SOLICITATION FOR:

ALBION PARK REPAIRS

INVITATION FOR BIDS (IFB) #14-32



CITY OF SOMERVILLE, MASSACHUSETTS

RELEASED: Wednesday, October 9, 2013

DUE BY: Thursday, October 24, 2013 @ 11:00A.M. EST

DELIVER TO:

City of Somerville
Purchasing Department
Attn: Orazio DeLuca, MCPPO- Contract Manager
93 Highland Avenue
Somerville, MA 02143

Albion Park Repairs

TABLE OF CONTENTS

PART 1: BID INVITATION	
Section 1: Pages:	Pages:
00020 Invitation to Bid	1
Spatian 3:	
Section 2: 00200 Instructions to Bidders	1 0
00200 instructions to bidders	1-8
Section 3: Bid Submission Documents:	
(See Enclosed Submission Packet)	
00300 Form for General Bid	2-4
00320 Somerville Living Wage Form	1-3
00330 Acknowledgement of Notice to Bidders	1-2
00335 Quality Requirements Form	1
00340 Certificate of Non-Collusion & Tax Compliance Statement	1
00350 Certificate of Signature Authority	1
00360 Signature Form	1
00370 Reference Form	1
00380 Bid Bond	1
00385 Wage Rates Compliance Form	1
Section 4: Other Bid Documents	
00410 Division of Labor and Industries Prevailing Wage Rates	
00420 Division of Labor and Industries Statement of Compliance	
00430 General Term and Conditions	

PART 2: SAMPLE CONSTRUCTION CONTRACT

- a. Sample Contract
- Appendix A Scope of Work (including Technical Specifications)
- Appendix A2- Certificate of Authority
- Appendix B Contractor's Bid Price; Form for General Bid
- 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)
- Appendix G Procurement documentation (Advertisements and Notice to Bidders)
- Appendix H Statement of Management n/a
- Appendix I 50% Payment Bond, if contract over \$2000

^{*}Appendix to be included in contract by reference

PART 3: TECHNICAL SPECIFICATIONS

DOCUMENT TITLE		LE	SECTIO	N - PAGES
SECTION	01010 -	General Requirements		
1.01	Proj	ect Description	1.01	1-1
1.02		tract Time	1.02	1-1
1.03	Con	tract Documents	1.03	1-1
1.04	Insp	ection of the Site	1.04	1-1
1.05		tractor's use of the Site	1.05	1-1
1.06	Encl	osures	1.06	1-2
1.07	Safe	ty and Security	1.07	1-2
1.08	Wor	k to be done	1.08	1-2
1.09	Subi	nittals	1.09	1-1
1.10	Pern	nits	1.10	1-2
1.11	Sam	pling & Testing	1.11	
1.12	Dust	Control	1.12	
1.13	Envi	ronmental Protection	1.13	
1.14	Rod	ent Control	1.14	
1.15	Con	struction Layout	1.15	
Section 010	010	Summary of Work		
Section 015	500	Temporary Facilities		
Section 022	220	Demolition		
Section 022	235	Tree Pruning & Tree Removal		
Section 023	355	Gravel Borrow		
Section 027	755	Color Sealcoat		
Section 028	810	Irrigation System		
Section 029	920	Sodding		
Section 029	950	Planting		
Section 03300		Cement Concrete – Cast in Place		

PART 4: CONSTRUCTION DOCUMENT DRAWING LIST

<u>Drawing Number</u> <u>Drawing Title</u>	
L-1 Site Repair Plans	
L-2 Existing Conditions & Site Prepara	ation
L-3 Layout Materials and Grading Plan	1
L-4 Site Details	
L-5 Site Details	

CITY OF SOMERVILLE MASSACHUSETTS INVITATION FOR BID (IFB) ALBION PARK REPAIRS IFB # 14-10CD

Enclosed you will find an invitation to bid for: Albion Park Repairs. Plans and specifications will be available from 8:30 AM to 4:30 PM, Monday through Thursday, 8:30 AM to 12:00 Noon, Fridays, at the Purchasing Department, 1st Floor, City Hall, 93 Highland Avenue, Somerville, MA 02143 from Wednesday, October 9, 2013.

A Pre-Bid Conference will be held on Thursday, October 17, 2013 at 11:00 AM, Committee Room, 2nd Floor, Somerville City Hall, 93 Highland Avenue, Somerville, MA 02143

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 11:00AM, on Thursday, October 24, 2013. Please mark the outside of all bid envelopes with the following: "IFB #14-32, Albion Park Repairs" 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) Unit Price Form
- 3) Somerville Living Wage Form
- 4) Acknowledgement of Notice to Bidders
- 5) Ouality Requirements Form
- 6) Certificate of Non-Collusion & Tax Compliance
- 7) Certificate of Signature Authority
- 8) Signature Form complete when submitting your bid.
- 9) Reference Form
- 10) 5% Bid Deposit
- 11) 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.

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

PART 1, SECTION 2 - 00200:

INSTRUCTIONS TO BIDDERS

(Chapter 30:39M-Public Works Construction-Competitive Sealed Bids)

1. NAME OF PROJECT

ALBION PARK REPAIRS

2. AWARDING AUTHORITY

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

OSPCD Contact:

Arn Franzen
Office of Strategic Planning & Community Development
City of Somerville
93 Highland Avenue
Somerville, MA 02143
Phone (617) 625-6600 x2545
Fax: (617) 625-0722

3. LANDSCAPE ARCHITECT:

Weston & Sampson Engineers 85 Devonshire Street 3rd Floor Boston, MA 02109

Contact: Cheri Ruane, RLA
Phone: (617) 412-4480
Email: ruanec@wseinc.com

4. LOCATION OF PROJECT

Albion Park, Albion Street between Lowell and Cedar Streets.

PART 1 SECTION 3

Albion Park Repairs (IFB # 14-32)

BID SUBMISSION DOCUMENTS

BIDDER'S NAME:
This Bid Submission includes the following:
Form for General Bid
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 3 - 00300: Form for general bid for construction contract

To the Awarding Authority:

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

Albion Park Repairs

in accordance with the accompanying plans and specifications prepared by

Weston & Sampson Engineers 85 Devonshire Street, 3rd floor Boston, MA 02109

Contact: Cheri Ruane, RLA

Phone: 617-412-4480

Email: ruanec@wseinc.com

specified below, subject to a specifications.	dditions and	deductions	according to	o the terms of	f the
This hid includes addenda	#1 . #	2 . #	#3 .	. #4	

- 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 50% 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, Albion Park Repairs

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

III WHICH C	ase me reasons	tor refection	were as follows	•	

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

E	xecuted this day of 2013.	
	On behalf of:	
	(Undersigned Bidder Business Name)	
	(Business Address) and (Telephone)	
Ву:		
((Name and Address of Person Signing Bid)	A CONTRACTOR OF THE CONTRACTOR
	(Title of Person Signing bid)	

Part 1 Section 3 – 00320: Somerville Living Wage Form

Form:____Contract Number:



SOMERVILLE LIVING WAGE ORDINANCE CERTIFICATION FORM CITY OF SOMERVILLE CODE OF ORDINANCES SECTION 2-397 et seq*.

<u>Instructions</u>: 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.

<u>Definition of "Living Wage":</u> For this contract or subcontract, as of 7/1/2013 "Living Wage" shall be deemed to be an hourly wage of no less than \$11.89 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

^{*}Copies of the Ordinance are available upon request to the Purchasing Department.

Form:	CITY OF SOMERVILLE	Rev. 06/27/13
Contract Number:		
security returns, and evider contracting City Departmen	nce of payment thereof and such other don't from time to time.	lata as may be required by the
_	abmit payroll records to the City upon re	•
	ncompliance with the provisions the Son	
	d shall permit City representatives to ob employees, and to examine the books at	
•	to determine payment of wages.	
g gri 1 1 . 1 . 11	- t for d in an analysis of her the t	Camamilla Livina Wasa
	ot fund wage increases required by the shealth insurance benefits of any of its e	
Ordinarios of roducing me	mountained bolicants of any of the c	mp.og 440.
	that the penalties and relief set forth in	
Ordinance shall be in addit subcontract.	ion to the rights and remedies set forth	in the contract and/or
Suoconti act.		
CERTIFIED BY:		
Signature:		
	Authorized Representative of Vendor)

Online at: www.somervillema.gov/purchasing

Title:

Date: _____

Name of Vendor:

CITY	Ω	CON	ADDY	711	TD
CHY	Or.	3U1	/I E/K	V 11	alara.

Rev. 06/27/13

Contract	Number:	

Form:

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.

Online at: www.somervillema.gov/purchasing

Page 3 of 3

Part 1 Section 3 – 00330: Acknowledgement of Notice to Bidders

NOTICE TO BIDDERS IFB #14-32

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

SEC	TTO	VΑ	
N. Land	$x = \sqrt{x}$		

Sealed bids for: **Albion Park Repairs**. The bids will be received at the office of the Purchasing Director, Somerville City Hall, 93 Highland Avenue, Somerville, MA. 02143 no later than **Thursday, October 24, 2013 at 11:00 A.M.** at which time and place they will be publicly opened and read.

A Pre-Bid conference for all bidders will be held as follows: Thursday, October 17, 2013 @ 11:00 AM Committee Room, 2nd Floor, Somerville City Hall, 93 Highland Avenue, Somerville, MA 02143

SECTION B.

Forms of price bid, specifications and terms of contract can be obtained at the Purchasing Department office on or after Wednesday, October 9, 2013.

SECTION C.

Bid envelopes shall be clearly marked as follows: "Response to IFB 14-32, Albion Park Repairs".

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) Prevailing Wage Rates - and Compliance Form

SECTION G

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 H.

A <u>Payment Bond</u> in the amount of 50% of the total contract price will be required by the City.

SECTION I.	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 J.	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 K.	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.
G: 4	
Signature:	
Company:	
By:	Title:
Date:	Tel. No:Fax:
Applicable to Cor	porations:
I hereby attest that	the signatory to this bid has the authority to sign and submit bids for the Corporation.
ATTEST:	ecretary
Se	ecretary

Part 1 Section 3 – 00335: Quality Requirements

QUALITY REQUIREMENTS

The following quality requirements, or basic business requirements, are the minimum set of standards that an entity must meet and certify to be considered responsible and responsive. The City of Somerville will disqualify any response that does not meet the minimum quality requirements. A "No Response" to items 1-4, or a failure to respond to any of the following minimum standards will result in disqualification of your bid.

	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?		
Can the Vendor meet the date requirements for this project?		
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:		
Are you a Mass. Supplier Diversity Office MBE/WBE certified		#
minority or woman owned business?		

Part 1 Section 3 – 00340: Certificate of Non-Collusion & Tax Compliance Statement

CERTIFICATE OF NON-COLLUSION

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

Date

Name of business

Signature of individual submitting bid or proposal

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 of person submitting bid or proposal	
Jame of business	
Date	_
	_

Part 1 Section 3 – 00350: Certificate of Signature Authority

Form:____Contract Number:



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 (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. ATTEST: 4. Signature: (Clerk or Secretary) AFFIX CORPORATE SEAL HERE Printed Name: Printed Title:

(Date Must Be on or after Date Officer Signed Contract/Bonds)

Online at: www.somervillema.gov/purchasing

Date:

Form:____Contract Number:



Certificate of Authority (Limited Liability Companies Only)

Instru	actions: Complete this form and sig	gn and date where indicated below.
1. I, t	he undersigned, being a member or m	nanager of
***************************************	(Complete Name of Lin	mited Liability Company)
	ted liability company (LLC) hereby cose of contracting with the City of Son	ertify as to the contents of this form for the nerville.
2. Th	e LLC is organized under the laws of	the state of:
3. Th	e LLC is managed by (check one) a	Manager or by its Members.
	 other legally binding docum on behalf of the LLC; duly authorized to do and pe appropriate to carry out the tof the LLC; and 	nd deliver this contract, agreement, and/or ents relating to any contract and/or agreement erform all acts and things necessary or terms of this contract or agreement on behalf ther document or action is necessary to
	Name	Title
5.	Signature: Printed Name:	
	Printed Title:	
	Date:	

Online at: www.somervillema.gov/purchasing

Part 1 Section 3 – 00360: Signature Form

NAME OF COMPANY	
ADDRESS:	
TELEPHONE #:	FAX #:
DATE:	EMAIL:
	IORIZED CONTRACTING OFFICIAL:
RESIDENCE:	· · · · · · · · · · · · · · · · · · ·
IF COMPANY IS A P	RTNERSHIP:
FULL NAME AND RI	SIDENCE OF EACH PARTNER:
IF COMPANY IS A C	
THE CORPORATE N	ME IS:
THE CORPORATION	S ORGANIZED UNDER THE LAWS OF:
THE PRESIDENT IS:	
THE TREASURER IS	
THE CLERK/SECRET	ARY OR ASSISTANT CLERK/SECRETARY WHO WILL EXECUTE
THE CONTRACT AN	SIGN THE CERTIFICATE OF AUTHORITY IS:
NAME OF CORPORA	TION THAT WILL APPEAR ON A POTENTIAL CONTRACTUAL
AGREEMENT IF DIF	ERENT FROM ABOVE:
NAME AND TITLE C	PERSON WHO WILL BE THE PRINCIPAL SIGNATORY ON THE
CONTRACT IF OTHE	R THAN THE PRESIDENT:
NAME:	TITLE:

Part 1 Section 3 – 00370: Reference Form

Bidder:		
IFB Title: #14-32 Albion Park R Bidder must provide references fro completed during the previous six	om three municipalities for similar municipalities	cipal parks projects
Reference:	Contact:	
Address:	Phone:	
	Fax:	
	s or services provided:	
Reference:	Contact:	
Address:	Phone:	
	Fax:	
Description and date(s) of supplie	s or services provided:	
Reference:	Contact:	
Address:	Phone:	
	Fax:	**************************************
Description and date(s) of supplie	s or services provided:	
	Allaina Daula Daunius	

Albion Park Repairs

Part 1 Section 3 – 00380: 5% Bid Bond or Guaranty

BIDDER TO INSERT BOND HERE

Part 1 Section 3 – 00385: Prevailing Wage Rates Compliance Form

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:

STATEMEN	T OF COMPLIANCE
	, 20
	•
(Name of signatory party) lo hereby state:	(Title)
	ment of the persons employed by on the
said project have been paid in accordance	
Signa	ture
Title _	

$\begin{array}{c} \textbf{Part 1 Section 4-00410:} \\ \textbf{Division of Labor and Industries Prevailing Wage Rates} \end{array}$



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 JOANNE F. GOLDSTEIN HEATHER E. ROWE Director

Awarding Authority:

City of Somerville

Contract Number:

City/Town: SOMERVILLE

Description of Work:

Albion Park Repairs - New Concrete retaining wall, install sod, install new tree, repair irrigation

Job Location:

Albion Park

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.
- Awarding authorities 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.
- 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. Once a contractor has been selected by the awarding authority, the wage schedule shall be made a part of the contract for that project. The wage schedule must be posted in a conspicuous place at the work site during 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 regardless of 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 Training (DAT). Apprentices must keep his/her apprentice identification card on his/her person during all work hours on the project. If an apprentice rate is listed on the prevailing wage schedule for the trade in which an apprentice is registered with the DAT, the apprentice 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 DAT, 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. 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 directly to the awarding authority 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.

Wage Request Number: 20131009-019 10/09/2013 Issue Date:

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			······································	**	
(2 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$31.55	\$8.91	\$8.00	\$0.00	\$48.46
(3 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$31.62	\$8.91	\$8.00	\$0.00	\$48.53
(4 & 5 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$31.74	\$8.91	\$8.00	\$0.00	\$48.65
ADS/SUBMERSIBLE PILOT	08/01/2013	\$84.21	\$9.80	\$18.17	\$0.00	\$112.18
PILE DRIVER LOCAL 56 (ZONE 1)	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	06/01/2013	\$33.80	\$7.10	\$12.45	\$0.00	\$53.35
LABORERS - ZONE 1	12/01/2013	\$34.55	\$7.10	\$12.45	\$0.00	\$54.10
	06/01/2014	\$35.30	\$7.10	\$12.45	\$0.00	\$54.85
	12/01/2014	\$36.05	\$7.10	\$12.45	\$0.00	\$55.60
	06/01/2015	\$36.80	\$7.10	\$12.45	\$0.00	\$56.35
	12/01/2015	\$37.55	\$7.10	\$12.45	\$0.00	\$57.10
	06/01/2016	\$38.30	\$7.10	\$12.45	\$0.00	\$57.85
	12/01/2016	\$39.30	\$7.10	\$12.45	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"	·				. ~~~~~	
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	06/01/2013	\$29.88	\$10.40	\$5.95	\$0.00	\$46.23
NEAT & FROST INSOLATORS DOCAL'S (BOSTON)	12/01/2013	\$30.68	\$10.40	\$5.95	\$0.00	\$47.03
	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	06/01/2013	\$33.30	\$7.10	\$12.45	\$0.00	\$52.85
LABORERS - ZONE I	12/01/2013	\$34.05	\$7.10	\$12.45	\$0.00	\$53.60
	06/01/2014	\$34.80	\$7.10	\$12.45	\$0.00	\$54.35
	12/01/2014	\$35.55	\$7.10	\$12.45	\$0.00	\$55.10
	06/01/2015	\$36.30	\$7.10	\$12.45	\$0.00	\$55.85
	12/01/2015	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
	06/01/2016	\$37.80	\$7.10	\$12.45	\$0.00	\$57.35
	12/01/2016	\$38.80	\$7.10	\$12.45	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE OPERATING ENGINEERS LOCAL 4	06/01/2013	\$40.34	\$10.00	\$13.55	\$0.00	\$63.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2013	\$41.12	\$10.00	\$13.55	\$0.00	\$64.67
BACKHOE/FRONT-END LOADER	06/01/2013	\$40.34	\$10.00	\$13.55	\$0.00	\$63.89
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$41.12	\$10.00	\$13.55	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	a we ver many star	U.1.12	ψ. VIV V		4 27 2	Ψ0 1101

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 2 of 42

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BARCO-TYPE JUMPING TAMPER	06/01/2013	\$33.30	\$7.10	\$12.45	\$0.00	\$52.85
LABORERS - ZONE I	12/01/2013	\$34.05	\$7.10	\$12.45	\$0.00	\$53.60
	06/01/2014	\$34.80	\$7.10	\$12.45	\$0.00	\$54.35
	12/01/2014	\$35.55	\$7.10	\$12.45	\$0.00	\$55.10
	06/01/2015	\$36.30	\$7.10	\$12.45	\$0.00	\$55.85
	12/01/2015	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
	06/01/2016	\$37.80	\$7.10	\$12.45	\$0.00	\$57.35
	12/01/2016	\$38.80	\$7.10	\$12.45	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"	V-II.					
BLOCK PAVER, RAMMER / CURB SETTER	06/01/2013	\$33.80	\$7.10	\$12.45	\$0.00	\$53.35
LABORERS - ZONE I	12/01/2013	\$34.55	\$7.10	\$12.45	\$0.00	\$54.10
	06/01/2014	\$35.30	\$7.10	\$12.45	\$0.00	\$54.85
	12/01/2014	\$36.05	\$7.10	\$12.45	\$0.00	\$55.60
	06/01/2015	\$36.80	\$7.10	\$12.45	\$0.00	\$56.35
	12/01/2015	\$37.55	\$7.10	\$12.45	\$0.00	\$57.10
	06/01/2016	\$38.30	\$7.10	\$12.45	\$0.00	\$57.85
	12/01/2016	\$39.30	\$7.10	\$12.45	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER BOILERMAKERS LOCAL 29	01/01/2010	\$37.70	\$6.97	\$11.18	\$0.00	\$55.85

	Effect Step	ive Date - percent	01/01/2010	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:	en sentemen ditionism	annana versitet valuti titeliiti birkillis tastile kun	The second section makes section sections.	MARKETY PROMISE VONEY	mentalista (Seerom emboret)	anning and an area of the second		
	Appre	entice to Jo	urneyworker Ratio:1:5	ulu Ausgrafikar Suhalilalifus PPPSylvinia PPPSylvinia (1975)aggirissi.	MALLER STREET, WAS AND STREET, SEE	and the second s		manan andaranan samanan. Mananan	
		FICIAL M	ASONRY (INCL. MASONR	Y 08/01/201:	3 \$48.06	\$10.18	\$18.15	\$0.00	\$76.39
ATERPRO	OFING) LOCAL 3 (BO	つぶてといい		02/01/201	\$48.62	\$10.18	\$18.15	\$0.00	\$76.95
C1820 11 13147 1		22.1011,		08/01/201-	\$49.52	\$10.18	\$18.22	\$0.00	\$77.92
				02/01/201	5 \$50.08	\$10.18	\$18.22	\$0.00	\$78.48
				08/01/201	5 \$50.98	\$10.18	\$18.29	\$0.00	\$79.45
				02/01/201	5 \$51.55	\$10.18	\$18.29	\$0.00	\$80.02
٠				08/01/201	5 \$52.45	\$10.18	\$18.37	\$0.00	\$81.00
				02/01/201	7 \$53.02	\$10.18	\$18.37	\$0.00	\$81.57

Wage Request Number: 20131009-019

Page 3 of 42

Issue Date: 10/09/2013

Total Rate

Page 4 of 42

		ve Date - 08/01/2013				Complement t		
	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
****	1	50	\$24.03	\$10.18	\$18.15	\$0.00	\$52.36	-
	2	60	\$28.84	\$10.18	\$18.15	\$0.00	\$57.17	
	3	70	\$33.64	\$10.18	\$18.15	\$0.00	\$61.97	
	4	80	\$38.45	\$10.18	\$18.15	\$0.00	\$66.78	
	5	90	\$43.25	\$10.18	\$18.15	\$0.00	\$71.58	
		ve Date - 02/01/2014				Supplemental		
-	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$24.31	\$10.18	\$18.15	\$0.00	\$52.64	
	2	60	\$29.17	\$10.18	\$18.15	\$0.00	\$57.50	
	3	70	\$34.03	\$10.18	\$18.15	\$0.00	\$62.36	
	4	80	\$38.90	\$10.18	\$18.15	\$0.00	\$67.23	
	5	90	\$43.76	\$10.18	\$18.15	\$0.00	\$72.09	
	Notes:	. Annihir diposper aribita astronomic serimatis serimatis menungan menungan serimanin	, Samulation modulator Saladinada Saladinada Spelificação Weensanan	ramintellin Talkadadın Veringiyanı	untilitation alliteral dim ultivisionels.	reservated biotechnical sedimentary per	Augusta Television Augusta Augusta Augus	
	Alvers	Aggregatiga schlarecki under Wess Aggregatiga schrischen still kinden William (ANALYSIS MARKANINI STITUTUTU MARKANINI MARKANINI ANALYSIS	POWER SAME		Maryuphina diagnoshirin hadroniash kida	Name Sandalalah Wadalista Ballimban	
***************************************		ntice to Journeyworker Ratio:1:5		~~-,				
BULLDOZER/G Operating engin			06/01/201	3 \$39.96	\$10.00	\$13.55	\$0.00	\$63.51
		Apprentice- OPERATING ENGINEERS"	12/01/201	3 \$40.74	\$10.00	\$13.55	\$0.00	\$64.29
		INNING BOTTOM MAN	06/01/201	3 \$34.20	\$7.10	\$12.60	\$0.00	\$53.90
LABORERS + FOUNL	DATION.	AND MARINE	12/01/201	3 \$34.9:	5 \$7.10	\$12.60	\$0.00	\$54.65
			06/01/201	4 \$35.70	\$7.10	\$12.60	\$0.00	\$55.40
			12/01/201	4 \$36.43	5 \$7.10	\$12.60	\$0.00	\$56.15
			06/01/201	5 \$37.20	\$7.10	\$12.60	\$0.00	\$56.90
			12/01/201	5 \$37.9:	5 \$7.10	\$12.60	\$0.00	\$57.65
			06/01/201	6 \$38.7	9 \$7.10	\$12.60	\$0.00	\$58.40
Environties e	ofoo ooo "	Apprentice- LABORER"	12/01/201	6 \$39.70	97.10	\$12.60	\$0.00	\$59.40
		INNING LABORER	06/01/201	3 \$33.0	5 \$7.10	\$12.60	\$0.00	\$52.75
LABORERS - FOUNI	DATION	AND MARINE	12/01/201	•		\$12.60	\$0.00	\$53.50
			06/01/201			\$12.60	\$0.00	\$54.25
			12/01/201			\$12.60	\$0.00	\$55.00
			06/01/201			\$12.60	\$0.00	\$55.75
			12/01/201			\$12.60	\$0.00	\$56.50
			06/01/201			\$12.60	\$0.00	\$57.25
			12/01/201			\$12.60	\$0.00	\$58.25
For apprentice r	ates see '	'Apprentice- LABORER"			¥ · · · · *			

Issue Date: 10/09/2013 Wage Request Number: 20131009-019

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING TOP MAN	06/01/2013	\$33.05	\$7.10	\$12.60	\$0.00	\$52.75
LABORERS - FOUNDATION AND MARINE	12/01/2013	\$33.80	\$7.10	\$12.60	\$0.00	\$53.50
	06/01/2014	\$34.55	\$7.10	\$12.60	\$0.00	\$54.25
	12/01/2014	\$35.30	\$7.10	\$12.60	\$0.00	\$55.00
	06/01/2015	\$36.05	\$7.10	\$12.60	\$0.00	\$55.75
	12/01/2015	\$36.80	\$7.10	\$12.60	\$0.00	\$56.50
	06/01/2016	\$37.55	\$7.10	\$12.60	\$0.00	\$57.25
	12/01/2016	\$38.55	\$7.10	\$12.60	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR	06/01/2013	\$33.30	\$7.10	\$12.45	\$0.00	\$52.85
LABORERS - ZONE I	12/01/2013	\$34.05	\$7.10	\$12.45	\$0.00	\$53.60
	06/01/2014	\$34.80	\$7.10	\$12.45	\$0.00	\$54.35
	12/01/2014	\$35.55	\$7.10	\$12.45	\$0.00	\$55.10
	06/01/2015	\$36.30	\$7.10	\$12.45	\$0.00	\$55.85
	12/01/2015	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
	06/01/2016	\$37.80	\$7.10	\$12.45	\$0.00	\$57.35
	12/01/2016	\$38.80	\$7.10	\$12.45	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
CARPENTER	09/01/2013	\$40.35	\$9.80	\$15.61	\$0.00	\$65.76
CARPENTERS -ZONE 1 (Metro Boston)	03/01/2014	\$41.18	\$9.80	\$15.61	\$0.00	\$66.59
	09/01/2014	\$42.20	\$9.80	\$15.61	\$0.00	\$67.61
	03/01/2015	\$43.22	\$9.80	\$15.61	\$0.00	\$68.63

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 5 of 42

Supplemental Unemployment

	Step	ve Date - percent	09/01/2013	Apprentice Base Wage	Health		Pension	Supplemental Unemployment	Total Rate	
•	1	50		\$20.18	\$9.80		\$1.57	\$0.00	\$31.55	
	2	60		\$24.21	\$9.80		\$1.57	\$0.00	\$35.58	
	3	70		\$28.25	\$9.80		\$10.90	\$0.00	\$48.95	
	4	75		\$30.26	\$9.80		\$10.90	\$0.00	\$50.96	
	5	80		\$32.28	\$9.80		\$12.47	\$0.00	\$54.55	
	6	80		\$32.28	\$9.80		\$12.47	\$0.00	\$54.55	
	7	90		\$36.32	\$9.80		\$14.04	\$0.00	\$60.16	
	8	90		\$36.32	\$9.80		\$14.04	\$0.00	\$60.16	
	Effecti Step	ve Date -	03/01/2014	Apprentice Base Wage	Health		Pension	Supplemental Unemployment	Total Rate	
	1	50	A TO THE RESIDENCE OF THE PROPERTY OF THE PROP	\$20.59	\$9.80		\$1.57	\$0.00	\$31.96	
	2	60		\$24.71	\$9.80		\$1.57	\$0.00	\$36.08	
	3	70		\$28.83	\$9.80		\$10.90	\$0.00	\$49.53	
	4	75		\$30.89	\$9.80		\$10.90	\$0.00	\$51.59	
	5	80		\$32.94	\$9.80		\$12.47	\$0.00	\$55.21	
	6	80		\$32.94	\$9.80		\$12.47	\$0.00	\$55.21	
	7	90		\$37.06	\$9.80		\$14.04	\$0.00	\$60.90	
	8	90		\$37.06	\$9.80		\$14.04	\$0.00	\$60.90	
	Notes:	h ^e conductable Accounts of a	MARIAN INITIALIA PARILATA WANTON TERROPORA PROCESSIVE III	registação electricis incontrati incontrati incontrati incontrati incontrati incontrati incontrati incontrati			happying man 2 philym mangapayayin	uphammunk umuqeteekk upmühasiri riii		
	,			PARAGONS IIIIIIIIIIIGI (QUINGSSAAS) AANDOOSSA IAGAAIIIXIII LUUSSSASSA					:	
	Appre	ntice to Jo	urneyworker Ratio:1:5	THE PROPERTY OF THE PROPERTY O	miniliair willt-w	383000 - 4000	RECEIVED THE PROPERTY OF THE P	minimide summy Abeletika sinja	generouse certibalii ilidhadaPii	
		PLASTER	ING	07/01/201	3 \$4	12.68	\$10.90	\$18.71	\$1.30	\$73.5
AYERS LOC	AL 3 (BC	151 ON)		01/01/201	4 \$4	13.60	\$10.90	\$18.71	\$1.30	\$74.5
				07/01/201	4 \$4	4.20	\$10.90	\$18.71	\$1.30	\$75.1
				01/01/201	z 64	15.14	\$10.90	\$18.71	\$1.30	\$76.0

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 6 of 42

01/01/2016

\$46.64

\$18.71

\$10.90

\$1.30

\$77.55

	Effecti Step	ve Date - 07 percent	7/01/2013 Appre	ntice Base Wage	Hea	lth	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$21.34	\$10		\$12.21	\$1.30	\$45.75	
	2	60		\$25.61	\$10		\$13.71	\$1.30	\$51.52	
	3	65		\$27.74	\$10		\$14.71	\$1.30	\$54.65	
	4	70		\$29.88	\$10		\$15.71	\$1.30	\$57.79	
	5	75		\$32.01	\$10	.90	\$16.71	\$1.30	\$60.92	
	6	80		\$34.14	\$10	.90	\$17.71	\$1.30	\$64.05	
	7	90		\$38.41	\$10	.90	\$18.71	\$1.30	\$69.32	
	Effecti	ve Date - 01	/01/2014					Supplemental		
	Step	percent	Appre	ntice Base Wage	Hea	lth	Pension	Unemployment	Total Rate	
	1	50		\$21.80	\$10	.90	\$12.21	\$1.30	\$46.21	
	2	60		\$26.16	\$10	.90	\$13.71	\$1.30	\$52.07	
	3	65		\$28.34	\$10	.90	\$14.71	\$1.30	\$55.25	
	4	70		\$30.52	\$10	.90	\$15.71	\$1.30	\$58.43	
	5	75		\$32.70	\$10	.90	\$16.71	\$1.30	\$61.61	
	6	80		\$34.88	\$10	.90	\$17.71	\$1.30	\$64.79	
	7	90		\$39.24	\$10	.90	\$18.71	\$1.30	\$70.15	
	Notes:	Steps 3,4 are	500 hrs. All other steps are 1,00	00 hrs.	abathonesse	Character delegation and	agardine seconder	making makeng verific verific	and the second s	
	Appre	ntice to Journ	eyworker Ratio:1:3				J-194			
JN SAW O		OR		06/01/201	3	\$33.30	\$7.10	\$12.45	\$0.00	\$52.8
RERS - ZONE	I			12/01/2013	3	\$34.05	\$7.10	\$12.45	\$0.00	\$53.60
				06/01/201	4	\$34.80	\$7.10	\$12.45	\$0.00	\$54.3
				12/01/201	4	\$35.55	-\$7.10	\$12.45	\$0.00	\$55.10
				06/01/201	5	\$36.30	\$7.10	\$12.45	\$0.00	\$55.85
				12/01/201	5 -	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
		•		06/01/201	6	\$37.80	\$7.10	\$12.45	\$0.00	\$57.33
			ON TO I	12/01/201	6	\$38.80	\$7.10	\$12.45	\$0.00	\$58.33
		Apprentice- LABO	S/HEADING MACHINES			A. ·	·····	A-A	ΦΑ Ας	
M SHELLS ATING ENGII			SALEADING MACHINES	06/01/201		\$41.34		\$13.55	\$0.00	\$64.89
or apprentice	rates see '	'Apprentice- OPEF	RATING ENGINEERS"	12/01/201	5	\$42.12	\$10.00	\$13.55	\$0.00	\$65.6
1PRESSOR	OPER	ATOR		06/01/201	3	\$28.19	\$10.00	\$13.55	\$0.00	\$51.74
	NEERS L	3/747.4				/		•		

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DELEADER (BRIDGE)	07/01/2013	\$45.41	\$7.85	\$15.85	\$0.00	\$69.11
PAINTERS LOCAL 35 - ZONE 1	01/01/2014	\$45.91	\$7.85	\$16.10	\$0.00	\$69.86
	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 - BR	IDGES/TANKS					
Effective Date - 07/01/2013	Annual Des Mess H			Supplement	al	

		ntice - PAINTER Local 35 - BRIDG ve Date - 07/01/2013 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$22.71	\$7.85	\$0.00	\$0.00	\$30.56	***************************************
	2	55	\$24.98	\$7.85	\$3.58	\$0.00	\$36.41	
	3	60	\$27.25	\$7.85	\$3.90	\$0.00	\$39.00	
	4	65	\$29.52	\$7.85	\$4.23	\$0.00	\$41.60	
	5	70	\$31.79	\$7.85	\$13.90	\$0.00	\$53.54	
	6	75	\$34.06	\$7.85	\$14.23	\$0.00	\$56.14	
	7	80	\$36.33	\$7.85	\$14.55	\$0.00	\$58.73	
	8	90	\$40.87	\$7.85	\$15.20	\$0.00	\$63.92	
	Effecti Step	ve Date - 01/01/2014 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$22,96	\$7.85	\$0.00	\$0.00	\$30.81	
	2	55	\$25.25	\$7.85	\$3.66	\$0.00	\$36.76	
	3	60	\$27.55	\$7.85	\$3.99	\$0.00	\$30.76 \$39.39	
	4	65	\$29.84	\$7.85	\$4.32	\$0.00	\$42.01	
	5	70	\$32.14	\$7.85	\$14.11	\$0.00	\$54.10	
	6	75	\$34.43	\$7.85	\$14.44	\$0.00	\$56.72	
	7	80	\$36.73	\$7.85	\$14.77	\$0.00	\$59.35	
	8	90	\$41.32	\$7.85	\$15.44	\$0.00	\$64.61	
	Notes:	na salahilika Andronomi salahilika mahanan salahin momenin salahinda kumbula	TATION SERVICE ANALONS	www. varyin y	destruite middenna varieteem	WIFEERING METSALIS SPENALAR SE		
		Steps are 750 hrs.						
	Appre	ntice to Journeyworker Ratio:1:1	and the area of the second sec	**************************************	and a second sec		anger engarers ye yangasistik wawanin	
(O: ADZE rers - zon			12/01/201	\$31.80	\$7.10	\$12.45	\$0.00	\$51.3
or apprentice	e rates see '	'Apprentice- LABORER"						
IO: BACK rers - zon		DADER/HAMMER OPERATOR	12/01/201	1 \$32.80	\$7.10	\$12.45	\$0.00	\$52.3
or apprentice	e rates see	'Apprentice- LABORER"						
IO: BURN RERS - ZON			12/01/201	1 \$32.55	\$7.10	\$12.45	\$0.00	\$52.1
or apprentice	e rates see '	'Apprentice- LABORER"						

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 8 of 42

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"	a,jin (va		and a second	****		
DEMO: JACKHAMMER OPERATOR LABORERS - ZONE 1	12/01/2011	\$32.55	\$7.10	\$12.45	\$0.00	\$52.10
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER LABORERS - ZONE I	12/01/2011	\$31.80	\$7.10	\$12.45	\$0.00	\$51.35
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR	06/01/2013	\$39.96	\$10.00	\$13.55	\$0.00	\$63.51
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.74	\$10.00	\$13.55	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER	08/01/2013	\$56.14	\$9.80	\$18.17	\$0.00	\$84.11
PILE DRIVER LOCAL 56 (ZONE 1)	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	08/01/2013	\$40.10	\$9.80	\$18.17	\$0.00	\$68.07
PILE DRIVER LOCAL 56 (ZONE 1)	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)	08/01/2013	\$60.15	\$9.80	\$18.17	\$0.00	\$88.12
PILE DRIVER LOCAL 56 (ZONE 1)	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)	08/01/2013	\$84.21	\$9.80	\$18.17	\$0.00	\$112.18
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2014	\$90.51	\$9.80	\$18.17	\$0.00	\$113.33
DRAWBRIDGE OPERATOR (Construction)					\$0.00	
ELECTRICIANS LOCAL 103	09/01/2013	\$43.96	\$13.00	\$14.42		\$71.38
	03/01/2014	\$44.45	\$13.00	\$14.68	\$0.00	\$72.13
	09/01/2014	\$45.12	\$13.00	\$14.70	\$0.00	\$72.82
	03/01/2015	\$45.84	\$13.00	\$14.72	\$0.00	\$73.56
	09/01/2015	\$46.80	\$13.00	\$14.75	\$0.00	\$74.55
For any of the case "Augmentics FI FCTDICIANIS	03/01/2016	\$47.75	\$13.00	\$14.78	\$0.00	\$75.53
For apprentice rates see "Apprentice- ELECTRICIAN"	00/01/0010	0.40.00	#12 CA	£1440	£0.00	6#1.20
ELECTRICIAN ELECTRICIANS LOCAL 103	09/01/2013	\$43.96	\$13.00	\$14.42	\$0.00	\$71.38
	03/01/2014	\$44.45	\$13.00	\$14.68	\$0.00	\$72.13
	09/01/2014	\$45.12	\$13.00	\$14.70	\$0.00	\$72.82
•	03/01/2015	\$45.84	\$13.00	\$14.72	\$0.00	\$73.56
	09/01/2015	\$46.80	\$13.00	\$14.75	\$0.00	\$74.55
	03/01/2016	\$47.75	\$13.00	\$14.78	\$0.00	\$75.53

 Issue Date:
 10/09/2013
 Wage Request Number:
 20131009-019
 Page 9 of 42

Supplemental Unemployment

Step	ve Date - 09/01/2013 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.58	\$13.00	\$0.53	\$0.00	\$31.11
2	40	\$17.58	\$13.00	\$0.53	\$0.00	\$31.11
3	45	\$19.78	\$13.00	\$10.78	\$0.00	\$43.56
4	45	\$19.78	\$13.00	\$10.78	\$0.00	\$43.56
5	50	\$21.98	\$13.00	\$11.11	\$0.00	\$46.09
6	55	\$24.18	\$13.00	\$11.45	\$0.00	\$48.63
7	60	\$26.38	\$13.00	\$11.77	\$0.00	\$51.15
8	65	\$28.57	\$13.00	\$12.11	\$0.00	\$53.68
9	70	\$30.77	\$13.00	\$12.43	\$0.00	\$56.20
10	75	\$32.97	\$13.00	\$12.77	\$0.00	\$58.74
Effect	ive Date - 03/01/2014				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	40	\$17.78	\$13.00	\$0.53	\$0.00	\$31.31
2	40	\$17.78	\$13.00	\$0.53	\$0.00	\$31.31
3	45	\$20.00	\$13.00	\$11.04	\$0.00	\$44.04
4	45	\$20.00	\$13.00	\$11.04	\$0.00	\$44.04
5	50	\$22.23	\$13.00	\$11.37	\$0.00	\$46.60
6	55	\$24.45	\$13.00	\$11.70	\$0.00	\$49.15
7	60	\$26.67	\$13.00	\$12.03	\$0.00	\$51.70
8	65	\$28.89	\$13.00	\$12.37	\$0.00	\$54.26
9	70	\$31.12	\$13.00	\$12.69	\$0.00	\$56.81
10	75	\$33.34	\$13.00	\$13.03	\$0.00	\$59.37
Notes:		/40/45/50/55/65/70/75/80	45M-Norwie-1 zwarw-dware INCS-u	shirin	d whethlites manifolds withtell, street	at material distribution to the state of the
home room	entice to Journeyworker	Bafia-7:24**	obnissa, sassina www.	1995 - The Madadam Street, and a security of the second	AMELIANS THE STATE STATES	national desirable and reco

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 10 of 42

		ntice - ELEVATOR		: - Local 4					
	Effect: Step	ive Date - 01/01/20 percent	12	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1 Step	50	La L						
	2			\$26.23	\$8.78	\$0.00	\$0.00	\$35.01	
	3	55		\$28.85	\$8.78	\$6.96	\$0.00	\$44.59	
		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 mental manager contains manager assessed.	inglymany samula	900 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -	dergreenskape dergreeftydd Waddaphidd da	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	
	Appre	entice to Journeywor	ker Ratio:1:1	ALLANI TV MESMELL SEATEN AND REPORTED A ANDROHINA SEALANDINGS T	arianti tritanna eriilani	www.commons.com	alidebodo intercedes assimilable sida	Hatain Vergrouth intelligenter writeringen	
ELEVATOR CON	STRUCTOI		50.000 A. A. A. A. S. S. S. A. A. A. S. S. S. A. A. A. A. S.	01/01/201	2 \$38.	59 \$8.78	\$6.96	\$0.00	\$54.33
		"Apprentice - ELEVATOR	CONSTRUCTOR"	***************************************			11 TO 1 T	······································	
ENCE & GU Aborers - zoi		AIL ERECTOR		06/01/201	3 \$33.		\$12.45	\$0.00	\$52.85
				12/01/201	3 \$34.	05 \$7.10	\$12.45	\$0.00	\$53.60
				06/01/201	\$34.	80 \$7.10	\$12.45	\$0.00	\$54.35
				12/01/201	4 \$35.	55 \$7.10	\$12.45	\$0.00	\$55.10
				06/01/201	5 \$36.	30 \$7.10	\$12.45	\$0.00	\$55.85
				12/01/201	5 \$37.	05 \$7.10	\$12.45	\$0.00	\$56.60
				06/01/201	s37.	80 \$7.10	\$12.45	\$0.00	\$57.35
				12/01/201	6 \$38.	80 \$7.10	\$12.45	\$0.00	\$58.35
		"Apprentice- LABORER"	annonno annonno — e e e e e e e e e e e e e e e e e e						
TELD ENG.I DPERATING EN		RSON-BLDG,SITE,E	IVY/HWY	05/01/201	3 \$38.	50 \$10.00	\$13.02	\$0.00	\$61.52
MA DWIINAAA	GINEEIG L	OCAL 4		11/01/201	3 \$38.	73 \$10.00	\$13.55	\$0.00	\$62.28
				05/01/201	4 \$39.	50 \$10.00	\$13.55	\$0.00	\$63.05
		"Apprentice- OPERATING		a myra myra 1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (19			IA	****	
FIELD ENG.I Perating en		CHIEF-BLDG,SITE,F	HVY/HWY	05/01/201	3 \$39.	91 \$10.00	\$13.02	\$0.00	\$62.93
Z EMILITO EM	CHARACTER CO.	OCAL 4		11/01/201	3 \$40.	15 \$10.00	\$13.55	\$0.00	\$63.70
Y		"Annuantian OPED ATING	ENGINEEDC"	05/01/201	4 \$40.	92 \$10.00	\$13.55	\$0.00	\$64.47
		"Apprentice- OPERATING RSON-BLDG, SITE, H		05/01/201	3 \$21.	17 \$10.00	\$13.02	\$0.00	\$44.19
DPERATING EN		•						\$0.00	\$44.65
				11/01/201				\$0.00	
For apprenti	ce rates see	"Apprentice- OPERATING	G ENGINEERS"	05/01/201	4 \$21.	.55 \$10.00) \$13.33	\$0.00	\$45.10
IRE ALARN	A INSTA	LLER		09/01/201	3 \$43.	.96 \$13.00) \$14.42	\$0.00	\$71.38
ELECTRICIANS	LOCAL 103	1		03/01/201				\$0.00	\$72.13
				09/01/201				\$0.00	\$72.82
				03/01/201				\$0.00	\$73.56
				09/01/201				\$0.00	\$74.55
				03/01/201				\$0.00	\$75.53
For apprenti	ce rates see	"Apprentice- ELECTRICI	AN"	03/03/201	υ φ τ /,	.,	, 417.70	w 0.00	gry Grydd d

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIRE ALARM REPAIR / MAINTENANCE	09/01/2013	\$32.97	\$13.00	\$12.77	\$0.00	\$58.74
/ COMMISSIONING ELECTRICIANS LOCAL 103	03/01/2014	\$33.44	\$13.00	\$13.03	\$0.00	\$59.47
	09/01/2014	\$33.84	\$13.00	\$13.05	\$0.00	\$59.89
	03/01/2015	\$34.38	\$13.00	\$13.06	\$0.00	\$60.44
	09/01/2015	\$35.10	\$13.00	\$13.08	\$0.00	\$61.18
	03/01/2016	\$35.81	\$13.00	\$13.10	\$0.00	\$61.91
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER)	06/01/2013	\$33.73	\$10.00	\$13.55	\$0.00	\$57.28
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$34.39	\$10.00	\$13.55	\$0.00	\$57.94
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER	06/01/2013	\$20.50	\$7.10	\$12.45	\$0.00	\$40.05
LABORERS - ZONE 1	12/01/2013	\$20.50	\$7.10	\$12.45	\$0.00	\$40.05
	06/01/2014	\$20.50	\$7.10	\$12.45	\$0.00	\$40.05
	12/01/2014	\$20.50	\$7.10	\$12.45	\$0.00	\$40.05
	06/01/2015	\$20.50	\$7.10	\$12.45	\$0.00	\$40.05
	12/01/2015	\$20.50	\$7.10	\$12.45	\$0.00	\$40.05
	06/01/2016	\$20.50	\$7.10	\$12.45	\$0.00	\$40.05
	12/01/2016	\$20.50	\$7.10	\$12.45	\$0.00	\$40.05
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER	09/01/2013	\$38.61	\$9.80	\$16.71	\$0.00	\$65.12
FLOORCOVERERS LOCAL 2168 ZONE I	03/01/2014	\$38.61	\$9.80	\$16.71	\$0.00	\$65.12
·						

Issue Date: 10/09/2013 **Wage Request Number:** 20131009-019 **Page 12 of 42**

Apprentice - FLOORCOVERER - Local 2168 Zone 1

Pension

Total Rate

	Effect	ive Date - 09/01/2013				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$19.31	\$9.80	\$1.79	\$0.00	\$30.90	
	2	55	\$21.24	\$9.80	\$1.79	\$0.00	\$32.83	
	3	60	\$23.17	\$9.80	\$11.34	\$0.00	\$44.31	
	4	65	\$25.10	\$9.80	\$11.34	\$0.00	\$46.24	
	5	70	\$27.03	\$9.80	\$13.13	\$0.00	\$49.96	
	6	75	\$28.96	\$9.80	\$13.13	\$0.00	\$51.89	
	7	80	\$30.89	\$9.80	\$14.92	\$0.00	\$55.61	
	. 8	85	\$32.82	\$9.80	\$14.92	\$0.00	\$57.54	
	Effect	ive Date - 03/01/2014				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	:
	1	50	\$19.31	\$9.80	\$1.79	\$0.00	\$30.90	
	2	55	\$21.24	\$9.80	\$1.79	\$0.00	\$32.83	
	3	60	\$23.17	\$9.80	\$11.34	\$0.00	\$44.31	
	4	65	\$25.10	\$9.80	\$11.34	\$0.00	\$46.24	
	5	70	\$27.03	\$9.80	\$13.13	\$0.00	\$49.96	
	6	75	\$28.96	\$9.80	\$13.13	\$0.00	\$51.89	
	7	80	\$30.89	\$9.80	\$14.92	\$0.00	\$55.61	
	8	85	\$32.82	\$9.80	\$14.92	\$0.00	\$57.54	
	Notes:		Andrew (Andrew Andrew A	orphylon konjuktón pyszeklel a	William delectrical representation	minimus seemins reservo sa	Action Commission Commission and Assembly	
	:	Steps are 750 hrs.						
	Appre	entice to Journeyworker Ratio:1:1	ьеділь, ілівірні, міштер сітрійде серенен шиште ш	WANT DELLAW ALIDEM W	erbelm- methodisk indicators :	шинше, заклюн доскаке жа	PART PRINCIPLE AND	
RK LIFT	/CHERRY	PICKER	06/01/2013	\$40,34	\$10.00	\$13.55	\$0.00	\$63.89
ERATING E	NGINEERS L	OCAL 4	12/01/2013		\$10.00	\$13.55	\$0.00	\$64.67
For appren	tice rates see	"Apprentice- OPERATING ENGINEERS"						
		ING PLANT/HEATERS	06/01/2013	\$28.19	\$10.00	\$13.55	\$0.00	\$51.74
	NGINEERS L		12/01/2013	\$28.74	\$10.00	\$13.55	\$0.00	\$52.29
		"Apprentice- OPERATING ENGINEERS"					4 5 / 1 P 1 7 P 111 P P P	
LAZIER (G ZSTEMS)	GLASS PL	ANK/AIR BARRIER/INTERIOR	07/01/2013		\$7.85	\$15.85	\$0.00	\$64.40
	CAL 35 (ZONI	E 1)	01/01/2014		\$7.85	\$16.10	\$0.00	\$65.15
			07/01/2014		\$7.85	\$16.10	\$0.00	\$66.00
			01/01/2015		\$7.85	\$16.10	\$0.00	\$66.90
			07/01/2015		\$7.85	\$16.10	\$0.00	\$67.80
			01/01/2016		\$7.85	\$16.10	\$0.00	\$68.75
			07/01/2016		\$7.85	\$16.10	\$0.00	\$69.70
		•	01/01/2017	\$46.70	\$7.85	\$16.10	\$0.00	\$70.65

Effective Date Base Wage Health Pension Supplemental Total Rate Unemployment

	Effecti Step	ive Date - 07/01/2013 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$20.35	\$7.85	\$0.00	\$0.00	\$28.20	
	2	55	\$22.39	\$7.85	\$3.58	\$0.00	\$33.82	
	3	60	\$24.42	\$7.85	\$3.90	\$0.00	\$36.17	
	4	65	\$26.46	\$7.85	\$4.23	\$0.00	\$38.54	
	5	70	\$28.49	\$7.85	\$13.90	\$0.00	\$50.24	
	6	75	\$30.53	\$7.85	\$14.23	\$0.00	\$52.61	
	7	80	\$32.56	\$7.85	\$14.55	\$0.00	\$54.96	
	8	90	\$36.63	\$7.85	\$15.20	\$0.00	\$59.68	
		ive Date - 01/01/2014				Supplemental	m . 1 m .	
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$20.60	\$7.85	\$0.00	\$0.00	\$28.45	
	2	55	\$22.66	\$7.85	\$3.66	\$0.00	\$34.17	
	3	60	\$24.72	\$7.85	\$3.99	\$0.00	\$36.56	
	4	65	\$26.78	\$7.85	\$4.32	\$0.00	\$38.95	
	5	70	\$28.84	\$7.85	\$14.11	\$0.00	\$50.80	
	6	75	\$30.90	\$7.85	\$14.44	\$0.00	\$53.19	
	7	80	\$32.96	\$7.85	\$14.77	\$0.00	\$55.58	
	8	90	\$37.08	\$7.85	\$15.44	\$0.00	\$60.37	
	Notes	Steps are 750 hrs.	· Markadar Amerikan Amerikan	TERRETARIO METERATO ELEGISTAS I	triAphrapis supplementus syphosis[11	shaasahi's tuuhushaa Yaluuhaasii isaa	stradiu ammuyust Addilatetet ikustung	
	Appro	entice to Journeyworker Ratio:1:1	GIIIIIAPE, VRIMAGRII VRIBELEP IPTIVVIIV AIIIAILEPE IIIIVVIIPT	englasamen skempasses; npellisteds 200	interest where	avolunia reminea actaviata astav	Мію, троником шинераў фрагогра-	
		R/CRANES/GRADALLS	06/01/201	3 \$40.34	\$10.00	\$13.55	\$0.00	\$63.89
RATING ENC	GINEERS L	OCAL 4	12/01/201	3 \$41,12	\$10.00	\$13.55	\$0.00	\$64.67

Classification

 Issue Date:
 10/09/2013
 Wage Request Number:
 20131009-019
 Page 14 of 42

Page 15 of 42

Issue Date: 10/09/2013

Apprentice - OPERATING ENGINEERS - Local 4

NATI	fective Date -	06/01/2013				Supplemental		
Ste	p percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	55		\$22.19	\$10.00	\$0.00	\$0.00	\$32.19	
2	60		\$24.20	\$10.00	\$13.55	\$0.00	\$47.75	
3	65		\$26.22	\$10.00	\$13.55	\$0.00	\$49.77	
4	70		\$28.24	\$10.00	\$13.55	\$0.00	\$51.79	
5	75		\$30.26	\$10.00	\$13.55	\$0.00	\$53.81	
6	80		\$32.27	\$10.00	\$13.55	\$0.00	\$55.82	
7	85		\$34.29	\$10.00	\$13.55	\$0.00	\$57.84	
8	90		\$36.31	\$10.00	\$13.55	\$0.00	\$59.86	
Efi	fective Date -	12/01/2013				Supplemental		
Ste	ep percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	55		\$22.62	\$10.00	\$0.00	\$0.00	\$32.62	
2	60		\$24.67	\$10.00	\$13.55	\$0.00	\$48.22	
3	65		\$26.73	\$10.00	\$13.55	\$0.00	\$50.28	
4	70		\$28.78	\$10.00	\$13.55	\$0.00	\$52.33	
5	75		\$30.84	\$10.00	\$13.55	\$0.00	\$54.39	
6	80		\$32.90	\$10.00	\$13.55	\$0.00	\$56.45	
7	85		\$34.95	\$10.00	\$13.55	\$0.00	\$58.50	
8	90		\$37.01	\$10.00	\$13.55	\$0.00	\$60.56	
No	ites:	SAMANAN PENUNUNUN SPECIAL MANIMAN PENUNUNUN PENUNUNUN PENUNUNUNUN PENUNUNUNUN PENUNUNUNUN PENUNUNUN PENUNUNUN		minimizer systemate Asternative	Marining relations established	VILANISTON BAYONAMI IBBIIIZAIII IIVI	nyerrapha shiriyatareen nagaqah Aras' rayaasanay	
: : %		HIIIILLI LLAHILLIY "MIIMMO "WAYTNI" MIYUMMI NIZAFUL S						
		urneyworker Ratio:1:6	HIMAKKI (KIIIIIII.M) HIIIIIIPOHII #90KIIIIIPY PPUIDAIIII IIKKKKIIII. N	MINORE DOWNER DETOCRACE	number of the number of	OTT-ONE SHOWER DEED-ONE BEEF	Post Postopi diminini daniaav	
AC (DUCTWO)			09/01/2013	\$42.35	\$9.82	\$19.08	\$2.14	\$73.39
IMEIAL WORKE	SG LOCAL 17 - A		02/01/2014	\$43.20	\$9.82	\$19.08	\$2.14	\$74.24
			08/01/2014	\$44.05	\$9.82	\$19.08	\$2.14	\$75.09
			02/01/201	\$44.95	\$9.82	\$19.08	\$2.14	\$75.99
			08/01/201	\$45.95	\$9.82	\$19.08	\$2.14	\$76.99
			02/01/2010	\$46.95	\$9.82	\$19.08	\$2.14	\$77.99
			08/01/2010	5 \$48.10	\$9.82	\$19.08	\$2.14	\$79.14
			02/01/201	7 \$49.20	\$9.82	\$19.08	\$2.14	\$80.24
			08/01/201	7 \$50.30	\$9.82	\$19.08	\$2.14	\$81.34
For apprentice rates	see "Apprentice- S	SHEET METAL WORKER"	02/01/2013	8 \$51.45	\$9.82	\$19.08	\$2.14	\$82.49
AC (ELECTRIC		LS)	09/01/201	3 \$43.96	\$13.00	\$14.42	\$0.00	\$71.38
CTRICIANS LOCAL	. 103		03/01/2014			\$14.68	\$0.00	\$72.13
			09/01/2014	4 \$45.12	\$13.00	\$14.70	\$0.00	\$72.82
			03/01/201:			\$14.72	\$0.00	\$73,56
			09/01/201:	5 \$46.80	\$13.00	\$14.75	\$0.00	\$74.55
			03/01/2016			\$14.78	\$0.00	\$75.53
For apprentice rates	see "Apprentice- E	ELECTRICIAN"	03/01/2019	5 \$47.75	\$13.00	\$14.78	\$0.00	

Wage Request Number:

20131009-019

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR)	09/01/2013	\$42.35	\$9.82	\$19.08	\$2.14	\$73.39
SHEETMETAL WORKERS LOCAL 17 - A	02/01/2014	\$43.20	\$9.82	\$19.08	\$2.14	\$74.24
	08/01/2014	\$44.05	\$9.82	\$19.08	\$2.14	\$75.09
	02/01/2015	\$44.95	\$9.82	\$19.08	\$2.14	\$75.99
	08/01/2015	\$45.95	\$9.82	\$19.08	\$2.14	\$76.99
	02/01/2016	\$46.95	\$9.82	\$19.08	\$2.14	\$77.99
	08/01/2016	\$48.10	\$9.82	\$19.08	\$2.14	\$79.14
	02/01/2017	\$49.20	\$9.82	\$19.08	\$2.14	\$80.24
	08/01/2017	\$50.30	\$9.82	\$19.08	\$2.14	\$81.34
	02/01/2018	\$51.45	\$9.82	\$19.08	\$2.14	\$82.49
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER) PIPEFITTERS LOCAL 537	03/01/2013	\$49.34	\$8.75	\$14.39	\$0.00	\$72.48
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC PIPEFITTERS LOCAL 537	03/01/2013	\$49.34	\$8.75	\$14.39	\$0.00	\$72.48
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS	06/01/2013	\$33.80	\$7.10	\$12.45	\$0.00	\$53.35
LABORERS - ZONE I	12/01/2013	\$34.55	\$7.10	\$12.45	\$0.00	\$54.10
	06/01/2014	\$35.30	\$7.10	\$12.45	\$0.00	\$54.85
	12/01/2014	\$36.05	\$7.10	\$12.45	\$0.00	\$55.60
	06/01/2015	\$36.80	\$7.10	\$12.45	\$0.00	\$56.35
	12/01/2015	\$37.55	\$7.10	\$12.45	\$0.00	\$57.10
	06/01/2016	\$38.30	\$7.10	\$12.45	\$0.00	\$57.85
	12/01/2016	\$39.30	\$7.10	\$12.45	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"	/	***************************************		~ 41 0000 mm + 0 0 mm + 0 1 0000 mm + 11 0 0 mm + 12 0 0 0 mm + 12 0 0 0 mm	T 12.5.5. EE T 1000000.05.000 EF 100000.15.15.5.5.000000.0000000.000.0000.00000.00000.0000	A Lack Status Fack but de lacens and analysis by Malesta State of Philosoccus
INSULATOR (PIPES & TANKS) HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	09/01/2013	\$42.11	\$10.95	\$12.10	\$0.00	\$65.16
REAL & PROSE INSULATORS LOCAL & (BUSIUN)	09/01/2014	\$44.11	\$10.95	\$12.10	\$0.00	\$67.16

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 16 of 42

Supplemental Unemployment

Total Rate

Step	ive Date - 09/01/2013 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.06	\$10.95	\$9.00	\$0.00	\$41.01
2	60	\$25.27	\$10.95	\$9.62	\$0.00	\$45.84
3	70	\$29.48	\$10.95	\$10.24	\$0.00	\$50.67
4	80	\$33.69	\$10.95	\$10.86	\$0.00	\$55.50
Effect	ive Date - 09/01/2014				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50	\$22.06	\$10.95	\$9.00	\$0.00	\$42.01
2	60	\$26.47	\$10.95	\$9.62	\$0.00	\$47.04
3	70	\$30.88	\$10.95	\$10.24	\$0.00	\$52.07
4	80	\$35.29	\$10.95	\$10.86	\$0.00	\$57.10
Notes	The comment of the control of the co	apper santrone summover transcent sections someone enfects	whichman structure were	нары түрүүлүн тарымуу учаната	ak antiplaymiya alkalikiliyin Vallalikiliyin abelikili	gar watering therefore with the control of the cont
	Steps are 1 year					
Appro	entice to Journeyworker Ratio:1:4	A TANAHAMA MARAMANA AMAMANA MARAMANA MA	minido vieneka avelini	B). ATTITUTE - ANNAUTOM TOTAL	minores, secures commercial serverse	eg opperation (conserve) illitaribiliti
Appro WORKER/WEL		09/16/201	3 \$40.	85 \$7.70	\$18.60	\$0.00

	Apprei	ntice - IRONWORKER - Local 7 Bo	ston				<i>1</i>	
	Effecti Step	ve Date - 09/16/2013 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	60	\$24.51	\$7.70	\$18.60	\$0.00	\$50.81	
	2	70	\$28.60	\$7.70	\$18.60	\$0.00	\$54.90	
	3	75	\$30.64	\$7.70	\$18.60	\$0.00	\$56.94	
	4	80	\$32.68	\$7.70	\$18.60	\$0.00	\$58.98	
	5	85	\$34.72	\$7.70	\$18.60	\$0.00	\$61.02	
	6	90	\$36.77	\$7.7 0	\$18.60	\$0.00	\$63.07	
	Notes:	** Structural 1:6; Ornamental 1:4		Materials described Vision	NATE SHAMMON SAFELLARY WITH SPALE	s Sandare anarem salarem re		
	Appre	ntice to Journeyworker Ratio:**	GABARLE ARRESTORIE BILLARIERO COMMUNICACIONE WYSTONIA	sepulpad melliphid olippiii	m maniposely sesseence of manying	sewiciles govinili Westerli TN	ANAL BEIDARY JULIANIA DISSERVA	
		VING BREAKER OPERATOR	06/01/201	3 \$33.	30 \$7.10	\$12.45	\$0.00	\$52.85
ABORERS - ZONE	₹ <i>1</i>		12/01/201	3 \$34.	05 \$7.10	\$12.45	\$0.00	\$53.60
			06/01/201	4 \$34.	80 \$7.10	\$12.45	\$0.00	\$54.35
			12/01/201	4 \$35.	55 \$7.10	\$12.45	\$0.00	\$55.10
			06/01/201	5 \$36.	30 \$7.10	\$12.45	\$0.00	\$55.85
			12/01/201	5 \$37.	05 \$7.10	\$12.45	\$0.00	\$56.60
			06/01/201	6 \$37.	80 \$7.10	\$12.45	\$0.00	\$57.35
			12/01/201	6 \$38.	80 \$7.10	\$12.45	\$0.00	\$58.35
For apprentice	rates see '	'Apprentice- LABORER"						

Classification		the up-	Effective Date	e Base Wage	Health		Supplemental Unemployment	Total Rat
LABORER LABORERS - ZONE	I		06/01/2013	\$33.05	\$7.10	\$12.45	\$0.00	\$52.60
ADORERS - ZONE	1		12/01/2013	\$33.80	\$7.10	\$12,45	\$0.00	\$53.35
			06/01/2014	\$34.55	\$7.10	\$12.45	\$0.00	\$54.10
			12/01/2014	\$35.30	\$7.10	\$12.45	\$0.00	\$54.85
			06/01/2015	\$36.05	\$7.10	\$12.45	\$0.00	\$55.60
			12/01/2015	\$36.80	\$7.10	\$12.45	\$0.00	\$56.35
			06/01/2016	\$37.55	\$7.10	\$12.45	\$0.00	\$57.10
			12/01/2016	\$38.55	\$7.10	\$12.45	\$0.00	\$58.10
	Apprentice	- LABORER - Zone I						
	Effective D	Pate - 06/01/2013			*	Supplementa		
	Step per	rcent	Apprentice Base Wage	Health	Pension	Unemploymen		
	1 60)	\$19.83	\$7.10	\$12.45	\$0.00	\$39.38	
	2 70)	\$23.14	\$7.10	\$12.45	\$0.00	\$42.69	
	3 80)	\$26.44	\$7.10	\$12.45	\$0.00	\$45.99	
	4 90)	\$29.75	\$7.10	\$12.45	\$0.00	\$49.30	
	Effective D		Apprentice Base Wage	Uaalth	Pension	Supplementa Unemploymen		
	······································	rcent						
	1 60		\$20.28	\$7.10	\$12.45	\$0.00		
	2 70		\$23.66	\$7.10	\$12.45	\$0.00		
	3 80		\$27.04	\$7.10	\$12.45	\$0.00	\$46,59	
	4 90)	\$30.42	\$7.10	\$12.45	\$0.00	\$49.97	
	Notes:	AMERICAN MANAGERI WANNENS PRESENTA WINGERS PRESENTE WINGSHIP	namo(qq), o(qq)qqq Byrbinini diverbine zimentibe imperiore zi	MARIANNA JOHANNAMA EESTAMANAMA 1994	dell'inor Wedvelde medamble	concensus and the plants and an annual con-	inhaidherr minlannan dinnaman tananna	
	Apprentice	e to Journeyworker Ratio:1:5		UNKERNE KARIMENTETT WAS GROUNT SHALL	SANSET TEMPERATURE THROUGHWAY	деритультару подположения напримента	THE PROPERTY OF THE PROPERTY O	
ABORER: CA		TENDER	06/01/2013	\$33.05	\$7.10	\$12.45	\$0.00	\$52.60
BORERS - ZONE			12/01/2013	\$33.80	\$7.10	\$12.45	\$0.00	\$53.35
			06/01/2014	\$34.55	\$7.10	\$12.45	\$0.00	\$54.10
			12/01/2014		\$7.10	\$12.45	\$0.00	\$54.85
			06/01/2015		\$7.10	\$12.45	\$0.00	\$55.60
			12/01/2015		\$7.10	\$12.45	\$0.00	\$56.35
			06/01/2016		\$7.10	\$12.45	\$0.00	\$57.10
			12/01/2016		\$7.10	\$12.45	\$0.00	\$58.10
For apprentice r	ates see "Appr	entice- LABORER"		······································	·	-	L. V. III. at. III A III. at. at. at. at. at. at. at. at. at. at	
		ISHER TENDER	06/01/2013	\$33.05	\$7.10	\$12.45	\$0.00	\$52.60
BORERS - ZONE	1		12/01/2013	\$33.80	\$7.10	\$12.45	\$0.00	\$53.35
			06/01/2014	\$34.55	\$7.10	\$12.45	\$0.00	\$54.10
			12/01/2014	\$35.30	\$7.10	\$12.45	\$0.00	\$54.85
			06/01/2015	\$36.05	\$7.10	\$12.45	\$0.00	\$55.60
			12/01/2015	\$36.80	\$7.10	\$12.45	\$0.00	\$56.35
			06/01/2016		\$7.10	\$12.45	\$0.00	\$57.10
						\$12.45		\$58.10

Wage Request Number: 20131009-019

Page 18 of 42

Issue Date: 10/09/2013

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS - ZONE 1	12/01/2011	\$31.80	\$7.10	\$12.45	\$0.00	\$51.35
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER	06/01/2013	\$33.30	\$7.10	\$12.45	\$0.00	\$52.85
LABORERS - ZONE I	12/01/2013	\$34.05	\$7.10	\$12.45	\$0.00	\$53.60
	06/01/2014	\$34.80	\$7.10	\$12.45	\$0.00	\$54.35
	12/01/2014	\$35.55	\$7.10	\$12.45	\$0.00	\$55.10
	06/01/2015	\$36.30	\$7.10	\$12.45	\$0.00	\$55.85
	12/01/2015	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
	06/01/2016	\$37.80	\$7.10	\$12.45	\$0.00	\$57.35
	12/01/2016	\$38.80	\$7.10	\$12.45	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"	NO					·
LABORER: MULTI-TRADE TENDER	06/01/2013	\$33.05	\$7.10	\$12.45	\$0.00	\$52.60
LABORERS - ZONE 1	12/01/2013	\$33.80	\$7.10	\$12.45	\$0.00	\$53.35
	06/01/2014	\$34.55	\$7.10	\$12.45	\$0.00	\$54.10
	12/01/2014	\$35.30	\$7.10	\$12.45	\$0.00	\$54.85
	06/01/2015	\$36.05	\$7.10	\$12.45	\$0.00	\$55.60
	12/01/2015	\$36.80	\$7.10	\$12.45	\$0.00	\$56.35
	06/01/2016	\$37.55	\$7.10	\$12.45	\$0.00	\$57.10
	12/01/2016	\$38.55	\$7.10	\$12.45	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						71 TOOLSOON AND TOO BEEN TO A STORY OF THE OWN TO STORY OF THE OWN
LABORER: TREE REMOVER LABORERS - ZONE I	06/01/2013	\$33.05	\$7.10	\$12.45	\$0.00	\$52.60
LABORERS - ZONE I	12/01/2013	\$33.80	\$7.10	\$12.45	\$0.00	\$53.35
	06/01/2014	\$34.55	\$7.10	\$12.45	\$0.00	\$54.10
	12/01/2014	\$35.30	\$7.10	\$12.45	\$0.00	\$54.85
	06/01/2015	\$36.05	\$7.10	\$12.45	\$0.00	\$55.60
	12/01/2015	\$36.80	\$7.10	\$12.45	\$0.00	\$56.35
	06/01/2016	\$37.55	\$7.10	\$12.45	\$0.00	\$57.10
	12/01/2016	\$38.55	\$7.10	\$12.45	\$0.00	\$58.10
This classification applies to the wholesale removal of standing trees including all associated trimming of branches and limbs, a apprentice rates see "Apprentice- LABORER"	and applies to the removal of branc	hes at locations r	ot on or arou	nd utility lines.	For	
LASER BEAM OPERATOR	06/01/2013	\$33.30	\$7.10	\$12.45	\$0.00	\$52.85
LABORERS - ZONE I	12/01/2013	\$34.05	\$7.10	\$12.45	\$0.00	\$53.60
	06/01/2014	\$34.80	\$7.10	\$12.45	\$0.00	\$54.35
	12/01/2014	\$35.55	\$7.10	\$12,45	\$0.00	\$55.10
	06/01/2015	\$36.30	\$7.10	\$12.45	\$0.00	\$55.85
	12/01/2015	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
	06/01/2016	\$37.80	\$7.10	\$12.45	\$0.00	\$57.35
	12/01/2016	\$38.80	\$7.10	\$12.45	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"	h daei V h der V h U	<i>\$20.00</i>	Ψ/,10		\$0.00	ψυ (3 ∗υ U

Issue Date: 10/09/2013 Wage Request Number: 20131009-019

Page 19 of 42

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
MARBLE & TILE FINISHERS	08/01/2013	\$36.66	\$10.18	\$16.83	\$0.00	\$63.67
BRICKLAYERS LOCAL 3 - MARBLE & TILE	02/01/2014	\$37.11	\$10.18	\$16.83	\$0.00	\$64.12
	08/01/2014	\$37.82	\$10.18	\$16.90	\$0.00	\$64.90
	02/01/2015	\$38.27	\$10.18	\$16.90	\$0.00	\$65.35
	08/01/2015	\$38.98	\$10.18	\$16.97	\$0.00	\$66.13
	02/01/2016	\$39.43	\$10.18	\$16.97	\$0.00	\$66.58
	08/01/2016	\$40.13	\$10.18	\$17.05	\$0.00	\$67.36
	02/01/2017	\$40.59	\$10.18	\$17.05	\$0.00	\$67.82

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

лесп tep	ve Date - percent	08/01/2013	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	50	V / 1710	\$18.33	\$10.18	\$16.83	\$0.00	\$45.34	
2	60		\$22.00	\$10.18	\$16.83	\$0.00	\$49.01	
3	70	•	\$25.66	\$10.18	\$16.83	\$0.00	\$52.67	
4	80		\$29.33	\$10.18	\$16.83	\$0.00	\$56.34	
5	90		\$32.99	\$10.18	\$16.83	\$0.00	\$60.00	
Effecti	ve Date -	02/01/2014			÷	Supplemental		
tep	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$18.56	\$10.18	\$16.83	\$0.00	\$45.57	
2	60		\$22.27	\$10.18	\$16.83	\$0.00	\$49.28	
3	70		\$25.98	\$10.18	\$16.83	\$0.00	\$52.99	
4	80		\$29.69	\$10.18	\$16.83	\$0.00	\$56.70	
5	90		\$33.40	\$10.18	\$16.83	\$0.00	\$60.41	
lotes:	- Ankalakter holomorkeler he	dayaya iliyenne njillininin malayayi dahillani sahihalan saw	erapak yanarenna namerirara simulande shekilabada debilikhad	www.Godes wileweb.Ngp HHILLIAM.	AULIANIA IIIIIIIII IIIIIAAIA	patamagan madalifanga managand Sala	THE PROPERTY OF THE REAL PROPERTY.	
NAME and A				covered security attended to				
t nnna	ntice to Io	urneyworker Ratio:1:3	more and a second	***************************************				

MARBLE MASONS, IILELAYERS & IERRAZZO MECH	08/01/2013	\$48.10	\$10.18	\$18.15	\$0.00	\$76.43
BRICKLAYERS LOCAL 3 - MARBLE & TILE	02/01/2014	\$48.66	\$10.18	\$18.15	\$0.00	\$76.99
	08/01/2014	\$49.56	\$10.18	\$18.22	\$0.00	\$77.96
	02/01/2015	\$50.12	\$10.18	\$18.22	\$0.00	\$78.52
	08/01/2015	\$51.02	\$10.18	\$18.29	\$0.00	\$79.49
	02/01/2016	\$51.59	\$10.18	\$18.29	\$0.00	\$80.06
	08/01/2016	\$52.49	\$10.18	\$18.37	\$0.00	\$81.04
	02/01/2017	\$53.06	\$10.18	\$18.37	\$0.00	\$81.61

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 20 of 42

Pension

\$15.76

\$0.00

\$63.70

Total Rate

04/01/2015

\$38.14

\$9.80

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 21 of 42

A	pprentice - A	MILLWRIGHT - Local 1121 .	Zone I					
E	Effective Date -	10/01/2013				Supplemental		
S	step percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
]	1 55		\$19.50	\$9.80	\$4.32	\$0.00	\$33.62	
2	2 65		\$23.04	\$9.80	\$13.01	\$0.00	\$45.85	
3	3 75		\$26.59	\$9.80	\$13.80	\$0.00	\$50.19	
2	4 85		\$30.13	\$9.80	\$14.58	\$0.00	\$54.51	
E	Effective Date -	04/01/2014				Supplemental		
S	step percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
J	1 55	•	\$19.93	\$9.80	\$4.32	\$0.00	\$34.05	
2	2 65		\$23.55	\$9.80	\$13.01	\$0.00	\$46.36	
3	3 75		\$27.17	\$9.80	\$13.80	\$0.00	\$50.77	
4	4 85		\$30.80	\$9.80	\$14.58	\$0.00	\$55.18	
N	Notes:	managamen yerasilasan madereraya, maraliberin rawasilata lamadawal ra	mmorcia antiseppo suggestar succeppo, attaitum, samunas	nomething companies concentral a	erronnen menskannige omerikaris.	National Commission Association in	· ·	
	Steps are	e 2,000 hours					2	
ъ А	abe autobilio emilijili, verosere	ourneyworker Ratio:1:5		MINISTER DIP-CLASS - CPTILLING -	www.de deglereps enmissier	rillillin. Illilliwe weekw bill	deed statement thatment wouldn't	
MORTAR MIXE	Ŗ	······································	06/01/2013	\$33.30	\$7.10	\$12.45	\$0.00	\$52.85
LABORERS - ZONE I			12/01/2013			\$12.45	\$0.00	\$53.60
			06/01/2014	\$34.80		\$12.45	\$0.00	\$54.35
		-	12/01/2014	\$35.55	\$7.10	\$12.45	\$0.00	\$55.10
)		06/01/2015	\$36.30		\$12.45	\$0.00	\$55.85
			12/01/2015	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
			06/01/2016	\$37.80	\$7.10	\$12.45	\$0.00	\$57.35
			12/01/2016	5 \$38.80	\$7.10	\$12.45	\$0.00	\$58.35
For apprentice rat	es see "Apprentice-	LABORER"					#PORE 1000	
OILER (OTHER TO OPERATING ENGINE		CRANES,GRADALLS)	06/01/2013	\$21.17	\$10.00	\$13.55	\$0.00	\$44.72
			12/01/2013	\$21.59	\$10.00	\$13.55	\$0.00	\$45.14
***************************************		OPERATING ENGINEERS"			·	**************************************	,\	
OILER (TRUCK (OPERATING ENGINE		ADALLS)	06/01/2013	\$24.57	\$10.00	\$13.55	\$0.00	\$48.12
		· OPERATING ENGINEERS"	12/01/2013	\$25.06	\$10.00	\$13.55	\$0.00	\$48.61
/VL/		TPMENT - CLASS II	07/04/002	420.00	*	e12 cc	ΦΛ ΛΛ	ACA #4
OPERATING ENGINE	_	II WENT CEARS II	06/01/2013			\$13.55	\$0.00	\$63.51
For apprentice rate	es see "Apprentice-	OPERATING ENGINEERS"	12/01/2013	\$40.74	\$10.00	\$13.55	\$0.00	\$64.29
PAINTER (BRID	GES/TANKS)		07/01/2013	3 \$45.41	\$7.85	\$15.85	\$0.00	\$69.11
PAINTERS LOCAL 35	- ZONE 1		01/01/2014		\$7.85	\$16.10	\$0.00	\$69.86
			07/01/2014			\$16.10	\$0.00	\$70.71
			01/01/201			\$16.10	\$0.00	\$71.61
			07/01/2015			\$16.10	\$0.00	\$72.51
			01/01/201		\$7.85	\$16.10	\$0.00	\$73.46
						\$16.10		
			07/01/2016				\$0.00	\$74.41
			01/01/201	7 \$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

•	Effecti	ve Date -	07/01/2013				Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50		\$22.71	\$7.85	\$0.00	\$0.00	\$30.56	
	2	55		\$24.98	\$7.85	\$3.58	\$0.00	\$36.41	
	3	60		\$27.25	\$7.85	\$3.90	\$0.00	\$39.00	
	4	65		\$29.52	\$7.85	\$4.23	\$0.00	\$41.60	
•	5	70		\$31.79	\$7.85	\$13.90	\$0.00	\$53.54	
	6	75		\$34.06	\$7.85	\$14.23	\$0.00	\$56.14	
	7	80		\$36.33	\$7.85	\$14.55	\$0.00	\$58.73	
	8	90		\$40.87	\$7.85	\$15.20	\$0.00	\$63.92	
	Effecti	ve Date -	01/01/2014				Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50		\$22.96	\$7.85	\$0.00	\$0.00	\$30.81	
	2	55		\$25.25	\$7.85	\$3.66	\$0.00	\$36.76	
	3	60		\$27.55	\$7.85	\$3.99	\$0.00	\$39.39	
	4	65		\$29.84	\$7.85	\$4.32	\$0.00	\$42.01	
	5	70		\$32.14	\$7.85	\$14.11	\$0.00	\$54.10	
	6	75		\$34.43	\$7.85	\$14.44	\$0.00	\$56.72	
	7	80		\$36.73	\$7.85	\$14.77	\$0,00	\$59.35	
	8	90		\$41.32	\$7.85	\$15.44	\$0.00	\$64.61	
	Notes:	n conformation displaying of	дантару, өзөнүүлүн, мүүнүнүн жүнүүнүн түнүүнүн, улуучин ши	ween, washist seemes alwasta thrower assesses	remember sensitive washinki se	skyggelik syrummer rhunderhu	· VVVVVIIIA WWW.Phori shishishishi ku	can capping and an annual and an an an and an	
•		Steps are	750 hrs.					<u> </u>	
	Appre	ntice to Jo	urncyworker Ratio:1:1	HIIIP KRAMAYA NIHIIIIIA ALIIKMA AATIMAH KARMANA J	Michigan aballand, papagawa gu	IKIINII ITIIIMIIZ IIIIIPLIIN	memorini separatera alesabilio: No-	resex specialists (notations to institute	
PAINTER (SPR				07/01/2013	\$42.10	\$7.85	\$15.85	\$0.00	\$65.80
			painted are new construction TERS LOCAL 35 - ZONE 1	on, 01/01/2014	\$42.60	\$7.85	\$16.10	\$0.00	\$66.55
TVL W paint rate	snan oc	usca.FAIN1	ERS EOCAL 33 - ZONE 1	07/01/2014	\$43.45	\$7.85	\$16.10	\$0.00	\$67.40
				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

	Effecti	ve Date - 07/01/2013				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$21.05	\$7.85	\$0.00	\$0.00	\$28.90	
	2	55	\$23.16	\$7.85	\$3.58	\$0.00	\$34.59	
	3	60	\$25.26	\$7.85	\$3.90	\$0.00	\$37.01	
	4	65	\$27.37	\$7.85	\$4.23	\$0.00	\$39.45	
	5	70	\$29.47	\$7.85	\$13.90	\$0.00	\$51.22	
	6	75	\$31.58	\$7.85	\$14.23	\$0.00	\$53.66	
	7	80	\$33.68	\$7.85	\$14.55	\$0.00	\$56.08	
	8	90	\$37.89	\$7.85	\$15.20	\$0.00	\$60.94	
	Effecti	ve Date - 01/01/2014				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$21.30	\$7.85	\$0.00	\$0.00	\$29.15	
	2	55	\$23.43	\$7.85	\$3.66	\$0.00	\$34.94	
	3	60	\$25,56	\$7.85	\$3.99	\$0.00	\$37.40	
	4	65	\$27.69	\$7.85	\$4.32	\$0.00	\$39.86	
	5	70	\$29.82	\$7.85	\$14.11	\$0.00	\$51.78	
	6	75	\$31.95	\$7.85	\$14.44	\$0.00	\$54.24	
	7	80	\$34.08	\$7.85	\$14.77	\$0.00	\$56.70	
	8	90	\$38.34	\$7.85	\$15.44	\$0.00	\$61,63	
	Notes:	or Historicky, Athermic obstrained (Calderly), appropriate VVAVVA FAMILIE Hydrodick	THE PROPERTY OF THE PROPERTY O	TRANSPORT TRANSPORTER PROSPERATOR	Sussidified Substances Statement	And the second s	Access, maximum commercial attraction	
		Steps are 750 hrs.						
	Appre	ntice to Journeyworker Ratio:1:1	финанция оприняния шиншта» муменая опименция барамара.	semblecter dargitelette Valorighye a	applitudes assessed, propping	devicted influence Viscolistics wild	PLASS HIRIBRITHI MIDAATIA SAIPTYAN	
		SANDBLAST, REPAINT)	07/01/201	3 \$40.16	\$7.85	\$15.85	\$0.00	\$63.86
ITERS LOCAL	. 35 - ZONI	t I	01/01/201	4 \$40.66	\$7.85	\$16.10	\$0.00	\$64.61
			07/01/201	4 \$41.51	\$7.85	\$16.10	\$0.00	\$65.46
			01/01/201	5 \$42.41	\$7.85	\$16.10	\$0.00	\$66.36
			07/01/201	5 \$43.31	\$7.85	\$16.10	\$0.00	\$67.26
			01/01/201	6 \$44.26	\$7.85	\$16.10	\$0.00	\$68.21
			07/01/201	6 \$45.21	\$7.85	\$16.10	\$0.00	\$69.16
			01/01/201	7 \$46.16	\$7.85	\$16.10	\$0.00	\$70.11

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 24 of 42

	Step	ve Date - 07/01/2013 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$20.08	\$7.85	\$0.00	\$0.00	\$27.93	
	2	55	\$22.09	\$7.85	\$3.58	\$0.00	\$33.52	
	3	60	\$24.10	\$7.85	\$3.90	\$0.00	\$35.85	
	4	65	\$26.10	\$7.85	\$4.23	\$0.00	\$38.18	
	5	70	\$28.11	\$7.85	\$13.90	\$0.00	\$49.86	
	6	75	\$30.12	\$7.85	\$14.23	\$0.00	\$52.20	
	7	80	\$32.13	\$7.85	\$14.55	\$0.00	\$54.53	
	8	90	\$36.14	\$7.85	\$15.20	\$0.00	\$59.19	
	Effecti	ve Date - 01/01/2014				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$20.33	\$7.85	\$0.00	\$0.00	\$28.18	
	2	55	\$22.36	\$7.85	\$3.66	\$0.00	\$33.87	
	3	60	\$24.40	\$7.85	\$3.99	\$0.00	\$36.24	
	4	65	\$26.43	\$7.85	\$4.32	\$0.00	\$38.60	
	5	70	\$28.46	\$7.85	\$14.11	\$0.00	\$50.42	
	6	75	\$30.50	\$7.85	\$14.44	\$0.00	\$52.79	
	7	80	\$32.53	\$7.85	\$14.77	\$0.00	\$55.15	
	8	90	\$36.59	\$7.85	\$15.44	\$0.00	\$59.88	
	Notes:	Steps are 750 hrs.	В Ваходання нададацію честавуні Алексічні назавання авенераль іншефара	McVindums* Shints*(post internacea)	tatidhiddi mekalaridar Adaablaya	ортовново, <u>Д</u> епунково продружду по	urrent lassurer shows the sense	
	Appre	ntice to Journeyworker Ratio	« постам жаначе шенька валить», ежичене солиши шалишт	ORBREO SEETING CARRYN S	symmen employeds attitudativ	PARTITUM STRUMBER HUMBERS AND	KEUMI SEOKKER III-I	
	AFFIC N	MARKINGS)	06/01/201	3 \$33.05	\$7.10	\$12.45	\$0.00	\$52.60
RERS - ZON	E I		12/01/201	3 \$33.80	\$7.10	\$12.45	\$0.00	\$53.35
			06/01/201	4 \$34.55	\$7.10	\$12.45	\$0.00	\$54.10
•			12/01/201	4 \$35.30	\$7.10	\$12.45	\$0.00	\$54.8
			06/01/201	5 \$36.05	\$7.10	\$12.45	\$0.00	\$55.60
			12/01/201	5 \$36.80	\$7.10	\$12.45	\$0.00	\$56.33
			06/01/201	6 \$37.55	\$7.10	\$12.45	\$0.00	\$57.10
			12/01/201	6 \$38.55	\$7.10	\$12.45	\$0.00	\$58.10
		"Apprentice- LABORER"	· — \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	and a second of the second of	•		\$*	
		RUSH, NEW) * faces to be painted are new con	07/01/201 struction			\$15.85	\$0.00	\$64.40
		used.PAINTERS LOCAL 35 - ZONE	1 01/01/201			\$16.10	\$0.00	\$65.13
			07/01/201			\$16.10	\$0.00	\$66.0
			01/01/201			\$16.10	\$0.00	\$66.9
			07/01/201			\$16.10	\$0.00	\$67.80
			01/01/201			\$16.10	\$0.00	\$68.73
			07/01/201	6 \$45.75	\$7.85	\$16.10	\$0.00	\$69.70

Apprentice - PAINTER - Local 35 Zone 1 - BRUSH NEW

	Effect	ive Date - 07/01/2013	•					
	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$20.35	\$7.85	\$0.00	\$0.00	\$28.20	
	2	55	\$22.39	\$7.85	\$3.58	\$0.00	\$33.82	
	3	60	\$24.42	\$7.85	\$3.90	\$0.00	\$36.17	
	4	65	\$26.46	\$7.85	\$4.23	\$0.00	\$38.54	
	5	70	\$28.49	\$7.85	\$13.90	\$0.00	\$50.24	
	6	75	\$30.53	\$7.85	\$14.23	\$0.00	\$52.61	
	7	80	\$32,56	\$7.85	\$14.55	\$0.00	\$54.96	
	8	90	\$36.63	\$7.85	\$15.20	\$0.00	\$59.68	
	Effect	ive Date - 01/01/2014						
	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$20.60	\$7.85	\$0.00	\$0.00	\$28.45	
	2	55	\$22.66	\$7.85	\$3.66	\$0.00	\$34.17	
	3	60	\$24.72	\$7.85	\$3.99	\$0.00	\$36.56	
	4	65	\$26.78	\$7.85	\$4.32	\$0.00	\$38.95	
	, 5	70	\$28.84	\$7.85	\$14.11	\$0.00	\$50.80	
•	6	75	\$30.90	\$7.85	\$14.44	\$0.00	\$53.19	
	7	80	\$32.96	\$7.85	\$14.77	\$0.00	\$55.58	
	8	90	\$37.08	\$7.85	\$15.44	\$0.00	\$60.37	
	Notes:	Steps are 750 hrs.	Makadada elahanna Aphablah middan elaminik fadasilisi	androdogy - emercerature electrodogy W	WARRING STRATEGIC TEACHERSTA	SALOWANE PROMISER SALOWAN	BETTO, SURVEYOR VERTONIA VARAMING	
	Appro	entice to Journeyworker Ratio:1:1	wallindow Allikhidid. Bilindoligid silidowawa lowbidolos pradedolos pradedolos a	opiojdisk omistiklji illikilonini da	HINDE BEHNME HIPLAYW	BIHIHIHI VIIIIANNI A-HIHIHIHI) ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	
		RUSH, REPAINT)	07/01/2013	\$38.76	\$7.85	\$15.85	\$0.00	\$62.46
TERS LOC	'AL 35 - ZON	E /	01/01/2014	\$39.26	\$7.85	\$16.10	\$0.00	\$63.21
			07/01/2014	\$40.11	\$7.85	\$16.10	\$0.00	\$64.06
			01/01/201:	\$41.01	\$7.85	\$16.10	\$0.00	\$64.96
			07/01/201:	\$41.91	\$7.85	\$16.10	\$0.00	\$65.86
			01/01/2016	\$42.86	\$7.85	\$16.10	\$0.00	\$66.81
			07/01/2010	\$43.81	\$7.85	\$16.10	\$0.00	\$67.76
			01/01/201	\$44.76	\$7.85	\$16.10	\$0.00	\$68.71

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 26 of 42

\$0.00

\$0.00

\$0.00

\$0.00

\$71.07

\$68.07

\$69.57

\$71.07

\$18.17

\$18.17

\$18.17

\$18.17

PILE DRIVER

PILE DRIVER LOCAL 56 (ZONE 1)

Total Rate

		ive Date - 07/01/2013	A manufacture Process MA	YY 341:	D'	Supplemental	Tr 1.D	
	Step	percent	Apprentice Base Wage		Pension	Unemployment	Total Rate	· · · · · · · · · · · · · · · · · · ·
	1	50	\$19.38	\$7.85	\$0.00	\$0.00	\$27.23	
	2	55	\$21.32	\$7.85	\$3.58	\$0.00	\$32.75	
	3	60	\$23.26	\$7.85	\$3.90	\$0.00	\$35.01	
	4	65	\$25.19	\$7.85	\$4.23	\$0.00	\$37.27	
	5	70	\$27.13	\$7.85	\$13.90	\$0.00	\$48.88	
	6	75	\$29.07	\$7.85	\$14.23	\$0.00	\$51.15	
	7	80	\$31.01	\$7.85	\$14.55	\$0.00	\$53.41	
	8	90	\$34.88	\$7.85	\$15.20	\$0.00	\$57.93	5.
	Effect	ive Date - 01/01/2014	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$19.63	\$7.85	\$0.00	\$0.00	\$27.48	~~~~~
	2	55	\$21.59	\$7.85	\$3.66	\$0.00	\$33.10	
	3	60	\$23.56	\$7.85	\$3.99	\$0.00	\$35.40	
	4	65	\$25.52	\$7.85	\$4.32	\$0.00	\$37.69	
	5	70	\$27.48	\$7.85	\$14.11	\$0.00	\$49.44	
	6	75	\$29.45	\$7.85	\$14,44	\$0.00	\$51,74	
	7	80	\$31.41	\$7.85	\$14.77	\$0.00	\$54.03	
	8	90	\$35.33	\$7.85	\$15.44	\$0.00	\$58.62	
	Notes:	Steps are 750 hrs.	ayahindah. Adaquintiq Virgipiydaj qiyalayda indahindig affinddadi. Vandrilari	harandona della de	AAAAAA ahdintaa iskeey	I www.n =en.mass wasseve w.	Months of the Market Arthur	
	,		HILLIAND GUIVEN HERMON SCHEMEN STATISH WAS WAS IN HILLIAND .					
	Appre	ntice to Journeyworker Ratio:			minora valuati	TOPMULLI IPSNOON WELL	n = PPTP APPROPRIE	
		UCKS DRIVER IL NO. 10 ZONE A	12/01/201	2 \$31.38	\$8.91	\$8.00	\$0.00	\$48.2
	OCK CO	NSTRUCTOR (UNDERPINNI)	NG AND 08/01/201	3 \$40.10	\$9.80	\$18.17	\$0.00	\$68.0
K)	CAL 56 (ZC		08/01/201-	4 \$41.60	\$9.80	\$18.17	\$0.00	\$69.5

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 27 of 42

08/01/2015

08/01/2013

08/01/2014

08/01/2015

\$43.10

\$40.10

\$41.60

\$43.10

\$9.80

\$9.80

\$9.80

\$9.80

	ive Date - 08/01/2013				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50	\$20.05	\$9.80	\$18.17	\$0.00	\$48.02
2	60	\$24.06	\$9.80	\$18.17	\$0.00	\$52.03
3	70	\$28.07	\$9.80	\$18.17	\$0.00	\$56.04
4	75	\$30.08	\$9.80	\$18.17	\$0.00	\$58.05
5	80	\$32.08	\$9.80	\$18.17	\$0.00	\$60.05
6	80	\$32.08	\$9.80	\$18.17	\$0.00	\$60.05
7	90	\$36.09	\$9.80	\$18.17	\$0.00	\$64.06
8	90	\$36.09	\$9.80	\$18.17	\$0.00	\$64.06
Effect	ive Date - 08/01/2014				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	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
Notes	- 	THE THE THE STATE STATES STATES STATES STATES STATES STATES	Partition of the Advance to Appendix	TO THE STATE OF TH	s vooronneers enhantsiin hyddyddiasy sarybryg	Pas washaram shikawashi nyensangi :
:						
Ánnr	entice to Journeyworker Rati	HER HEADERHI SIIISLESII IPAAAAT SAIDAPIL HERIIIIIII WARRAA WARRAAN A 113	mandren (EP)PIACO ANTHON	ш епинення ментинг. помыму	Treppene Attended bloodedy BENVER	a simessary desirated converse.

tep	percent 03/01/2013	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
	40	\$19.74	\$8.75	\$6.50	\$0.00	\$34.99
2	45	\$22.20	\$8.75	\$14.39	\$0.00	\$45.34
3	60	\$29.60	\$8.75	\$14.39	\$0.00	\$52.74
4	70	\$34.54	\$8.75	\$14.39	\$0.00	\$57.68
5	80	\$39.47	\$8.75	\$14.39	\$0.00	\$62.61

** 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:**

PIPEFITTERS LOCAL 537

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIPELAYER LABORERS - ZONE 1	06/01/2013	\$33.30	\$7.10	\$12.45	\$0.00	\$52.85
LABORERS - ZONE 1	12/01/2013	\$34.05	\$7.10	\$12.45	\$0.00	\$53.60
	06/01/2014	\$34.80	\$7.10	\$12.45	\$0.00	\$54.35
	12/01/2014	\$35.55	\$7.10	\$12.45	\$0.00	\$55.10
	06/01/2015	\$36.30	\$7.10	\$12.45	\$0.00	\$55.85
	12/01/2015	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
	06/01/2016	\$37.80	\$7.10	\$12.45	\$0.00	\$57.35
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$38.80	\$7.10	\$12.45	\$0.00	\$58.35
PLUMBERS & GASFITTERS PLUMBERS & GASFITTERS LOCAL 12	03/01/2013	\$49.31	\$9.32	\$13.29	\$0.00	\$71.92

	Step	ive Date - 03/01/2013	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total I	Rate
	1	35	\$17.26	\$9.32	\$4.97	\$0.00		1.55
	2	40	\$19.72	\$9.32	\$5.61	\$0.00	·	4.65
	3	55	\$27.12	\$9.32	\$7.53	\$0.00	*-	3.97
	4	65	\$32.05	\$9.32	\$8.81	\$0.00		0.18
	5	75	\$36.98	\$9.32	\$10.09	\$0.00	, .	6.39
	Notes	** 1:2; 2:6; 3:10; 4:14; 5:19 Step4 with lic\$53.29 Step5 v	•	· controlled shoulding IIIAta	ultrillidik venuverene verpenga	1 whitehold allohology willingsome or	v-blektit, Mattiddek Mattiddek d	20-6-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0
	Appro	entice to Journeyworker Rati	O: **	minutes with the first of	Pr attioneds: Iministity responding	waanagam ilingishiin maaamaga mi	ARDON VEHILLAVA (AMBRADA) AL	inman
'NEUMATIC PIPEFITTERS LO		COLS (TEMP.)	03/01/201	13 \$49.	34 \$8.75	\$14.39	\$0.00	\$72.48
For apprentic	e rates see	"Apprentice- PIPEFITTER" or "PLUM	MBER/PIPEFITTER"					
		TOOL OPERATOR	06/01/20	13 \$33.	30 \$7.10	\$12,45	\$0.00	\$52.85
ABORERS - ZON	VE I		12/01/201	13 \$34.	05 \$7.10	\$12.45	\$0.00	\$53.60
		i e	06/01/201	14 \$34.	80 \$7.10	\$12.45	\$0.00	\$54.35
			12/01/201	\$35.	55 \$7.10	\$12.45	\$0.00	\$55.10
			06/01/201	l5 \$36.	30 \$7.10	\$12.45	\$0.00	\$55.85

PNEUM. LABORERS 12/01/2015 \$12.45 \$0.00 \$37.05 \$7.10 \$56.60 06/01/2016 \$37.80 \$7.10 \$12.45 \$0.00 \$57.35 12/01/2016 \$38.80 \$7.10 \$12.45 \$0.00 \$58.35 For apprentice rates see "Apprentice- LABORER" POWDERMAN & BLASTER 06/01/2013 \$34.05 \$7.10 \$12.45 \$0.00 \$53.60 LABORERS - ZONE 1 12/01/2013 \$7.10 \$12.45 \$0.00 \$34.80 \$54.35 06/01/2014 \$35.55 \$7.10 \$12.45 \$0.00 \$55.10 12/01/2014 \$36.30 \$7.10 \$12.45 \$0.00 \$55.85 \$12.45 06/01/2015 \$37.05 \$7.10 \$0.00 \$56.60 12/01/2015 \$37.80 \$7.10 \$12.45 \$0.00 \$57.35 06/01/2016 \$12.45 \$38.55 \$7.10 \$0.00 \$58.10 12/01/2016 \$39.55 \$7.10 \$12,45 \$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	06/01/2013	\$40.34	\$10.00	\$13.55	\$0.00	\$63.89
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$41.12	\$10.00	\$13.55	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE)	06/01/2013	\$40.34	\$10.00	\$13.55	\$0.00	\$63.89
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$41.12	\$10.00	\$13.55	.\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4	06/01/2013	\$28.19	\$10.00	\$13.55	\$0.00	\$51.74
OF BIGHTING ENGINEERS LOCAL 4	12/01/2013	\$28.74	\$10.00	\$13.55	\$0.00	\$52.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER TEAMSTERS LOCAL 25a	05/01/2011	\$29.99	\$7.75	\$5.91	\$0.00	\$43.65
RECLAIMERS	06/01/2013	\$39.96	\$10.00	\$13.55	\$0.00	\$63.51
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.74	\$10.00	\$13.55	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RESIDENTIAL WOOD FRAME (All Other Work) CARPENTERS - ZONE 1 (Residential Wood)	04/01/2011	\$37.25	\$8.67	\$15.51	\$0.00	\$61.43
RESIDENTIAL WOOD FRAME CARPENTER ** ** The Residential Wood Frame Carpenter classification applies	05/01/2011	\$27.49	\$6.34	\$6.23	\$0.00	\$40.06

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

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 I	1
--------------	-----------	--------------	-------------	----------	---

		ive Date - 05/01/2011	i ir odd i rumej - Zone i					
	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rat	e
	1	60	\$16.49	\$6.34	\$0.00	\$0.00	\$22.8	3
	2	60	\$16.49	\$6.34	\$6.23	\$0.00	\$29.0	6
	. 3	65	\$17.87	\$6.34	\$6.23	\$0.00	\$30.4	4
	4	70	\$19.24	\$6.34	\$6.23	\$0.00	\$31.8	1
	5	75	\$20.62	\$6.34	\$6.23	\$0.00	\$33.1	9
	. 6	80	\$21.99	\$6.34	\$6.23	\$0.00	\$34.5	6
	7	85	\$23.37	\$6.34	\$6.23	\$0.00	\$35.9	4
	8	90	\$24.74	\$6.34	\$6.23	\$0.00	\$37.3	1
	Notes:		PPWN AAAAAAAP WWW.aalam Sababdaa aykkabuur jibhuuruu Nabuubgi.		urrusudd ddddarfu ethiolog	r iiddalaan arrenarii Maaliinee Ab	enneme allestiferam velocometa, tresteram	
	Appre	ntice to Journeyworker Ratio:1:5	as asymmetry the same and the asymmetry and asymmetry and asymmetry and asymmetry and asymmetry and asymmetry	and the second s	nerview receives revenues	menusere removação quiposerus ensi-	Anala emilianin severene iliningina	
		D BUGGY OPERATOR	06/01/201	3 \$33.30	\$7.10	\$12.45	\$0.00	\$52.85
ORERS - ZO	NE I		12/01/201	3 \$34.05	\$7.10	\$12.45	\$0.00	\$53.60
			06/01/201-	4 \$34.80	\$7.10	\$12.45	\$0.00	\$54.35
			12/01/201	4 \$35.55	\$7.10	\$12.45	\$0.00	\$55.10
			06/01/201	5 \$36.30	\$7.10	\$12.45	\$0.00	\$55.85
			12/01/201	5 \$37.05	\$7.10	\$12.45	\$0.00	\$56.60
			06/01/201	6 \$37.80	\$7.10	\$12.45	\$0.00	\$57.35

Issue Date: 10/09/2013

For apprentice rates see "Apprentice- LABORER"

Wage Request Number:

20131009-019

\$7.10

\$12.45

\$0.00

12/01/2016

\$58.35

^{1 (}Residential Wood)

Classification			Effective Dat	e Base Wage	e Health	Pensian	Supplemental Unemployment	Total Rate
ROLLER/SPREAD		NG MACHINE	06/01/2013	\$39.96	\$10.00	\$13.55	\$0.00	\$63.51
OPERATING ENGINEE			12/01/2013	\$40.74	\$10.00	\$13.55	\$0.00	\$64.29
		OPERATING ENGINEERS"			······································			ساندانده و و درسانده و به رسان سان و سسان
ROOFER (Inc.Roo: ROOFERS LOCAL 33	fer Waterproof	ng &Roofer Damproofg)	08/01/2013	\$38.31	\$10.50	\$10.70	\$0.00	\$59.51
			02/01/2014	\$39.21	\$10.50	\$10.70	\$0.00	\$60.41
			08/01/2014	\$40.11	\$10.50	\$10.70	\$0.00	\$61.31
			02/01/2015	\$41.01	\$10.50	\$10.70	\$0.00	\$62.21
			08/01/2015	\$41.91	\$10.50	\$10.70	\$0.00	\$63.11
			02/01/2016	\$42.81	\$10.50	\$10.70	\$0.00	\$64.01
	pprentice - R	OOFER - Local 33 08/01/2013						
	ep percent		Apprentice Base Wage	Health	Pension	Supplementa Unemploymen		adam ki danda la mana a mallowa
1	50		\$19.16	\$10.50	\$3.38	\$0.00	\$33.04	
2	60		\$22.99	\$10.50	\$10.70	\$0.00	\$44.19	
3	65		\$24.90	\$10.50	\$10.70	\$0.00	\$46.10	
4	75		\$28.73	\$10.50	\$10.70	\$0.00	\$49.93	
5	85		\$32.56	\$10.50	\$10.70	\$0.00	\$53.76	
	ffective Date -	02/01/2014	Apprentice Base Wage	Health	Pension	Supplementa Unemploymen		
î.	**************************************		\$19.61	\$10.50	\$3.38	\$0.00	·	
2			\$23.53	\$10.50	\$10.70	\$0.00		
3			\$25.49	\$10.50	\$10.70	\$0.00		
4			\$29.41	\$10.50	\$10.70	\$0.00		
5			\$33.33	\$10.50	\$10.70	\$0.00		
\mathbf{N}_0	-	6-10, the 1:10; Reroofing: 1:- 2000 hrs.; Steps 2-5 are 1000		menetusket essilliten Numbestell a	maniner andresses shirt-serve	entituette utuen etuu titigenetsee -	AMPRICATE SECURITY SECURITY SECURITY	
:								
Aj		ourneyworker Ratio:**	nage kylomodyket indeggedydd ithoustelliaer Nodrych ac Africallinin i	ngamagayan vanagadar dalayangga, nga	11.49mm	ANNERS SERVICE (Afternoon)		
ROOFER SLATE	pprentice to Jo		08/01/2013	3 \$38.56	\$10.50	\$10.70	\$0.00	\$59.76
ROOFER SLATE	pprentice to Jo		08/01/2013 02/01/2014		\$10.50 \$10.50	\$10.70 \$10.70	\$0.00	\$59.76 \$60.66
ROOFER SLATE	pprentice to Jo			\$39.46				
A) ROOFER SLATE / ROOFERS LOCAL 33	pprentice to Jo		02/01/2014	\$39.46 \$40.36	\$10.50	\$10.70	\$0.00	\$60.66
ROOFER SLATE	pprentice to Jo		02/01/2014 08/01/2014	\$39.46 \$40.36 \$41.26	\$10.50 \$10.50	\$10.70 \$10.70	\$0.00 \$0.00	\$60.66 \$61.56

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 31 of 42

sification		Effective Date	Base Wage	Health		Supplemental Unemployment	Total Rate
ETMETAL WORK		09/01/2013	\$42.35	\$9.82	\$19.08	\$2.14	\$73.39
TMETAL WORKERS LO	OCAL 17 - A	02/01/2014	\$43.20	\$9.82	\$19.08	\$2.14	\$74.24
		08/01/2014	\$44.05	\$9.82	\$19.08	\$2.14	\$75.09
		02/01/2015	\$44.95	\$9.82	\$19.08	\$2.14	\$75.99
		08/01/2015	\$45.95	\$9.82	\$19.08	\$2.14	\$76.99
		02/01/2016	\$46.95	\$9.82	\$19.08	\$2.14	\$77.99
		08/01/2016	\$48.10	\$9.82	\$19.08	\$2.14	\$79.14
		02/01/2017	\$49.20	\$9.82	\$19.08	\$2.14	\$80.24
		08/01/2017	\$50.30	\$9.82	\$19.08	\$2.14	\$81.34
		02/01/2018	\$51.45	\$9.82	\$19.08	\$2.14	\$82.49
	ive Date - 09/01/2013	ORKER - Local 17-A	Lionish	Danaian	Supplementa		
Effecti Step	ive Date - 09/01/2013 percent	Apprentice Base Wage	· · · · · · · · · · · · · · · · · · ·	Pension	Unemploymen	t Total Rat	
Effecti Step 1	percent 40.	Apprentice Base Wage \$16.94	\$9.82	\$4.82	Unemploymen \$0.00	t Total Rat	8
Effecti Step 1 2	percent 40.	Apprentice Base Wage \$16.94 \$16.94	\$9.82 \$9.82	\$4.82 \$4.82	\$0.00 \$0.00	Total Rat 31.5 31.5 31.5	8
Effecti Step 1 2 3	percent 40 45	Apprentice Base Wage \$16.94 \$16.94 \$19.06	\$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45	\$0.00 \$0.00 \$1.12	Total Rat 31.5 331.5 338.4	8
Effecti Step 1 2 3 4	percent 40 45 45	\$16.94 \$16.94 \$19.06 \$19.06	\$9.82 \$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45 \$8.45	\$0.00 \$0.00 \$1.12	Total Rat \$31.5 \$31.5 \$38.4	8 8 5 5
Effecti Step 1 2 3 4 5	percent 40 45 45 50	\$16.94 \$16.94 \$19.06 \$19.06 \$21.18	\$9.82 \$9.82 \$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45 \$8.45 \$9.24	\$0.00 \$0.00 \$1.12 \$1.12 \$1.21	Total Rat 31.5 331.5 338.4 338.4 4341.4	8 8 5 5 5
Effecti Step 1 2 3 4 5	percent 40 45 45 50 50	\$16.94 \$16.94 \$19.06 \$19.06 \$21.18	\$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45 \$8.45 \$9.24 \$9.49	\$0.00 \$0.00 \$1.12 \$1.23 \$1.21	Total Rat \$31.5 \$31.5 \$38.4 \$41.4	8 8 5 5 5 5 0
Effecti Step 1 2 3 4 5 6 7	percent 40 45 45 50 60	\$16.94 \$16.94 \$19.06 \$19.06 \$21.18 \$21.18	\$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45 \$8.45 \$9.24 \$9.49 \$10.80	\$0.00 \$0.00 \$1.12 \$1.2 \$1.21 \$1.38	Total Rat 3 \$31.5 3 \$31.5 3 \$38.4 3 \$38.4 4 \$41.4 5 \$41.7 8 \$47.4	8 8 5 5 5 5 0 1 1
Effecti Step 1 2 3 4 5 6 7 8	percent 40 45 45 50 60 65	\$16.94 \$16.94 \$19.06 \$19.06 \$21.18 \$21.18 \$25.41 \$27.53	\$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45 \$8.45 \$9.24 \$9.49 \$10.80 \$11.59	\$0.00 \$0.00 \$1.12 \$1.23 \$1.23 \$1.38 \$1.47	Total Rat \$31.5 \$31.5 \$31.5 \$38.4 \$41.4 \$41.7 \$47.4 \$50.4	8 8 5 5 5 5 0 1
Effecti Step 1 2 3 4 5 6 7 8 9	percent 40 40 45 45 50 60 65 75	\$16.94 \$16.94 \$19.06 \$19.06 \$21.18 \$21.18 \$25.41 \$27.53 \$31.76	\$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45 \$8.45 \$9.24 \$9.49 \$10.80	\$0.00 \$0.00 \$1.12 \$1.21 \$1.22 \$1.38 \$1.47	Total Rat 331.5 331.5 338.4 338.4 341.4 341.7 347.4 550.4	8 8 5 5 5 5 0 1 1 1 8 8
Effecti Step 1 2 3 4 5 6 7 8	percent 40 45 45 50 60 65	\$16.94 \$16.94 \$19.06 \$19.06 \$21.18 \$21.18 \$25.41 \$27.53	\$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45 \$8.45 \$9.24 \$9.49 \$10.80 \$11.59	\$0.00 \$0.00 \$1.12 \$1.23 \$1.23 \$1.38 \$1.47	Total Rat 331.5 331.5 338.4 338.4 341.4 341.7 347.4 550.4	8 8 5 5 5 5 0 1 1 1 8 8
Effecti Step 1 2 3 4 5 6 7 8 9 10	percent 40 40 45 45 50 60 65 75	\$16.94 \$16.94 \$19.06 \$19.06 \$21.18 \$21.18 \$25.41 \$27.53 \$31.76	\$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82 \$9.82	\$4.82 \$4.82 \$8.45 \$8.45 \$9.24 \$9.49 \$10.80 \$11.59 \$13.16	\$0.00 \$0.00 \$1.12 \$1.21 \$1.22 \$1.38 \$1.47	Total Rat 331.5 331.5 338.4 338.4 341.4 341.7 347.4 550.4 561.8	8 8 5 5 5 0 1 1 1 8 5

step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	40	\$17.28	\$9.82	\$4.82	\$0.00	\$31.92
2	40	\$17,28	\$9.82	\$4.82	\$0.00	\$31.92
3	45	\$19.44	\$9.82	\$8.45	\$1.12	\$38.83
4	45	\$19.44	\$9.82	\$8.45	\$1.12	\$38.83
5	50	\$21.60	\$9.82	\$9.24	\$1.21	\$41.87
6	50	\$21.60	\$9.82	\$9.49	\$1.21	\$42.12
7	60	\$25,92	\$9.82	\$10.80	\$1.38	\$47.92
8	65	\$28.08	\$9.82	\$11.59	\$1.47	\$50.96
9	75	\$32.40	\$9.82	\$13.16	\$1.64	\$57.02
10	85	\$36.72	\$9.82	\$14.23	\$1.80	\$62.57

Apprentice to Journeyworker Ratio:1:4

Steps are 6 mos.

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

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 32 of 42

Supplemental Unemployment

	Step	ive Date - 06/01/2013 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	>
	1	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.98	3
	2	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72	<u>!</u>
	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	7
	8	85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06	ś
	9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35	;
	Notes:	он такженун аканеены жаналық анеерену, құлықтық челедірік тақырық жарырың жұғыды.	anne efectivem perference (thirtieth) ethethiese etemphiase parencee.	wanters messens ownship i	and a second sec	sportficientes' deletabilitates Phosphilates' sele	The second second second	
		Steps are 4 mos.					:	
	Appre	ntice to Journeyworker Ratio:1:1	VI ACHICALAN DAMETITI, IIIAVIIIIITI MIIIIIIINVI IIIIITEKKII AMMIIIAII A	DNAHEC IZABINIA ZIDVIAJIM PZ	winner wheelpfour Lixinders.	HIPAPARI HIHRIBIRI MIHABAA -AH	Hindrin wholstroom attenueum nactualities	
		H MOVING EQUIP < 35 TONS IIL NO. 10 ZONE A	12/01/2012	\$31.84	\$8.91	\$8.00	\$0.00	\$48.75
		H MOVING EQUIP > 35 TONS IIL NO. 10 ZONE A	12/01/2012	\$32.13	\$8.91	\$8.00	\$0.00	\$49.04
	R FITTER		10/01/2013	\$53.58	\$8.42	\$12.60	\$0.00	\$74.60
'RINKLER F	TTTERS LOCA	L 550 - (Section B) Zone I	01/01/2014	\$53.33	\$8.42	\$12.85	\$0.00	\$74.60
			03/01/2014	\$54.58	\$8.42	\$12.85	\$0.00	\$75.85
			10/01/2014	\$55.73	\$8.42	\$12.85	\$0.00	\$77.00
			01/01/2015	\$55.73	\$8.42	\$13.00	\$0.00	\$77.15
			03/01/2015	\$56.73	\$8.42	\$13.00	\$0.00	\$78.13
			10/01/2015	\$57.88	\$8.42	\$13.00	\$0.00	\$79.30
			01/01/2010	\$57.88	\$8.67	\$13.15	\$0.00	\$79.70
			03/01/2016	\$58.88	\$8.67	\$13.15	\$0.00	\$80.70
			10/01/2016	\$60.03	\$8.67	\$13.15	\$0.00	\$81.8

\$13.10

\$13.00

\$0.00

\$61.91

Health

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 34 of 42

03/01/2016

\$35.81

	ve Date -	09/01/2013	Apprentice Base Wage	Haalth	Pension	Supplemental Unemployment	Total Rate	
Step 1	percent							
	40		\$13.19	\$13.00	\$0.40	\$0.00	\$26.59	
2	40		\$13.19	\$13.00	\$0.40	\$0.00	\$26.59	
3	45		\$14.84	\$13.00	\$10.04	\$0.00	\$37.88	
4	45		\$14.84	\$13.00	\$10.04	\$0.00	\$37.88	
5	50		\$16.49	\$13.00	\$10.29	\$0.00	\$39.78	
6	55		\$18.13	\$13.00	\$10.53	\$0.00	\$41.66	
7	60		\$19.78	\$13.00	\$10.78	\$0.00	\$43.56	
8	65		\$21.43	\$13.00	\$11.03	\$0.00	\$45.46	
. 9	70		\$23.08	\$13.00	\$11.28	\$0.00	\$47.36	
10	75		\$24.73	\$13.00	\$11.53	\$0.00	\$49.26	
Effect Step	ive Date -	03/01/2014	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	40	**************************************	\$13.38	\$13.00	\$0.40	\$0.00	\$26.78	
2	40		\$13.38	\$13.00	\$0.40	\$0.00	\$26.78	
3	45		\$15.05	\$13.00	\$10.29	\$0.00	\$38.34	
4	45		\$15.05	\$13.00	\$10.29	\$0.00	\$38.34	
5	50		\$16.72	\$13.00	\$10.54	\$0.00	\$40.26	
6	55		\$18.39	\$13.00	\$10.79	\$0.00	\$42.18	
7	60		\$20.06	\$13.00	\$11.04	\$0.00	\$44.10	
8	65		\$21.74	\$13.00	\$11.29	\$0.00	\$46.03	
9	70		\$23.41	\$13.00	\$11.54	\$0.00	\$47.95	
10	75		\$25.08	\$13.00	\$11.79	\$0.00	\$49.87	
Notes	ASSESSMENT ASSESSMENT	opposition of the second secon	opagagas agencian amanana amin'nin sobalistic belonco	AZIANGERIT REPROPARIA MANUALZIM	A ADDRESS SPENSIAL AND SAN		Annual	
Appre	entice to Jo	ourneyworker Ratio:1:1	andmore illiminares, authorizar authorizaris, schedurisis inidagogui	apanagayan sanasannin sanagannya	enggangdigallyr elegenylangdirk Wildellellikks	robotologier iemiertija streninger 2000.	medic mellomer (meeting managed)	
AZZO FINISHE			08/01/201	3 \$47.0	0 \$10.18	\$18.15	\$0.00	\$75.3
AYERS LOCAL 3 - M	ARBLE & TI	LE	02/01/201				\$0.00	\$75.8
			08/01/201			\$18.22	\$0.00	\$76.8
			02/01/201	5 \$49.0	2 \$10.18	\$18.22	\$0.00	\$77.4
			08/01/201	5 \$49.9	2 \$10.18	\$18.29	\$0.00	\$78.3
			02/01/201	6 \$50.4	9 \$10.18	\$18.29	\$0.00	\$78.9

02/01/2017

\$51.96

\$18.37

\$0.00

\$80.51

\$10.18

	Step	ive Date - 0 percent	08/01/2013	Apprentice Base Wage	Health		Pension	Supplemental Unemployment	Total Rate	
	1	50		\$23.50	\$10.18		\$18.15	\$0.00	\$51.83	
	2	60		\$28.20	\$10.18		\$18.15	\$0.00	\$56.53	
	3	70		\$32.90	\$10.18		\$18.15	\$0.00	\$61.23	
	4	80		\$37.60	\$10.18		\$18.15	\$0.00	\$65.93	
	5	90		\$42.30	\$10.18		\$18.15	\$0.00	\$70.63	
	Effect	ive Date - 0	02/01/2014					Supplemental		
	Step	percent		Apprentice Base Wage	Health		Pension	Unemployment	Total Rate	
	1	50		\$23.78	\$10.18		\$18.15	\$0.00	\$52.11	
	2	60		\$28.54	\$10.18		\$18.15	\$0.00	\$56.87	
	3	70		\$33.29	\$10.18		\$18.15	\$0.00	\$61.62	
	4	80		\$38.05	\$10.18		\$18.15	\$0.00	\$66.38	
	5	90		\$42.80	\$10.18		\$18.15	\$0.00	\$71.13	
	Notes:	zon usbabben stennambre hindricum	ur dalassessan Nechsischen schnödelsen imministe, Nechsischen	ographine engrephyd sphyngoli innannan sonwhole maininan	AAAAARAA waxaayaar	wanter.	oblinion salamana amanyusa	SAAMAAZ WWW.FSS miduAZNA ISW	Shinari Shinting unimphor uthouse	
									:	
	Appro	entice to Jour	neyworker Ratio:1:3	RATE AND ADDRESS HIS MINISTER MATERIAL WAS A CONTRACT.	mariania Visionarian i	1,717-1114, Wys	hyfdiald grynlygdiryn sfryghynyrigi	And the second s		
ST BORIN				06/01/201	3 \$3	34.45	\$7.10	\$12.60	\$0.00	\$54.15
JRERS - FOU	INDATION	AND MARINE		12/01/201	3 \$3	35.20	\$7.10	\$12.60	\$0.00	\$54.90
				06/01/201	4 \$3	35.95	\$7.10	\$12.60	\$0.00	\$55.65
				12/01/201	4 \$3	36.70	\$7.10	\$12.60	\$0.00	\$56.40
				06/01/201	5 \$3	37.45	\$7.10	\$12.60	\$0.00	\$57.15
				12/01/201	5 \$3	88.20	\$7.10	\$12.60	\$0.00	\$57.90
				. 06/01/201	6 \$3	38.95	\$7.10	\$12.60	\$0.00	\$58.65
				12/01/201	6 \$3	39.95	\$7.10	\$12.60	\$0.00	\$59.65
		"Apprentice- LAF			A.F ************************************				INDUMA NAMES OF ASSOCIATION OF ASSOC	~~~~~~~~~~~~~~~
		LER HELPER TAND MARINE		06/01/201	3 \$3	33.17	\$7.10	\$12.60	\$0.00	\$52.87
MENS - POC	MUATION	MINDINARDING		12/01/201	3 \$3	33.92	\$7.10	\$12.60	\$0.00	\$53.62
				06/01/201	4 \$3	34.67	\$7.10	\$12.60	\$0.00	\$54.37
				12/01/201	4 \$3	35.42	\$7.10	\$12.60	\$0.00	\$55.12
				06/01/201	5 \$3	36.17	\$7.10	\$12.60	\$0.00	\$55.87
				12/01/201	5 \$3	36.92	\$7.10	\$12.60	\$0.00	\$56.62
				06/01/201	6 \$3	37.67	\$7.10	\$12.60	\$0.00	\$57.37

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TEST BORING LABORER	06/01/2013	\$33.05	\$7.10	\$12.60	\$0.00	\$52.75
LABORERS - FOUNDATION AND MARINE	12/01/2013	\$33.80	\$7.10	\$12.60	\$0.00	\$53.50
	06/01/2014	\$34.55	\$7.10	\$12.60	\$0.00	\$54.25
	12/01/2014	\$35.30	\$7.10	\$12.60	\$0.00	\$55.00
	06/01/2015	\$36.05	\$7,10	\$12.60	\$0.00	\$55.75
	12/01/2015	\$36.80	\$7.10	\$12.60	\$0.00	\$56.50
	06/01/2016	\$37.55	\$7.10	\$12.60	\$0.00	\$57.25
	12/01/2016	\$38.55	\$7.10	\$12.60	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
TRACTORS/PORTABLE STEAM GENERATORS OPERATING ENGINEERS LOCAL 4	06/01/2013	\$39.96	\$10.00	\$13.55	\$0.00	\$63.51
	12/01/2013	\$40.74	\$10.00	\$13.55	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$32.42	\$9.07	\$8.00	\$0.00	\$49.49
TUNNEL WORK - COMPRESSED AIR	06/01/2013	\$45.33	\$7.10	\$13.00	\$0.00	\$65.43
LABORERS (COMPRESSED AIR)	12/01/2013	\$46.08	\$7.10	\$13.00	\$0.00	\$66.18
	06/01/2014	\$46.83	\$7.10	\$13.00	\$0.00	\$66.93
	12/01/2014	\$47.58	\$7.10	\$13.00	\$0.00	\$67.68
	06/01/2015	\$48.33	\$7.10	\$13.00	\$0.00	\$68.43
	12/01/2015	\$49.08	\$7.10	\$13.00	\$0.00	\$69.18
	06/01/2016	\$49.83	\$7.10	\$13.00	\$0.00	\$69.93
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$50.83	\$7.10	\$13.00	\$0.00	\$70.93
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	06/01/2013	\$47.33	\$7.10	\$13.00	\$0.00	\$67.43
LABORERS (COMPRESSED AIR)	12/01/2013	\$48.08	\$7.10	\$13.00	\$0.00	\$68.18
	06/01/2014	\$48.83	\$7.10	\$13.00	\$0.00	\$68.93
	12/01/2014	\$49.58	\$7.10	\$13.00	\$0.00	\$69.68
	06/01/2015	\$50.33	\$7.10	\$13.00	\$0.00	\$70.43
	12/01/2015	\$51.08	\$7.10	\$13.00	\$0.00	\$70.43
	06/01/2016	\$51.83	\$7.10	\$13.00	\$0.00	\$71.13
	12/01/2016	\$51.83 \$52.83	\$7.10	\$13.00	\$0.00	\$72.93
For apprentice rates see "Apprentice- LABORER"	12/01/2010	\$72.63	\$7.10	915.00	\$0.00	\$12.93
TUNNEL WORK - FREE AIR	06/01/2013	\$37.40	\$7.10	\$13.00	\$0.00	\$57.50
LABORERS (FREE AIR TUNNEL)	12/01/2013	\$38.15	\$7.10	\$13.00	\$0.00	\$58.25
	06/01/2014	\$38.90	\$7.10	\$13.00	\$0.00	\$59.00
	12/01/2014	\$39.65	\$7.10	\$13.00	\$0.00	\$59.75
	06/01/2015	\$40.40	\$7.10	\$13.00	\$0.00	\$60.50
	12/01/2015	\$41.15	\$7.10	\$13.00	\$0.00	\$61.25
	06/01/2016	\$41.90	\$7.10	\$13.00	\$0.00	\$62.00
	12/01/2016	\$42.90	\$7.10	\$13.00	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"	12/01/2010	Ψ 1 <i>i</i> 1.70	97.10	ψ15.00	40.00	#05.00

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 37 of 42

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - FREE AIR (HAZ. WASTE)	06/01/2013	\$39.40	\$7.10	\$13.00	\$0.00	\$59.50
; LABORERS (FREE AIR TUNNEL)	12/01/2013	\$40.15	\$7.10	\$13.00	\$0.00	\$60.25
	06/01/2014	\$40.90	\$7.10	\$13.00	\$0.00	\$61.00
	12/01/2014	\$41.65	\$7.10	\$13.00	\$0.00	\$61.75
	06/01/2015	\$42,40	\$7.10	\$13.00	\$0.00	\$62.50
	12/01/2015	\$43.15	\$7.10	\$13.00	\$0.00	\$63.25
	06/01/2016	\$43.90	\$7.10	\$13.00	\$0.00	\$64.00
	12/01/2016	\$44.90	\$7.10	\$13.00	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"	***************************************			1 december 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100		
VAC-HAUL TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$31.84	\$8.91	\$8.00	\$0.00	\$48.75
WAGON DRILL OPERATOR	06/01/2013	\$33.30	\$7.10	\$12.45	\$0.00	\$52.85
LABORERS - ZONE 1	12/01/2013	\$34.05	\$7.10	\$12.45	\$0.00	\$53.60
	06/01/2014	\$34.80	\$7.10	\$12.45	\$0.00	\$54.35
	12/01/2014	\$35.55	\$7.10	\$12.45	\$0.00	\$55.10
	06/01/2015	\$36.30	\$7.10	\$12.45	\$0.00	\$55.85
	12/01/2015	\$37.05	\$7.10	\$12.45	\$0.00	\$56.60
	06/01/2016	\$37.80	\$7.10	\$12.45	\$0.00	\$57.35
	12/01/2016	\$38.80	\$7.10	\$12.45	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						\$50,00
WASTE WATER PUMP OPERATOR	06/01/2013	\$40.34	\$10.00	\$13.55	\$0.00	\$63.89
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$41.12	\$10.00	\$13.55	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						- 1
WATER METER INSTALLER PLUMBERS & GASFITTERS LOCAL 12	03/01/2013	\$49.31	\$9.32	\$13.29	\$0.00	\$71.92
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GA: Rental of Equipment - East	SFITTER"					
(2 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$31.55	\$8.91	\$0.00	\$0.00	\$40.46
(3 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$31.62	\$8.91	\$0.00	\$0.00	\$40.53
(4 & 5 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$31.74	\$8.91	\$0.00	\$0.00	\$40.65
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	06/01/2013	\$40.34	\$10.00	\$0.00	\$0.00	\$50.34
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$41.12	\$10.00	\$0.00	\$0.00	\$50.34 \$51.12
	1414114113	☆ユエ・エ ∠	φ10.00	Ψ0.00	90.00	ب.۱.۷⊄
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
For apprentice rates see "Apprentice- OPERATING ENGINEERS" BACKHOE/FRONT-END LOADER	06/01/2013	\$40.34	\$10.00	\$0.00	\$0.00	\$50.34
		\$40.34 \$41.12	\$10.00 \$10.00	\$0.00 \$0.00	\$0.00 \$0.00	\$50.34 \$51.12
BACKHOE/FRONT-END LOADER	06/01/2013					\$50.34 \$51.12
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" BULLDOZER/GRADER/SCRAPER	06/01/2013					
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4	06/01/2013 12/01/2013	\$41.12	\$10.00	\$0.00	\$0.00	\$51.12
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" BULLDOZER/GRADER/SCRAPER	06/01/2013 12/01/2013 06/01/2013	\$41.12 \$39.96	\$10.00 \$10.00	\$0.00	\$0.00	\$51.12 \$49.96
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	06/01/2013 12/01/2013 06/01/2013	\$41.12 \$39.96	\$10.00 \$10.00	\$0.00	\$0.00	\$51.12 \$49.96
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4	06/01/2013 12/01/2013 06/01/2013 12/01/2013	\$41.12 \$39.96 \$40.74	\$10.00 \$10.00 \$10.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	\$51.12 \$49.96 \$50.74
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice-OPERATING ENGINEERS" BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice-OPERATING ENGINEERS" CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice-OPERATING ENGINEERS"	06/01/2013 12/01/2013 06/01/2013 12/01/2013 06/01/2013 12/01/2013	\$41.12 \$39.96 \$40.74 \$41.34 \$42.12	\$10.00 \$10.00 \$10.00 \$10.00 \$10.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$51.12 \$49.96 \$50.74 \$51.34 \$52.12
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4	06/01/2013 12/01/2013 06/01/2013 12/01/2013 06/01/2013	\$41.12 \$39.96 \$40.74 \$41.34	\$10.00 \$10.00 \$10.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	\$51.12 \$49.96 \$50.74 \$51.34

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 38 of 42

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DIVER	08/01/2013	\$56.14	\$9.80	\$0.00	\$0.00	\$65.94
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2014	\$58.24	\$9.80	\$0.00	\$0.00	\$68.04
	08/01/2015	\$60.34	\$9.80	\$0.00	\$0.00	\$70.14
DIVER TENDER	08/01/2013	\$40.10	\$9.80	\$0.00	\$0.00	\$49.90
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2014	\$41.60	\$9.80	\$0.00	\$0.00	\$51.40
	08/01/2015	\$43.10	\$9.80	\$0.00	\$0.00	\$52.90
FLAGGER & SIGNALER	06/01/2013	\$20.50	\$7.10	\$0.00	\$0.00	\$27.60
ABORERS - ZONE 1	12/01/2013	\$20.50	\$7.10	\$0.00	\$0.00	\$27.60
	06/01/2014	\$20.50	\$7.10	\$0.00	\$0.00	\$27.60
	12/01/2014	\$20.50	\$7.10	\$0.00	\$0.00	\$27.60
	06/01/2015	\$20.50	\$7.10	\$0.00	\$0.00	\$27.60
	12/01/2015	\$20.50	\$7.10	\$0.00	\$0.00	\$27.60
	06/01/2016	\$20.50	\$7.10	\$0.00	\$0.00	\$27.60
	12/01/2016	\$20.50	\$7.10	\$0.00	\$0.00	\$27.60
For apprentice rates see "Apprentice- LABORER"				0181(cam-1		
FORK LIFT/CHERRY PICKER	06/01/2013	\$40.34	\$10.00	\$0.00	\$0.00	\$50.34
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$41.12	\$10.00	\$0.00	\$0.00	\$51.12
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GENERATOR/LIGHTING PLANT/HEATERS	06/01/2013	\$28.19	\$10.00	\$0.00	\$0.00	\$38.19
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$28.74	\$10.00	\$0.00	\$0.00	\$38.74
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
HOISTING ENGINEER/CRANES/GRADALLS	06/01/2013	\$40.34	\$10.00	\$0.00	\$0.00	\$50.34
OPERATING ENGINEERS LOCAL 4	12/01/2013	\$41.12	\$10.00	\$0.00	\$0.00	\$51.12

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 39 of 42

Step	ive Date - percent	06/01/2013	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	55	men mentana kala Pandhardha dalam un da men menandi kala dalam men	\$22.19	\$10.00	\$0.00	\$0.00	\$32.19	
2	60		\$24.20	\$10.00	\$0.00	\$0.00	\$34.20	
3	65		\$26.22	\$10.00	\$0.00	\$0.00	\$36.22	
4	70		\$28.24	\$10.00	\$0.00	\$0.00	\$38.24	
5	75		\$30.26	\$10.00	\$0.00	\$0.00	\$40.26	
6	80		\$32.27	\$10.00	\$0.00	\$0.00	\$42.27	
7	85		\$34.29	\$10.00	\$0.00	\$0.00	\$44.29	
8	90		\$36.31	\$10.00	\$0.00	\$0.00	\$46.31	
Effect Step	ive Date -	12/01/2013	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	55	and the first state of the stat	\$22.62	\$10.00	\$0.00	\$0.00	\$32.62	
2	60		\$24.67	\$10.00	\$0.00	\$0.00	\$34.67	
3	65		\$26.73	\$10.00	\$0.00	\$0.00	\$36.73	
4	70		\$28.78	\$10.00	\$0.00	\$0.00	\$38.78	
5	75	4	\$30.84	\$10.00	\$0.00	\$0.00	\$40.84	
6	80		\$32.90	\$10.00	\$0.00	\$0.00	\$42.90	
7	85		\$34.95	\$10.00	\$0.00	\$0.00	\$44.95	
8	90		\$37.01	\$10.00	\$0.00	\$0.00	\$47.01	
Notes	nud representative Assessment	ANAMAN ARTHUR PROPERTY MANAGEMENT ANAMANY TO	errande (surando) samente demonstra estadoror tembras.	and NAMES CO. SuppleMarker 1991-200404	hadalandar gharahayda hafaliyami	s (waterment watersteen werensteen total	merene, arkinem militaran, maumi	
Appre	entice to Jo	urneyworker Ratio:1:6	MORIUS AMBROMATI AGARIASSII MIIDANIIR ISASIIIIIIII IMPAIRAMA	MANUAL ANALISM NIIIPAANA	similimis associate impossole	MINMOREL ARRESTMENT DOMESTICAL TRACT	Person of Schiller Minness Property	
ONE I			06/01/201	3 \$33.0	5 \$7.10	\$0.00	\$0.00	\$40.
ME 1			12/01/201	3 \$33.80	0 \$7.10	\$0.00	\$0.00	\$40.
			06/01/201	4 \$34.5	5 \$7.10	\$0.00	\$0.00	\$41
			12/01/201	4 \$35.30	0 \$7.10	\$0.00	\$0.00	\$42
			06/01/201	5 \$36.0	5 \$7.10	\$0.00	\$0.00	\$43
			12/01/201	5 \$36.8	0 \$7.10	\$0.00	\$0.00	\$43
			06/01/201	6 \$37.5	5 \$7.10	\$0.00	\$0.00	\$44
		•	12/01/201	6 \$38.5	5 \$7.10	\$0.00	\$0.00	\$45

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRACTORS/PORTABLE STEAM GENERATORS OPERATING ENGINEERS LOCAL 4	06/01/2013	\$39.96	\$10.00	\$0.00	\$0.00	\$49.96
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2013	\$40.74	\$10.00	\$0.00	\$0.00	\$50.74
TRAILERS FOR EARTH MOVING EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2012	\$32.42	\$9.07	\$0.00	\$0.00	\$41.49
TREE TRIMMER OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	01/29/2012	\$17.18	\$3.37	\$0.00	\$0.00	\$20.55
This classification applies only to the trimming of branches on and around utility lines.						
TREE TRIMMER GROUNDMAN outside electrical workers - east local 104	01/29/2012	\$15.15	\$3.37	\$0.00	\$0.00	\$18.52
This classification applies only to the trimming of branches on and around utility lines.						
VAC-HAUL/CATCH BASIN CLEANING teamsters joint council no. 10 zone a	12/01/2012	\$31.84	\$8.91	\$0.00	\$0.00	\$40.75

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) unless otherwise specified.

- * Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof.
- ** 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.

Issue Date: 10/09/2013 Wage Request Number: 20131009-019 Page 42 of 42

Part 1 Section 4-00420: Division of Labor and Industries Statement of Compliance

MASSACHUSETTS WEEKLY CERTIFIED PAYROLL REPORT FORM

Employers Signature:		TIBBS								Contract No.	9.	158 Payer ID No.	9N.Q	Work Week Ending:	Ending:		
Awarding Authority's Name:		Public w	lorks Pro	Public Works Project Name:	2					Public Wo	Public Works Project Location:	ocation:		Min. Wage	Min. Wage Rate Sheet No.		
Sensor Sensor		Subson	Subcontractor's Name:	191001								"Employar"	Employer" Hourly Frings Benefit Contributions	enefft Contrib	utlons		
											,				(8+C+D+B)	(A x f)	
T. Carre	dove (e	Appr				Worked			Hours	Project Hours (A)	Hourly Base	Health & Welfare	ERISA	2 54 6	Total Hourly	[
Employee Name & Complete Address Cet	Control of Work Classification:	Rate (%)	Su	Mo.	T _d .	We.	41	F.	Sa	A# Other Hours	Wage (B)	many desired	Pension Plan (D)	Unemp (E)	Prev. Wage (F)	Total Gross Wades	Check No.
											-						
Lancara			State St		1996 (1996) 1996 (1996) 1997 (1996)												
													Property of the Control of the Contr				
	P							10			·					·	
Localization												B 5 5					-

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.

1	
ŏ	
ø,	
2	

Date recieved by awarding authority



CITY OF SOMERVILLE, MASSACHUSETTS JOSEPH A. CURTATONE MAYOR

Vendor Certification

The vendor certifies that it has provided the City of Somerville with an accurate tax identification number (TIN). In the event that the City is fined by the IRS for an incorrect TIN provided by the vendor, the vendor agrees to reimburse the City for the amount of the fine.

TIN	
Signature	
Printed Name of Person signing	
Company	
Date	



Part 1 Section 4-00430: General Terms and Conditions

GENERAL TERMS AND CONDITIONS

1. CONTRACTOR'S OBLIGATION

The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified, in accordance with the provisions of this contract and said specifications and in accordance with the plans and drawings, and in accordance with the directions of the Design Professional or OSPCD as given from time to time during the progress of the work. He shall furnish, erect, maintain and remove such construction plant and such temporary works as may be required.

The Contractor shall observe, comply with and be subject to all terms, conditions, requirements and limitations of the contract and specifications, and shall do, carry on and complete the entire work to the satisfaction of the Design Professional and OSPCD.

2. PERFORMANCE/PAYMENT BONDS

Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the contract price as security for the faithful performance of this Contract and also a payment bond in an amount not less than one hundred percent (100%) of the contract price or in a penal sum not less than that prescribed by State, territorial or local law, as security for payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law, and shall to the extent feasible be in the form developed by the American Institute of Architects (AIA).

3. DESIGN PROFESSIONAL'S AUTHORITY

Design Professional shall give orders and directions contemplated under the contract and specifications, relative to the execution of the work. The Design Professional shall determine the amount, quality, acceptability and fitness of several kinds of work and the construction thereof. The Design Professional's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any questions shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Design Professional shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question. The Design Professional shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this contract and other Contractors performing work for OSPCD shall be adjusted and determined by the Design Professional. In accordance with Chapter 30, section 30P of the General Laws the Design Professional's decision on interpretation of the specifications, approval

of equipment or material, or any other approval, or progress of the work, shall be made promptly and, in any event, no later than thirty days after a written submission for decision; but if such decision requires extended investigation and study, the Awarding Authority or the Design Professional shall 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.

4. SUBCONTRACTING

The Contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors, subject to the provisions of this section.

The Contractor shall not award any work to any subcontractor without prior written approval of OSPCD, which approval will not be given until the Contractor submits a written approval statement concerning the proposed award to the subcontractor, which statement shall contain such information as OSPCD may require. All subcontracts subject to Mass. General laws, Chapter 149, Sections 44A-J, shall comply with the filed sub-bid requirements of that statute.

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

The Contractor shall cause appropriate provisions to be inserted in all subcontractors relative to the work to bind subcontractors to the Contractor by the Terms of the General Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that OSPCD may exercise over the Contractor under any provision of the contract documents.

Nothing contained in this contract shall create any contractual relation between any subcontractor and OSPCD.

5. PERMITS AND CODES

It shall be the Contractor's responsibility to obtain and pay for all permits required in connection with the work. Unless otherwise agreed by the Awarding Authority in writing, the Contractor shall, prior to commencement of the work, (i) meet with the City of Somerville Inspectional Services Department to determine what permits are needed for the work; (ii) obtain all such permits; and (iii) provide copies of such permits to the Awarding Authority. Permits shall include, without limitation, demolition, foundation, digsafe, and building permits; permits for removal, sealing up, or installation of utilities, including gas, electrical, water and sewer; and permits for obstructing public streets and sidewalks.

The Contractor shall comply with all state and local laws, ordinances, and codes. Before

installing any work, the Contractor shall examine the Drawings and Technical Specifications for compliance with applicable laws, ordinances, and codes and shall immediately report any discrepancy to OHCD. Where the requirements of the Drawings and Technical Specification fail to comply with applicable laws, ordinances, or codes, OHCD will adjust the Contract by change order to conform to such laws, ordinances or codes (unless waivers in writing covering the differences have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices. Should the Contractor fail to observe the foregoing provisions and proceed with the construction, (notwithstanding the fact that such construction is in compliance with the Drawings and Technical Specifications), the Contractor shall remove such work without cost to OHCD, and a change order will be issued to cover only the excess cost that the Contractor would have been entitled to receive if the change had been made before the Contractor commenced work on the items involved.

Notwithstanding the generality of the foregoing, the Contractor shall comply with federal, state and local laws, ordinances, and codes governing the disposal of excavation materials, and debris and rubbish on and off the Project site.

6. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

The Contractor will be furnished additional instructions and detail drawings as necessary to carry out the work included in the contract. The additional drawings and instructions thus supplied to the Contractor will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Design Professional or OSPCD will prepare jointly (a) a schedule, fixing the dates at which special detail drawings will be required, such drawings, if any, to be furnished by the Design Professional or OSPCD in accordance with said schedule, and (b) a schedule fixing the dates for the submission of shop drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment, and the completion of the various parts of the work; each such schedule to be subject to change from time to time in accordance with the progress of the work.

7. TECHNICAL SPECIFICATIONS AND DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Technical Specifications, shall be of like effect as if shown on or mentioned in both. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the Designer or OSPCD for a decision. Said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

8. SHOP DRAWINGS

All required shop drawings, machinery, details, layout drawings, etc. shall be submitted to the Designer or OSPCD for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at his own risk and expense, with manufacture or installation of

any equipment or work covered by said shop drawings, etc. until they are approved, and no claim by the Contractor for extension of the Contract time will be granted by reason of his failure in this respect.

Any drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of Contract price and/or time. Otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.

If a shop drawing is in accord with the Contractor or involves only a minor adjustment in the interest of OSPCD not involving a change in Contract price or time, the Designer or OSPCD may approve the drawing. The approval shall be general and shall not relieve the Contractor from his responsibility for adherence to the contract or for any error in the drawing and shall contain in substance the following: "The modification shown on the attached drawing is approved in the interest of OSPCD to affect an improvement for the Project and is ordered with the understanding that it does not involve any change in the Contract Price or time; that it is subject generally to all Contract stipulation and covenants; and that it is without prejudice to any and all rights of OSPCD under the Contract and surety bond or bonds."

9. MATERIALS AND WORKMANSHIP

Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as "equal to" any particular standard, the Designer shall decide the question of equality.

The Contractor shall furnish to OSPCD for approval the manufacturer's detailed specifications for all machinery, mechanical equipment and other equipment articles and materials, together with complete information as to type, performance characteristics, and all other pertinent information. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejections.

Materials specified by reference to the number or symbol of a specific standard, such as an A.S.T.M. Standard, or a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the invitation for Bids, except as limited to type, class or grade, or modified in such reference. The standards referred to, except as modified in the Technical Specifications, shall have full force and effect as though printed therein.

OSPCD may require the Contractor to dismiss from the work such employee or employees as, OSPCD or the Designer may deem incompetent, careless, or insubordinate.

10. SAMPLES

The Contractor shall/promptly submit all material and equipment samples called for in the Contract Documents or required by the Designer or OSPCD. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk and expense, until the required samples have been approved in writing by OSPCD or the Designer. Any delay in the work caused by late or improper submission of samples for approval shall not be considered just cause for an extension of the contract time.

Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying letter from the Contractor shall state that the sample complies with Contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Designer in passing upon the acceptability of the sample promptly. It shall also state that all materials or equipment furnished for use in the project will comply with the sample.

Approval of any sample shall be general only and shall not constitute a waiver of OSPCD's right to demand full compliance with Contract requirements. After actual deliveries, the Designer will have such check tests made as he deems necessary in each instance and may reject materials and equipment for cause, even though such materials and equipment have been given general approval. If materials or equipment which fail to meet check tests have been incorporated in the work, the Designer will have the right to cause their removal and replacement by proper materials and equipment or to demand and secure such reparation by the Contractor as is equitable.

Except as otherwise specifically stated in the Contract, the costs of samples and tests will be as follows:

- (1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the Project by the Designer.
- (2) The Contractor shall assume all costs of retesting materials which fail to meet contract requirement.
- (3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient.

11. INSPECTION OF THE WORK

All materials and workmanship shall be subject to inspection, examination, and/or testing by OSPCD or its designated representative. OSPCD shall have the right to reject defective material and workmanship and require it to be promptly segregated and removed from the Project Area

and replaced with materials and workmanship of specified quality without charge. If the Contractor fails to proceed at once with the correction of rejected materials and workmanship, OSPCD may proceed to correct the work itself and charge the cost of the same against any monies which may be due the Contractor, without prejudice to any other rights or remedies of OSPCD.

The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. All tests will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the Technical Specifications.

The Contractor shall notify OSPCD sufficiently in advance of covering or concealing any work in order to permit proper inspection. If any work is covered or concealed without the consent of OSPCD, the Contractor shall uncover and recover such work for inspection at the contractor's expense, when so requested by OSPCD. Should it be considered necessary or advisable by OSPCD to examine work already completed and covered, the Contractor shall on request promptly uncover said work. If such work is found to be defective in any important or essential respect the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, plus an additional amount equal to that allowed for change orders shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

Whenever the quantity justifies it, inspections of work may be made at the place of production, manufacture or shipment, in which case, acceptance shall be final, except as regards (1) latent defects, (2) damage or loss in transit; or (3) fraud or such gross mistakes as amount to fraud. Otherwise, inspections of materials shall take place at the Project Site.

No examination, inspection, or testing, by OSPCD or its agent shall relieve the Contractor or the Contractor's sureties of liability for defective materials or workmanship.

Any inspection party may include one or more HUD representatives and one or more representatives of each department of the City having jurisdiction over the work being inspected.

12. DEDUCTION FOR INCORRECTED WORK

If OSPCD deems it expedient not to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and OSPCD. Any dispute regarding such deduction shall be subject to settlement, in case of dispute, as herein provided.

13. CONSTRUCTION SUPERINTENDENT

At the site of the work the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. Such representative shall be acceptable to the Design Professional or OSPCD and shall continue in that capacity for the duration of the job

unless he ceases to be on the Contractor's payroll.

14. ACCIDENT PREVENTION

The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as OSPCD may determine to be reasonably necessary. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.

The Contractor shall indemnify and save harmless OSPCD from any claims for damages resulting from personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this Contract.

15. EXISTING UTILITY LINES

Should the Contractor in the execution of his work uncover or discover utility service lines not indicated on the relevant drawings, or that do not show signs of singular service to any existing structures being demolished, the Contractor shall cease work in that area immediately and promptly notify the Public Works Department. Within forty-eight hours, the Public Works Department will inspect the site and issue written instructions to the Contractor. The Contractor shall proceed with only after such written instructions have been received and shall proceed in full compliance with such instructions.

The above mentioned situation or similar circumstances and/or modification if any, shall not relieve the Contractor from his responsibilities in this Contract and also it is without prejudice to any and all rights of OSPCD covering this said contract and surety or bonds.

16. CARE OF WORK

The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by OSPCD.

The Contractor shall provide sufficient competent watchmen, both day and night, including Saturdays, Sundays and holidays, as necessary, from the time the work is commenced until final completion and acceptance. Sufficient lighting shall be provided to aid in the prevention of injury to passersby or vandalism to the property or other illegal activities.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from OSPCD is authorized to act at his

discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by OSPCD. Any compensation claimed by the Contractor on account of such emergency work will be determined by OSPCD as provided in the Section - CHANGES IN THE WORK.

The Contractor shall avoid damage as a result of its operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc. and the Contractor shall at its own expense completely repair any damage thereto caused by its operations.

The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structure adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of work. The Contractor shall indemnify and save harmless the City of Somerville and/or OSPCD from any liability for damages on account of settlement or the loss of lateral support of adjoining property resulting from the Contractor's failure to comply with this section.

17. WEATHER PROTECTION

In the event of temporary suspension of work, during inclement weather, the Contractor will carefully protect and will cause his subcontractors to carefully protect all work and materials against damage or injury from the weather. If, in the opinion of the Design Professional or OSPCD, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors so to protect the work, such work or materials shall be removed and replaced at the expense of the Contractor.

It is the intent of these Specifications to require that, in all Chapter 149, s. 94A contracts, the General Contractor shall provide temporary enclosures and heat to permit construction work to be carried on during the months of November through March in compliance with M.G.L. Chapter 149, Section 44D (G). These Specifications are not to be construed as requiring enclosures or heat for operations that are not economically feasible to protect in the judgment of OSPCD. Included in the preceding category, without limitation, are such items as site work, excavation, pile driving, steel erection, erection of certain "exterior" wall panels, roofing, and similar operation:

(1) "WEATHER PROTECTION" shall mean 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 Design Professional and consistent with the approved construction schedule to permit the continuous progress of all work necessary to maintain an orderly and efficient sequence of construction operations. The General Contractor shall furnish and install all "Weather Protection" material and be responsible for all costs, including heating required to maintain a minimum temperature 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 General Conditions set forth in the Contract Articles with added regard to performance obligations of the Contractor.

- (2) Within 30 calendar days after his award of contract, the General Contractor shall submit in writing to OSPCD for approval, three copies of his proposed methods for "Weather Protection".
- (3) Installation of weather protection and heating devices shall comply with all safety regulations including provisions for adequate ventilation and fire protection devices. Heating devices which may cause damage to finish surfaces shall not be used.
- (4) The General Contractor shall furnish and install one accurate Fahrenheit thermometer at each work area as designated by the Designer. However, one additional accurate Fahrenheit thermometer shall be provided for every 2,000 square feet of floor space where the work areas exceed 2,000 square feet.

18. SANITARY FACILITIES

The Contractor shall furnish, install and/or maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations. Nothing in this Section shall be construed as forbidding the use of facilities available in existing buildings on the job site if they meet the above requirements and the use of them will not interfere with the progress of the work.

19. USE OF PREMISES AND REMOVAL OF DEBRIS

The Contractor expressly undertakes at his own expense:

- a. to store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;
- b. to place upon the work or any part thereof, only such loads as are consistent with the safety of that portion of the work.
- c. to clean up frequently all refuse, rubbish, scrap materials and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance.
- d. before final payment to remove all surplus material, false work, temporary structure, including foundations thereof, plant of any description and debris of every nature

resulting from this operations, and to put the site in a neat, orderly condition.

e. to effect all cutting, fitting or patching of his work required to make the same to conform to the plans and specifications and, except with the consent of the Design Professional or OSPCD not to cut or otherwise work of any other contractor.

20. COORDINATION WITH OTHER CONTRACTORS

The Contractor shall coordinate his operations with those of other Contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of work. The Contractor, including his subcontractors, shall keep informed of the progress and the detail work of other Contractors and shall notify the Design Professional or OSPCD immediately of lack of progress or defective workmanship on the part of other Contractors. Failure of a contractor to keep informed of the work progressing on the site and failure to give notice of lack of progress of defective workmanship by others shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with his own work.

21. QUANTITIES OR ESTIMATES

Wherever the estimated quantities of work to be done and materials to be furnished under this contract are shown in any of the documents including the proposal, they are given for use in comparing bids and the right is especially reserved herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by OSPCD to complete the work contemplated by the contract, nor shall any such increases or diminution shall in no way violate this contract, nor shall any such increase or diminution give cause for claims or liability for damages.

22. DISPUTES

All disputes arising under this Contract or its interpretation, whether involving law of fact or both, or extra work, and all claims for alleged breach of Contract shall within ten (10) days of commencement of the dispute be presented by the Contractor to OSPCD for decision. All papers pertaining to claims shall state the facts surrounding the claims in sufficient detail to identify the claim, with its character and scope. In the meantime, the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt by OSPCD of notice thereof.

The Contractor shall submit proof of the Contractor's claim in detail. Each decision by OSPCD will be in writing and will be mailed to the Contractor by registered or certified mail, return receipt requested.

If the Contractor does not agree with OSPCD's decision the Contractor shall not delay the work, but shall notify OSPCD promptly that he is proceeding with the work under protest and he may then except the matter in question from the final release.

23. LAND AND RIGHTS-OF-WAY

Prior to the start of construction, OSPCD shall obtain all lands and rights-of-way necessary for the carrying out and completion of work to be performed under this contract.

24. WARRANTY OF TITLE

No material, supplies, or equipment to be installed as part of the work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and, upon completion of all work, shall deliver the same to OSPCD free from any claims, liens, or charges. Neither the Contractor nor any person, furnishing any material or labor for any work covered by this Contract shall have any right to a lien. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection, or to recover under any laws permitting such persons to look to funds due the Contractor in the hands of OSPCD. The provisions of this paragraph shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

25. GENERAL GUARANTY

Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by OSPCD shall constitute any acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work unless a longer period is specified. OSPCD will give notice of observed defects with reasonable promptness.

26. REVIEW OF RECORDS

OSPCD, its authorized representative and agents and the HUD Representative for the Secretary shall, at all times have access to and be permitted to observe and review all work materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by OSPCD through its authorized representatives or agents.

PART 2 - SAMPLE CONSTRUCTION CONTRACT

Sample Contract

- Appendix A Scope of Work (including Technical Specifications)*
- Appendix A2- Certificate of Authority
- 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)
- Appendix G Procurement documentation (Advertisements and Notice to Bidders)
- Appendix H Statement of Management N/A
- Appendix I 50% Payment Bond, if contract over \$2000

^{*}Appendix to be included in contract by reference

SAMPLE CONTRACT

A- PURCHA	SE ORDER # AND AMO	UNI
BID NUM	BER	
OSPCD		
ISSUING	DEPARTMENT	
	G DEPARTMENT (Divisi	on)

CITY OF SOMERVILLE MAYOR'S OFFICE OF STRATEGIC PLANNING AND COMMUNITY DEVELOPMENT

PUBLIC CONSTRUCTION CONTRACT

FOR:

Capuano School Playground Renovations

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: E-Mail:
PROJECT: (Description)
PROJECT MANAGER: Name: Arn Franzen Address: City Hall, 3 rd floor, 93 Highland Avenue, Somerville, MA 02143 Telephone: 617-625-6600, x.2529 Fax: 617-625-0722 E-Mail: afranzen@somervillema.gov
DESIGN PROFESSIONAL: (Contact Info)
Profession: Architect [] Landscape Architect [X] Engineeer [X]
FUNDING SOURCE: Federal [] State [] City [X] Name:

THIS CONTRACT IS A: Public Works Contract estimated to cost more than \$10,000 subject to 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 \mathbf{X} \$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. Certificate of Authority \mathbf{X}_{-} 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)

	<u>X</u>	Appendix G - Procurement Documentation (includes Advertisement; Notice to Bidders)
	N/A	_Appendix H - Statement of Management (over \$100,000) N/A
	<u>X</u>	Appendix I - Performance Bond and Payment Bond, if contract is over \$2,000
X *		ched uded in the Project Manual and incorporated herein by reference sched and also duplicated in the Project Manual
Section	n 2:	THE CONTRACTOR'S WORK.
variou labor, provid	s separ materia ed by t	or's "Work" refers to the services and the entire completed construction or the ately identifiable parts thereof required by the Contract Documents, including all als, and equipment furnished, furnished and incorporated into the Project, or to be the Contractor to fulfill the Contractor's obligations. The Work may constitute the rt of the Project.
Section	n 3:	PROJECT DATES.
	(a)	Contract Period: The Contract shall begin on and end on
be stip	(b) oulated	<u>Date of Commencement of Work:</u> The Date of Commencement of the Work shall by a written Notice to Proceed given by the City to the Contractor.
Comm Work except of the	nencem has been for mi Work.	Date of Substantial Completion: The Contractor shall achieve Substantial of the Work on or before or calendar days after the Date of ent of the Work, time being of the essence. Substantial Completion means that the en completed and the Site or the facility is opened for full and intended public use, nor incomplete or unsatisfactory items that do not materially impair the usefulness. The Design Professional shall decide what constitutes "minor," "incomplete," ry," and "materially" and the Design Professional's decision shall be final.
	(d)	Date of Final Completion: The Date of Final Completion shall be
	4	Section 4. CONTRACT SUM/LIQUIDATED DAMAGES
	(a)	Contract Sum: The Contract Sum shall be \$

(b) <u>Liquidated Damages</u>: The Contractor and the City agree to a Liquidated Damages sum of \$250.00 per calendar day.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the City and the Contractor have executed this Contract as a sealed instrument as of the date first written above.

<u>CITY OF SOMERVILLE</u>	<u>VENDOR:</u>		
I hereby certify that an unencumbered balance of \$ is available			
for this Contract and I further certify that the sum of \$\\$ is	Signature of Authorized Agent of Vendor		
the sum of \$ is hereby encumbered against the	Printed Name:		
appropriate account for the purposes of this contract.	Title:		
	Vendor Address:		
	Federal Tax ID: #		
Edward Bean, City Auditor			
	FOR CORPORATIONS ONLY:		
Joseph A. Curtatone			
Mayor	Clerk's Signature		
No. 1 and Company of the Company of			
Michael F. Glavin, OSPCD Executive Director	Clerk's Name		
Angela M. Allen, Purchasing Director			
Approved as to form:			
Francis X. Wright, Jr., City Solicitor			

APPENDIX A

Scope of Work - Includes Technical Specifications

APPENDIX A2 CERTIFICATE OF AUTHORITY

APPENDIX B Contractor's Bid Price - Form for General Bid

APPENDIX C General Terms & Conditions*

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......\$\frac{Two Million}{Zwo 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 AND LIVING WAGE FORM

PREVAIING WAGE RATES

INSERT MANUALLY

SOMERVILLE LIVING WAGE ORDINANCE FORM (Ordinance No. 1999-1*)

APPENDIX F

CERTIFICATE OF GOOD STANDING (FOR CORPORATIONS)

INSERT DOCUMENT FROM BID BOOK HERE

<u>Certificate of Good Standing</u>: 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
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, 17th Floor, Boston, MA 02133 or you may access their web site at: 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 <u>your</u> state of incorporation.

Please note that without the above certificate (s), the City of Somerville <u>cannot execute</u> 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.

APPENDIX H

N/A

STATEMENT OF MANAGEMENT FOR CONTRACTS OVER \$100,000

APPENDIX I

50% PAYMENT BOND

FOR CONTRACTS OVER \$2000

Payment Bond

e, the undersigned,			
(Name of Contractor)	,		
(Address of Contractor)			
, hereinafter called (Corporation, Partnership, or Individual)	d Principal, and		
(Name of Surety)			
	, (Address of Su	ırety)	
hereinafter called Surety, are held and firm	ly bound unto CITY	OF SOMERV	TLLE, 93
Highland Avenue, Somerville, MA 02139,	hereinafter called Ov	wner, in the pe	nal sum of
Dollars			
(\$) in lawful money of the United	d States, for the payr	ment of which	sum well and
truly to be made. We hereby jointly and se	verally bind ourselve	es, our heirs, ex	xecutors,
administrators, successors, and assigns.			
The condition of this obligation is s	uch that the Principa	l entered into a	a certain
contract with the Owner, dated the	day of	, 20	, a copy of
which is attached hereto and made a part he	ereof, for the project	known as Zero	<u>New</u>
Washington Street Community Park and O	ff-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 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 so	ettlement between the Own	er and the Contra	ctor shall
abridge the right of any beneficiary here	eunder, whose claim may b	e unsatisfied.	
IN WITNESS WHEREOF, this instrument is executed on this		day of	, 2012
CONTRACTOR AS PRINCIPAL	SURETY		
			`
(Signature)	(Signature)		
Name and Title:	Name and Title:		
SEAL	SEAL		

PART 3 - TECHNICAL SPECIFICATIONS

Division 2 – Site Work / Specifications

SECTION 01010 SUMMARY OF WORK

PART 1- GENERAL: 1.01 PROJECT DESCRIPTION

The project is the construction of **Albion Park Improvements and Repairs Project** as described in the Contract Documents.

1.02 CONTRACT TIME

- A. The work of this contract shall be completed by May 15, 2014.
- B. The Contractor shall submit shop drawings, data and samples or place his/her order sufficiently early to permit consideration and approval by the Landscape Architect before materials are necessary for incorporation into the Work. Any delay resulting from the Contractor's failure to do so shall not be used as a basis of a claim against the Owner.

1.03 CONTRACT DOCUMENTS

The Contract Documents are enumerated in the Agreement, and include these Specifications and the Drawings, as prepared for City of Somerville, by Weston & Sampson Engineers, Inc.

1.04 INSPECTION OF THE SITE

It is a contract requirement of the Contractor that his/her subcontractor shall have thoroughly inspected the site during the bidding period. By submitting a bid they confirm that they are thoroughly familiar with the site and all existing conditions which impact and affect their work. Requests for extra compensation will not be considered for any work which could have been foreseen by a visual inspection of the site.

1.05 CONTRACTOR'S USE OF THE SITE

- A. The contractor will have full access to the site shown within the Contract Limit of Work Line.
- 1. The Contractor, his/her Subcontractors, and their employees may park on the site inside the Contract Limit of Work Line, given that no such on-site parking interferes with the site work.
- 2. The Contractor shall furnish his/her own toilet facilities on-site.
- B. The Contractor shall take all precautions necessary to protect all abutting properties during construction. Any and all damage caused by construction operations shall be repaired.

Albion Park Repairs

- 1. The project site shall be kept clean and free from accumulation of waste material and debris.
- 2. The Contractor, his/her Subcontractors, and their employees shall be respectful and courteous of the neighborhood while working on site.

1.06 ENCLOSURES

Provide at the earliest practical time temporary enclosure of materials, work in progress and completed portions of the work to provide protection to the work and the employees.

1.07 SAFETY AND SECURITY

- A. The Contractor shall be responsible for the safety and security of the site within the Contract Limit of Work Line and for the safety of all persons who enter within the Contract Limit of Work Line.
- B. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions & programs in connection with the work. He/she shall promulgate safety regulations and shall notify the Owner of particular hazards.
- C. The Contractor shall erect and maintain, as required by existing conditions and progress of work, all reasonable safeguards for safety and security. This includes the construction of barriers and the posting of danger signs and other warnings against hazards. By these and other necessary methods the Contractor shall stop unauthorized entry within the Contract Limit of Work Line.
- D. The Contractor shall cooperate with and maintain a close liaison with the Police Department and Fire Department, and he/she shall abide by safety or security related requests from any of these authorities.

1.08 WORK TO BE DONE

The work of this Contract includes improvements to the Albion Park property and includes, but is not necessarily limited to the following:

- 1. Excavation, backfill and grading
- 2. Paving
- 3. Drainage Improvements
- 4. Landscaping
- 5. Other improvements as outlined on the drawings.

1.09 SUBMITTALS

a. The work to be performed under this Section shall include the compilation and submittal of all required shop drawings, manufacturer's cuts, specifications, and certifications of all materials and equipment for the Engineer's approval. Actual product samples may also be required as stipulated in the technical specifications sections.

Albion Park Repairs

- b. All submittals shall be submitted within four (4) weeks after the award of the contract, and shall be in not more than six (6) submittal packages so that a manual can be prepared for office and field reference. Alternatively, submittals may be made and distributed digitally with the approval of the Owner via email or File Transfer Protocol (FTP) site. If emailed, the subject line must reference the project name and specification number to which the submittal responds and include the specific submittal name. Failure to comply is punishable by nasty stares and mean frowns.
- c. A list of required submittals may be provided by the Owner's Representative but does not relieve the contractor of the responsibility of providing submittals included in this specification or as required by the Owner to complete the project in good order. Submittals may be requested by the Owner or Owner's Rep for any and all products to be installed on site at no additional cost to the Owner.

PART II - SUBMITTALS

2.01 REQUIREMENTS

- a. References are made throughout the specifications where submittals are required. All finishes, colors, and patterns are to be reviewed and approved by submittal or field sample.
- b. Where the Contractor's intention is to furnish the materials or equipment as specified, a list of all such elements, by Specification section, shall accompany the submittals so that the entire submittal is complete for the project.

PART III - EXECUTION

3.01 Submit all documents and data in a collated, manual format, with two hard-copy manuals to be submitted. Include a Table of Contents of the material for reference. The submittal is to be entire and complete, addressing all furnishings and installation.
3.02 Submit all required product or material samples concurrent with the materials/equipment information manuals described above. Each submittal shall reference its appropriate specification section, part and paragraph.

1.10 PERMITS

1.01 SCOPE OF WORK

a. The Contractor shall be responsible for obtaining all permits 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

Permits by Contractor
Backflow Preventers
Trench Permit (520 CMR 14.00)(eff. date 3/1/09)
Electrical Permit
Plumbing Permit

Albion Park Repairs

NSTAR Work Order, see form appended to this section.

(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, including the

attached permits/order of conditions, and any applicable municipal requirements.

1.02 DIGSAFE

a. Contact Digsafe seventy-two (72) hours prior to initiating work at telephone # 1-888-344-7233.

PART II - MATERIALS

a. All materials and equipment shall conform to permit requirements and the City's standards for utilities, excavation, backfill, patching, and surveying or other work unless otherwise stated in these specifications. Coordinate as necessary with the appropriate City official and/or private utility.

3.01 EXECUTION

a. Execute all work per permit requirements. All plumbing and electric work to be approved by City Inspectors, sidewalk ramps to be approved by City Engineer. b. The Contractor is responsible for coordinating electrical service improvements with NSTAR and ensuring that the project is completed in a timely manner, to the best of the Contractor's ability.

4.01 GUARANTEE

a. Guarantee all work per permit requirements.

1.11 SAMPLING & TESTING

1.01 SCOPE OF WORK

a. The work under this Section shall consist of performing or ordering the work of collecting samples for testing, having tests performed by a Certified Testing Laboratory satisfactory to the Engineer, having all test results forwarded to the Engineer for approval, and paying all costs associated with the collection and sampling, transportation, shipping, postage, and testing, and the coordination of test results and approvals.

1.03 SUBMITTALS

a. In accordance with Section 01330 of these Specifications, submit the names, addresses and certification of laboratories to be utilized for approval by the

Engineer.

PART II - MATERIALS

2.01 CONTAINERS AND TOOLS

a. Utilize tools recommended by the laboratory to obtain samples, packaging or containers suitable to, or furnished by, the laboratory, and collect all samples in the proper number and quantity to permit tests to be conducted.

2.02 TESTS

- a. Refer to section specifications for test requirements and criteria for results; coordinate with the Owner's Representative.
- b. All irrigation systems, splash pad elements, play equipment, locking gates, lighting systems, and any other components from the scope of work as requested by the Owner's Representative shall be tested to ensure complete compliance with manufacturer's installation instructions and warrantee requirements.
- c. Cast in place concrete requires a slump and air entrainment test for every load of concrete delivered. All costs shall be the responsibility of the Contractor.
- d. Should the contractor require soil testing for disposal, it is at their full expense. It is expected that the site has typical urban fill component that may include brick, concrete, tires, and the like. These materials are to be disposed of at no additional expense to the owner.

PART III - EXECUTION

3.01 METHODOLOGY

- a. Unless otherwise directed by the Section specifications, perform sampling and testing will be ordered by the Contractor and approved by the Owner's Representative. Locations, number and quantity of samples shall be submitted for approval as directed in accordance with the Specifications.
- b. Sampling and Testing results must be provided to the Owner's Representative and Approved prior to the installation of any work potentially impacted by unacceptable test results.

3.02 PAYMENT

a. Payment for all sampling and testing efforts shall be included in the lump sum contract price bid.

1.12 DUST CONTROL

1. Description

This section of the specification covers the control of dust via water ONLY, complete.

- 2. Calcium Chloride
- A. Calcium chloride shall NOT BE USED.
- 3. Water
- A. Water shall not be brackish and shall be free from oil, acid, and injurious alkali or vegetable matter.
- 4. Application
- A. The site shall be kept DUST FREE at all times. Given the close proximity of housing on three sides of the site, the contractor must be VIGILANT in the protection of the site and surrounding properties from dust pollution.
- B. Water may be sprinkler applied with equipment including a tank with gauge-equipped pressure pump and a nozzle-equipped spray bar.
- C. Water shall be dispersed through the nozzle under a minimum pressure of 20 pounds per square inch, gauge pressure.

1.13 ENVIRONMENTAL PROTECTION

- 1. Description
- 2. Notification
- 3. Implementation
- 4. Area of Construction Activity
- 5. Protection of Water Resources
- 6. Protecting and Minimizing Exposed Areas
- 7. Location of Storage Areas
- 8. Protection of Landscape
- 9. Clearing and Grubbing
- 10. Discharge of Dewatering Operations
- 11. Dust Control
- 12. Separation and Replacement of Topsoil
- 13. Baled Hay or Straw
- 14. Silt Fence
- 15. Noise Control

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 ENGINEER 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 ENGINEER 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 representatives of the ENGINEER to develop mutual understandings relative to compliance of the environmental protection program.

B. The CONTRACTOR shall submit for approval six sets of details and literature 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 Albion 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 City representative and Department of Traffic and Parking. There shall be no vehicle idling, per City Ordinance.

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 placement of haybales around catchbasins and along temporary construction fencing, as indicated on Drawing SP-1 – Demolition 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 ENGINEER.

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 ENGINEER. Plans showing storage facilities for equipment and materials shall be submitted for approval of the ENGINEER.
- 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 toprotect any downstream areas from siltation.
- C. The ENGINEER 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.
- D. Storage areas shall be restored to pre-construction conditions.

8. Protection of Landscape

- A. The CONTRACTOR shall not deface, injure, or destroy trees or shrubs nor remove or cut them without written authority from the OWNER. No ropes, cables, or guys shall be fastened to or attached to any existing nearby trees for anchorages unless specifically authorized by the ENGINEER. Excavating machinery and cranes shall be of suitable type and be operated with care to prevent injury to trees which are not to be removed, particularly overhanging branches and limbs. The CONTRACTOR shall, in any event, be responsible for any damage resulting from such use.
- B. Branches, limbs, and roots shall not be cut except by permission of the ENGINEER. All cutting shall be smoothly and neatly done without splitting or crushing. When there is unavoidable injury to branches, limbs and trunks of trees, the injured portions shall be neatly trimmed and covered with an application of grafting wax or tree healing paint as directed.
- C. Where, in the opinion of the ENGINEER, trees may possibly be defaced, bruised, injured, or otherwise damaged by the CONTRACTOR 's equipment or by his blasting or other operations, the ENGINEER may direct the CONTRACTOR to adequately protect such trees by placing boards, planks, poles or fencing around them. Any trees or landscape feature scarred or damaged by the CONTRACTOR 's equipment or operations shall be restored as nearly as possible

to its original condition at the expense of the CONTRACTOR. The ENGINEER will decide what method of restoration shall be used, and whether damaged trees shall be treated and healed or removed and disposed of under the provisions of Section 02230, CLEARING AND GRUBBING.

D. Cultivated hedges, shrubs, and plants which could be injured by the CONTRACTOR 's operations shall be protected by suitable means or shall be dug up, balled and temporarily replanted and maintained. After construction operations have been substantially completed, they shall be replanted in their original positions and cared for until growth is re-established. If cultivated hedges, shrubs, and plants are injured to such a degree as to affect their growth or diminish their beauty or usefulness, they shall be replaced by items of a kind and quality at least equal to that existing at the start of the work.

9. 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 Engineer.

10. 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. Under no circumstances shall the CONTRACTOR discharge water to the areas designated as wetlands.
- C. 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.
- D. 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 ENGINEER. E. 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 Control

A. 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. Calcium chloride shall not beused. Dust control requirements shall be strictly enforced by the City

B. All soil stockpiled on site shall be covered with a tarp when on in active use.

12. Separation and Replacement of Topsoil

Topsoil shall be carefully removed from cross-country 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 ENGINEER 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 Drawing C-2 – 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. Silt Fence

A. While no wetlands or their buffer areas are within the limits of this project, it may be necessary to install silt fence to protect surrounding properties from the effects of construction and potential for erosion. Where indicated on the drawings or where directed by the ENGINEER, the CONTRACTOR shall erect and maintain a temporary silt fence. The silt fence shall be used specifically to contain sediment from runoff water and to minimize environmental damage caused by construction. The Owner's Representative reserves the right to require silt fence installation at any point during construction for the downstream property lines within the limit of work.

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
- 7. Permittivity (sec-1) 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.

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. 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.

1.14 RODENT CONTROL

1.01 WORK INCLUDED:

- A. This section specifies requirements for rodent control activities by the Contractor at all work and laydown (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 laydown 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. The licensed rodent exterminator must be approved by City Director of Inspectional Services.

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 laydown areas and remove all remaining trash, debris, and weeds.
- C. Maintain work and laydown 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 Engineer within 24 hours whenever rodents (rats or mice) or signs of rodent activity (burrows or droppings) are observed in work or laydown areas. Take appropriate action to locate and control the rodents.

3.02 LAYDOWN AREAS OUTSIDE THE CONTRACT AREA:

- A. Implement pest control at all laydown 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 laydown areas of trash, debris, and weeds prior to occupancy. Initiate those actions only after rodent populations have been effectively controlled.
- C. Maintain laydown 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.

1.15 CONSTRUCTION LAYOUT

1.01 SCOPE OF WORK

a. The work under this section shall consist of field staking the horizontal and

vertical alignment of all essential features and proposed work, including fields, courts, sidewalks, fencing, drainage, electrical and utility structures, plantings, and other related features as shown on the plans, by a registered Engineer or Land Surveyor. The Contractor shall familiarize himself with the existing conditions and shall be responsible for locating or re-establishing survey field ties, property lines, and benchmarks indicated on the plans.

b. Existing survey tie information if available shall be provided by the City, or the Owner's Representative upon request.

1.02 QUALIFICATIONS & SUBMITTALS

a. The Contractor shall engage the services of a Professional Engineer or Land Surveyor Registered in the Commonwealth of Massachusetts and shall submit the name, address, and registration number of such person or persons to the Engineer in writing.

b. Whenever reference is made on the plans or in these specifications to a Land Surveyor registered in the Commonwealth of Massachusetts, the Contractor may substitute a Registered Professional Engineer, except that only a Registered Land Surveyor will be permitted to conduct property line or boundary surveys.

PART II - MATERIALS

2.01 LAYOUT AND STAKING

a. The Contractor shall be responsible for furnishing all stakes, pins, and grade markings as required to implement the work of layout and staking and shall make all field adjustments ordered by the Engineer at no extra cost to the Owner. b. Upon request by the Engineer, the Contractor shall make available to the Owner survey instruments necessary to check the proposed vertical and horizontal alignments at no extra cost. Paving and rubber surfacing patterns are to be laid out in the field and reviewed by the Owner's Representative. The Contractor is expected to work collaboratively with the Owner's Rep to establish final layout lines for all ground plan elements. The Contractor should keep in mind that edits to the pattern or the spacing may occur in the field and shall be accommodated at no additional cost to the owner.

PART III - EXECUTION 3.01 SURVEY LAYOUT

a. The Contractor shall use the alignments shown on the plans to establish the layout of all proposed features and shall perform field adjustments as ordered by the Engineer.

b. The Surveyor shall lay out the essential or necessary grades and locations of site furnishings, footings, pavements, utilities, structures and other proposed elements. The surveyor shall verify the location of any existing spikes, stakes, pipes, drill holes, etc. and shall be responsible for their accuracy. Proposed features shall be located in relation to dimensions shown on the drawings and as adjusted by the Engineer.

- c. The Contractor shall inform the Engineer when the general layout is completed and shall not begin excavation until the Engineer approves the various alignments. Any discrepancies encountered in field conditions shall be reported to the Engineer immediately and shall be adjusted as directed.
- d. The Contractor shall be responsible for maintaining the correct vertical and horizontal alignment of all elements, which responsibility shall not be waived by the Engineer's approval of basic layout and stakeout.

SECTION 01500 TEMPORARY FACILITIES

1.01 GENERAL PROVISIONS

1.01

1-2

Attention is directed to the General Conditions of the Contract, all Divisions of the Specifications and the Contract Drawings, all of which apply to this section.

1.02 SCOPE OF WORK

1.02

1-1

- A. The scope of the work under this Specification section, without limiting the generality thereof, includes the furnishing of all labor, materials, equipment, services, and incidentals necessary to complete all of the work in accordance with the Contract Documents, which are intended to describe and provide for a finished piece of work.
- B. The work includes the following, without limiting the generality thereof;
- 1. Temporary utilities.
- 2. Barriers and enclosures.
- 3. Safety and security.

1.02. TEMPORARY UTILITIES

1.02

1-1

- A. The Contractor is responsible for all temporary electrical distribution, lighting, and water distribution from existing sources.
- B. The provision for temporary toilets is included under Section 01010 Summaryof Work.

1.03 BARRIERS AND ENCLOSURES

1.03

1-2

- A. The Contractor shall maintain the construction fence if required by the Owner and furnish warning signs around the work area to limit unauthorized entry within the Contract Limit Line.
- B. At the earliest practical time provide temporary enclosure of materials, equipment, work in progress and completed portions of the work to provide protection to the work and employees

1.04 SAFETY AND SECURITY

1.04

1-2

- A. The Contractor shall be responsible for the safety and security of the buildings and the site within the Contract Limit Line, and for the safety of all persons who enter within the Contract Limit Line.
- B. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.

C. The Contractor shall erect and maintain, as required by existing conditions and progress of the work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying the Owner of particular hazards.

D. The Contractor shall cooperate with and maintain a close liaison with the Police Department and Fire Department, and he shall abide by safety-related requests from any of these agencies.

SECTION 02220 DEMOLITION

1.01 SCOPE OF WORK

1.01 1-1

A. Work under this Section shall consist of the careful removal, transportation offsite, or demolition, of all structures and site features encountered or noted to be removed or abandoned to three feet below finished grade, and the removal and disposal of all materials not called for to be reused or salvaged, in accordance with the contract drawings, these specifications, and the directions of the Engineer. Provide all labor, equipment, materials and transportation necessary to complete the work.

- B. Items plan referenced, or as directed by the Engineer to be removed and disposed of shall be removed from the site and properly and legally disposed of by the Contractor.
- C. The scope for the general work/demolition requirements of this section include:
- 1. Removal of tree.
- 2. Strip and stockpile top soil.
- 3. Relocate existing under drain pipe and drain inlet.
- 4. Relocate and salvage existing irrigation.
- 5. Other features as indicated on the drawings.

1.02 PROTECTION

1.02

1_1

A. The Contractor shall assume complete responsibility and liability for the safety and structural integrity of all work and utilities to remain during demolition.

- B. Provide safeguards including, but not limited to, warning signs, barricades, temporary fences, warning lights and other items required for protection of personnel and the general public during performance of all work.
- C. All features related to protection shall be maintained until that work has been completed to the point when such safeguards are no longer required.

1.03 SPECIAL REQUIREMENTS

1.03

1-1

A. Where items to be demolished are located within or adjacent to pavements to remain, the Contractor shall make provisions to protect that pavement to remain. Cut concrete pavement back to score line and cut bituminous concrete pavement back far enough so as not to allow disturbance to base course materials. Pavements damaged as a result of Contractor activities shall be replaced to the

extent determined by the Engineer at no additional cost to the Owner.

PART II – MATERIALS

2.01 BACKFILL

2.01

1-1

- A. The Contractor shall provide suitable backfill to fill voids left by removal or abandonment of site features, and shall provide all pipe cap ends, mortar, brick and other material needed to cap off or plug pipes of various sizes and kinds.
- B. Suitable materials shall be used as base course fill and topsoil to the depth as specified herein. Restore disturbed areas with similar materials blended to match the line and grades of adjacent surfaces.

2.02 TEMPORARY FENCE

2.02

1-1

- A. The work under these Items shall conform to the relevant provisions of MASSDOT standard specifications and the following:
- 1. The work shall include temporary installation of chain link fence around the perimeter of the work limits where shown on the plans, and as directed by the engineer.
- 2. Temporary fence shall consist of 6' high chain link fence anchored into a base that is both stable and movable to allow access and adjustment as needed. The contractor will be required to submit a shop drawing to the engineer for approval prior to installation.
- 3. Existing on site fence fabric that is designated to be removed and disposed may be used for the temporary construction fence fabric with a suitable approved frame and anchor system.

SECTION 02235 TREE PRUNING AND TREE REMOVAL

1.01 SCOPE OF WORK

1.01

1-2

- a. The work of this Section includes the following:
- 1. Pruning Crown cleaning of all crossing and rubbing limbs, deadwood and including the removal of all limbs on ALL trees to remain and be protected within the limit of work at the beginning of the project.
- 2. Removal of tree complete.
- b. Refer to the Contract Drawings for general location of trees indicated for pruning. In general, all trees are to remain and be pruned in conformance with this Specification. Tree removals shall be limited to those denoted on the plans.

b. All work shall be conducted by qualified and trained personnel under the direct supervision of a Massachusetts Certified Arborist in the Contractor's employ.

1.03 PROTECTION OF THE VEGETATION TO BE PRESERVED

1.03

1.02

1-1

- a. The Contractor shall protect all existing trees, shrubs, lawns and other site features designated to remain. The placement of protection devices, such as snow fence enclosures, shall, however, be at the Contractor's discretion.
- b. The Contractor shall be liable for any damage to any trees, shrub, lawn or other site features to remain, and shall immediately report to the Owner. Damaged shrubs or lawns shall be restored or replaced to match existing to remain to the satisfaction of the Owner.
- c. The Contractor shall compensate the Owner for damages by installing replacement tree(s) of the size and species approved by the City and of sufficient quantity such that the sum of the Diameter at Breast Height (DBH) inches for replacement trees equals the total DBH inches of the damaged tree(s). Damaged shrubs shall be replaced with shrubs(s) of the same size, species, and quantity, unless determined otherwise by the Owner.

PART II - MATERIALS

2.01 EQUIPMENT

2.01

1-1

a. Cutting tools shall be kept well sharpened to provide clean smooth cuts. Any tools utilized on any tree suspected to have cankers or other fungal, bacterial or viral diseases shall be sterilized or not used on any other specimen.

PART III - EXECUTION OF PRUNING/REMOVALS

3.01 PRUNING

3.01

1-1

- a. Under this Section, the Contractor shall furnish all labor, materials, equipment and transportation required to complete all aspects of the work in accordance with all local, state and federal regulations in force at the same time of this Contract and in accordance with tree pruning as specified herein.
- b. The work of this Section consists of all pruning work and related items as specified herein and includes, but is not limited to:
- 1. Pruning Crown cleaning throughout the designated areas and limb

removal required to allow for the proper installation of all fields, play equipment and new fencing.

Crown cleaning pruning is defined as medium pruning and shall consist of the removal of dead, dying, diseased, interfering, objectionable and weak branches on the main trunks as well as those within the leaf area. All crossing and rubbing limbs are to be removed as well at the closest junction.

3.02 DESCRIPTION OF PRUNING WORK

3.02 1-1

- a. Pruning and trimming are generally described as the removal and disposal of limbs, branches and stubs which are either dead, potentially detrimental to the health of the tree or dangerous to pedestrians, visually deficient, interfering or otherwise objectionable as determined by the Owner.
- b. The limits of all trees to be pruned have been identified on the plans or referenced elsewhere in this specification section.
- c. All pruning shall be performed in a manner that maintains the natural aesthetic characteristics of the species and variety of trees, in accordance with American Association of Nurserymen Standards. No topping or dehorning of trees or stubbing back of branches shall be permitted. All cuts shall be made to a lateral branch that is a minimum of one third (1/3) the size of the branch being removed, unless otherwise instructed by the Owner.
- d. All dead or dying limps and tips, sucker growth, water sprouts, crossing or rubbing branches, broken or damaged branches, and/or diseased or insect infested limbs shall be removed unless conforming to 3.02m. Questionable weak limb and branch removal that may disfigure the tree should be left for final approval by the Engineer.
- e. All cuts shall be made sufficiently close to the parent stem so that wound closure can be readily started under normal conditions. Cuts shall, however, never be made through the branch collar. Slab cuts and rip cuts will result in cancellation of the contract.
- f. All limbs over two (2) inches in diameter to be removed shall be precut to prevent splitting. Any branches that by falling would injure existing trees to remain or other objects shall be lowered to the ground by proper ropes.

3.03 REMOVALS

3.03

1-1

a. The Contractor shall furnish all labor, materials, equipment and transportation required to complete all aspects of the removals work in accordance with all local,

state, and federal regulations in force at the time of this contract and in accordance with tree and stump removals as specified herein.

SECTION 02355

GRAVEL BORROW

1.01 SCOPE OF WORK

1.01

1-1

a. Under this Section the Contractor shall furnish all labor, materials, equipment and transportation required for the placement and compaction of approved Processed Gravel in accordance with these specifications to the lines and grades shown on the plans or as directed by the Engineer.

b. All references to "Processed Gravel", "Gravel Borrow", or "Gravel" shall conform to this Section 02355, Gravel Borrow.

PART II - MATERIALS

GRAVEL BORROW

2.01 GRAVEL BORROW

2.01

1-1

a. Gravel Borrow shall conform to Section m1.03.0 of the MHD Standard Specifications and shall consist of inert material that is hard, durable stone and coarse sand, free from loam and clay, surface coatings, and deleterious materials.

b. Gradation requirements for gravel borrow shall be determined by AASHO-T11 and T27 and shall conform to the following:

Sieve Percent Passing

2" 100

1/2" 50-85

No. 440-75

No. 50 8-28

No. 200 0-10

c. Maximum size of stone in gravel shall be two (2) inches, largest dimension.

PART III - EXECUTION

GRAVEL BORROW

3.01 BASE COURSE

3.01

1-1

- a. The gravel shall be spread and compacted in layers not exceeding six (6) inches in depth compacted measurement and all layers shall be compacted to not less than ninety-five percent (95%) of the maximum dry density of the material as determined by the Standard AASHO Test Designation T99 compaction test Method C at optimum moisture content as determined by the Engineer. If the material retained on the #4 sieves is fifty percent (50%) or more of the total sample this test shall not apply and the material shall be compacted to the satisfaction of the Engineer. The specific density of the Gravel Sub-base shall be maintained by determining the number of passes of a roller required to produce a constant and uniform density, after conducting a series of tests either using the sand/volume method or the nuclear device.
- b. Compaction shall continue until the surface is even and true to the proposed lines and grades within a tolerance of three-eighths (3/8) inch above or below the required cross sectional elevations and to a maximum irregularity not exceeding three-eighths (3/8) inch under a ten (10) foot line extended longitudinally. Any specific area of gravel sub-base which, after being rolled, does not form a satisfactory, solid, stable foundation shall be removed and replaced and/or recompacted by the Contractor without extra compensation.
- c. All tests for compaction shall be as ordered by the Engineer and paid for by the Contractor, regardless of their result.

SECTION 02755

COLOR SEALCOAT

1.01 SCOPE OF WORK

1.01

1-2

- a. Under this Section, the Contractor shall furnish all necessary labor, materials, equipment, and transportation necessary to construct the following:
- 1. Color sealcoating filler and overlay of existing color seal coated bituminous concrete pavements as shown on the plans and as specified herein.

1.02 REFERENCE STANDARDS AND SPECIFICATIONS

1.02

1-1

1-1

- a. Reference to the standards, specifications and tests of technical societies, organizations and governmental bodies are made in the Contract Documents.
- 1. AASHTO American Association of State Highway and Transportation Officials (tests or specifications).
- 2. ASTM American Society for Testing and Materials.
- 3. Mass. Standard Specs. Latest edition of the Standard Specifications for Highways and Bridges, Massachusetts Highway Department, hereinafter referred to as the "Massachusetts Standard Specifications."

1.03 SUBMITTALS 1.03

- a. Color Sealcoat: The Contractor shall submit catalog cuts, manufacturer's specifications and color chips or charts.
- b. Field layout of color sealcoat must be approved by Landscape Architect prior to installation.

1.04 QUALIFICATIONS/SPECIAL REQUIREMENTS - COLOR SEALCOAT 1.04 1-1

APPLICATION

- a. The Contractor shall engage the manufacturer's representative to inspect and monitor the application of the initial filler coat upon the prepared surfaces of all pavements to receive color sealcoat.
- b. Addition of silica to acrylic sealer/surfacer by mechanical agitation on-site shall be inspected and monitored by the manufacturer's representative who is to be engaged by the Contractor at the Contractor's cost.
- c. Adequate means shall be provided to protect the color seal coating(s) from damage until such time that each layer has cured sufficiently and no seal will adhere to and be picked up by the tires of vehicles or by pedestrian traffic.
- d. No color seal coating shall be applied during any period within which rain or subapplication temperatures are predicted within forty-eight (48) hours, unless otherwise specified by the manufacturer.

PART II - MATERIALS

2.01 ACRYLIC RESURFACER WITH SAND

2.01

1-1

- A. Acrylic resurfacer with Sand shall be Acrylic Resurfacer by Plexipave, a division of California Products Corporation, Andover, MA; NovaPlay Base Coat, by Nova Sports USA, Milford, MA; Dynaflex® Acrylic Resurfacer, by Neyra Industries, Inc., Cincinnati, OH; and/or equal as approved by the Landscape Architect.
- 1. Sand shall be clean, dry sand with 100% passing through a #80 mesh sieve.
- 2. Water shall be clean and potable.
- B. Acrylic Resurfacer with Sand shall be applied over all existing asphalt pavement to remain within the limit of work except the parking area.
- 1. In areas that will not receive color painted graphics, color shall be black.
- 2. In areas that will receive color painted graphics, color shall be neutral or black as required by the color selected.

1-1

a. Latex-ite Acrylic Color is a non-fading, weather-proof, 100% acrylic coating for use on plant mix asphalt, emulsified asphalt and suitable concrete surfaces. Latex-ite protects the underlying surface from weather and climactic conditions and is resistant to fuels, oils, alkalies and solvents. Made of acrylic resins, mineral fillers and colorfast pigments, the Latex-ite Acrylic Color System provides a tough, durable surface of uniform texture that remains flexible. Designed for use on tennis courts, basketball courts*, recreational areas and various other usages, the finished texture can be varied easily by controlling the amounts of fine mesh silica sand aggregate which is added to the Latex-ite Acrylic Color at the project site. Unlike other acrylic surfacing systems, each coat of Latex-ite Acrylic Color, is fully pigmented, resulting in richer, longer lasting, in depth color.

*Four applications recommended in key areas.

Color Range Latex-ite Acrylic Court Surface Color is produced in eight standard colors: Dark Green, Light Green, Red, Dark Tan, Light Tan, Brown, Gray and Blue. Custom colors are available upon request.

Mix Design The Latex-ite Acrylic Color is mixed at the project site with clean dry 80 - 100 mesh silica sand and potable water to obtain the consistency desired for texture, aesthetics and performance. The material must be thoroughly mixed to insure a uniform consistency. The table below gives the amounts of water and silica sand which may be added to the Latex-ite Acrylic Color.

Product Description Filler Coats Finish Coat Latex-ite Acrylic Color 55 gallons 55 gallons 80 - 100 mesh, clean, dry Silica Sand 200 - 450 lbs. 0 - 200 lbs. Potable Water 30 - 40 gallons 30 - 40 gallons

Note: Mix Design may need to be adjusted according to humidity, ambient temperatures and surface porosity.

PART III - EXECUTION

3.01 The Latex-ite Acrylic Color System or approved equal is applied in three separate applications and is accomplished by use of a 24" to 48" long, flexible, 50 to 70 durometer, rubber squeegee of good quality and in good condition. The first two coats are filler coats. The first coat will be applied in a perpendicular direction to the playing net. The second coat and finish coat will be applied parallel with the playing net. Each application must thoroughly dehydrate before application of succeeding coat. The entire surface shall be checked for ridges and imperfections after each filler coat and scraped smooth and cleaned of all loose debris. Care must be taken to insure a smooth and uniform texture, free from ridges and tool marks, as the final coat is not to be scraped. An economy color

system, that can be applied to existing courts in good condition, would consist of one filler coat and one finish coat. The application method would remain the same. Coverage will depend upon the porosity of the surface to which the Latexite AcrylicColor System is applied.

FIRST FILLER COAT = .05 GALLON PER SQUARE YARD SECOND FILLER COAT = .05 GALLON PER SQUARE YARD FINISH COAT = .04 GALLON PER SQUARE YARD Drying Time 30 to 90 minutes under optimum conditions. Humidity, surface temperature and ambient temperature will affect drying process. Limitations and Precautions Latex-ite Acrylic Color or approved equal should not be applied when ambient temperature is below 50° F or when surface temperature is above 140° F. Do not apply when rain is imminent. Do not store in direct sunlight. Keep from freezing. Latex-ite acrylic color should be allowed to cure for 24 hours before courts are opened for use.

COLOR SEAL COAT

- a. The bituminous concrete pavement shall cure for fourteen (14) days prior to applying the Color Sealcoat System where specified.
- b. The Contractor shall furnish and apply to the approved bituminous pavements so designated on the plans: two (2) filler coats and one (1) finish coat of acrylic emulsion color coating.
- c. Prior to application of the filler coats, all dirt, sand, dust, and other loose material shall be cleaned from the paved areas to be covered, by sweeping and pressure washing with water. All surfaces shall be dry prior to starting any color seal coating process. The Contractor shall take special precautions to assure that existing pavements are thoroughly cleaned and that all cracks or joints in existing pavements are repaired in conformance with these specifications and to the satisfaction of the Owner. Limits or areas to be color coated shall be taped with minimum two (2) inch wide tape true as to alignment prior to application of the color coating material.
- d. The two (2) filler coats shall be applied so that both coats are of a total quantity and with a uniform spread at the rate of one (1) gallon per each one hundred (100) square feet of surface area. Additional filler coating material is to be used if necessary to complete the court surfaces satisfactory to the Supervisor. The first coat shall be applied length-wise of the court or drive and the second coat cross-wise of the court or drive.
- e. After the filler coat applications have been completed and approved, apply one (1) acrylic color emulsion coating to the properly prepared surfaces with a uniform spread at the rate of one (1) gallon per each two hundred (200) square feet of surface area. The color emulsion coating shall be California Products

Company's "Plexichrome" or an approved equal emulsion product. Colors shall match those of the Plexipave filler coats. The Plexichrome shall be applied lengthwise of the court with a wide type pushbroom.

f. The entire system of two (2) filler and one (1) finish coat shall be applied with approved squeegees and hair-type pushbrooms, respectively. The material shall be thoroughly mixed by mechanical agitation and all work shall be done in a thorough and workmanlike manner. The emulsion shall be thoroughly stirred in its container as received, by stationery bucket power mixer, so that a creamy, smooth consistency of all the emulsion in the container is assured for ready application. The entire work of color coat surfacing shall be done in accordance with the recommendations of the manufacturer's representative. Special care shall be taken so as to allow none of the material to spatter or flow beyond the perimeter of areas to be covered. The filler coats and finish coat shall not be applied in foggy or rainy weather, or when ambient temperature is below forty-five degrees F (45oF), nor shall they be applied if such conditions are anticipated during the next forty-eight (48) hours.

g. The finished surface shall be smooth and uniform, true to required grade and cross section, and free of depressions, ridges, or other irregularities.

PART IV - GUARANTEE/WARRANTY

4.01 The pavement and coatings shall be guaranteed against defects in workmanship or quality

for a period of one (1) year after final acceptance. The Contractor shall replace, repair,

recoat or otherwise make satisfactory to the Owner any unacceptable pavement and or

coating at no additional cost to the Owner.

SECTION 02810

IRRIGATION SYSTEM

1.01 GENERAL REQUIREMENTS

1.01 1-1

- a. Include GENERAL CONDITIONS and applicable parts of Division 1 as part of this Section.
- b. Coordinate work of this Section with other underground utilities and with trades responsible for their installation. Refer to respective Drawings pertaining to other work.

1.02 WORK TO BE DONE

1.02 1-1

- a. Work to be done includes furnishing all labor, materials, equipment and services required to inspect and repair the existing irrigation system as well as the relocation of a few heads and lines affected by the new concrete wall installation.
- b. All work is to be verified in the field, there are no drawings depicting this work.
- c. The work shall be constructed and finished in every respect in a good, workmanlike and substantial manner, to the full intent and meaning of the Specifications. All parts necessary for the proper and complete execution of the work, whether the same may have been specifically mentioned or not, or indicated on the Drawings, shall be done or furnished in a manner corresponding with the rest of the work as if the same were specifically herein described.

1.03 SCOPE 1.03 1-1

a. The irrigation repairs described within these Specifications represents a single controller, turf and landscape irrigation system supplied from municipal water. The system is designed for 13 gallons per minute. Minimum 45-psi dynamic pressure at full system flow is required from the irrigation point of connection downstream of the meter and backflow preventer.

1.06 EXAMINATION OF CONDITIONS

1.06 1-1

a. The Contractor shall be fully informed of existing conditions on the site before submitting bid, and shall be fully responsible for carrying out all work required to fully and properly execute the work of the Contract, regardless of the conditions encountered in the actual Work. No claim for extra compensation or extension of time will be allowed on account of actual conditions inconsistent with those assumed, except those conditions described in the GENERAL CONDITIONS.

1.07 QUALITY ASSURANCE

1.07 1-1

- a. Installer: A firm which has at least five (5) years' experience in work of the type and size required by this Section and which is acceptable to the Owner's Representative.
- b. Applicable requirements of accepted Standards and Codes shall apply to the Work of this Section and shall be so labeled or listed:
- 1. American Society for Testing & Materials (ASTM):
- (a) ASTM: D1784 Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
- (b) ASTM: D1785 Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40,

80, and C1200

(c) ASTM: D2464 Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe

Fittings, Schedule 80

(d) ASTM: D2466 Poly (Vinyl Chloride) (PVC) Plastic Pipe

Fittings, Schedule 40

(e) ASTM: D2564 Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Albion Park Repairs

Piping Systems

- 2. National Standard Plumbing Code (NSPC)
- 3. National Electric Code (NEC)
- 4. National Sanitary Foundation (NSF)
- 5. American Society of Agricultural and Biological Engineers (ASABE) 02810-20
- 6. Underwriters Laboratories, Inc. (UL)
- 7. Occupational Safety and Health Administration (OSHA)

1.08 TESTS

1.08 1-1

- a. Observation: The Owner's Representative will be on site to observe the initial test run and confirm the areas in need of repair.
- b. Coverage Test: before any work is done the contractor must test the operation of entire system and adjust sprinklers as directed by the Owner's Representative. Demonstrate to the Owner's Representative that all irrigated areas are being adequately covered. Furnish and install materials required to correct inadequacies of coverage.
- c. The Owner's Representative shall be notified 7 days in advance for observations.

1.12 COORDINATION

1.12 1-1

a. Work at all times shall be coordinated closely with the Owner's Representative to avoid misunderstandings and to efficiently bring the project to completion. The Owner's Representative shall be notified as to the start of work, progression and completion, as well as any changes to the drawings before the change is made. Also work shall be coordinated with that of any other Company hired to perform work under contract on the contract as a substitute to complete the work. b. Be responsible and pay for all Damage to other work caused by work, workmen or any other Company hired to perform work under contract on the contract as a substitute. Repairing of such damage shall be done by the Company under contract who installed the work, as directed by the Owner's Representative.

PART 2 – PRODUCTS

2.01 GENERAL

2.01 1-1

- a. All materials to be incorporated in this system shall be new and without flaws or
- defects and of quality and performance as specified and meeting the requirements of the system. All material overages at the completion of the installation are the property of the company performing the work and shall be removed from the site.
- b. No material substitutions from the irrigation products described in these

specifications and shown on the drawings shall be made without prior approval and acceptance from the Owner's Representative.

2.02 PVC IRRIGATION PIPE

2.02 1-1

- a. All pipe shall bear the following markings: Manufacturer's name, nominal pipe size, schedule or class, pressure rating in psi, and date of extrusion.
- b. All pipe in sizes 1-1/4 inches and smaller shall be PVC, Class 200, Type 1120, SDR 21, Solvent-Weld PVC, conforming to ASTM No. D2241 as manufactured by Certainteed, Cresline, JM or equal.
- c. The pipe insertion mark shall be visible to show the proper depth into spigot.

2.03 PVC IRRIGATION FITTINGS

2.03 1-1

- a. Fittings for solvent weld PVC pipe, 1-1/4 inch and smaller in size, shall be Schedule 40 solvent weld PVC fittings as manufactured by Dura, Lasco, Spears or equal.
- b. Fittings shall bear manufacturer's name or trademark, material designation, size, and applicable I.P.S. schedule.
- c. All PVC threaded connections in and out of valves shall be made using Schedule 80 toe nipples and Schedule 40 couplers or socket fittings. Schedule 40 threads will not be approved for installation.
- d. PVC solvent shall be NSF approved, for Type I and Type II PVC pipe, and Schedule 40 and 80 fittings. Cement is to meet ASTM D2564 and FF493 for potable water pipes. PVC solvent cement shall be Rectorseal Gold, IPS Weld-ON 711, Oatey Heavy Duty Cement or equal, and shall be used in conjunction with the appropriate primer. Primer shall be NSF approved, and formulated for PVC and CPVC pipe applications. Primer is to meet ASTM F 656. Primer shall be Rectorseal Jim PR-2, IPS Weld-ON P-68 Clear, Oatey Clear Primer for PVC and CPVC, or equal.
- e. All nipples to be schedule 80 PVC.
- f. Supply only pipes and fittings that are marked by the manufacturer with the appropriate ASTM designations and pressure ratings and are free from cracks, wrinkles, blisters, dents or other damage. Fittings shall be per ASTM D2609 as manufactured by Dura, Lasco, Spears or approved equal.

2.04 SPRAY SPRINKLERS

2.04

1-1

a. Full and part circle pop up spray sprinklers shall be pressure regulating (30-psi), plastic construction with ratcheting riser, removable nozzle and check valve. Nozzle size shall be as indicated on the drawing and in the legend. Pop-up height shall be 6 inches for turf and 12 inches for ground cover, shrubs and annual beds. b. Sprinkler shall carry a minimum 3-year exchange warranty against defects. Sprinklers shall be manufactured by Toro, model 570Z-PRX-COM, Rain Bird, model 1800-SAM-PRS, Hunter Industries, model PROS-XX-PRS30-CV or approved equal.

2.05 FLOOD BUBBLER ASSEMBLIES

2.05

1-1

- a. Flood bubbler assemblies shall be pressure compensating, have a non-adjustable flow rate, 1/2-inch female threads and a 1/2-inch filter screen. Bubblers shall have a flow of 0.5 gallons per minute.
- b. Assemblies shall include 4-inch basket weave canister, check valve, 4-inch plastic grate with steel clasp and 1/2-inch sch-80 PVC riser.
- c. Flood bubbler assemblies shall be manufactured by Rain Bird model RWS-B-C-1402, Hunter Industries model RZWS-36-50-CV or approved equal.

2.06 SPARE PARTS

2.06

1-1

- a. Supply the following tools and equipment to the Owner's Representative before final observation:
- 1. Two (2) wrenches or keys for disassembling and adjusting each type of sprinkler head provided.
- 2. One (1) of each size electric control valve used in the project.
- Three (3) of each type sprinkler head used in the project.
- 3. Two (2) of each type nozzle used in the project.
- b. Before final observation can occur, written evidence that the Owner's Representative has received the tools and equipment must be shown to the Owner.

PART 3 - EXECUTION

3.01 GENERAL

3.01

1-1

- a. Before work is commenced, hold a conference with the Owner's Representative to discuss general details of the work.
- b. Examine all contract documents applying to this Section noting any discrepancies and bringing the same to the attention of the Owner's Representative for timely resolution.
- c. All works indicated on drawings shall be provided whether or not specifically mentioned in the Specifications.

- d. If there are ambiguities between drawings and specifications, and specific interpretation or clarification is not issued prior to bidding, the interpretation or clarification will be made only by Owner's Representative, and compliance with the decisions shall be required. In the event the installation contradicts the directions given, the installation shall be corrected at no additional cost to Owner.
- e. Verify dimensions and grades at job site before work is commenced. Do not proceed with installation of the landscape irrigation system when it is apparent that obstructions or grade differences exist or if conflicts in construction details, legend or specific notes are discovered. All such obstructions, conflicts, or discrepancies shall be brought to the attention of the Owner's Representative.
- f. Make all field measurements necessary for the work noting the relationship of the irrigation work to the other trades. Coordinate with other trades (landscaping and other site work trades). Project shall be laid out essentially as indicated on the Irrigation Plans, making minor adjustments for variations in the planting arrangement. Major changes shall be reviewed with the Owner's Representative prior to proceeding.

3.02 PIPE AND FITTINGS INSTALLATION

3.02

- a. Using proper width trencher chain, excavate a straight (vertical) and true trench to a depth of 2-inch of pipe invert elevation.
- b. Loam or topsoil encountered within the limits of trench excavation for irrigation mains and branch lines shall be carefully removed to the lines and depths as shown on the Drawings and stockpiled for subsequent replacement in the upper 6 inches of the trench from which it is excavated. Such removal and replacement of the quantities of loam shall be considered incidental to the irrigation system and no additional compensation will be allowed therefore.
- c. Pipe shall be laid on undisturbed trench bottom provided suitable base is available- no rock larger than 1-inch or sharp edges; if not, excavate to 2-inch below pipe invert and provide and install sand base or crushed stone upon which to lay pipe.
- d. Back filling shall be accomplished as follows: the first 10-inch of backfill material shall contain no foreign matter and no rock larger than 1-inch in diameter. Carefully place material around pipe and wire and tamp in place. Remainder of backfill shall be laid-up in 6-inch (maximum) lifts and tamped to compaction with mechanical equipment. Compact backfill in trenches to dry density equal to the adjacent undisturbed soil, and conform to adjacent grades without dips, sunken area, humps, or other irregularities. Frozen material shall not be used for backfill.
- e. Make all solvent-weld joints in strict accordance with manufacturer's

recommendations, making certain not to apply an excess of primer or solvent, and wiping off excess solvent from each connection. Allow welded joints at least 15 minutes set-up/curing time before moving or handling. When the temperature is above 80° F, allow connections to set minimum 24 hours before pulling or pressure is applied to the system. When temperature is below 80° F, follow manufacturer's recommendations. Provide and install for expansion and contraction as recommended. Wire shall be laid in same trench as mainline and at pipe invert (see Wire Installation).

- f. Cut plastic pipe with handsaw or pipe-cutting tool, removing all burrs at cut ends. All pipe cuts are to be square and true. Bevel cut end as required to conform to Manufacturer's Specifications.
- g. Every precaution shall be taken to prevent foreign material from entering the pipe while it is being placed in the trench. At times, when installation of the piping is not in progress, the open end(s) of the pipe shall be closed by a watertight plug or other means. All piping, which cannot temporarily be joined, shall be sealed to make as watertight as possible. This provision shall apply during the lunch hour as well as overnight. Pipe not to be installed that day shall not be laid out. Should water enter the trench during or after installation of the piping. All testing shall be at the expense of the Company performing the work piping may be installed or back filled until all water is removed from the trench. Pipe shall not be installed when water is in the trench, when precipitation is occurring, or when the ambient temperature is at 40° F or below. Pipe installed at temperatures below 40° F shall be removed and replaced at no cost to the Owner. PVC pipe shall be snaked in the trench to accommodate for expansion and contraction due to changes in temperature.
 - h. Maintain 6-inch minimum clearance between sprinkler lines and lines of other trades. Do not install sprinkler lines directly above another line of any kind.
 - i. Maintain 3-inch minimum between lines which cross at angles of 45 to 90 degrees.
 - j. Throughout the guarantee period it will be the responsibility of The Company under contract performing the work to refill any trenches that have settled due to incomplete compaction.
 - k. Pulling of pipe will be allowed provided soil is suitable and specified depth of bury can be maintained.

a. Flood bubbler assemblies shall be installed two per tree, flush to grade. Bubblers shall be properly placed beside root balls to irrigate the trees.

3.04 SPRINKLER INSTALLATION

3.04 1-1

- a. Spray sprinklers shall be installed flush (perpendicular) to grade on swing pipe assemblies, minimum length 6 inches, maximum 18 inches.
- b. Sprinklers shall not exceed maximum spacing indicated
- c. Adjust sprinkler zone after installation using flow control device on valve.

3.05 QUICK COUPLING VALVE INSTALLATION

3.05 1-1

- 3. All testing shall be at the expense of the Company performing the work
- a. Provide and install quick coupling valves where indicated on the Drawings.
- b. Quick coupling valves to be mounted on 1-inch prefabricated PVC unitized swing

joint assemblies with integral o-rings, minimum length 12 inches with brass insert and stabilizer as per details.

3.06 CHECK/TEST/START-UP/ADJUST

3.06 1-1

- a. Flushing:
- 1. After all piping, valves, sprinkler bodies, pipe lines and risers are in place and connected, but prior to installation of sprinkler internals, open the control valves and flush out the system under a full head of water.
- 2. Sprinkler internals, and riser nozzles shall be installed only after flushing of the system has been accomplished to the full satisfaction of the Owner's Representative.
- 3. Flush the entire system after installation is complete and service any clogged nozzles for thirty (30) days after substantial completion of this portion of the landscape irrigation system.
- b. Testing:
- 1. Leakage test: test all lines for leaks under operating pressure. Repair all leaks and re-test.
- 2. Coverage test: perform a coverage test in the presence of the Owner's Representative (notify Owner's Representative or Architect at least seven (7) days in advance of scheduled coverage test). Representative will determine if the water coverage is complete and adequate. Readjust heads and/or head locations as necessary or directed to achieve proper coverage. under contract.

- a. At the completion of the work, all parts of the installation shall be thoroughly All testing shall be at the expense of the Company performing the work cleaned. All equipment, pipe, valves and fittings shall be cleaned of grease, metal cuttings and sludge which may have accumulated by the operation of the system for testing.
- b. Adjust sprinkler heads, valve boxes, and quick coupling valves to grade as required, so that they will not be damaged by mowing operations.
- c. Continue sprinkler coverage adjustment as required by settlement, etc., throughout the guarantee period.
- d. Each control zone shall be operated for a minimum of 5 minutes and all heads checked for consistency of delivering water. Adjustments shall be made to sprinklers that are not consistent to the point that they match the manufacturer's standards. All sprinklers, valves, timing devices or other mechanical or electrical components, which fail to meet these standards, shall be rejected, replaced and tested until they meet the manufacturer's standards.

3.18 ACCEPTANCE AND OPERATION BY OWNER

3.18 1-1

a. Upon completion of the work and acceptance by the Owner, train the Owner's Representative(s) in the operation of the system (provide minimum 7 day written notice in advance of test). Furnish, in addition to the Record Drawings and operational manuals, copies of all available specification sheets and catalog sheets to the Owner's personnel responsible for the operation of the irrigation system. Guarantee all parts and labor for a minimum period of one (1) year from date of acceptance.

3.19 CLEAN UP

3.19 1-1

- a. Upon completion of all installation work, the Company performing the work under contract shall remove all leftover materials and equipment from the site in a safe and legal manner.
- b. Remove all debris resulting from work of this section.
- c. Regrade, lightly compact, and replant around sprinkler heads where necessary to maintain proper vertical positioning in relation to established grade.
- d. Fill all depressions and eroded channels with sufficient soil mix to adjust grade to ensure proper drainage. Compact lightly, and replant filled areas in accord with Drawings requirements.

SECTION 02920

SODDING

1.01

1-1

a. The work under this section shall require that the Contractor provide all labor, materials, equipment and transportation involved in the installation and establishment of a sodded lawn. The work shall include, but not be limited to; the respreading of top soil and furnishing of loam borrow, incorporating soil additives, fine grading, sodding and the protection and maintenance of the established lawn until final acceptance of the project, or a minimum of sixty (60) days, whichever is longer.

1.02 SAMPLES

1.02

1-1

- a. Submit the following samples in accordance with the provisions of the GENERAL CONDITIONS:
- 1. Suitable reusable topsoil or Loam Borrow as directed by the Engineer.
- 2. Sod with statement of composition percentages of purity and germination of each variety.

1.03 STANDARDS

1.03 1-1

a. Soil analysis in accordance with the current "Standards of the Association of Official Agricultural Chemists".

1.04 QUALIFICATIONS

1.04 1-1

a. Fine grading and installation of sod shall be done under the supervision of a qualified foreman acceptable to the Engineer.

1.05 SUBMITTALS

1.05 1-1

- a. Provide affidavits from manufacturers and/or suppliers where required by these Specifications.
- b. Provide watering and fertilizing schedule to Engineer for approval.
- c. Provide two marked up prints to the Engineer indicating square footages for all lawn areas with quantities of all soil additives and sod for each area prior to beginning work.

1.06 GUARANTEE

a. Guarantee lawns until final acceptance of the project.

PART II-MATERIALS

2.01 TOPSOIL 2.01 1-1

- a. Re-spread existing topsoil stored on site and furnish all loam borrow required for the work of this section.
- b. Growth medium shall be a "fine sandy loam," or a "sandy loam" determined by mechanical analysis and based on the "U.S.D.A. Classification System." It shall be of uniform composition, without admixture of subsoil. It shall be free of stones, lumps, plants and their roots, debris and other extraneous matter over one (1) inch in diameter or excess quantities of smaller pieces of the same materials as determined by the Engineer, it shall not contain toxic substances harmful to plant growth. It shall be obtained from naturally well drained areas which have never been stripped before.
- c. It shall have an acidity range of pH 5.5 to pH 7.0.
- d. The Contractor shall provide representative samples for testing and approval as directed by the Engineer. The Contractor shall deliver samples to testing laboratory; have testing report sent directly to the Engineer; and pay all costs associated with testing the soil in accordance with loam borrow.
- e. Mechanical and chemical (pH soluble salts) analysis shall be by a public extension service agency or a certified private testing laboratory in accordance with the current "standards" of the "Association of Official Agricultural Chemists."
- f. Growth medium shall not be delivered or worked in a frozen or muddy condition.
- g. Soluble salts shall not be higher than 75 parts per million.

2.02 FERTILIZER

- a. Fertilizer shall be commercial fertilizer, 10-8-4 U.F. Fertilizer mixture containing at least sixty percent (60%) of organic material.
- b. Percentages of nitrogen, phosphorus and potash shall be based on laboratory test recommendations as approved by the Engineer. For purpose of bidding, assume ten percent (10%) nitrogen, twenty percent (20%) phosphorus and six percent (6%) potash by weight. At least fifty percent (50%) of the total nitrogen shall contain no less than three percent (3%) water-insoluble nitrogen.
- c. Fertilizer shall be delivered to the site, mixed as specified, in the original unopened standard size bags showing weight, analysis and name of manufacturer. Containers shall bear the manufacturer's guaranteed statement of analysis, or a manufacturer's certificate of compliance covering analysis shall be furnished to the Engineer. Store fertilizer in a weatherproof place and in such a manner that it will be kept dry and its effectiveness will not be impaired.
- d. Fertilizer shall be applied in two (2) applications. The first application shall be within one (1) week before the sodding at the rate of thirty-five (35) pounds per thousand (1,000) square feet harrowed into the top two (2) inches of sod bed.

The second application shall be done as a maintenance application per paragraph 3.06.

2.03 LIMESTONE 2.03 1-1

a. Ground Limestone shall contain not less than eighty-five percent (85%) total carbonates and shall be ground to such fineness that fifty percent (50%) will pass through a 100-mesh sieve and ninety percent (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.

b. After the loam has been spread and graded, and if recommended as a result of thesoil analysis, apply ground limestone at the rate recommended by the testing laboratory. Assume at least twenty (20) pounds per one thousand (1,000) square feet.

2.04 SUPERPHOSPHATE

- a. Superphosphate shall be composed of finely ground phosphate rock as commonly used for agricultural purposes containing not less than eighteen percent (18%) available phosphoric acid.
- b. Superphosphate shall be applied with the fertilizer at the rate of twenty (20) pounds per thousand (1,000) square feet.
- c. At least four (4) days shall lapse after the application of lime and fertilizer before sodding shall begin.

2.05 SOD

a. After the preparation of the areas to be sodded has been approved by the Engineer, the Contractor shall sod the areas as specified herein. The Contractor shall sod with nursery-grown sod composed of Bluegrass as follows:

Rye Grass and Gettysburg Perennial Ryegrass 20% (Endophytic)

P 104 Kentucky Bluegrass 16%

America Kentucky Bluegrass 16%

Glade Kentucky Bluegrass 16%

Challenger Kentucky Bluegrass 16%

Touchdown Kentucky Bluegrass 16%

- b. Submit blend percentages and names to Engineer for approval. The sod shall be grown by a recognized turf farm which meets the approval of the Engineer. The approved farm must, in turn, certify in writing that they are the Contractor's selected supplier.
- c. Sod shall be furnished in either of the following dimensions:
- 1. In rectangular sod strips measuring twelve (12) inches or sixteen (16) inches in width and from four (4) feet or six (6) feet in length, stored in rolls with the grass top side inverted so that the topsoil side is to the

exterior.

- 2. In rectangular sod strips termed "Big Rolls," consisting of three (3) sixteen (16) inch wide sod strips, maximum fifty (50) feet long, rolled and stored on specially fabricated heavy duty tubes furnished by the sod supplier. The overall dimensions of the "Big Roll" are forty-eight (48) inches wide by a maximum of fifty (50) feet long.
- d. All sod furnished shall be living sod containing at least seventy percent (70%) of thickly matted grasses as specified, and free from noxious weeds.
- d. Any sod with growth of more than two (2) inches in height shall be mowed to a height of from one and one-half ($1\frac{1}{2}$) to two (2) inches not more than five (5) days prior to harvesting. The sod shall be machine cut at a uniform soil thickness of from one-half (1/2) to three-quarter (3/4) inches, excluding top growth and thatch at time of cutting. The maximum allowable deviation from the widths and lengths specified shall be five percent (5%). No broken pads or torn and uneven ends shall be accepted. Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper eighteen percent (18%) of the section. Sod shall not be harvested when its moisture content (excessively wet or dry) may adversely affect its survival.
- f. Sod shall be harvested, delivered and installed within a period of thirty-six (36) hours. Sod not installed within this time period shall be inspected by the Engineer and shall not be installed prior to his approval. Any sod not approved by the Engineer shall be removed from the site by the Contractor and a fresh sod supply shall be furnished at no extra cost to the Owner.

PART III-EXECUTION

3.01 SOD BASE PREPARATION

3.01 1-1

- a. Personnel for lawn work shall be familiar with sodding and lawn construction and be under the constant supervision of a qualified foreman.
- b. After acceptance of sub-base as prepared under Section 02350 of these Specifications, the Contractor shall do whatever additional grading is necessary to bring the sub-base to a true smooth slope, parallel and six (6) inches below finished grade for all areas to be sodded.
- c. The top four (4) inches of the sub-base immediately prior to being covered with topsoil shall be raked or otherwise loosened and shall be free from stones, rock, and other foreign material three (3) inches or greater in dimensions.
- d. There shall be sufficient grade stakes as determined by the Engineer to insure correct line and grade of sub-base and of finished grade.
- e. Sub-base shall be inspected and approved by the Engineer before placing of topsoil.
- f. Topsoil shall be placed and spread over approved areas to a depth sufficiently greater than necessary for the required thickness so that after natural settlement and light rolling, the completed work will conform to the lines, grades and

elevations indicated. Supply additional loam, after testing and approval as may be needed to give the specified depths and finished grades under the contract without additional cost to the Owner.

g. After topsoil has been spread, it shall be carefully prepared by scarifying or harrowing and hand raking. All large still clods, lumps, brush, roots, stumps, litter and other foreign matter, and stones over one (1) inch in diameter shall be removed from the topsoil and also be free of smaller stones in excessive quantities as determined by the Engineer.

3.02 LIMING

- a. The liming, fertilizing and sodding shall be done during a period of time to be approved by the Owner. In general sodding will be allowed after September 1 or before May 15. The Contractor shall notify the Owner thirty (30) days prior to the time that he intends to begin this work. No sodding shall be permitted prior to approval in writing by the Owner.
- b. After all surfaces to be sodded have been topsoiled to the sod sub-grade, the Contractor shall furnish and apply limestone as herein specified.
- c. Limestone shall be applied at the rate determined by the results of laboratory tests conducted at a certified testing laboratory at the Contractor's expense.
- d. Lime shall be mechanically spread at the rate determined by testing on all areas which are to be sodded up to a slope gradient of twenty-five percent (25%).
- e. The lime shall be distributed uniformly and worked into the top four (4) inches minimum of the topsoil areas designated for sodding by discing or rototilling and shall be uniformly blended into the topsoil.

3.03 FERTILIZER

- a. After the liming and tilling has been approved by the Engineer, the Contractor shall apply fertilizer to all areas to be sodded. All fertilizer shall be uniformly spread by a mechanical spreader at the rate recommended by the testing laboratory. Fertilizer shall not be applied during the months of June, July or August.
- b. After the areas to be sodded have been properly fertilized, the Contractor shall hand rake the fertilizer into the topsoil to a minimum depth of one (1) inch so that the material is uniformly blended by means of garden rakes. During this raking process, the areas to be sodded shall be cleared of all stones over one (1) inch in size and all other unsuitable material. All such undesirable material shall be removed from the site. These areas shall be fine graded to achieve sod sub-grade after compaction which shall be obtained by rolling, dragging or by an approved method which obtains an equivalent compaction to that produced by a hand roller weighing from 75 to 100 pounds per foot of width. All depressions caused by settlement or rolling shall be filled with additional topsoil and re-graded and prepared as specified above until it presents a reasonable smooth and even finish at the required sod sub-grade.

c. At least four (4) days shall elapse after the application of lime and fertilizer before sodding shall begin.

3.04 SODDING

- a. After the preparation of the areas to be sodded has been reviewed by the Engineer, the Contractor shall sod the areas as specified herein.
- b. In accordance with the rectangular sod strips measuring twelve (12) inches or sixteen (16) inches in width and from four (4) feet to six (6) feet in length the following provisions shall apply:
- 1. All sod shall be placed with close joints and no overlapping by whatever method is chosen. Sod shall be laid in strips, edge to edge, with the lateral joints staggered. All minor or unavoidable openings in the sod shall be closed with sod plugs. However, sod laid with joints determined by the Engineer to be too large shall be lifted and re-laid to the Engineer's satisfaction at no extra cost to the Owner. On slope areas exceeding twenty-five percent (25%) gradient, the Contractor shall secure sod by pegging each strip five (5) feet on center.
- c. In accordance with the "Big Roll" method of furnishing and installing sod, the following provisions shall apply:
- 1. Only sod harvested with a "Big Roll" (Sod-O-Matic) harvester as supplied by the Tuckahoe Turf Farm or the Kingston Turf Farm, or equal, shall be permitted.
- 2. Sod so harvested shall be stored, delivered and unloaded while rolled on the manufacturer's specially made tubes which permit the rolling and storage of three (3) sixteen (16) inch wide sod strips, a maximum of fifty (50) feet in length and stored side by side.
- 3. Sod shall be installed by means of the Big Roll Laying Device as manufactured by the Beck Manufacturing Company, Auburn, Alabama, or equal which is available on loan or by purchase from the specified sod suppliers or manufacturers. This device is available in both mechanical or hydraulic models. Small areas may be laid by hand at the Contractors discretion.
- 4. The Contractor shall be required to borrow, rent or buy this "Laying Device" for use in the sod installation and shall utilize a tandem wheel tractor or one equipped with high flotation tires which has a three point hitch.
- 5. The sod shall be laid only by persons instructed by and in the presence of the sod supplier's representative until such time as the representative is satisfied that the Contractor's forces are sufficiently experienced in the proper use of the tractor, the Laying Device and supplementary sod-laying procedures. The Contractor shall be wholly responsible for the installation.
- 6. The prepared topsoil shall be so prepared so as to permit use of the Albion Park Repairs

tractor and laying device without causing depressions, ruts, etc., in the smooth finished surface to be sodded. Any depressions caused by the Contractor shall be remedied at no extra cost to the Owner.

- 7. The topsoil shall not be moist at the time of installation; however, it shall contain sufficient moisture so as not to be powdery or dusty, both as determined by the supplier's representative.
- 8. At slopes exceeding twenty-five percent (25%) in gradient, sod shall be installed manually as specified herein and not by the "Big Roll" system.
- 9. The sod shall be uniformly distributed over the prepared topsoil bed and pulled tightly against the edges of previously laid sections by laborers with garden rakes so as to insure tight joints and to prevent drying of the sod at the joints.
- d. All sod shall be placed with close joints with no overlapping by whatever method is chosen. The overlapping of existing lawn with new sod along limit of work lines shall not be permitted. All new work shall abut existing lawn to match existing grades along a cut and prepared edge. Sod shall be laid in strips, edge to edge, with the lateral joints staggered. All minor or unavoidable openings in the sod shall be closed with sod plugs or with topsoil. However, sod laid with joints determined by the Engineer to be too large shall be lifted and re-laid in accordance with these specifications at no extra cost to the Owner. On slope areas exceeding a twenty-five percent (25%) gradient, the Contractor shall secure sod by pegging each strip five (5) feet on center.
- e. The sod must be watered on the same working day on which it is installed. If necessary, the Contractor shall provide special crews after normal working hours to accomplish such watering at no extra cost to the Owner. After this initial watering, the Contractor shall be required to furnish, install and maintain a system of temporary pipe, sprinklers and service connections which are adequate to water the sod weekly with the equivalent of one (1) inch rainfall. During the first week of the sod installation, watering shall be accomplished daily with a sufficient quantity of water to penetrate through the sod and into the sub-base. If the sod is watered by normal rainfall or if weather conditions dictate, the Contractor may, at his discretion, eliminate or increase watering during a given week. However, such action by the Contractor shall in no way waive the Contractor's responsibility for the growth and health of the grass until final acceptance of the sodding.
- f. If, in the opinion of the Engineer, rolling of the sod is required to properly joint the sod to the bed after the sod is laid and twenty-four (24) to forty-eight (48) hours after initial watering, the Contractor shall roll the required area with a roller which weighs from seventy-five (75) to one hundred (100) pounds per square foot of roller width at no extra cost to the Owner.
- g. The completed sodded surface shall be true to finish grades shown and even and firm at all points.

- a. Maintenance shall begin immediately after sod is installed and shall continue in accordance with the following:
- b. Sod
- 1. Sod shall be maintained until final acceptance of the project or a minimum of eight weeks, whichever is longer.
- 2. In the event that lawn operations are completed too late in the fall for adequate growth of grass, maintenance shall continue into the following spring growing season at least eight weeks.
- 3. Water sodded areas as necessary to supplement natural rain to the equivalent of one (1) inch rainfall per week and as follows:
- a. Lawns shall be watered in a satisfactory manner during and immediately after installation and not less than twice per week, until acceptance.
- b. Suitable water for planting and maintenance of lawns shall be provided by the General Contractor.
- c. The Contractor shall furnish his own hose and hose connections from the outlets where water is furnished. Provide all necessary watering equipment.
- d. Adjust approved schedule to fit weather and soil conditions.
- e. Mow grass as required. Remove grass clippings.
- f. Apply specified fertilizer over entire lawn area after six (6) weeks at rate of fifteen (15) pounds per one thousand (1,000) square feet.
- g. Eliminate weeds by methods approved by the Engineer; pre-emergent and post-emergent herbicides, EPA approved, are preferred.
- h. Repair bare spots and/or damage resulting from erosion, gullies, washouts, or other causes by filling with topsoil, tamping, refertilizing and resodding by the Contractor at his expense, if such damage occurs prior to acceptance. Sod shall be of same seed mixture as specified. If not weed-free, spraying shall be required.

3.07 CLEAN-UP 3.07 1-1

- a. Pavements shall be broom cleaned and kept clear at all times during construction.
- b. After completion of all landscaping work, dispose of all debris and excess material, to satisfaction of the Engineer. All pavements shall be broomed and hosed clean.

3.08 INSPECTION AND ACCEPTANCE

3.08 1-1

- a. Sod will be inspected upon delivery to the site and is subject to the Engineer's approval.
- b. No sod will be accepted until maintenance has been provided in accordance with 3.06 above and until healthy and vigorously turf conditions prevail.

Albion Park Repairs

SECTION 02950

PLANTING

1.01 SCOPE OF WORK

a. The work to be done under this section shall require the Contractor to provide all labor, material, equipment and transportation necessary for the furnishing and planting of new trees as shown on the Contract Drawings and as specified herein.

PART II - MATERIALS

2.01 LOAM BORROW

- a. Loam borrow shall meet the requirements as specified in Section 02910 of these Specifications. Loam shall be of a uniform composition throughout without admixture of subsoil, and shall be clean and reasonably free from clay, lumps, stones, roots two (2) inches or more in diameter, or other similar substances. Loam shall not contain toxic substances harmful to plant growth. It shall be free of weeds, weed seeds and debris, or other objects that might hinder planting operations.
- b. Loam shall have a pH value range between 5.0 and 7.0. If the soil does not fall within the pH range specified, it may be amended to bring it within the specified limit
- c. Loam shall not contain less than four percent (4%) nor more than twenty percent
- (20%) organic matter, as determined by the loss ignition of samples oven-dried at a constant weight at a temperature of $230\Box F$, $\Box 9\Box F$.
- d. Loam shall not be worked, excavated or delivered while in a frozen or muddy state.

2.02 PLANT MATERIALS

- a. All plants shall conform to the American Standard for Nursery Stock of the American Association of Nurserymen, publication Z60.1. All trees and shrubs shall be typical of their species or variety and shall have a normal habit of growth. b. The root system of each plant shall be well provided with fibrous roots. All parts shall be sound, healthy, and vigorous, well branched and densely foliated when in leaf. They shall be free of disease, insect pests, eggs or larvae. c. The Contractor shall take note that only plant stock grown specifically for hardiness in Zone 5 of the Hardiness Zones established by the Arnold Arboretum, Jamaica Plain, Massachusetts, will be accepted.
- d. Balled and Burlapped Plants
- 1. All plants designated balled and burlapped or 'B & B' must be moved with the root systems as solid units with balls of earth firmly wrapped with biodegradable burlap and bound carefully with twine or cord. The diameter and depth of the balls of earth must be sufficient to encompass Albion Park Repairs

the fibrous root feeding system necessary for the healthy development of the plant.

- 2. Soil characteristics (i.e., composition, texture, pH, etc.) of all field-grown balled and burlapped plants shall closely match that of the soil where plant materials are to be planted.
- e. The height of the trees (measured from the crown of the root flare to the tip of the

top branch) shall be not less than the minimum size designated. Caliper measurement shall be taken at six (6) inches above ground level for trees up to and including four (4) inch caliper size, and at twelve (12) inches above ground level for larger sizes. The branching height for shade trees next to walks shall be seven (7) feet minimum. This may be obtained by pruning after planting if this does not ruin the shape or form of the trees or cause unsightly scars.

j. All pruning cuts shall comply with acceptable horticultural practice.
k. Trees shall have single straight trunks, unless otherwise indicated by the contract drawings, 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. Tree trunks shall be free from sunscald, frost cracks, disfiguring knots or wounds resulting from abrasions, fire or other causes. All abrasions and cuts shall be completely callused over. No pruning wounds shall be present having a diameter exceeding two inches and such wounds must show vigorous bark on all edges. No trees which have had their leaders cut will be accepted.

PART III - EXECUTION

3.01 PLANT LOCATIONS

a. All plant locations and outlines for planting beds shall be staked out on the ground and approved by the Engineer before any excavation is begun. If it is necessary to adjust any of the locations, because of unforeseen problems, the

changes shall be under the direction of the Engineer and there shall be no extra charges for these adjustments.

3.02 PLANTING TREES, SHRUBS AND GROUNDCOVERS

- a. All ties, tags, rope, twine and/or other materials that would potentially girdle plant stems, trunks or branches shall be removed prior to planting.b. Balled and Burlapped Trees and Shrubs
- 1. Root ball masses of balled and burlapped (B&B) plants shall not be disturbed, loosened, broken or otherwise damaged during planting operations. All tying materials twine and ropes shall be cut off and removed. Biodegradable burlap shall be laid back and/or cut away from the top half of the ball. No burlap shall be pulled out from under the ball. Any and all non-biodegradable materials, synthetic and/or treated burlap, shall be entirely removed prior to planting. If a wire basket is present, the upper two-thirds (2/3) of the metal basket shall be cut away and removed.

Do not remove the entire basket.

c. Planting pits shall be backfilled with the existing, unamended soil removed from the hole, or prepared soil mix, as specified in the contract drawings, in layers not to exceed eight (8) inches. Each layer is to be tamped firmly and watered to sufficiently settle the backfilled soil. When the pit is approximately two-thirds (2/3) backfilled, water deeply and thoroughly, allowing it to drain through undisturbed. Continue backfilling and tamping in eight (8) inch layers until soil is at the level at which the plant was formerly grown. Water thoroughly and adjust soil level.

3.08 GUARANTEE

a. All plant materials shall be guaranteed for a period of one (1) year after the completion of the specified maintenance period and the date of final acceptance of the entire project, in writing from the Landscape Architect. Plants shall exhibit satisfactory growth and have no less than seventy-five percent (75%) of their branches alive at the end of the guarantee period. If the leader of any single-leader species is dead, the entire plant shall be considered dead.

b. At the end of the guarantee period, inspection will be made again. Any plant required under this Contract that is dead or unsatisfactory shall be removed from the site. These shall be replaced during the normal planting season, until the plants live through one (1) year.

SECTION 03300

CEMENT CONCRETE - CAST IN PLACE

1.01 SCOPE OF WORK

a. The work under this section shall consist of furnishing all labor, materials, equipment, transportation, reinforcing, forming, finishing and curing of cast in place concrete.

1.02 REFERENCE STANDARDS AND SPECIFICATIONS

- a. Reference to the standards, specifications and tests of technical societies, organizations, and governmental bodies is made of the Contract Documents.
- 1. AASHTO American Association of State Highway and Transportation Officials (tests or specifications).
- 2. ASTM American Society of Testing and Materials.
- 3. MassDOT Standard Specifications Latest edition of the Standard Specifications for Highways, Bridges and Waterways, The Commonwealth of Massachusetts, Department of Transportation, 1988 Edition.

1.03 JOB CONDITIONS

a. Subbase and base preparation, including material shall be of proper approved quality as specified under other sections of these Specifications. Start of work under this SECTION shall constitute acceptance of the foundation conditions to which this work is to be applied. Any defects in work resulting from such conditions shall be corrected under this section at no extra cost to the Owner. b. Maintain base in satisfactory condition and properly drained until surface improvement is placed.

PART II - MATERIALS

2.01 CONCRETE

a. Cement concrete to be used shall be Class 4,000 PSI according to the classification defined in the Massachusetts Standard Specifications and shall meet the following requirements.

CEMENT CONCRETE – CAST IN PLACE CLASS
MINIMUM 28 DAY COMPRESSIVE STRENGH
CEMENT CONTENT

LBS/CY FOR COURSE AGGREGATE
4,000 PSI 610 AIR-ENTRAINED CONTENT OF 7.0 +/- 1.0%
2.02 FORMWORK

Forms shall be strong enough to resist pressure of the concrete without springing, and tight enough to prevent leakage of mortar. Forms shall be staked, braced, or tied together to maintain their position and shape when concrete is compacted in place. Forms shall be clean and shall produce a smooth, even finish for exposed surfaces without wood grain appearance to match existing conditions.

2.03 REINFORCING

- a. Reinforcing bars shall consist of deformed bars unless otherwise specified. The bars will be rolled from new billet steel conforming to the requirements of AASHTO-M31, Grade 60.
- b. All reinforcement shall be free from imperfections and surface coatings of rust, dirt, oils, paint, grease, and mill scale and shall present a clean, fresh surface when placed in the structure. Rust that occurs in scales or that pits the steel will be considered an imperfection, but the surface shall be brushed to remove loose material.
- c. Dowels for installation at expansion joints, as detailed, shall be #4 smooth steel dowels, paper capped at one end.

2.04 PRE-FORMED EXPANSION JOINT FILLER

Preformed expansion joint filler shall be of a non-extruding and resilient non-bituminous type conforming to AASHTO-M135

2.05 POLYURETHANE SEALANT

a. Polyurethane Joint Sealant shall be cold applied, elastomeric joint sealing compound suitable for use on horizontal joint Portland cement concrete surfaces and shall conform to the Commonwealth of Massachusetts, Department of Public Works, Standard Specifications for Highways and Bridges, 1988 Edition, Section M9.14.3, except that only single component sealants shall be utilized. Color to match pavement.

PART III - EXECUTION

3.01 GRADING AND COMPACTION OF SUBGRADE AND BASE

- a. Do all grading and compaction of subgrade and base in conformance with Section 02350 of these Specifications.
- b. Bring subbase and base to required grades and sections after final compaction. Tamp traces of trenches. Remove spongy and otherwise unsuitable material and replace with approved material. Loosen exceptionally hard spots and recompact. Take every precaution to obtain a foundation of uniform bearing capacity. In absence of specific requirement, compact subbase and base by such means to provide firm base and insurance against settlement and cracking of superimposed work.

3.02 GENERAL FORMWORK

3.02 1-1

- a. Forms shall be smooth, free from warp, sufficient in strength to resist springing out of shape, equal in height to the depth of concrete, and free from all dirt or mortar if previously used. The forms shall be rigidly supported, well staked, thoroughly braced and set to the proper lines with the upper edges conforming to the finish grades. Forms shall be coated with non-staining mineral oil prior to placing concrete.
- b. Forms shall not be removed for at least twenty-four (24) hours after the concrete has been placed, or for a longer period if directed by the Engineer. Extreme care shall be taken in removing forms in order to prevent damage to the concrete. Under no conditions shall any bar, pick or other tool be used which depends upon leverage on the concrete for removal of the forms.

3.03 CAST-IN ITEMS

a. Reinforcing shall be placed as shown on the plans.

3.04 CONCRETE PLACING AND FINISHING

- a. Placing and finishing of cement concrete pavements on grade.
- 1. The concrete shall be placed in such quantity that after being thoroughly consolidated in place it shall be to the lines, grades and thicknesses

Albion Park Repairs

indicated. No finishing operation shall be performed until all bled water and water sheen has left the surface and the concrete has started to stiffen. After water sheen has disappeared, edging operations where required shall be completed. All tool marks shall be eliminated. After edging and jointing operations, the surface shall be floated with aluminum or magnesium floats. Immediately following floating, the surface shall be steel-troweled. After trowelling, the Contractor shall draw a fine nylon push broom lightly over the surface to produce a non-slip condition. If necessary, tooled joints and edges shall be rerun before and after trowelling to maintain uniformity and all tool marks shall be eliminated by brooming.

- b. Placing and finishing of cement concrete.
- 1. Concrete placing and finishing shall be in accordance with applicable provisions of Section 901 of the Commonwealth of Massachusetts Standard Specifications referenced herein.
- 2. Visible concrete surfaces are to match existing surfaces of like structures on site in finish and appearance when complete.
- 3. In conveying the material from the place of mixing to the place of deposit, the operation shall be conducted in such a manner that no cement will be lost, and the concrete shall be so handled that it will be of uniform composition throughout, showing neither excess nor lack of cement in any area.
- 4. Concrete shall be placed in the forms in an approved manner in order to prevent stone pockets, voids or segregation and to reduce rehandling and flowing in the forms to a minimum. Concrete shall be evenly distributed in the forms. Each layer shall be thoroughly consolidated by rodding and vibrating. The face of the forms shall be carefully spaded to bring a dense mortar to the face in order to produce a good surface finish. Compaction shall be accomplished by applying approved mechanical vibrators to the mass of concrete at the point and time of deposit using care to avoid over vibration. Vibration of forms or reinforcing shall not be permitted and extreme care shall be taken to prevent disturbing previously placed concrete that has become partially set.
- 5. Within forty-eight (48) hours after forms have been removed, all surfaces shall be finished as follows: Remove all fins, projections and irregularities from surfaces exposed to view. All voids and cavities on all surfaces shall be completely filled with stiff mortar of same composition and air-entrainment as the mortar in the original concrete mix. The same brand and color of cement, and the same kind and color of fine aggregate used in the original concrete mix shall be used in this mortar. The mortar shall be mixed, allowed to set for thirty (30) minutes and then remixed before placing in the work. Carefully remove surface film from these pointed areas before the mortar sets. If surfaces exposed to view do not present a uniformly smooth, clean surface of even texture and appearance when prepared in accordance with the foregoing, they shall be rubbed to obtain a satisfactory finish. Surfaces shall be wetted with clean water and

- rubbed with a carborundum brick without applying any cement or other coating until smooth and uniform in appearance.
- 6. Protection and curing shall be accomplished by one of the applicable methods specified in Section 901 of the Massachusetts Standard Specifications.
- 7. The Contractor shall be responsible for the quality and strength of the concrete. Inferior concrete, including that damaged by frost action, shall be removed and replaced at no additional cost to the Owner.
- 8. Existing concrete work damaged by the Contractor during operations under this contract shall be restored to the original condition acceptable to the Engineer.

PART IV - GUARANTEES

4.01 WARRANTEE

a. The Contractor shall be responsible to repair or replace any concrete exhibiting deficient materials or workmanship within one (1) year of final acceptance.

PART 4: CONSTRUCTION DOCUMENT DRAWING LIST

Drawing Number Drawing Title	
L-1 Site Repair Plans	
L-2 Existing Conditions & Site Prepar	ation
L-3 Layout Materials and Grading Pla	n
L-4 Site Details	
L-5 Site Details	

All of the requirements of Parts 3 and 4 shall be in conformance with the Commonwealth of Massachusetts Highway Department "Standard Specifications for Highway and Bridges (1998)" as amended by the Supplemental Specifications dated December 23, 1998 hereinafter referred to as the Standard Specifications and as modified by the following sections in these Technical Specifications. **NOTE**: Bidders shall check the attached documents with the above list to verify all parts are included before submitting a bid.

END OF SECTION

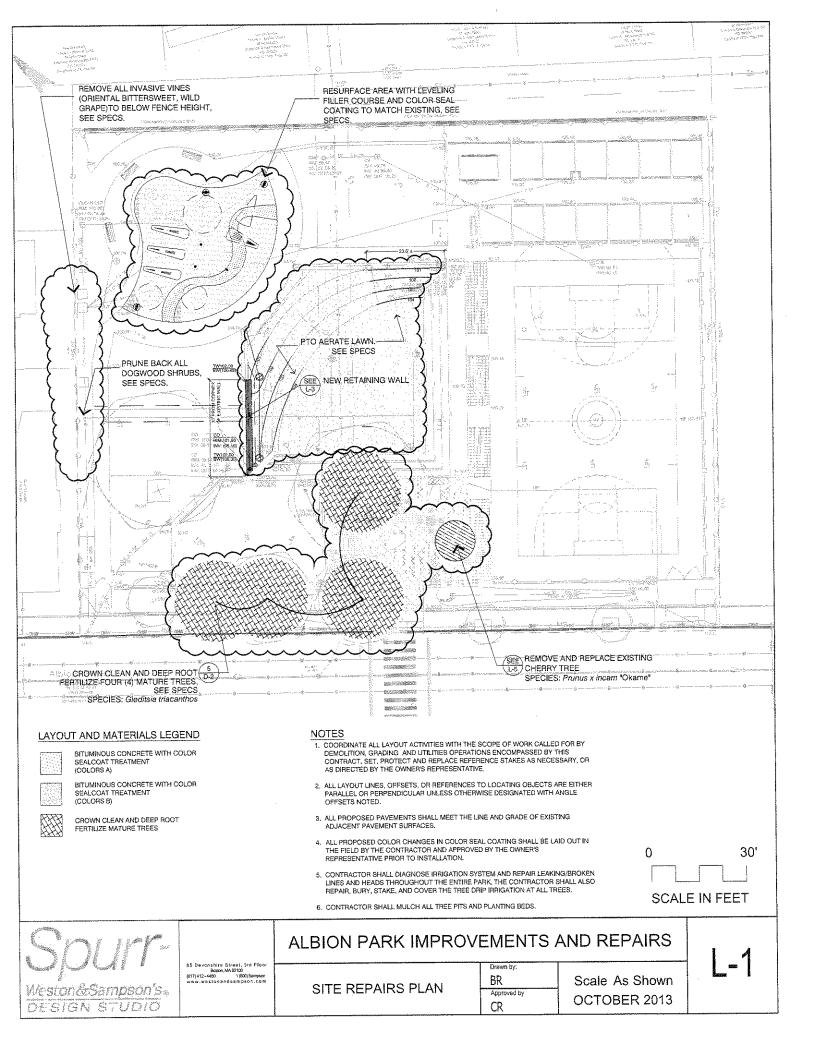
PART 1 SECTION - 00020:

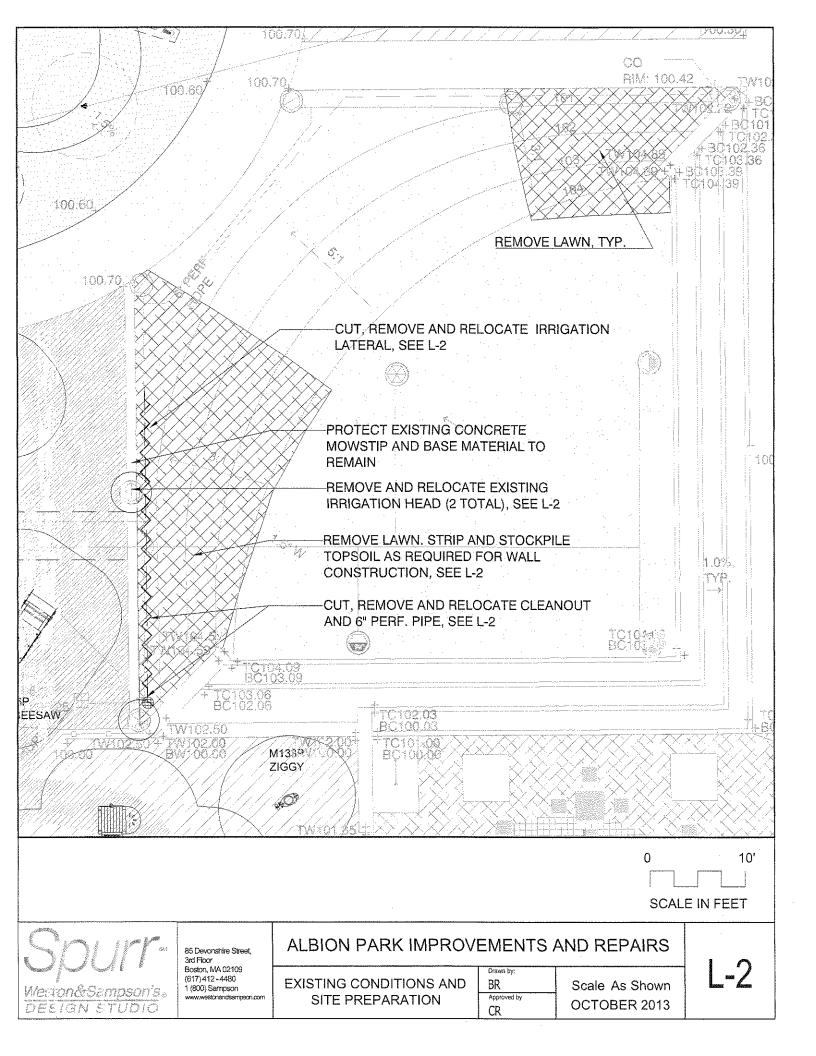
PART 4 - CONSTRUCTION DOCUMENT DRAWING LIST

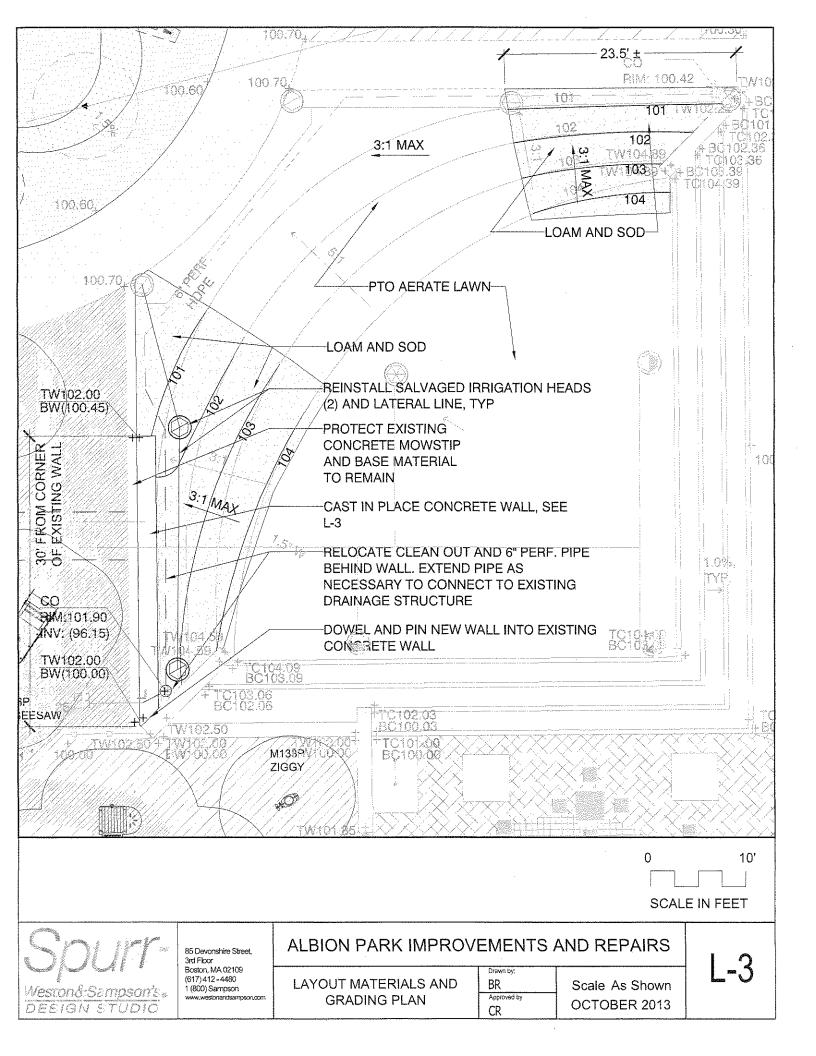
Drawing Number	Drawing Title
L-1	Site Repairs Plans
L-2	Existing Conditions & Site Preparation
L-3	Layout Materials and Grading Plan
L-4	Site Details
L-5	Site Details

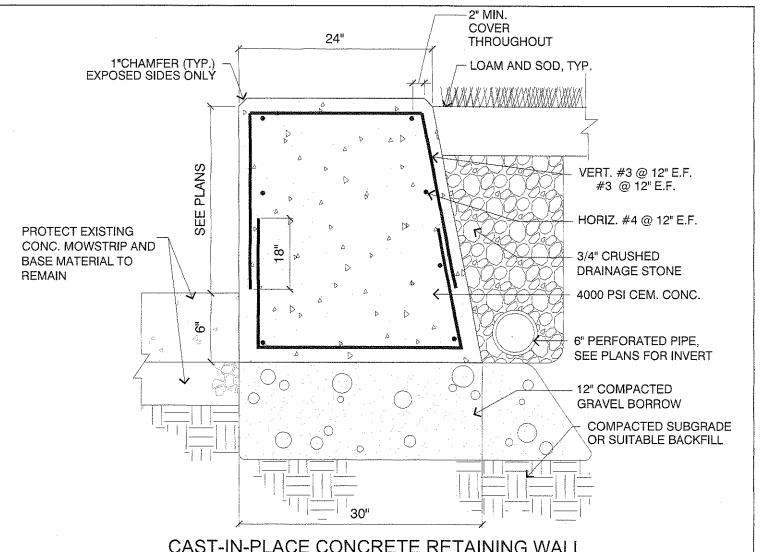
All of the requirements of Parts 3 and 4 shall be in conformance with the Commonwealth of Massachusetts Highway Department "Standard Specifications for Highway and Bridges (1998)" as amended by the Supplemental Specifications dated December 23, 1998 hereinafter referred to as the Standard Specifications and as modified by the following sections in these Technical Specifications.

NOTE: Please see included Plans as part of solicitation package. Bidders shall check the attached documents with the above list to verify all parts are included before submitting a bid.

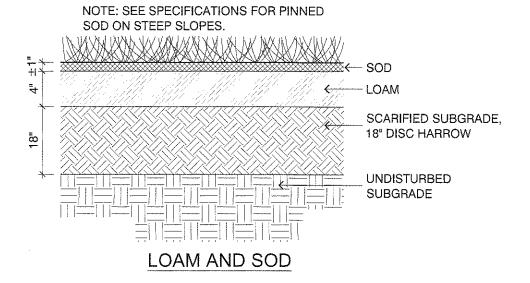








CAST-IN-PLACE CONCRETE RETAINING WALL



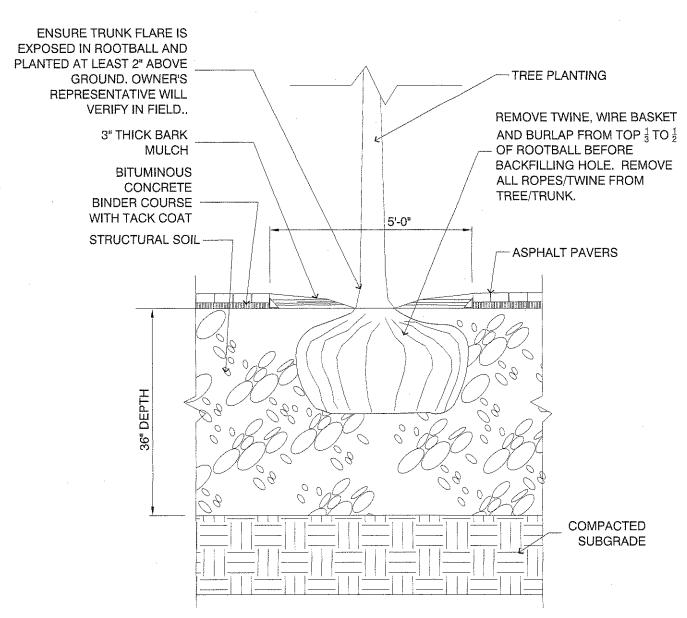


85 Devonshire Street, 3rd Floor Boston, MA 02109 (617) 412 - 4480 1 (800) Sampson

ALBION PARK IMPROVEMENTS AND REPAIRS

DETAILS

BR Scale As Shown Approved by OCTOBER 2013 CR



TREE PLANTING IN EXISTING STRUCTURAL SOILS



85 Devonshire Street, 3rd Floor Boston, MA 02109 (617) 412 - 4480 1 (800) Sampson www.westonandsempson.com ALBION PARK IMPROVEMENTS AND REPAIRS

DETAILS

BR Approved by CR Scale As Shown OCTOBER 2013

L-5