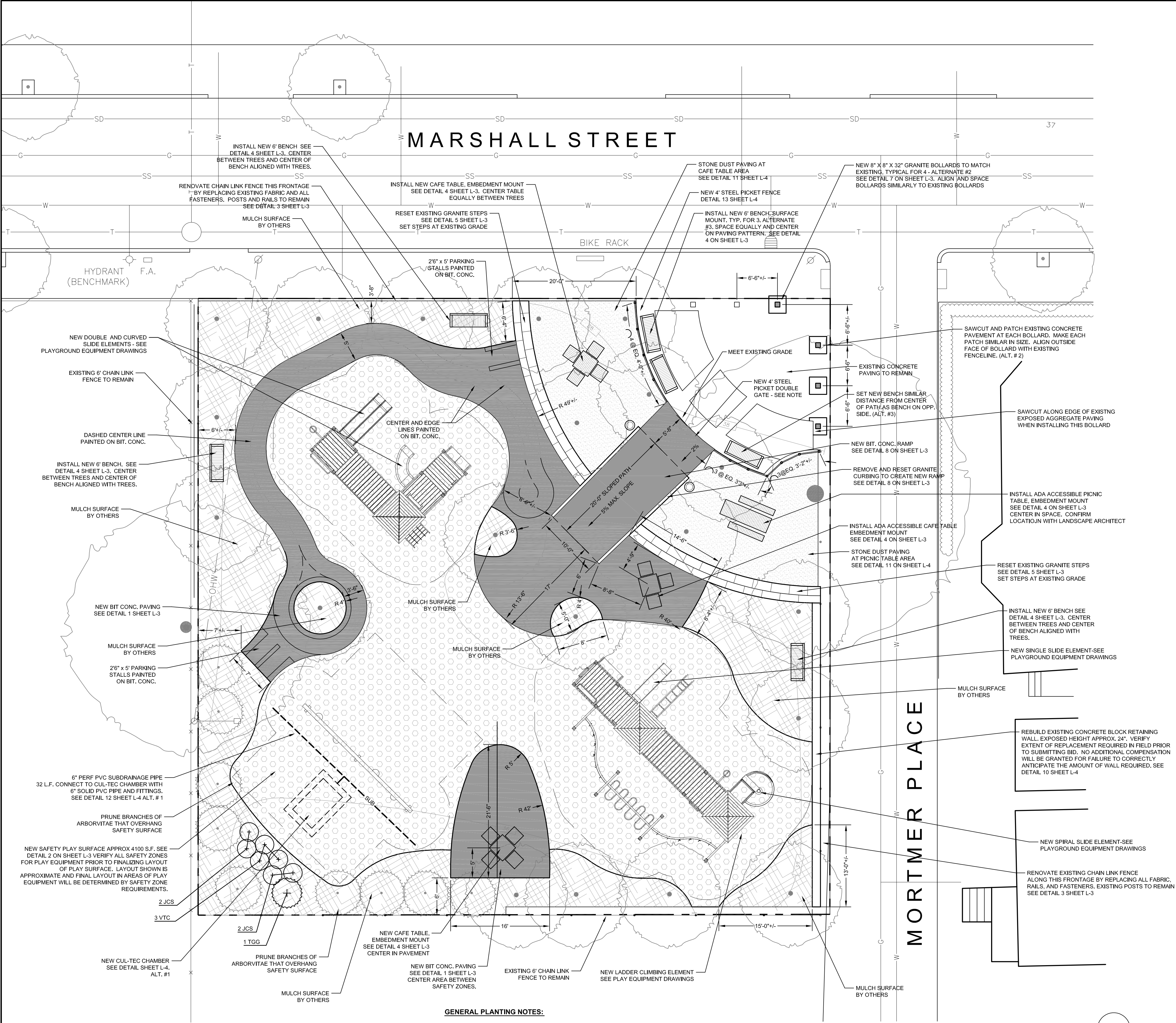
- A.L.D./K.A.S.L.
1. CONTRACTOR IS RESPONSIBLE FOR THE VERTICAL AND HORIZONTAL CONTROLS OF THE PROJECT.
  2. INSTALLATION OF THE SUBSURFACE CHAMBER IS TO BE PERFORMED ACCORDING TO THE RECOMMENDATIONS OF THE MANUFACTURER.
  3. THE MINIMUM CLEARANCE FROM THE BOTTOM OF THE SUBSURFACE DRAINAGE SYSTEM TO REFUSAL OR GROUNDWATER IS 24". IN THE EVENT THAT THIS CLEARANCE CANNOT BE MAINTAINED, NOTIFY THE LANDSCAPE ARCHITECT.
  4. ALL DRAINAGE PIPING IS SDR35 PVC, SOLID OR PERFORATED AS NOTED.

LEGEND

- NEW PLAYGROUND SAFETY SURFACE
- NEW BITUMINOUS CONCRETE PAVEMENT
- NEW STONE DUST PAVEMENT
- NEW MULCHED AREA
- NEW BENCH
- NEW CAFE TABLE
- NEW ACCESSIBLE CAFE TABLE
- NEW ACCESSIBLE PICNIC TABLE
- NEW SHRUB

FOR BIDS ONLY

L.2



GENERAL PLANTING NOTES:

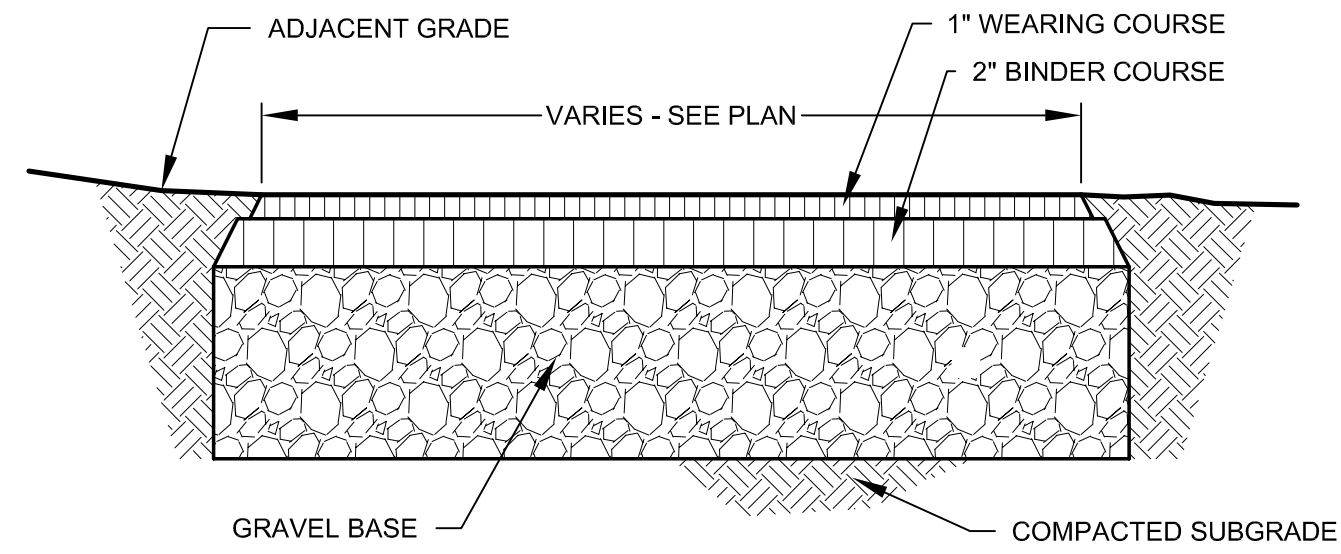
1. LAYOUT SHRUB MATERIAL IN APPROXIMATE LOCATIONS AND OBTAIN APPROVAL OF LANDSCAPE ARCHITECT BEFORE PLANTING. LANDSCAPE ARCHITECT MAY ADJUST LOCATIONS BASED ON EXISTING CONDITIONS AND FOR BEST EFFECT.
2. REPORT ANY UNSATISFACTORY CONDITIONS FOR PLANTING IMMEDIATELY TO THE OWNER FOR RESOLUTION. CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR UNSATISFACTORY CONDITIONS REPORTED AFTER THE FACT OR AFTER COMPLETION OF PLANTING.
3. ALL AREAS DISTURBED BY CONSTRUCTION AND PLANTING OPERATIONS TO BE REPAIRED OR RESTORED TO PREVIOUSLY EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
4. LOOSEN AND/OR DE-COMPACT SUBGRADE TO A DEPTH OF 6" PRIOR PLANTING.
5. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, LANDSCAPE ARCHITECT SHALL DECIDE WHICH QUANTITY SHALL GOVERN, AT NO ADDITIONAL COST TO THE OWNER.
6. NO MATERIALS MAY BE SUBSTITUTED WITHOUT APPROVAL OF LANDSCAPE ARCHITECT PRIOR TO DELIVERY.
7. PROVIDE MULCH FOR NEW SHRUB PLANTING BED ONLY AS DETAILED. MULCH FOR OTHER NON-PAVED AREAS WILL BE INSTALLED BY OTHERS.
8. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

NOTES ON GATE

1. DOUBLE GATE: 4' HIGH X 10'0\"/>

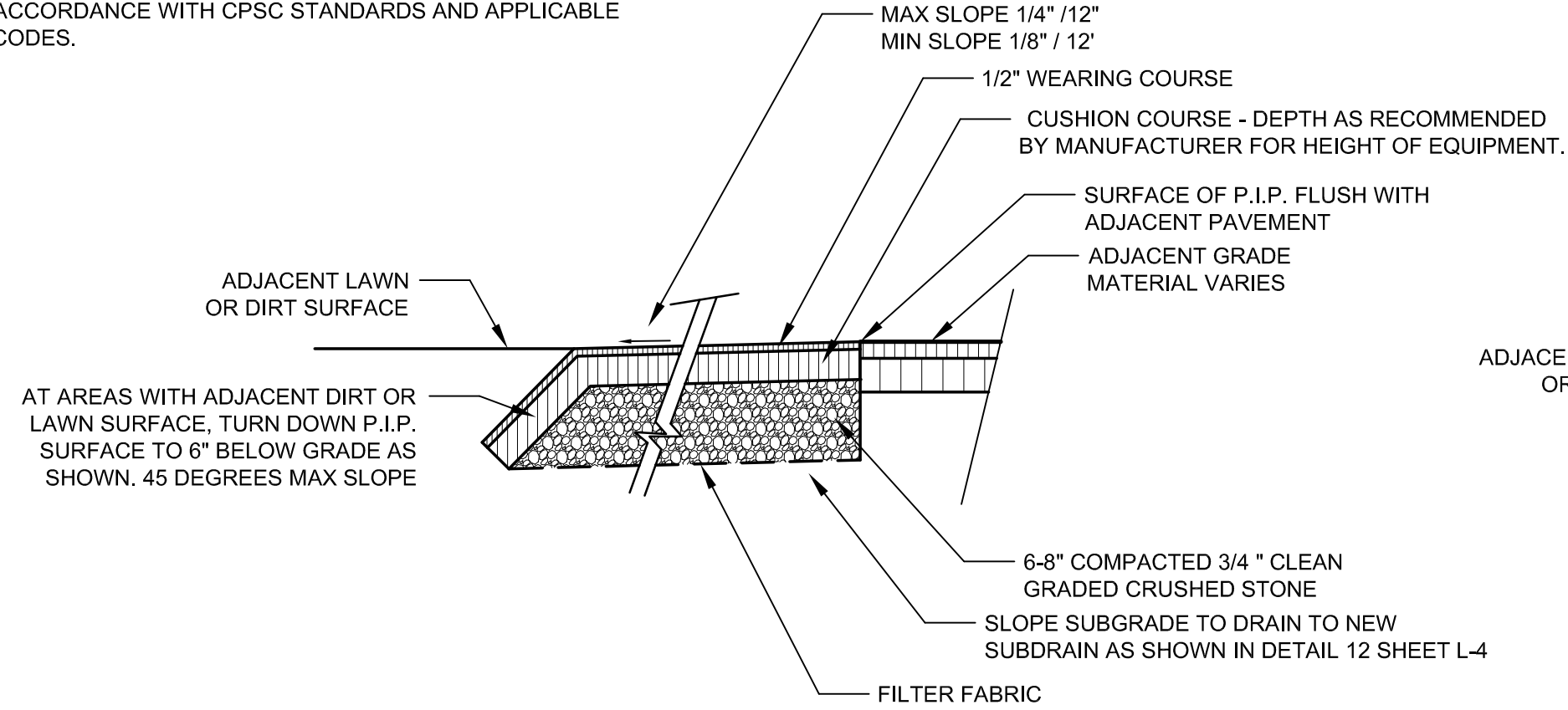
PLANT LIST

ITEM	QNTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS
JCS	4	JUNIPERUS CHINENSIS 'SEAGREEN'	SEAGREEN JUNIPER	24-30" SPR.	
TGG	1	THUJA PLICATA 'GREEN GIANT'	GREEN GIANT WESTERN REDCEDAR	5-6' HGT.	
VTC	3	VIBURNUM TRILOBUM COMPACTUM	COMPACT AMERICAN CRANBERRYBUSH	24-30" SPR.	

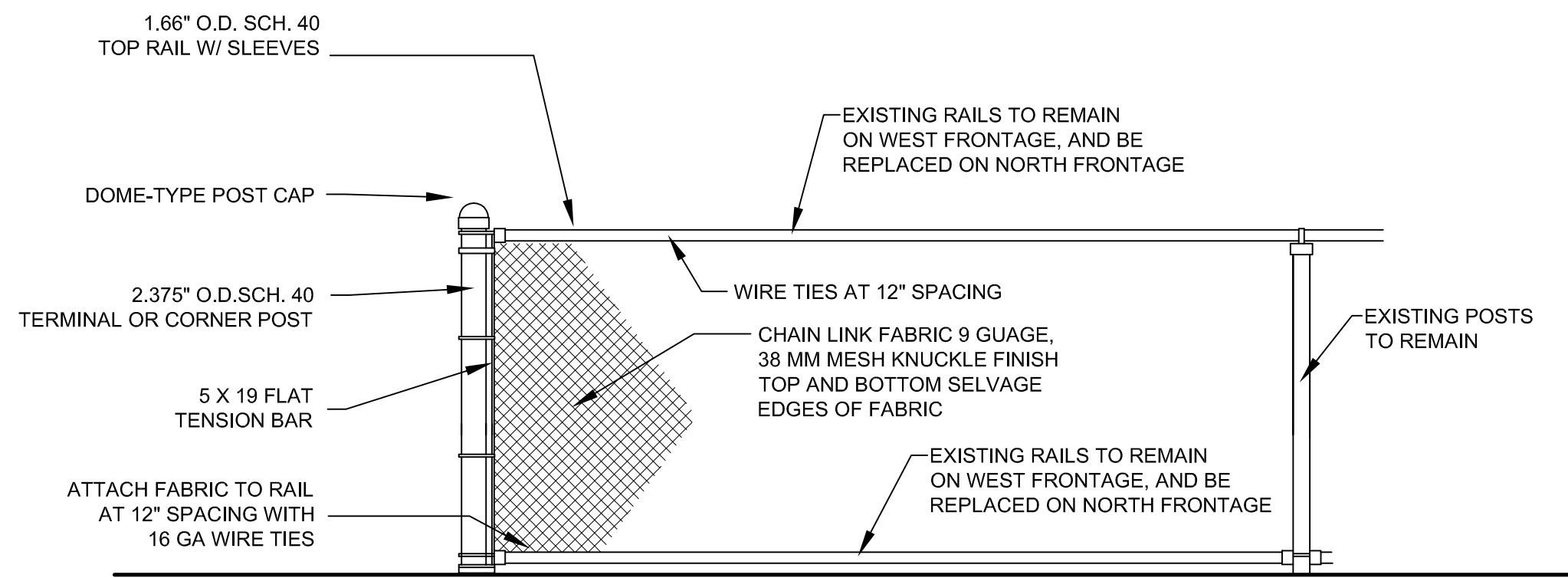


1 BITUMINOUS CONCRETE PAVING DETAIL  
NOT TO SCALE

NOTE: REMOVE EXISTING WOOD CARPET PLAY SURFACE AND EDGING AS NOTED ON DRAWINGS. INSTALL NEW SAFETY SURFACE TO PROPER GRADES IN RELATION TO PLAY EQUIPMENT IN ACCORDANCE WITH CPSC STANDARDS AND APPLICABLE CODES.

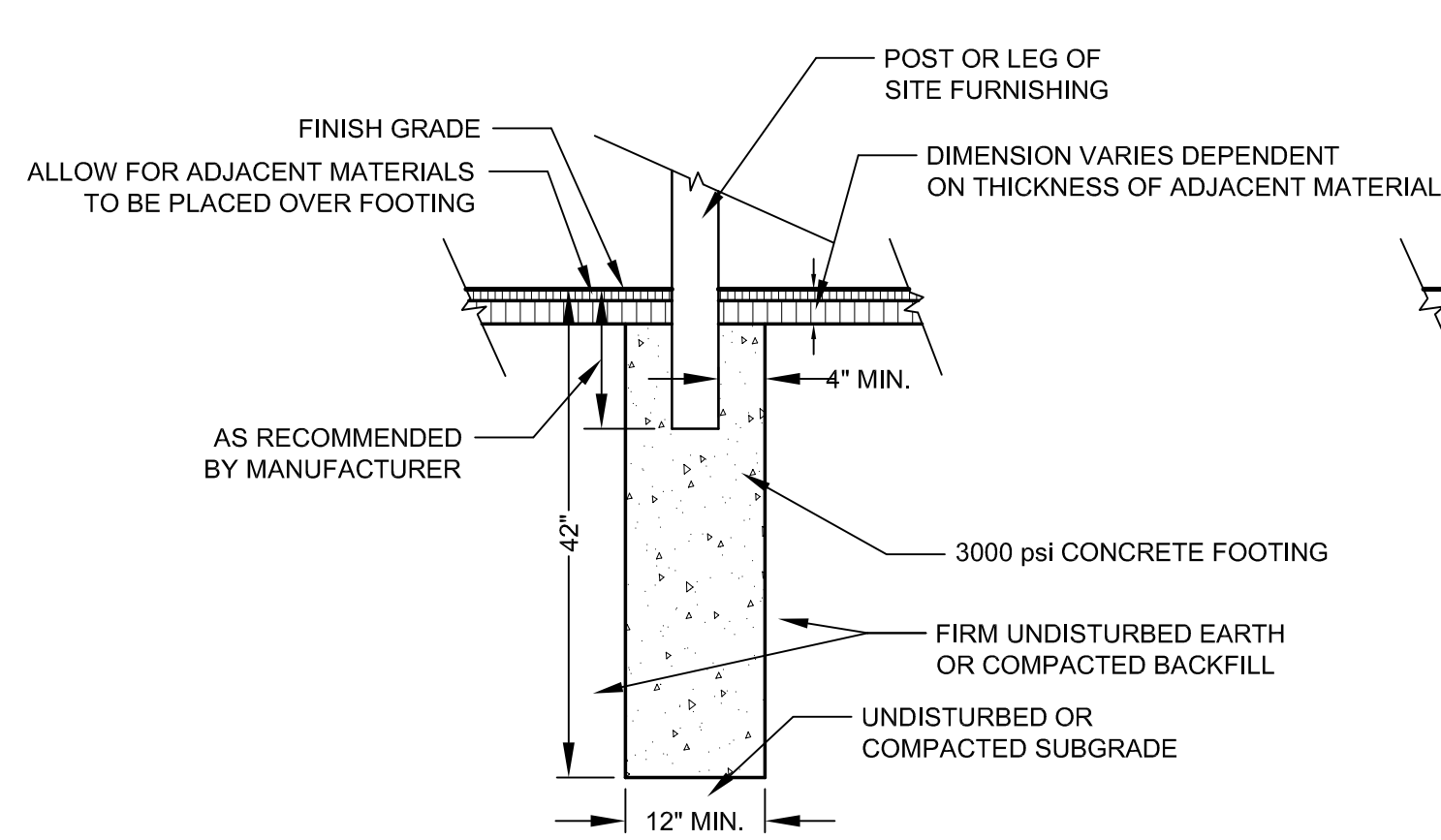


2 P.I.P. PLAY AREA SAFETY SURFACING  
NOT TO SCALE

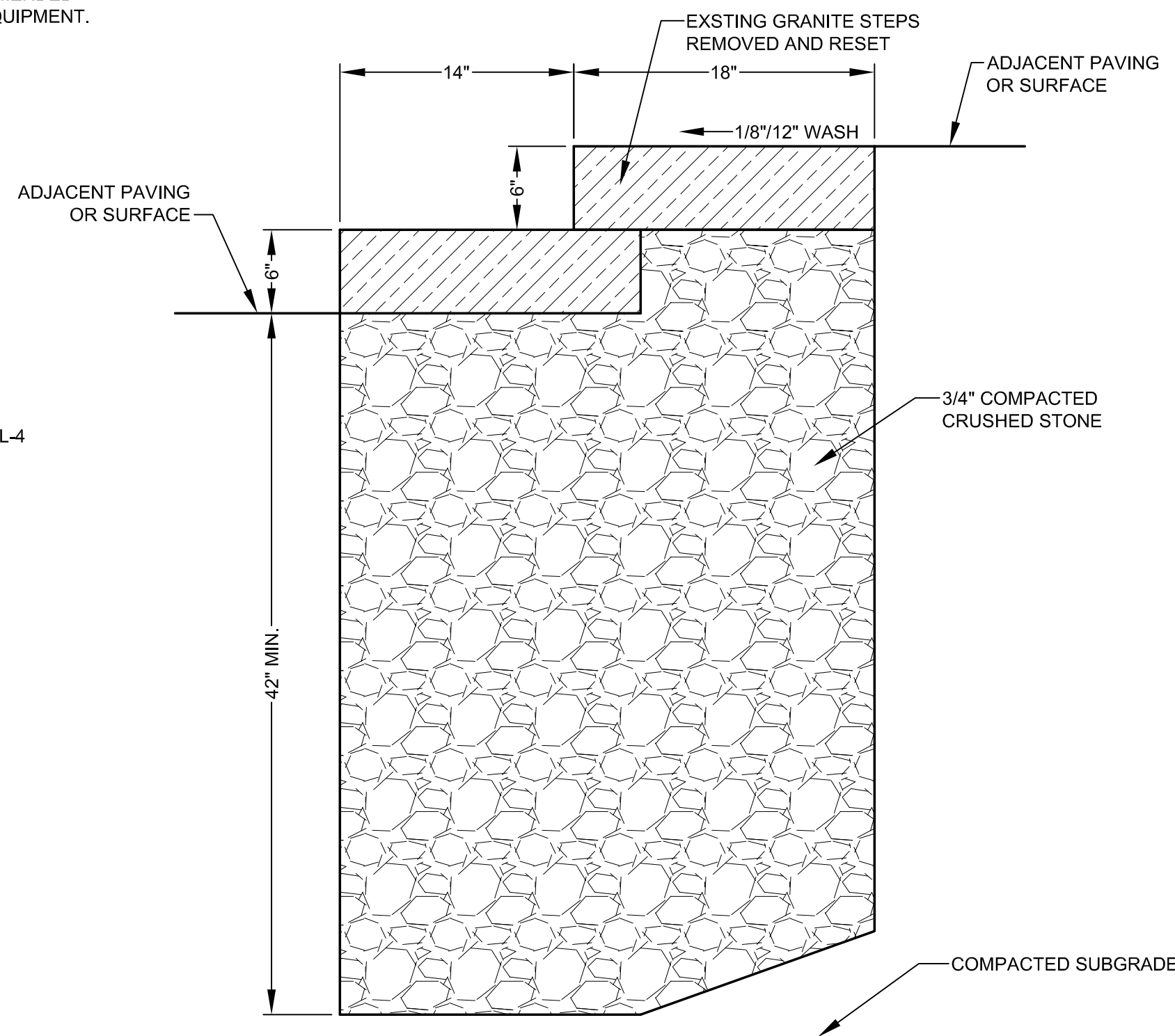


- NOTES:
1. SEE PLAN FOR EXTENT OF RENOVATION OF EXISTING FENCING
  2. DO NOT SCALE DRAWINGS.
  3. ALL RAILS, FABRIC AND ACCESSORIES TO BE BLACK VINYL-COATED GALVANIZED STEEL.
  4. TOUCH UP ALL ABRADED OR SCRATCHED VINYL SURFACES WITH MATCHING MATERIAL.

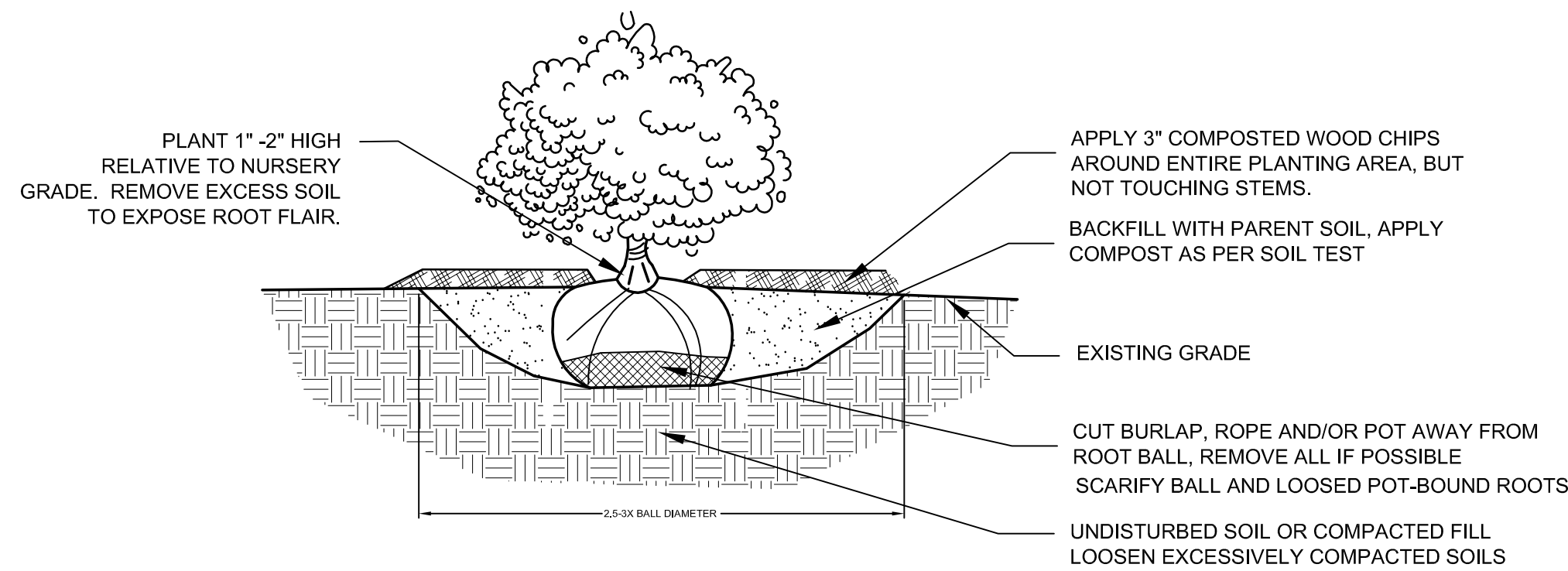
3 RENOVATION OF EXISTING CHAIN LINK FENCING  
NOT TO SCALE



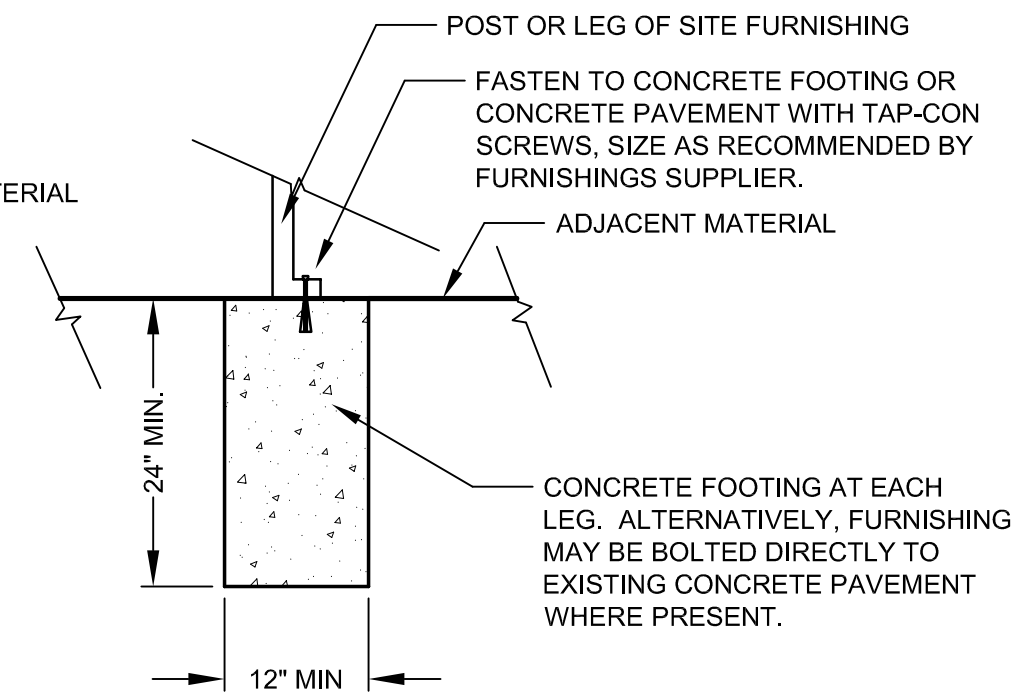
4 FOOTINGS FOR SITE FURNISHING  
NOT TO SCALE



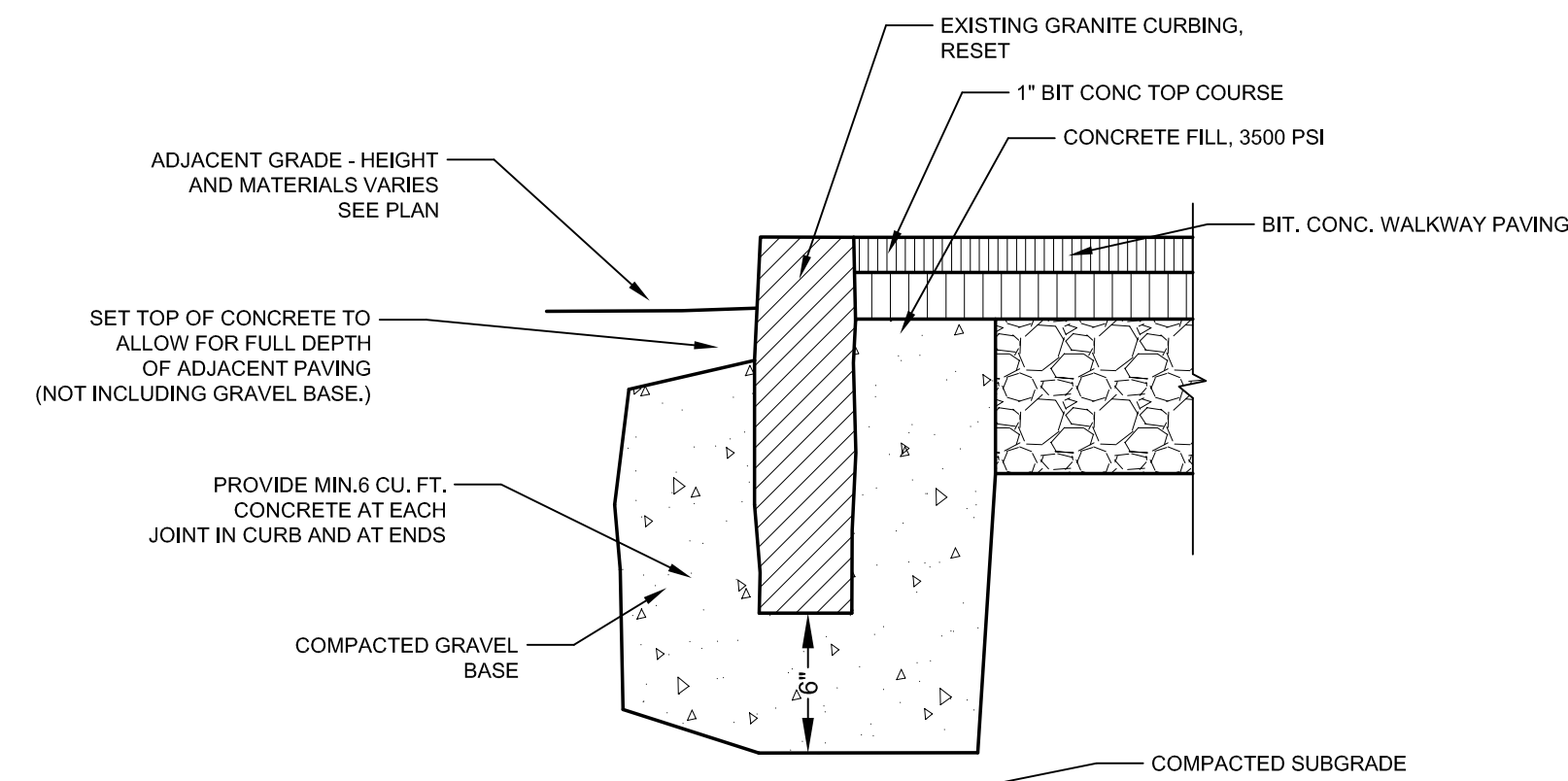
5 RESETTNG OF EXISTING GRANITE STEPS  
NOT TO SCALE



6 SHRUB PLANTING  
NOT TO SCALE



7 GRANITE BOLLARDS AND CONCRETE PAVING  
NOT TO SCALE



8 GRANITE CURBING AT BIT. CONC. PATH  
NOT TO SCALE

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95 Ronald Road  
Arlington, MA 02474  
(781) 641-0750

OWNER/DEVELOPER:  
  
CITY OF SOMERVILLE, MA  
Mayor's Office of Strategic Planning  
and Community Development  
93 Highland Ave  
Somerville, MA 02143  
617-625-6600 x2535

0	10/14/2014	Issued for Bid
No.	Date	Description

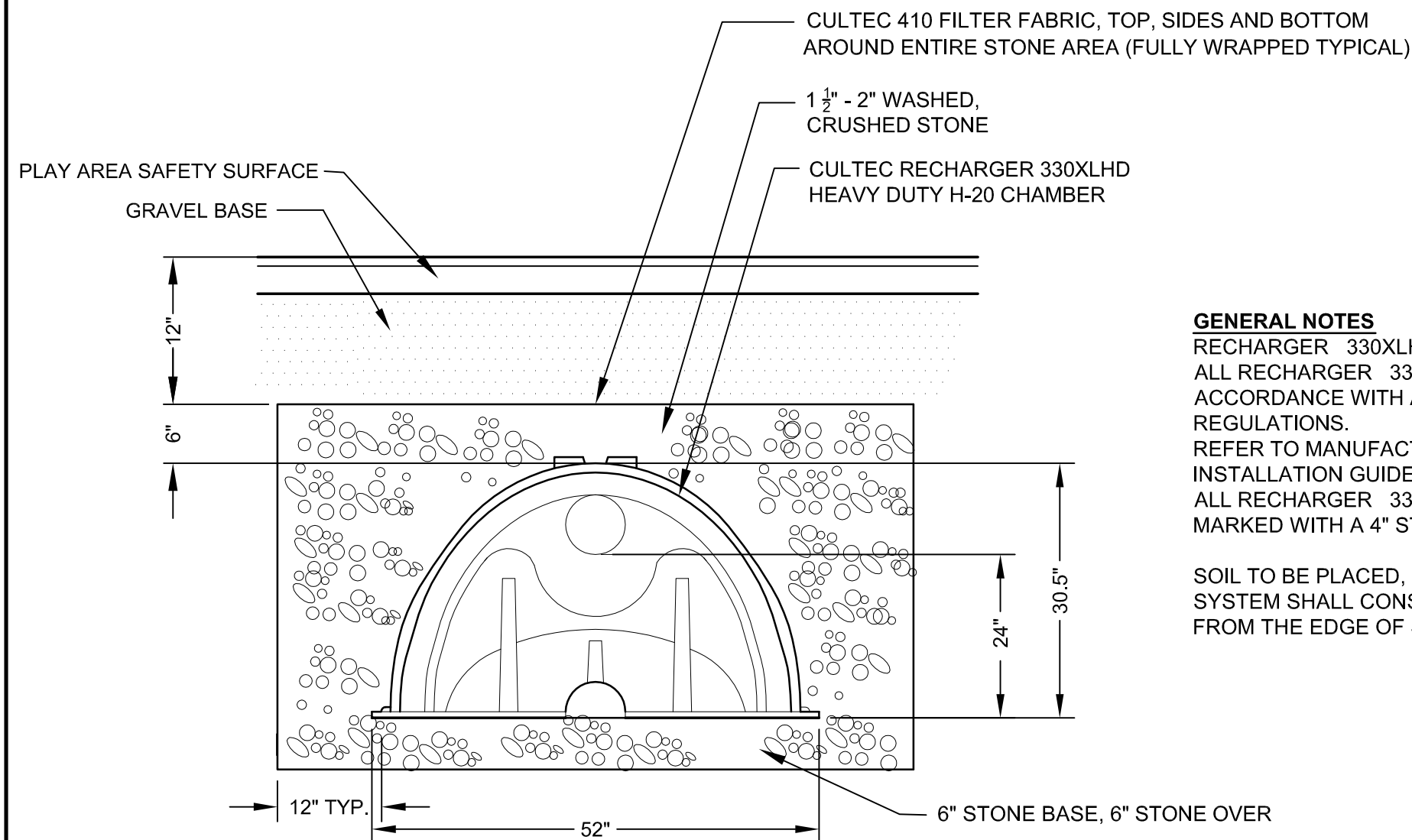
MARSHALL STREET  
PARK  
  
Somerville,  
Massachusetts

DETAILS

JOB NUMBER: 1413	DRAWN: ADL	DATE: October 14, 2014
FILE: Parks and Schools/ somerville/marshall st	CHECKED: ADL	SCALE: as noted

L.3

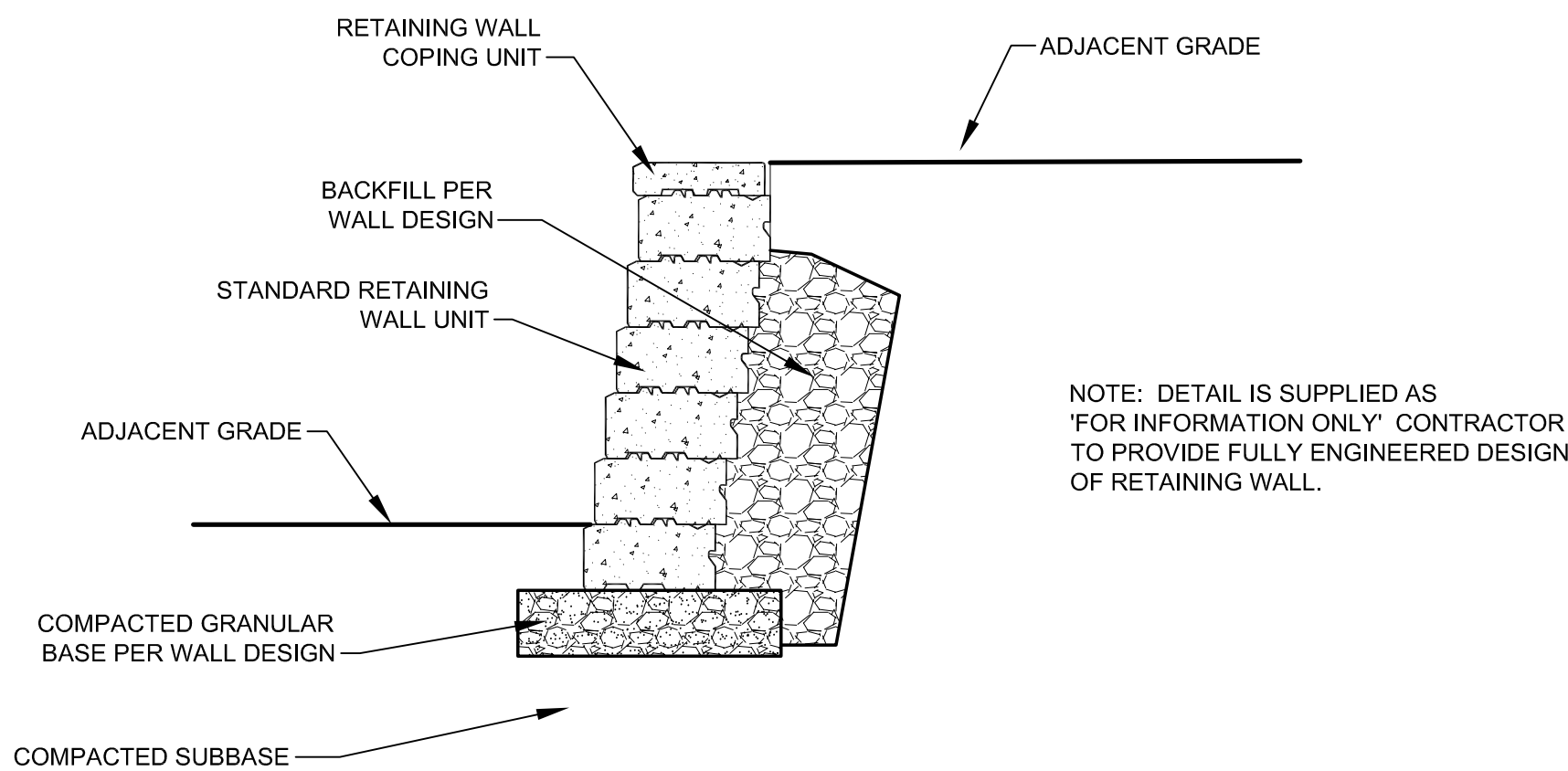
FOR BIDS ONLY



**GENERAL NOTES**  
RECHARGER 330XLHD BY CULTEC, INC. OF BROOKFIELD, CT.  
ALL RECHARGER 330XLHD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.  
REFER TO MANUFACTURER, CULTEC, INC.'S RECOMMENDED INSTALLATION GUIDELINES.  
ALL RECHARGER 330XLHD H20 HEAVY DUTY UNITS ARE MARKED WITH A 4" STRIPE ALONG THE LENGTH OF THE CHAMBER.  
  
SOIL TO BE PLACED, UNDER AND AROUND THE SUBSURFACE DRAINAGE SYSTEM SHALL CONSIST OF CLEAN COURSE SAND, INSTALLED AT LEAST 5' FROM THE EDGE OF STONE, AND COMPACTED IN 12" LIFTS.

9 CUL-TEC RECHARGE CHAMBER (ALT. #1)

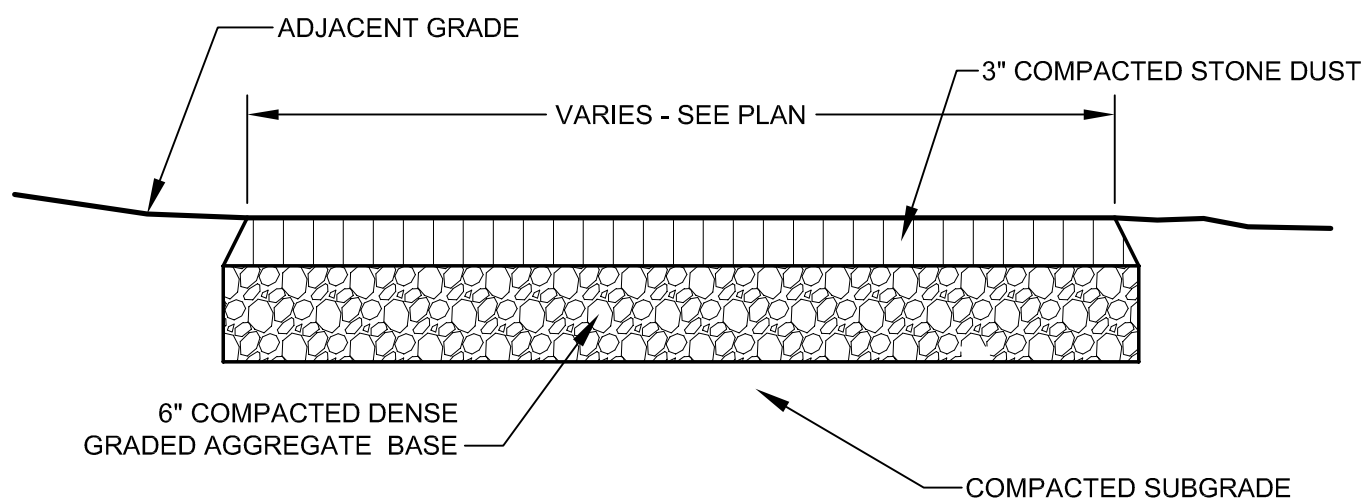
NOT TO SCALE



NOTE: DETAIL IS SUPPLIED AS FOR INFORMATION ONLY. CONTRACTOR TO PROVIDE FULLY ENGINEERED DESIGN OF RETAINING WALL.

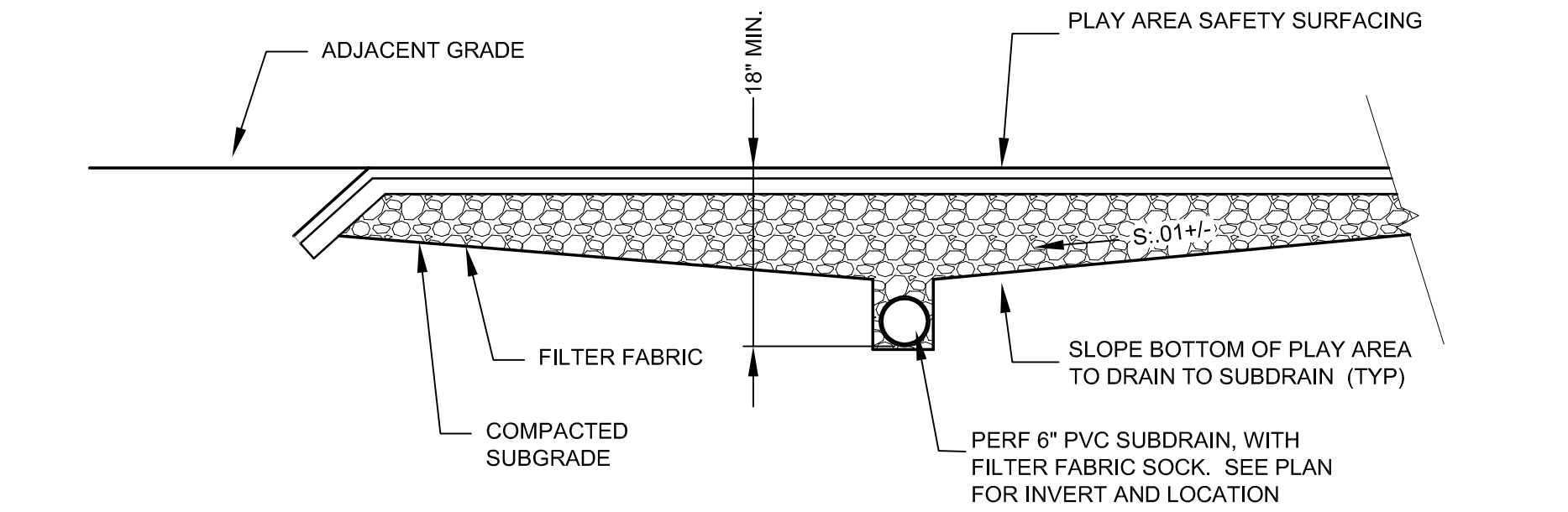
10 PRECAST CONCRETE RETAINING WALL

NOT TO SCALE



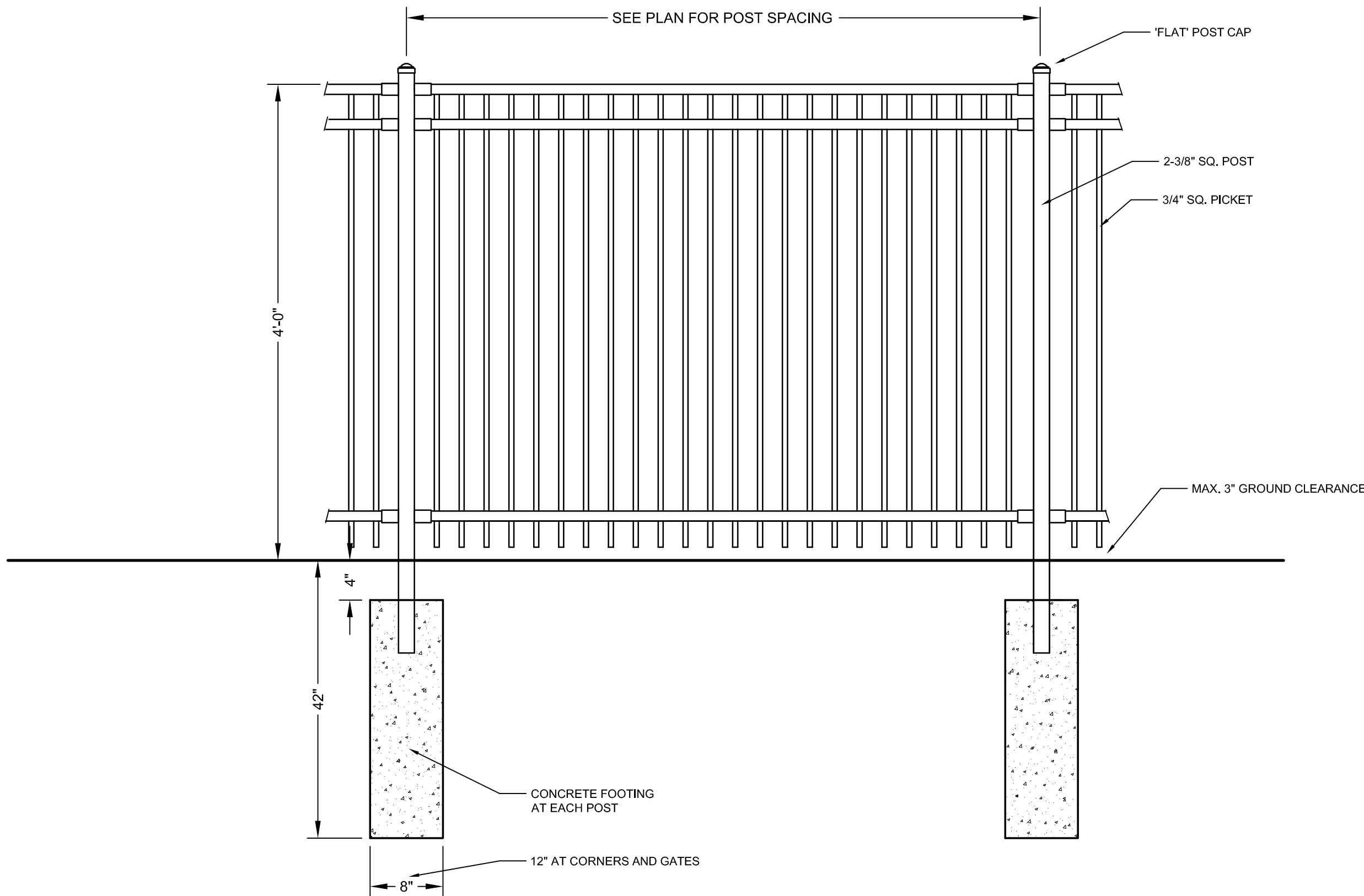
11 STONEDUST PAVING

NOT TO SCALE



12 PLAY AREA DRAINAGE

NOT TO SCALE



13 COMMERCIAL GRADE METAL PICKET FENCE

NOT TO SCALE

# Leonard Design Associates

Site Planning/  
Landscape Architecture

95 Ronald Road  
Arlington, MA 02474  
(781) 641-0750

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## MARSHALL STREET PARK

Somerville,  
Massachusetts

### DETAILS

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L.4

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