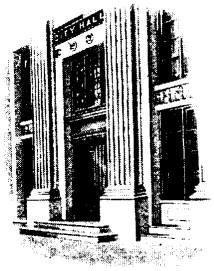
City of Quincy

City Hall
1305 Hancock Street
Quincy, Massachusetts 02169

Purchasing Department



THOMAS P. KOCH
Mayor

Kathryn R. Hobin
Purchasing Agent
Phone: (617) 376-1060
Fax: (617) 376-1074

SOLICITATION OF PRICE QUOTATION
CITY HALL ANNEX - HVAC DUCTWORK INSTALLATION

Pursuant to M.G.L. Chapter 149, the City of Quincy is soliciting written price quotations to: Supply labor, tools, and equipment for HVAC ductwork at Quincy City Hall Annex.

SCOPE OF WORK:

The project is to install new an HVAC ductwork system in approximately 3800 sqft office renovation. System will be comprised of insulated spiral medium pressure duct, VAV boxes, rectangular low pressure duct, insulation/liner, flex duct, and 2x2 diffusers. The new distribution system will connect to the existing supply duct system. The City of Quincy will purchase and provide all of the previously listed components along with miscellaneous installation materials and building controls. The contractor shall compile and coordinate the stock list with an acceptable supply house.

The contractor will be responsible for any damages to contents or interior of job site location.

The contractor will be responsible for **PROPER** disposal of all trash material.

Work must be completed before August 15, 2015.

The estimated time to complete job in 30 days.

Work will be allowed Monday - Friday (7:30 a.m. until 3:30 p.m.).

Certificate of Liability Insurance is required with the City named as an additional insured ($500,000. - minimum) and a copy of Employees Worker Compensation policy must be attached.

Quotes must be submitted by July 6, 2015 @ 11:00 a.m. Late quotes will be disqualified.

Inquiries and Bid submission:

All inquiries shall be made in writing by **fax and email** and shall be directed to:

Kathryn R. Hobin, Purchasing Agent
City of Quincy
Purchasing Department
1305 Hancock Street
Quincy, MA 02169
Fax: (617) 376-1074

Email: khobin@quincyma.gov and kimtrillcott@quincyma.gov

Inquiries shall be submitted no later than Wednesday, July 1, 2015 at 12:00 p.m.

If you have received this request for written responses from either the City of Quincy Website or hard copy from the office it is your responsibility to check for addenda at (www.quincyma.gov) before you turn in your quote. The City of Quincy will not be responsible for any quotes received omitting the addenda acknowledgement.

References:

Please include references from three similar projects that your company has completed.

The proposers shall provide below a list of at least 3 references, giving the name, address and telephone number of a contact person.

_____

_____

_____

_____

_____

_____

(Attach additional page if necessary.)

.

PRICE PROPOSAL PAGE

Total cost to Supply labor, tools, and equipment for HVAC ductwork at Quincy City Hall Annex, 1305 Hancock Street, Quincy, MA 02169.

$_____

_____

Amount in Words

Acknowledgement of Addendum(s) _____

Vendors Name: _____

Address: _____

City/St/Zip: _____

Telephone: _____

Fax: _____

E-Mail: _____

Signed by: _____

_____

(Please print name and title)

City of Quincy

City Hall
1305 Hancock Street
Quincy, Massachusetts 02169

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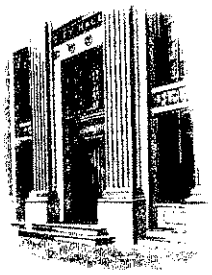

THOMAS P. KOCH
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Certificate of Non-Collusion

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

Name: _____

Address: _____

City, Town & Zip: _____

Email #: _____

Name of Business: _____

CITY OF QUINCY
Purchasing Department
1305 Hancock Street, Quincy, MA 02169

Phone: 376-1060
Fax: 376-1074

TAX COMPLIANCE CERTIFICATE

MASS. GENERAL LAWS, CH. 62C, S: 49A(b)

I hereby certify that I have complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding of child support.

Signed under the pains and penalties of perjury.

(1) Individual Contractor _____
(Contractor's Name and Signature)

Social Security Number _____

(2) Corporation, Association or Partnership _____
(Contractor's Name)

Federal Tax ID Number, or Social Security Number _____

By: _____
(Authorized Signature)

Note to Contractor: Please sign at (1) or (2), whichever applies.

CHAPTER 62C. ADMINISTRATIVE PROVISIONS RELATIVE TO STATE TAXATION

Chapter 62C: Section 49A Certification of compliance with tax laws as prerequisite to obtaining license or governmental contract

Section 49A. (a) Any person applying to any department, board, commission, division, authority, district or other agency of the commonwealth or any subdivision of the commonwealth, including a city, town or district, for a right or license to conduct a profession, trade or business, or for the renewal of such right or license, shall certify upon such application, under penalties of perjury, that he has complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support. Such right or license shall not be issued or renewed unless such certification is made.

(b) No contract or other agreement for the purposes of providing goods, services or real estate space to any of the foregoing agencies shall be entered into, renewed or extended with any person unless such person certifies in writing, under penalties of perjury, that he had complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

(c) Any such agency, which has been notified by the commissioner pursuant to section forty-seven A that a person who holds a license or certificate of authority issued by such agency or who has agreed to furnish goods, services or real estate space to such agency has neglected or refused to file any returns or to pay any tax required under this chapter and that such person has not filed in good faith a pending application for abatement of such tax or a pending petition before the appellate tax board contesting such tax or has been penalized pursuant to section 9 of chapter 62E for failure to comply with the provisions under said chapter 62E relating to reporting of employees and contractors, or has been penalized pursuant to paragraph (3) of subsection (f) of section 12 of chapter 119A for failure to comply with the provisions under said chapter 119A relating to withholding and remitting child support, shall refuse to reissue, renew or extend such license, certificate of authority, contract or agreement until the agency receives a certificate issued by the commissioner that the person is in good standing with respect to any and all returns due and taxes payable to the commissioner as of the date of issuance of said certificate, including all returns and taxes referenced in the initial notification or, if the licensee has been penalized for failure to comply with the provisions relating to reporting of employees and contractors under chapter 62E or withholding and remitting child support under chapter 119A, a certificate issued by the commissioner that the licensee is in compliance with said provisions.

(d) Any person who owns or leases a motor vehicle or trailer that is required to be registered in the commonwealth under chapter 90 and improperly registers the motor vehicle or trailer in another state or misrepresents the place of garaging of the motor vehicle or trailer in another city or town, shall be considered in violation of laws of the commonwealth relating to taxes under chapter 60A, chapter 64H or chapter 64I. The right, license or contract provided for in subsections (a) and (b) shall not be issued or renewed until the person or business entity has paid all taxes due at the time of application for such right, license or contract.

(e) Any person who, for the purpose of evading payment of a tax pursuant to chapters 59 to 64J, inclusive, willfully makes and subscribes any return, form, statement or other document pursuant to subsection (a), (b) or (d) that contains or is verified by a written declaration that is made under the penalties of perjury, and that contains information that he does not believe to be true and correct as to every matter material to his compliance with all laws of the commonwealth relating to taxes, shall be subject to section 73.

CITY OF QUINCY
Purchasing Department
1305 Hancock Street, Quincy, MA 02169

Phone: 376-1060
Fax: 376-1074

SIGNATURE AUTHORIZATION

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

_____
(NAME OF CORPORATION)

held on _____, at which all the Directors were present or waived notice, it was
(DATE)

VOTED, that:

_____ _____
(NAME) (OFFICER)

of this company, be and he/she hereby is authorized to execute Contracts and Bonds in the name and behalf of said Company, and affix its Corporate Seal thereto, and such execution of any Contract or obligation in this Company's name on its behalf by such _____ under seal of the Company, shall be valid
(OFFICER)

and binding upon this Company. It was further voted that the City of Quincy may rely on such authorization of future Contracts until notified to the contrary.

A true copy,

ATTEST: _____
(CLERK'S SIGNATURE)

PLACE OF BUSINESS: _____

DATE OF THIS CONTRACT: _____

I hereby certify that I am the Clerk of the:

_____ that _____ is the
(COMPANY) (NAME)

duly elected _____ of said Company, and that the above VOTE has not been
(TITLE)

amended or rescinded and remains in full force and effect as of the date of this Contract.

_____ CORPORATE SEAL

INDEMNITY AGREEMENT

In consideration of the award of Contract No._____.

by the City of Quincy, hereinafter referred to as INDEMNITEE, to the CONTRACTOR/BIDDER:

_____.

hereinafter referred to as INDEMNITOR, and for other good and valuable consideration, said INDEMNITOR agrees to hold INDEMNITEE, City of Quincy, and its various department and employees harmless from any and all liability, loss or damage that INDEMNITEE may suffer as the result of claims, demands, costs, including attorneys fees, or judgement or other actions against it by reason of any and all work done by or on behalf of the INDEMNITOR in connection with the above-referenced contract.

INDEMNITOR,

_____.
By Duly Authorized Agent

Date:_____.

CERTIFICATION RELATING TO DEBARMENT AND SUSPENSION

The undersigned contractor certifies to the City of Quincy that neither it nor its principals, officers or any affiliated entities has been debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction in accordance with the requirements of OMB Circular A-87 and with Executive Order 12549, "Debarment and Suspension."

Furthermore, the contractor certifies that it shall not make any subcontract or permit any subcontract to be made with any party which is debarred or suspended or is otherwise excluded in accordance with said OMB Circular and with Executive Order 12549.

This certification shall be for the benefit of the City of Quincy and its successors and/or assigns and is binding upon the contractor, its successors and assigned.

Executed under seal this _____ day of _____, _____.

_____

Contractor Name
By its duly authorized agent,

Contract Number_____

_____
(Authorized Signature)

CERTIFICATION OF GENERAL BIDDERS ON PUBLIC CONSTRUCTION PROJECTS

I. CERTIFICATION REGARDING HEALTH AND SAFETY

The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations application to awards made subject to section 44A.

II. CERTIFICATION REGARDING NON-COLLUSION AND DEBARMENT

The undersigned 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 subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date: _____

_____
Name of General Bidder

By _____
Signature

_____
Print name and title

_____
Business Address

_____
Street Address City and State

CERTIFICATION OF SUB- BIDDERS (IF ANY) ON PUBLIC CONSTRUCTION PROJECTS

I. CERTIFICATION REGARDING HEALTH AND SAFETY

The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupation Safety and Health Administration that is at least ten hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations applicable to awards of subcontracts subject to section 44F.

II. CERTIFICATION REGARDING NON-COLLUSION AND DEBARMENT

The undersigned further certifies under penalties of perjury that this subbid is in all responses bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date _____

_____
Name of Sub-bidder

By _____
Signature

_____
Print Name and Title

_____
Business Name

_____
Street Address, City and State

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
AH	AIR HANDLER
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
APD	AIR PRESSURE DROP
AS	AIR SEPARATOR
ATC	AUTOMATIC TEMPERATURE CONTROL
AWT	AVERAGE WATER TEMPERATURE
B	BOILER
BHP	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
BTUH	BTU/HOUR
BMS	BUILDING MANAGEMENT SYSTEM
CAP	CAPACITY
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CNV	CONVECTOR
COP	COEFFICIENT OF PERFORMANCE
CRD	CEILING RADIATION DAMPER
CT	COOLING TOWER
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
dB	DECIBELS
DAH	DUCTLESS AIR HANDLER
DHP	DUCTLESS HEAT PUMP
DN	DOWN
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE (DRY BULB)
EBB	ELECTRIC BASEBOARD
E.C.	ELECTRICAL CONTRACTOR
EDB	ENTERING DRY BULB TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EH	ELECTRIC HEATER
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
ETR	EXISTING TO REMAIN
EWB	ENTERING WET BULB TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
°F	DEGREES FAHRENHEIT
FD	FIRE DAMPER
FN	FURNACE
FSD	COMBINATION FIRE/SMOKE DAMPER
FT	FEET
FT WG	FEET WATER GAUGE
FLA	FULL LOAD AMPS
FPM	FEET PER MINUTE
G.C.	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HSPF	HEATING SEASON PERFORMANCE FACTOR
HW	HOT WATER
IN	INCHES
IPLV	INTEGRATED PART LOAD VALUE
IN WG	INCHES WATER GAUGE
KW	KILOWATTS
L	LOUVER
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	THOUSANDS OF BTU / HOUR
M.C.	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MOP	MAXIMUM OVERCURRENT PROTECTION
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE (DRY BULB)
ODB	OUTSIDE DRY BULB TEMPERATURE
OWB	OUTSIDE WET BULB TEMPERATURE
P	PUMP
PH	PHASE
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS PER SQUARE INCH GAUGE
QTY	QUANTITY
RE	REMOVE EXISTING
RF	RETURN FAN
RPM	REVOLUTIONS PER MINUTE
RPZB	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
RTU	ROOFTOP UNIT
SD	SMOKE DAMPER
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SF	SUPPLY FAN
SP	STATIC PRESSURE
SPD	STATIC PRESSURE DROP
SST	SATURATED SUCTION PRESSURE
TF	TRANSFER FAN
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UH	UNIT HEATER
UOI	UNLESS OTHERWISE INDICATED
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VRF	VARIABLE REFRIGERANT FLOW
WPD	WATER PRESSURE DROP

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	DUCTWORK (DOUBLE LINE)
	DUCTWORK WITH ACOUSTICAL LINING (DOUBLE LINE)
	DUCTWORK (SINGLE LINE)
	DUCTWORK WITH ACOUSTICAL LINING (SINGLE LINE)
	FLEXIBLE DUCTWORK
	DUCTWORK, PIPING AND EQUIPMENT TO BE DEMOLISHED
	RECTANGULAR/ROUND SUPPLY AIR DUCTWORK UP
	RECTANGULAR/ROUND RETURN AIR DUCTWORK UP
	RECTANGULAR/ROUND EXHAUST AIR DUCTWORK UP
	RECTANGULAR/ROUND SUPPLY AIR DUCTWORK DOWN
	RECTANGULAR/ROUND RETURN AIR DUCTWORK DOWN
	RECTANGULAR/ROUND EXHAUST AIR DUCTWORK DOWN
	VOLUME DAMPER
	CONTROL DAMPER
	FIRE DAMPER OR CEILING RADIATION DAMPER
	SMOKE DAMPER
	COMBINATION FIRE SMOKE DAMPER
	GRAVITY BACKDRAFT DAMPER
	COUNTERBALANCED BACKDRAFT DAMPER
HWS	HOT WATER SUPPLY PIPING
HWR	HOT WATER RETURN PIPING
REF	REFRIGERANT PIPING
CON	COOLING COIL CONDENSATE PIPING
	ELBOW UP
	ELBOW DOWN
	TEE DOWN
	TEE UP
	PIPE GUIDE
	PIPE ANCHOR
	FLOW DIRECTION
	PIPE CLEANOUT
	CONNECT TO EXISTING
	AIR ENTERING OPENING
	AIR LEAVING OPENING
	UNDERCUT DOOR
C	CO2 SENSOR
H	RELATIVE HUMIDITY SENSOR
P	PRESSURE SENSOR – DUCT MOUNTED
SD	SMOKE DETECTOR – DUCT MOUNTED
S	SWITCH
T	THERMOSTAT OR TEMPERATURE SENSOR
	CONTROL CONNECTION

TAG LEGEND

EQUIPMENT (REQUIRING POWER)	EQUIPMENT DESIGNATION NUMBER
EQUIPMENT (NON–POWERED)	EQUIPMENT DESIGNATION NUMBER
REGISTERS, GRILLES & DIFFUSERS	TYPICAL FOR # DESIGNATION BALANCE TO CFM INDICATED
SECTION CALL–OUT	DESIGNATION DRAWING REFERENCE

VARIABLE AIR VOLUME (VAV) TERMINAL UNIT SCHEDULE

GENERAL			PERFORMANCE								PHYSICAL		REMARKS			
TAG	LOCATION	AIR HANDLER	PRIMARY AIR (CFM)		HOT WATER COIL(FOR FUTURE CONNECTION)						INLET SIZE (IN)	MANUFACTURER MODEL	TYPE	RATINGS	FEATURES	INSTALL
			MAXIMUM	MINIMUM	ROWS	MBH	LAT (°F)	GPM	LWT (°F)	WPD (FT WG)						
VAV–2.1	2ND FLOOR	–	600	140	1	22.6	90	2.3	160	0.49	9	PRICE SDV–9	1	1 2 3	1 2	1 2 3
VAV–2.2	2ND FLOOR	–	350	70	1 HC	14.0	90	2.0	160	0.42	7	PRICE SDV–7	1	1 2 3	1 2	1 2 3
VAV–2.3	2ND FLOOR	–	425	90	1 HC	16.5	90	3.0	160	0.23	7	PRICE SDV–7	1	1 2 3	1 2	1 2 3
VAV–2.4	2ND FLOOR	–	300	60	2	11.3	90	1.2	160	0.45	6	PRICE SDV–6	1	1 2 3	1 2	1 2 3
VAV–2.5	2ND FLOOR	–	350	70	1 HC	14.0	90	2.0	160	0.42	8	PRICE SDV–8	1	1 2 3	1 2	1 2 3
VAV–2.6	2ND FLOOR	–	1250	250	2 HC	47.25	90	2.0	160	1.40	12	PRICE SDV–12	1	1 2 3	1 2	1 2 3
VAV–2.7	2ND FLOOR	–	1275	250	2 HC	47.25	90	2.0	160	1.40	12	PRICE SDV–12	1	1 2 3	1 2	1 2 3
VAV–2.8	2ND FLOOR	–	400	90	1 HC	16.5	90	3.0	160	0.87	7	PRICE SDV–7	1	1 2 3	1 2	1 2 3
VAV–2.9	2ND FLOOR	–	400	90	1 HC	16.5	90	3.0	160	1.40	7	PRICE SDV–7	1	1 2 3	1 2	1 2 3
VAV–2.10	2ND FLOOR	–	900	200	2	34.0	90	2.0	160	0.17	9	PRICE SDV–9	1	1 2 3	1 2	1 2 3
VAV–2.11	2ND FLOOR	–	800	160	2	30.2	90	2.0	160	0.31	9	PRICE SDV–9	1	1 2 3	1 2	1 2 3

1. AIR ONLY, PRESSURE INDEPENDENT, DIGITAL CONTROLS

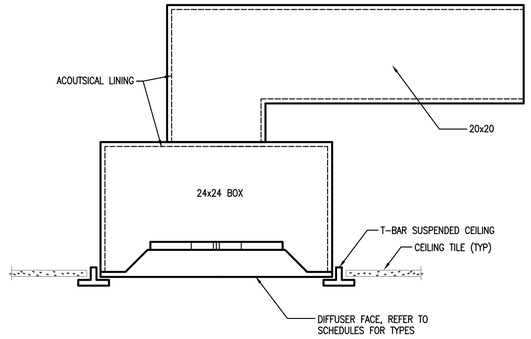
1. PERFORMANCE CERTIFIED IN ACCORDANCE WITH ARI 880
2. HOT WATER COIL PERFORMANCE AT MAXIMUM HEATING PRIMARY AIR, 55°F EAT, 180°F EWT
3. SEE VAV TERMINAL UNIT SOUND POWER SCHEDULE FOR ACOUSTICAL DATA

1. HOT WATER COIL
2. 1" THICK FIBERGLASS LINER

1. PROVIDE WITH HOT WATER COIL FOR FUTURE FIT UP.
2. PROVIDE DDC CONTROLS COMPATIBLE WITH BUILDING MANAGEMENT SYSTEM.
3. PROVIDE SENSORS FOR MORNING WARM–UP TO ALLOW BOXES TO GO FULL OPEN WHEN COMMANDED OR FOR FULL HEAT

DUCTWORK PLAN GENERAL NOTES

1. UOI, DUCTWORK SHALL BE MOUNTED AS HIGH AS POSSIBLE, EXCEPT THAT DUCTWORK HEIGHT SHALL BE ADJUSTED AS NECESSARY FOR THE PROPER INSTALLATION OF EQUIPMENT, PIPING, AND CONDUIT.
2. UOI, FLEXIBLE DUCTS ARE ALLOWED ONLY AT CONNECTIONS TO DIFFUSERS AND GRILLES. FLEXIBLE DUCTS SHALL BE MAXIMUM 5'–0" LONG, SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS ONLY, AND SHALL BE SUSPENDED OFF OF THE CEILING.
3. WHERE BRANCH DUCT SIZES TO DIFFUSERS AND GRILLES ARE NOT INDICATED, SEE THE BRANCH DUCT COLUMN OF THE DIFFUSER AND GRILLE SCHEDULE.
4. WHERE VOLUME DAMPERS ARE INACCESSIBLE, PROVIDE WORM GEAR DRIVE AND CABLE ASSEMBLIES SIMILAR TO METROPOLITAN AIR TECHNOLOGIES ROTOTWIST MODEL RT–200/250 SERIES WITH MODEL RT–CCR CEILING CAP. TO THE GREATEST EXTENT POSSIBLE, GROUP CEILING CAPS IN SPACES SUCH AS STORAGE ROOMS, CLOSETS, JANITORS ROOMS, MECHANICAL/ELECTRICAL ROOMS, ETC.
5. DUCTWORK VISIBLE THROUGH THE FACE OF DIFFUSERS, GRILLES, AND LOUVERS SHALL BE PAINTED BLACK
6. EXPOSED ROUND DUCTWORK SHALL BE SPIRAL LOCKSEAM TYPE.
7. UOI, ACOUSTICAL LINING SHALL BE 1" THICK.
8. DUCTWORK DIMENSIONS INDICATED ARE INSIDE CLEAR DIMENSIONS



1 RETURN GRILLE DETAIL NTS

DIFFUSER AND GRILLE SCHEDULE

GENERAL	PHYSICAL				REMARKS		
TAG	SIZE (IN)	BLOW PATTERN	BRANCH DUCT (IN)	MANUFACTURER MODEL	TYPE	FEATURES	INSTALL
A1.1	6x6	1–WAY	6"ø	TITUS TDC	–	1	–
A1.2	6x6	2–WAY OPPOSITE	6"ø	TITUS TDC	–	1	–
A1.3	6x6	3–WAY	6"ø	TITUS TDC	–	1	–
A1.4	6x6	4–WAY	6"ø	TITUS TDC	–	1	–
A1.5	6x6	2–WAY CORNER	6"ø	TITUS TDC	–	1	–
A2.1	9x9	1–WAY	8"ø	TITUS TDC	–	1	–
A2.2	9x9	2–WAY OPPOSITE	8"ø	TITUS TDC	–	1	–
A2.3	9x9	3–WAY	8"ø	TITUS TDC	–	1	–
A2.4	9x9	4–WAY	8"ø	TITUS TDC	–	1	–
A2.5	9x9	2–WAY CORNER	8"ø	TITUS TDC	–	1	–
A3.1	12x12	1–WAY	10"ø	TITUS TDC	–	1	–
A3.2	12x12	2–WAY OPPOSITE	10"ø	TITUS TDC	–	1	–
A3.3	12x12	3–WAY	10"ø	TITUS TDC	–	1	–
A3.4	12x12	4–WAY	10"ø	TITUS TDC	–	1	–
A3.5	12x12	2–WAY CORNER	10"ø	TITUS TDC	–	1	–
R1	24x24	RETURN	–	TITUS 350RL	–	1	–
R1	24x24	RETURN	–	TITUS 350RL	–	1	1

1. ACOUSTICALLY LINED PLENUM ON TOP OF GRILLE WITH LINED TRANSFER DUCT

1. LAY–IN T–BAR CEILING MOUNT
2. SURFACE MOUNT
3. INTEGRAL VOLUME DAMPER
4. INTEGRAL RADIATION DAMPER

1. WHERE NO BRANCH DUCT SIZE IS INDICATED ON PLAN, USE BRANCH DUCT SIZE INDICATED HEREIN
2. PROVIDE A DUCT MOUNTED VOLUME DAMPER WHETHER OR NOT A DUCT MOUNTED VOLUME DAMPER IS INDICATED ON PLAN. EXCEPTIONS:
   - TRANSFER AIR APPLICATIONS (GRILLE IS NOT CONNECTED BY A DUCTWORK SYSTEM TO A FAN)
   - EXHAUST AND RETURN GRILLES WHERE ONLY ONE GRILLE SERVES THE FAN/AIR HANDLING SYSTEM
   - GRILLES CONNECTED TO RELIEF AIR HOODS AND RELIEF AIR LOUVERS
3. PROVIDE A [1/2" 1"] THICK ACOUSTICALLY LINED PLENUM, SAME SIZE AS DIFFUSER/GRILLE X HEIGHT/DEPTH NECESSARY TO CONNECT BRANCH DUCT INDICATED

– SEE DETAIL #/M–###

PATTERN	TAG LEGEND
	TYPICAL FOR ## DIFFUSERS/GRILLES TAG BALANCE TO ### CFM

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QUINCY CITY HALL ANNEX RENOVATIONS
1305 HANCOCK ST., QUINCY, MA.
HONORABLE THOMAS P. KOCH, MAYOR

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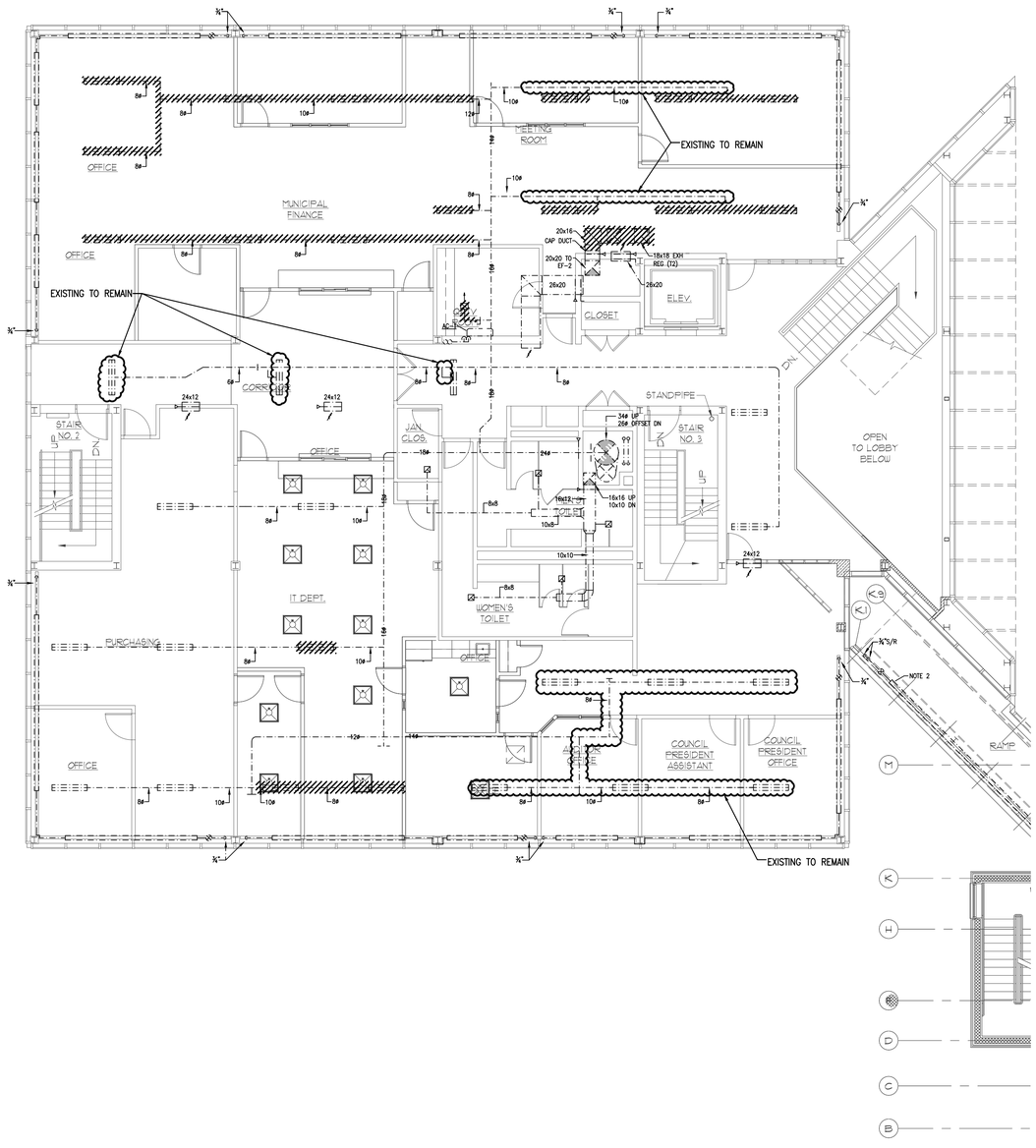
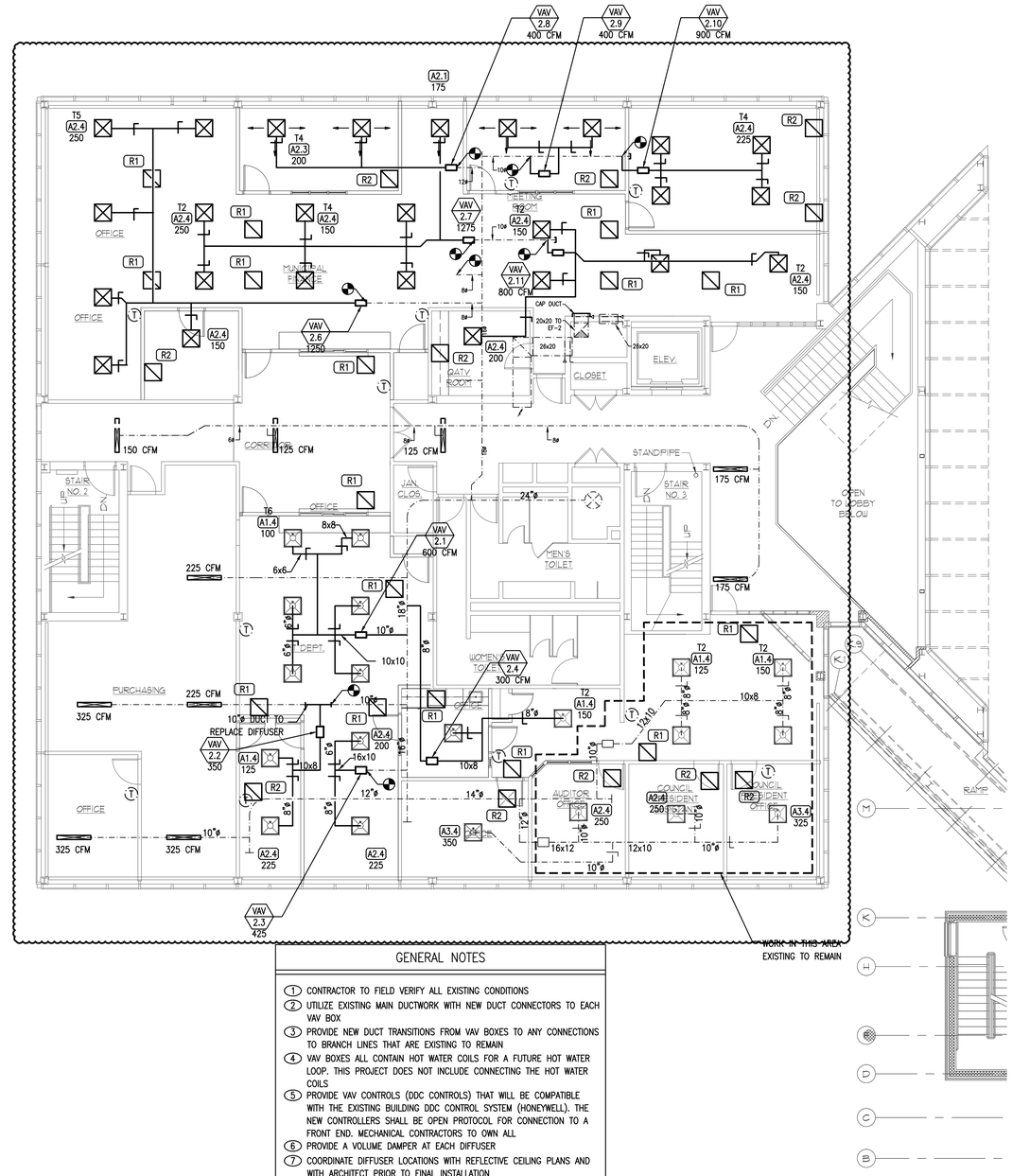
HOLMES & EDWARDS, INC., ARCHITECTS 26 Chestnut Street, Quincy, Mass. 02169		Project Number: 1003A
Sheet Name: MECHANICAL LEGEND, SCHEDULES, AND NOTES		Sheet Number: M-101



SECOND FLOOR DEMO PLAN

1 1/8" = 1'-0"



GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS
2. UTILIZE EXISTING MAIN DUCTWORK WITH NEW DUCT CONNECTORS TO EACH VAV BOX
3. PROVIDE NEW DUCT TRANSITIONS FROM VAV BOXES TO ANY CONNECTIONS TO BRANCH LINES THAT ARE EXISTING TO REMAIN
4. VAV BOXES ALL CONTAIN HOT WATER COILS FOR A FUTURE HOT WATER LOOP. THIS PROJECT DOES NOT INCLUDE CONNECTING THE HOT WATER COILS
5. PROVIDE VAV CONTROLS (DDC CONTROLS) THAT WILL BE COMPATIBLE WITH THE EXISTING BUILDING DDC CONTROL SYSTEM (HONEYWELL). THE NEW CONTROLLERS SHALL BE OPEN PROTOCOL FOR CONNECTION TO A FRONT END. MECHANICAL CONTRACTORS TO OWN ALL
6. PROVIDE A VOLUME DAMPER AT EACH DIFFUSER
7. COORDINATE DIFFUSER LOCATIONS WITH REFLECTIVE CEILING PLANS AND WITH ARCHITECT PRIOR TO FINAL INSTALLATION
8. COORDINATE THERMOSTAT LOCATION WITH THE ARCHITECT
9. PROVIDE AN ACOUSTICALLY LINED PLENUM BOX ON TOP OF DIFFUSER WITH A LINED TRANSFER GRILLE
10. INSULATE ALL SUPPLY DUCTWORK

PROPOSED SECOND FLOOR PLAN

2 1/8" = 1'-0"

NORTH

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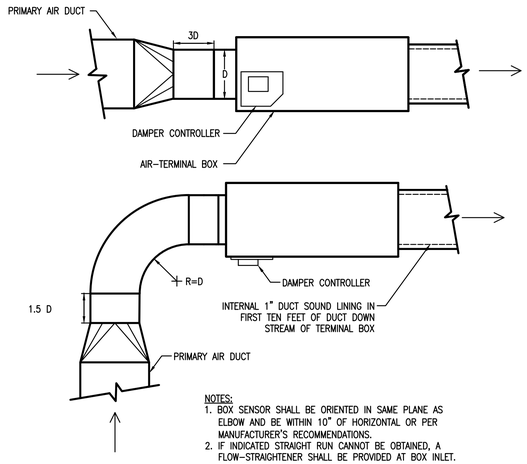
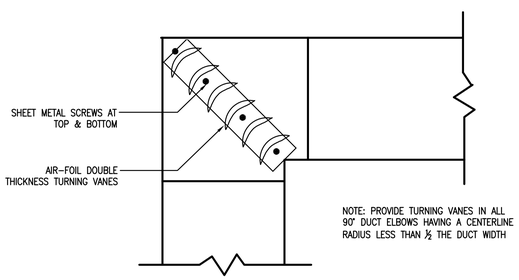
Sheet Name: SECOND FLOOR DEMO AND PROPOSED PLANS		Sheet Number: M-102

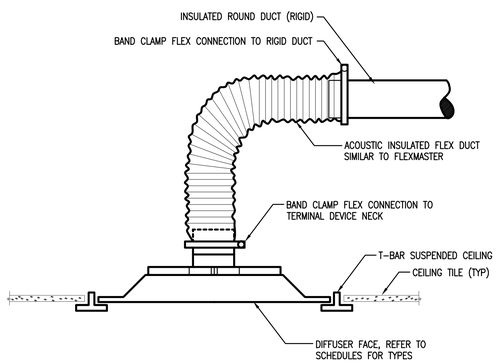


NOTES:
1. BOX SENSOR SHALL BE ORIENTED IN SAME PLANE AS ELBOW AND BE WITHIN 10" OF HORIZONTAL OR PER MANUFACTURER'S RECOMMENDATIONS.
2. IF INDICATED STRAIGHT RUN CANNOT BE OBTAINED, A FLOW-STRAIGHTENER SHALL BE PROVIDED AT BOX INLET.
3. ATC CONTRACTOR IS RESPONSIBLE FOR PROVISION OF DAMPER CONTROLLER & ALL INTERFACE DEVICES NECESSARY TO TIE INTO THE CONTROL SYSTEM FOR PROPER ORIENTATION & CONTROL.

1 VAV TERMINAL UNIT DETAIL NTS



2 TYPICAL 90° DUCT ELBOW DETAIL NTS



3 GRID CEILING DIFFUSER/REGISTER CONNECTION DETAIL NTS

MECHANICAL SPECIFICATIONS

PART 1: GENERAL

1.1 DESCRIPTION OF WORK
A. WORK INCLUDED: PROVIDE LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE WORK OF THIS SECTION, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
1. HEATING, VENTILATION AND AIR CONDITIONING OF ALL SPACES AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREINAFTER.
2. FURNISH AND INSTALL REGISTERS AND DIFFUSERS, VOLUME DAMPERS, ETC. AS REQUIRED AND INDICATED ON DRAWINGS.
3. FURNISH AND INSTALL A COMPLETE LOW VELOCITY SHEET METAL DUCTWORK DISTRIBUTION SYSTEM AS SHOWN ON THE DRAWINGS.
4. TESTING, ADJUSTING AND BALANCING OF ALL AIR SYSTEMS AND EQUIPMENT.
5. INSTALL THERMOSTATS, AND INTERLOCK WIRING AS SHOWN AND AS DESCRIBED HEREIN.
6. COORDINATE ALL DUCTWORK & PIPING WITH ELECTRICAL, PLUMBING, FIRE PROTECTION, AND ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.

1.2 REGULATORY REQUIREMENTS
A. COMPLY WITH ALL APPLICABLE FEDERAL AND STATE LAWS, AND ALL LOCAL CODES, BY-LAWS AND ORDINANCES.
B. REQUEST INSPECTIONS FROM AUTHORITIES HAVING JURISDICTION. OBTAIN ALL PERMITS AND PAY FOR ALL FEES AND INSPECTION CERTIFICATES AS APPLICABLE AND/OR REQUIRED. ALL PERMITS AND CERTIFICATES SHALL BE TURNED OVER TO THE OWNERS UPON COMPLETION OF THE WORK.
C. ALL WORK, EQUIPMENT AND MATERIALS SHALL CONFORM TO THE BUILDING CONSTRUCTION RULES AND REGULATIONS.

1.3 SUBMITTALS
A. PROVIDE SHOP DRAWINGS FOR ALL EQUIPMENT, INCLUDING BUT NOT LIMITED TO:
1. REGISTERS AND DIFFUSERS.
2. SHEET METAL FABRICATION STANDARDS AND DUCT INSULATION.
3. VAV BOXES

1.4 COORDINATION
A. WORK SHALL BE PERFORMED IN COOPERATION WITH OTHER TRADES ON THE PROJECT AND SO SCHEDULED AS TO ALLOW SPEEDY AND EFFICIENT COMPLETION OF THE WORK.
B. FURNISH TO OTHER TRADES ADVANCE INFORMATION ON LOCATIONS AND SIZES OF ALL FRAMES, BOXES, SLEEVES AND OPENINGS NEEDED FOR THEIR WORK, AND ALSO FURNISH INFORMATION AND SHOP DRAWINGS NECESSARY TO PERMIT TRADES AFFECTED BY THE WORK TO INSTALL SAME PROPERLY AND WITHOUT DELAY.
C. IF ANY HVAC WORK HAS BEEN INSTALLED BEFORE COORDINATION WITH OTHER TRADES SO AS TO CAUSE INTERFERENCE WITH THE WORK OF SUCH TRADES, ALL NECESSARY ADJUSTMENTS AND CORRECTIONS SHALL BE MADE BY THE HVAC TRADES INVOLVED WITHOUT EXTRA COST TO THE OWNERS.
D. PROTECT ALL MATERIALS AND WORK OF OTHER TRADES FROM DAMAGE WHICH MAY BE CAUSED BY THE HVAC WORK AND REPAIR ALL DAMAGES WITHOUT EXTRA COST TO OWNERS.

1.5 MECHANICAL AND ELECTRICAL COORDINATION
A. HEATING, VENTILATION, AND AIR CONDITIONING SUBCONTRACTOR SHALL FURNISH AND INSTALL VARIOUS ELECTRICAL ITEMS RELATING TO THE HVAC EQUIPMENT AND CONTROL APPARATUS. THE ELECTRICAL SUBCONTRACTOR SHALL BE REQUIRED TO CONNECT POWER WIRING TO THIS EQUIPMENT UNLESS NOTED OTHERWISE.
B. THE HVAC AND ELECTRICAL SUBCONTRACTOR SHALL COORDINATE THEIR RESPECTIVE PORTIONS OF THE WORK, AS WELL AS THE ELECTRICAL CHARACTERISTICS OF THE HVAC EQUIPMENT.
C. ALL POWER WIRING AND LOCAL DISCONNECT SWITCHES WILL BE PROVIDED BY THE ELECTRICAL SUBCONTRACTOR FOR THE LINE VOLTAGE POWER. ALL CONTROL AND INTERLOCKING WIRING SHALL BE THE RESPONSIBILITY OF THE HVAC SUBCONTRACTOR.
D. 120 VOLT POWER WIRING SOURCES EXTENDED AND CONNECTED TO HEATING AND VENTILATING CONTROL PANELS, TRANSFORMERS, AND SWITCHES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR. ALL LOW VOLTAGE THERMOSTAT, ZONE VALVE AND ANY SWITCH WIRING SHALL BE THE RESPONSIBILITY OF THE HVAC SUBCONTRACTOR.
E. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF DIVISION 16.
F. ALL STARTERS SHALL BE FURNISHED AND INSTALLED UNDER DIVISION 16 EXCEPT THOSE FURNISHED AS AN INTEGRAL PART OF PACKAGED EQUIPMENT. COORDINATE WITH ELECTRICAL CONTRACTOR.

1.6 INSTALLATION REQUIREMENTS
A. THE ARRANGEMENT OF ALL HVAC WORK SHOWN ON THE DRAWINGS IS DIAGRAMMATICAL ONLY AND INDICATES THE MINIMUM REQUIREMENTS OF THE WORK. CONDITION AT THE BUILDING INCLUDING ACTUAL MEASUREMENTS SHALL DETERMINE THE DETAILS OF THE INSTALLATION.

1.7 RECORD DRAWINGS/PROJECT CLOSEOUT
A. PROVIDE RECORD AS-BUILT DRAWINGS AT COMPLETION OF INSTALLATION.

1.8 GUARANTEE/WARRANTY
A. ALL NEW MATERIALS, ITEMS OR EQUIPMENT AND WORKMANSHIP FURNISHED UNDER THIS SECTION SHALL CARRY STANDARD WARRANTY AGAINST ALL DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF WORK. ANY FAULT DUE TO DEFECTIVE OR IMPROPER MATERIAL, EQUIPMENT, WORKMANSHIP OR MANUFACTURING DESIGN WHICH MAY DEVELOP WITHIN THAT PERIOD SHALL BE MADE GOOD, FORTHWITH, BY AND AT THE EXPENSE OF THIS CONTRACTOR, INCLUDING ALL OTHER DAMAGES DONE TO AREAS, MATERIALS AND OTHER SYSTEMS RESULTING FROM THIS FAILURE.
B. THIS CONTRACTOR SHALL GUARANTEE THAT ALL NEW ELEMENTS OF THE SYSTEMS MEET THE SPECIFIED PERFORMANCE REQUIREMENTS AS SET FORTH HEREIN OR AS INDICATED ON THE DRAWINGS.

PART 2: PRODUCTS

2.1 DUCTWORK
A. LOW PRESSURE DUCTWORK-
1. GALVANIZED STEEL SHEETS, REINFORCING AND COMPANION ANGLES, HANGERS, METAL SPECIFICATIONS, GAUGES AND CONSTRUCTION OF SEAMS, JOINTS AND REINFORCING SHALL BE ACCORDING TO THE LATEST SMACNA PUBLICATION - "HVAC CONSTRUCTION STANDARDS".
2. ALL RECTANGULAR SHEET DEFINED AS ALL DUCTWORK, UNLESS OTHERWISE SPECIFIED, SHALL BE CONSTRUCTED WITH PITTSBURGH LONGITUDINAL SEAMS. TRANSVERSE JOINTS SHALL BE MADE WITH POCKET LOCKS AND CORNER CLOSURES.
3. THE DUCTWORK SHALL BE CONSTRUCTED OF HOT DIPPED GALVANIZED STEEL WITH G-90 COATING.
B. FLEXIBLE DUCTS-
1. FURNISH AND INSTALL, WHERE SHOWN ON DRAWINGS, INSULATED FLEXIBLE DUCT. FLEXIBLE DUCT IS ALLOWED ONLY ABOVE DROPPED CEILINGS. FLEXIBLE DUCT MAXIMUM LENGTH SHALL BE 5 FEET.
C. VOLUME DAMPERS-
1. FURNISH AND INSTALL MANUAL VOLUME DAMPERS WHERE INDICATED ON THE DRAWINGS AND WHERE REQUIRED. DAMPERS SHALL BE NOT LESS THAN TWO GAUGES HEAVIER THAN DUCTWORK IN WHICH THEY ARE INSTALLED.
D. DUCT ACCESS DOORS-
1. ALL ACCESS DOORS SHALL BE OF DOUBLE WALL CONSTRUCTION FROM THE SAME MATERIAL AS THE DUCTWORK WITH 1 INCH THICK FIBERGLASS BETWEEN THE TWO LAYERS. EACH LAYER SHALL NOT BE LIGHTER THAN 24 GAUGE. ALL ACCESS DOORS SHALL BE AIR TIGHT AND SHALL BE FITTED WITH SPONGE RUBBER GASKETS AROUND THE ENTIRE PERIMETER.
E. DUCT SEALING-
1. ALL TRANSVERSE SEAMS, JOINTS AND WHERE DUCTS CONNECT SHALL BE MADE AIR TIGHT BY GENEROUSLY COATING WITH DUCT SEALANT AS MANUFACTURED BY MINNESOTA MINING AND MANUFACTURING, DOW CORNING, BOSTIK OR APPROVED EQUAL.
2. THE MAXIMUM ALLOWABLE DUCT LEAKAGE SHALL BE 5% OF THE RESPECTIVE SYSTEM TOTAL AIR QUANTITY.
F. ACOUSTICAL LINER-
1. THE ACOUSTICAL LINER SHALL BE MANUFACTURED BY KNAFF, CERTAIN-TEED, JOHNS MANVILLE OR APPROVED EQUAL.
2. THE ACOUSTICAL LINER SHALL BE INSTALLED IN ACCORDANCE WITH THE UNIT MANUFACTURER RECOMMENDATIONS.
3. THE FIRST 15 FEET OF SUPPLY AND RETURN DUCTWORK FROM ALL THE ROOF TOP UNITS SHALL BE LINED WITH ½" ACOUSTICAL LINER.

2.2 DUCT INSULATION
A. GENERAL
1. INSULATION SHALL BE KNAFF, CERTAIN-TEED, JOHNS MANVILLE OR OWENS CORNING. INSTALL INSULATION, MASTICS, ADHESIVES, COATINGS, COVERS, ETC. AS REQUIRED BY MANUFACTURER'S RECOMMENDATIONS. MATERIALS SHALL MEET REQUIREMENTS OF ADHESIVE AND SEALANT COUNCIL STANDARDS AND SMACNA.
2. APPLY INSULATION AFTER SYSTEMS HAVE BEEN TESTED, PROVED TIGHT AND APPROVED BY ARCHITECT. REMOVE DIRT, SCALE, OIL, RUST AND OTHER FOREIGN MATTER PRIOR TO INSTALLATION OF INSULATION.
3. LEAKS IN VAPOR BARRIER OR VOIDS IN INSULATION WILL NOT BE ACCEPTED.
4. ASTM E-84 MINIMUM FIRE HAZARD RATINGS SHALL BE 25 FLAME-SPREAD, 50 FUEL CONTRIBUTED AND 50 SMOKE DEVELOPED.
5. WHERE DUCTS ARE INSULATED, FLEXIBLE CONNECTIONS TO DUCTS SHALL BE INSULATED.
6. INSULATE STANDING SEAMS WITH SAME MATERIAL AND THICKNESS AS DUCT.
7. INSULATION SHALL BE CONTINUOUS THROUGH WALL AND CEILING OPENINGS AND IN SLEEVES.
8. TRANSMISSION RATES OF VAPOR BARRIERS SHALL NOT EXCEED 0.02 PERMS.
B. RECTANGULAR AND CIRCULAR DUCTWORK
1. INSULATE ALL SUPPLY AND RETURN AIR DUCTS IN CONCEALED SPACES WITH 1 ½" THICK FIBERGLASS DUCT WRAP WITH FOIL-KRAFT FLAME RESISTANT VAPOR BARRIER.
2. INSULATION DENSITY SHALL BE ¾ LB. PER CUBIC FOOT AND MAXIMUM K-FACTOR SHALL BE 0.3 AT 75°F MEAN TEMPERATURE.
3. COVER BREAKS IN VAPOR MATERIAL WITH PATCHES OF SAME MATERIAL, SECURED WITH ADHESIVE AND STAPLES. SEAL STAPLES WITH MATCHING FOIL FACE TYPE.

2.3 REGISTERS, GRILLES, AND DIFFUSERS
A. REGISTERS, GRILLES AND DIFFUSERS SHALL BE OF ALUMINUM CONSTRUCTION IN THE MODEL SIZE AND CAPACITY SCHEDULED ON THE DRAWINGS.
B. EQUIPMENT SHALL BE AS MANUFACTURED BY SEIHO OR APPROVED EQUAL.
C. FINISH AND STYLES TO CONFORM WITH BUILDING STANDARD.
D. ALL REGISTERS, GRILLES, AND DIFFUSERS SHALL BE FURNISHED WITH INDIVIDUALLY ADJUSTABLE OPPOSED BLADE VOLUME CONTROL DAMPERS UNLESS SPECIFIED OTHERWISE.

2.4 VARIABLE AIR VOLUME (VAV) TERMINAL UNITS
A. GENERAL: FURNISH AND INSTALL SINGLE DUCT VARIABLE AIR VOLUME TERMINAL UNITS AS INDICATED AND SCHEDULED. UNITS SHALL BE AS MANUFACTURED BY TRANE, TITUS, PRICE, OR ANOTHER APPROVED EQUAL PROVIDED THEY MEET THE PERFORMANCE CRITERIA SCHEDULED.
B. UNIT CASINGS SHALL BE CONSTRUCTED OF MIN. 22-GAGE GALVANIZED STEEL WITH THE ENTIRE INTERIOR SURFACE INSULATED WITH 1" THICK MATTE-FACED GLASS FIBER ACOUSTICAL/THERMAL LINING. INSULATION DENSITY SHALL BE 1.0 LB/FT^3 AND SHALL HAVE HIGH-DENSITY FACING. MINIMUM INSULATION R-VALUE SHALL BE 1.9, SHALL BE UL-LISTED, AND NFPA-90A COMPLIANT. THERE SHALL BE NO EXPOSED INSULATION EDGES.
C. PRIMARY AIR VALVES SHALL BE 18-GAGE GALVANIZED STEEL CYLINDER SIZED TO FIT STANDARD ROUND DUCT. A MULTIPLE-POINT AVERAGING FLOW FLOW SENSING RING SHALL BE STANDARD WITH BALANCING TAPS (MEASURING +/-5% CATALOGED AIRFLOW). DAMPER BLADES SHALL BE CLOSED-CELL FOAM SEAL MECHANICALLY LOCKED BETWEEN TWO 22 GAUGE GALVANIZED STEEL DISKS. DAMPER BLADE ASSEMBLY SHALL BE CONNECTED TO A CAST ZINC SHAFT WITH SELF-LUBRICATING BEARINGS. SHAFTS SHALL BE CAST WITH A DAMPER POSITION INDICATOR AND THE ASSEMBLY SHALL INCLUDE MECHANICAL STOP. AIR VALVE LEAKAGE SHALL NOT EXCEED 1% OF CATALOGED AIRFLOW AT 4.0" WG.
D. OUTLET CONNECTIONS SHALL BE SLIP & DRIVE TYPE.
E. HEATING COILS: SHALL BE FACTORY PROVIDED HOT WATER HEATING COILS IN THE CAPACITY INDICATED
F. ZONE TEMPERATURE SENSING DEVICES SHALL BE DDC TYPE AND MUST BE COMPATIBLE WITH THE BUILDING SYSTEM. SENSORS SHALL HAVE DIGITAL LCD DISPLAY OF SETPOINT AND SPACE TEMPERATURE. SENSOR BUTTONS SHALL ALLOW USER TO ADJUST SETPOINT, AND ALLOW SPACE TEMPERATURE READINGS TO BE TURNED ON/OFF. AN OVERRIDE BUTTON SHALL BE STANDARD, ALLOWING USERS THE OPTION TO SIGNAL THE FRONT END FROM UNOCCUPIED TO OCCUPIED. A CANCEL BUTTON FEATURE SHALL ALSO BE INCLUDED.
G. VAV CONTROLLERS SHALL BE CAPABLE OF PROGRAMMING TO ALLOW THE OPERATION OF THE HEATING COILS, WHICH WILL BE ACTIVATED IN THE FUTURE. CURRENT OPERATION IS COOLING ONLY BY MODULATING PRIMARY AIR DAMPER. FUTURE OPERATION WILL INCLUDE HEATING/COOLING, NIGHT SET BACK, AND MORNING WARM UP SEQUENCE.

PART 3: EXECUTION

3.1 TESTING AND CLOSEOUT
A. CLEANING:
1. UPON COMPLETION ALL SHEET METAL WORK SPECIFIED UNDER THIS SECTION IS TO BE CLEANED. ALL EQUIPMENT IS TO BE CLEANED, ALL TRIM INSTALLED, ALL PROTECTIVE OIL, TAPE OR OTHER MATERIALS USED TO PROTECT WORK ARE TO BE REMOVED.
2. ALL DUCTS, FANS, AND EQUIPMENT SHALL BE THOROUGHLY CLEANED INSIDE AND OUTSIDE AND BLOWN OUT TO PREVENT AND DEBRIS FROM DAMAGING FAN SHIELDS OR DEBRIS HANGING THROUGH REGISTERS OR DIFFUSERS WHEN SYSTEMS ARE PLACED IN OPERATION. ALL TEMPORARY CONNECTIONS REQUIRED FOR BLOWING OUT THE SYSTEMS, CHEESECLOTH FOR ALL DUCT OPENINGS, AND ANY OTHER EQUIPMENT OR LABOR FOR CLEANING, SHALL BE PROVIDED BY THE HVAC CONTRACTOR. THE ENTIRE HVAC SYSTEM SHALL BE KEPT CLEAN UNTIL FINAL ACCEPTANCE. ANY DAMAGE TO CEILINGS BY THE HVAC CONTRACTOR SHALL BE RECTIFIED BY HIM AT NO ADDITIONAL CHARGE TO THE OWNER, TO THE SATISFACTION OF THE DESIGNER.

3.2 OPERATING AND MAINTENANCE INSTRUCTIONS
A. PRIOR TO COMPLETION OF THE CONTRACT, PROVIDE FIELD AND WRITTEN OPERATING INSTRUCTIONS TO THE OWNER'S DESIGNATED REPRESENTATIVE WITH RESPECT TO OPERATION FUNCTIONS AND MAINTENANCE PROCEDURES FOR ALL EQUIPMENT AND SYSTEMS INSTALLED.
B. ALL OPERATING EQUIPMENT INSTALLED UNDER THIS SECTION SHALL BE PLACED IN OPERATION AND SHALL FUNCTION CONTINUOUSLY IN AN OPERATING TEST FOR A PERIOD OF THREE DAYS, WITHOUT SHUTDOWN DUE TO MECHANICAL FAILURE OR NECESSITY OF ADJUSTMENT. PRIOR TO SCHEDULING THE PROJECT FINAL INSPECTION AND AFTER COMPLETION OF ALL INSTALLATION AND RUNNING EQUIPMENT AND AUTOMATIC CONTROL ADJUSTMENTS, PERFORM AIR BALANCING AND ANY OTHER WORK REQUIRED TO PLACE THE EQUIPMENT IN COMPLETE OPERATING CONDITION TO MEET ALL REQUIREMENTS UNDER THIS SPECIFICATION. DURING THIS RUNNING TEST PERIOD, DELIVER TO THE OWNER TWO COMPLETE SETS OF OPERATING, SERVICE, MAINTENANCE AND REPLACEMENT DATA FOR ALL EQUIPMENT WHICH WILL REQUIRE OPERATING MAINTENANCE OR REPLACEMENT. DURING ALL WORKING HOURS OF THE "OPERATING TEST", THIS CONTRACTOR'S PERSONNEL SHALL BE AVAILABLE FOR GIVING FIELD INSTRUCTION, SHALL COVER OPERATION, MAINTENANCE AND ADJUSTING OF ALL EQUIPMENT INSTALLED.

3.3 HOISTING, SCAFFOLDING, STAGING AND PLANKING
A. PROVIDE, SETUP AND MAINTAIN ALL REQUIRED DERRICKS, HOISTING MACHINERY, SCAFFOLDS AND STAGING, PLANKING AND PERFORM ALL HOISTING REQUIRED TO COMPLETE THE WORK OF THIS FILED SUB-BID AS INDICATED AND SPECIFIED.
B. SCAFFOLDS SHALL HAVE SOLID BACKS AND FLOORS TO PREVENT DROPPING MATERIALS FROM THERE TO THE FLOORS OR GROUND.

3.4 TESTING AND BALANCING
A. TOTAL SYSTEM BALANCE SHALL BE PERFORMED IN ACCORDANCE WITH AABC NATIONAL STANDARDS FOR FIELD MEASUREMENT AND INSTRUMENTATION, TOTAL SYSTEM BALANCE OR ASHRAE SYSTEMS HANDBOOK.
B. PROVIDE THE FOLLOWING:
1. BEFORE COMMENCING WORK, VERIFY THAT SYSTEMS ARE COMPLETE AND OPERABLE. ENSURE THE FOLLOWING:
(1) EQUIPMENT IS OPERABLE AND IN A SAFE AND NORMAL CONDITION.
(2) TEMPERATURE CONTROL SYSTEMS ARE INSTALLED COMPLETE AND OPERABLE.
(3) PROPER THERMAL OVERLOAD PROTECTION IS IN PLACE FOR ELECTRICAL EQUIPMENT.
(4) FILTERS ARE CLEAN AND IN PLACE. IF REQUIRED, INSTALL TEMPORARY MEDIA IN ADDITION TO FINAL FILTERS.
(5) DUCT SYSTEMS ARE CLEAN OF DEBRIS.
(6) CORRECT FAN ROTATION.
(7) FIRE AND VOLUME DAMPERS ARE IN PLACE AND OPEN.
(8) ACCESS DOORS ARE CLOSED AND DUCT END CAPS ARE IN PLACE.
(9) AIR OUTLETS ARE INSTALLED AND CONNECTED.
(10) DUCT SYSTEM LEAKAGE HAS BEEN MINIMIZED.
2. REPORT ANY DEFECTS OR DEFICIENCIES NOTED DURING PERFORMANCE OF SERVICES TO THE ARCHITECT.
3. PROMPTLY REPORT ABNORMAL CONDITIONS IN MECHANICAL SYSTEMS OR CONDITIONS WHICH PREVENT SYSTEM BALANCE.
4. IF, FOR DESIGN, REASONS, SYSTEM CANNOT BE PROPERLY BALANCED, REPORT AS SOON AS OBSERVED.
5. START OF WORK MEANS ACCEPTANCE OF EXISTING CONDITIONS.
6. PROVIDE ADDITIONAL BALANCING DEVICES AS REQUIRED.
7. RECORDED DATA SHALL REPRESENT ACTUALLY MEASURED, OR OBSERVED CONDITION.
8. AFTER ADJUSTMENT, TAKE MEASUREMENTS TO VERIFY BALANCE HAS NOT BEEN DISRUPTED OR THAT SUCH DISRUPTION HAS BEEN RECTIFIED.
9. LEAVE SYSTEMS IN PROPER WORKING ORDER, REPLACING BELT GUARDS, CLOSING ACCESS DOORS, CLOSING DOORS TO ELECTRICAL SWITCH BOXES, AND RESTORING THERMOSTATS TO SPECIFIED SETTINGS.
10. AT FINAL INSPECTION, RECHECK RANDOM SELECTIONS OF DATA RECORDED IN REPORT. RECHECK POINTS OR AREAS AS SELECTED AND WITNESSED BY THE OWNER.
11. ADJUST AIR HANDLING AND DISTRIBUTION SYSTEMS TO PROVIDE REQUIRED OR DESIGN SUPPLY, RETURN, AND EXHAUST AIR QUANTITIES.
12. MAKE AIR QUANTITY MEASUREMENTS IN DUCTS BY PITOT TUBE TRAVERSE OF ENTIRE CROSS SECTIONAL AREA OF DUCT.
13. MEASURE AIR QUANTITIES AT AIR INLETS AND OUTLETS.
14. ADJUST DISTRIBUTION SYSTEM TO OBTAIN UNIFORM SPACE TEMPERATURES FREE FROM OBJECTIONABLE DRAFTS AND NOISE.
15. USE VOLUME CONTROL DEVICES TO REGULATE AIR QUANTITIES ONLY TO EXTENT THAT ADJUSTMENTS DO NOT CREATE OBJECTIONABLE AIR MOTION OR SOUND LEVELS. EFFECT VOLUME CONTROL BY DUCT INTERNAL DEVICES SUCH AS DAMPERS.
16. MEASURE STATIC AIR PRESSURE CONDITIONS ON AIR SUPPLY UNITS, INCLUDING FILTER AND COIL PRESSURE DROPS, AND TOTAL PRESSURE ACROSS THE FAN. MAKE ALLOWANCES FOR 50% LOADING OF FILTERS.
17. ADJUST OUTSIDE AIR AUTOMATIC DAMPERS, OUTSIDE AIR, RETURN AIR AND EXHAUST AIR DAMPERS FOR DESIGN CONDITIONS.
18. MEASURE TEMPERATURE CONDITIONS ACROSS OUTSIDE AIR, RETURN AIR AND EXHAUST AIR DAMPERS TO CHECK LEAKAGE.

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Sheet Name: MECHANICAL DETAILS AND SPECIFICATIONS		Sheet Number: M-103	

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

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

RONALD L. WALKER, II
Secretary

WILLIAM D MCKINNEY
Director

Awarding Authority: City of Quincy

Contract Number:

City/Town: QUINCY

Description of Work: General service for written responses in Acoustical Ceiling, Floor covering and HVAC

Job Location: Various locations

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

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

Issue Date: 06/22/2015 **Wage Request Number:** 20150622-074

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT *TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*	06/01/2015	$32.75	$9.91	$9.33	$0.00	$51.99
	08/01/2015	$32.75	$10.41	$9.33	$0.00	$52.49
	12/01/2015	$32.75	$10.41	$10.08	$0.00	$53.24
	06/01/2016	$33.25	$10.41	$10.08	$0.00	$53.74
	08/01/2016	$33.25	$10.91	$10.08	$0.00	$54.24
	12/01/2016	$33.25	$10.91	$10.89	$0.00	$55.05
(3 AXLE) DRIVER - EQUIPMENT *TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*	06/01/2015	$32.82	$9.91	$9.33	$0.00	$52.06
	08/01/2015	$32.82	$10.41	$9.33	$0.00	$52.56
	12/01/2015	$32.82	$10.41	$10.08	$0.00	$53.31
	06/01/2016	$33.32	$10.41	$10.08	$0.00	$53.81
	08/01/2016	$33.32	$10.91	$10.08	$0.00	$54.31
	12/01/2016	$33.32	$10.91	$10.89	$0.00	$55.12
(4 & 5 AXLE) DRIVER - EQUIPMENT *TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*	06/01/2015	$32.94	$9.91	$9.33	$0.00	$52.18
	08/01/2015	$32.94	$10.41	$9.33	$0.00	$52.68
	12/01/2015	$32.94	$10.41	$10.08	$0.00	$53.43
	06/01/2016	$33.44	$10.41	$10.08	$0.00	$53.93
	08/01/2016	$33.44	$10.91	$10.08	$0.00	$54.43
	12/01/2016	$33.44	$10.91	$10.89	$0.00	$55.24
ADS/SUBMERSIBLE PILOT *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 *LABORERS - ZONE 1*	06/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	12/01/2015	$36.60	$7.30	$13.20	$0.00	$57.10
	06/01/2016	$37.35	$7.30	$13.20	$0.00	$57.85
	12/01/2016	$38.35	$7.30	$13.20	$0.00	$58.85
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. *HEAT & FROST INSULATORS LOCAL 6 (BOSTON)*	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 *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.83	$10.00	$14.55	$0.00	$67.38
	12/01/2015	$44.08	$10.00	$14.55	$0.00	$68.63
	06/01/2016	$44.83	$10.00	$14.55	$0.00	$69.38
	12/01/2016	$46.08	$10.00	$14.55	$0.00	$70.63
	06/01/2017	$47.08	$10.00	$14.55	$0.00	$71.63
	12/01/2017	$48.08	$10.00	$14.55	$0.00	$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.83	$10.00	$14.55	$0.00	$67.38
	12/01/2015	$44.08	$10.00	$14.55	$0.00	$68.63
	06/01/2016	$44.83	$10.00	$14.55	$0.00	$69.38
	12/01/2016	$46.08	$10.00	$14.55	$0.00	$70.63
	06/01/2017	$47.08	$10.00	$14.55	$0.00	$71.63
	12/01/2017	$48.08	$10.00	$14.55	$0.00	$72.63

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER *LABORERS - ZONE 1*	06/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	12/01/2015	$36.60	$7.30	$13.20	$0.00	$57.10
	06/01/2016	$37.35	$7.30	$13.20	$0.00	$57.85
	12/01/2016	$38.35	$7.30	$13.20	$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

Apprentice - *BOILERMAKER - Local 29*

Effective Date - 01/01/2010

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

Notes:

Apprentice to Journeyworker Ratio:1:5

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) *BRICKLAYERS LOCAL 3 (QUINCY)*	02/01/2015	$48.96	$10.18	$18.50	$0.00	$77.64
	08/01/2015	$49.86	$10.18	$18.57	$0.00	$78.61
	02/01/2016	$50.43	$10.18	$18.57	$0.00	$79.18
	08/01/2016	$51.33	$10.18	$18.65	$0.00	$80.16
	02/01/2017	$51.90	$10.18	$18.65	$0.00	$80.73

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

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

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.48	$10.18	$18.50	$0.00	$53.16
2	60	$29.38	$10.18	$18.50	$0.00	$58.06
3	70	$34.27	$10.18	$18.50	$0.00	$62.95
4	80	$39.17	$10.18	$18.50	$0.00	$67.85
5	90	$44.06	$10.18	$18.50	$0.00	$72.74

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.93	$10.18	$18.57	$0.00	$53.68
2	60	$29.92	$10.18	$18.57	$0.00	$58.67
3	70	$34.90	$10.18	$18.57	$0.00	$63.65
4	80	$39.89	$10.18	$18.57	$0.00	$68.64
5	90	$44.87	$10.18	$18.57	$0.00	$73.62

Notes:

Apprentice to Journeyworker Ratio:1:5

BULLDOZER/GRADER/SCRAPER *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
CAISSON & UNDERPINNING BOTTOM MAN *LABORERS - FOUNDATION AND MARINE*	06/01/2015	$36.20	$7.30	$13.40	$0.00	$56.90
	12/01/2015	$36.95	$7.30	$13.40	$0.00	$57.65
	06/01/2016	$37.70	$7.30	$13.40	$0.00	$58.40
	12/01/2016	$38.70	$7.30	$13.40	$0.00	$59.40
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING LABORER *LABORERS - FOUNDATION AND MARINE*	06/01/2015	$35.05	$7.30	$13.40	$0.00	$55.75
	12/01/2015	$35.80	$7.30	$13.40	$0.00	$56.50
	06/01/2016	$36.55	$7.30	$13.40	$0.00	$57.25
	12/01/2016	$37.55	$7.30	$13.40	$0.00	$58.25
For apprentice rates see "Apprentice- LABORER"						
CAISSON & UNDERPINNING TOP MAN *LABORERS - FOUNDATION AND MARINE*	06/01/2015	$35.05	$7.30	$13.40	$0.00	$55.75
	12/01/2015	$35.80	$7.30	$13.40	$0.00	$56.50
	06/01/2016	$36.55	$7.30	$13.40	$0.00	$57.25
	12/01/2016	$37.55	$7.30	$13.40	$0.00	$58.25
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CARBIDE CORE DRILL OPERATOR *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
CARPENTER *CARPENTERS -ZONE 2 (Eastern Massachusetts)*	03/01/2015	$35.75	$9.80	$16.48	$0.00	$62.03

Apprentice - *CARPENTER - Zone 2 Eastern MA*

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$17.88	$9.80	$1.63	$0.00	$29.31
2	60	$21.45	$9.80	$1.63	$0.00	$32.88
3	70	$25.03	$9.80	$11.59	$0.00	$46.42
4	75	$26.81	$9.80	$11.59	$0.00	$48.20
5	80	$28.60	$9.80	$13.22	$0.00	$51.62
6	80	$28.60	$9.80	$13.22	$0.00	$51.62
7	90	$32.18	$9.80	$14.85	$0.00	$56.83
8	90	$32.18	$9.80	$14.85	$0.00	$56.83

Notes:

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING *BRICKLAYERS LOCAL 3 (QUINCY)*	01/01/2015	$44.90	$10.90	$18.71	$1.30	$75.81
	07/01/2015	$45.82	$10.90	$18.71	$1.30	$76.73
	01/01/2016	$46.44	$10.90	$18.71	$1.30	$77.35

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *CEMENT MASONRY/PLASTERING - Eastern Mass (Quincy)*

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$22.45	$10.90	$12.21	$0.00	$45.56
2	60	$26.94	$10.90	$13.71	$1.30	$52.85
3	65	$29.19	$10.90	$14.71	$1.30	$56.10
4	70	$31.43	$10.90	$15.71	$1.30	$59.34
5	75	$33.68	$10.90	$16.71	$1.30	$62.59
6	80	$35.92	$10.90	$17.71	$1.30	$65.83
7	90	$40.41	$10.90	$18.71	$1.30	$71.32

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$22.91	$10.90	$12.21	$0.00	$46.02
2	60	$27.49	$10.90	$13.71	$1.30	$53.40
3	65	$29.78	$10.90	$14.71	$1.30	$56.69
4	70	$32.07	$10.90	$15.71	$1.30	$59.98
5	75	$34.37	$10.90	$16.71	$1.30	$63.28
6	80	$36.66	$10.90	$17.71	$1.30	$66.57
7	90	$41.24	$10.90	$18.71	$1.30	$72.15

Notes:

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

Apprentice to Journeyworker Ratio:1:3

CHAIN SAW OPERATOR *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$43.83	$10.00	$14.55	$0.00	$68.38
	12/01/2015	$45.08	$10.00	$14.55	$0.00	$69.63
	06/01/2016	$45.83	$10.00	$14.55	$0.00	$70.38
	12/01/2016	$47.08	$10.00	$14.55	$0.00	$71.63
	06/01/2017	$48.08	$10.00	$14.55	$0.00	$72.63
	12/01/2017	$49.08	$10.00	$14.55	$0.00	$73.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
COMPRESSOR OPERATOR *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$29.61	$10.00	$14.55	$0.00	$54.16
	12/01/2015	$30.48	$10.00	$14.55	$0.00	$55.03
	06/01/2016	$31.00	$10.00	$14.55	$0.00	$55.55
	12/01/2016	$31.87	$10.00	$14.55	$0.00	$56.42
	06/01/2017	$32.56	$10.00	$14.55	$0.00	$57.11
	12/01/2017	$33.25	$10.00	$14.55	$0.00	$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DELEADER (BRIDGE) *PAINTERS LOCAL 35 - ZONE 2*	01/01/2015	$47.66	$7.85	$16.10	$0.00	$71.61
	07/01/2015	$48.56	$7.85	$16.10	$0.00	$72.51
	01/01/2016	$49.51	$7.85	$16.10	$0.00	$73.46
	07/01/2016	$50.46	$7.85	$16.10	$0.00	$74.41
	01/01/2017	$51.41	$7.85	$16.10	$0.00	$75.36

Apprentice - *PAINTER Local 35 - BRIDGES/TANKS*

Effective Date - 01/01/2015

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

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.28	$7.85	$0.00	$0.00	$32.13
2	55	$26.71	$7.85	$3.66	$0.00	$38.22
3	60	$29.14	$7.85	$3.99	$0.00	$40.98
4	65	$31.56	$7.85	$4.32	$0.00	$43.73
5	70	$33.99	$7.85	$14.11	$0.00	$55.95
6	75	$36.42	$7.85	$14.44	$0.00	$58.71
7	80	$38.85	$7.85	$14.77	$0.00	$61.47
8	90	$43.70	$7.85	$15.44	$0.00	$66.99

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

DEMO: ADZEMAN *LABORERS - ZONE 1*	06/01/2015	$35.25	$7.30	$13.20	$0.00	$55.75
	12/01/2015	$36.00	$7.30	$13.20	$0.00	$56.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: BACKHOE/LOADER/HAMMER OPERATOR *LABORERS - ZONE 1*	06/01/2015	$36.25	$7.30	$13.20	$0.00	$56.75
	12/01/2015	$37.00	$7.30	$13.20	$0.00	$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS *LABORERS - ZONE 1*	06/01/2015	$36.00	$7.30	$13.20	$0.00	$56.50
	12/01/2015	$36.75	$7.30	$13.20	$0.00	$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER *LABORERS - ZONE 1*	06/01/2015	$36.25	$7.30	$13.20	$0.00	$56.75
	12/01/2015	$37.00	$7.30	$13.20	$0.00	$57.50
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: JACKHAMMER OPERATOR *LABORERS - ZONE 1*	06/01/2015	$36.00	$7.30	$13.20	$0.00	$56.50
	12/01/2015	$36.75	$7.30	$13.20	$0.00	$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER *LABORERS - ZONE 1*	06/01/2015	$35.25	$7.30	$13.20	$0.00	$55.75
	12/01/2015	$36.00	$7.30	$13.20	$0.00	$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER *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 *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) *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) *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
DRAWBRIDGE OPERATOR (Construction) *ELECTRICIANS LOCAL 103*	03/01/2015	$45.17	$13.00	$15.40	$0.00	$73.57
	09/01/2015	$46.13	$13.00	$15.43	$0.00	$74.56
	03/01/2016	$47.08	$13.00	$15.46	$0.00	$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
ELECTRICIAN *ELECTRICIANS LOCAL 103*	03/01/2015	$45.17	$13.00	$15.40	$0.00	$73.57
	09/01/2015	$46.13	$13.00	$15.43	$0.00	$74.56
	03/01/2016	$47.08	$13.00	$15.46	$0.00	$75.54

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *ELECTRICIAN - Local 103*

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$18.07	$13.00	$0.54	$0.00	$31.61
2	40	$18.07	$13.00	$0.54	$0.00	$31.61
3	45	$20.33	$13.00	$11.64	$0.00	$44.97
4	45	$20.33	$13.00	$11.64	$0.00	$44.97
5	50	$22.59	$13.00	$11.98	$0.00	$47.57
6	55	$24.84	$13.00	$12.33	$0.00	$50.17
7	60	$27.10	$13.00	$12.66	$0.00	$52.76
8	65	$29.36	$13.00	$13.01	$0.00	$55.37
9	70	$31.62	$13.00	$13.35	$0.00	$57.97
10	75	$33.88	$13.00	$13.70	$0.00	$60.58

Effective Date - 09/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$18.45	$13.00	$0.55	$0.00	$32.00
2	40	$18.45	$13.00	$0.55	$0.00	$32.00
3	45	$20.76	$13.00	$11.65	$0.00	$45.41
4	45	$20.76	$13.00	$11.65	$0.00	$45.41
5	50	$23.07	$13.00	$11.99	$0.00	$48.06
6	55	$25.37	$13.00	$12.34	$0.00	$50.71
7	60	$27.68	$13.00	$12.68	$0.00	$53.36
8	65	$29.98	$13.00	$13.03	$0.00	$56.01
9	70	$32.29	$13.00	$13.37	$0.00	$58.66
10	75	$34.60	$13.00	$13.72	$0.00	$61.32

Notes: :

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

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR *ELEVATOR CONSTRUCTORS LOCAL 4*	01/01/2015	$53.30	$13.58	$14.21	$0.00	$81.09
	01/01/2016	$54.53	$14.43	$14.96	$0.00	$83.92
	01/01/2017	$55.86	$15.28	$15.71	$0.00	$86.85

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *ELEVATOR CONSTRUCTOR - Local 4*

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$26.65	$13.58	$0.00	$0.00	$40.23
2	55	$29.32	$13.58	$14.21	$0.00	$57.11
3	65	$34.65	$13.58	$14.21	$0.00	$62.44
4	70	$37.31	$13.58	$14.21	$0.00	$65.10
5	80	$42.64	$13.58	$14.21	$0.00	$70.43

Effective Date - 01/01/2016

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

Notes:

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

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER *ELEVATOR CONSTRUCTORS LOCAL 4*	01/01/2015	$37.31	$13.58	$14.21	$0.00	$65.10
	01/01/2016	$38.17	$14.43	$14.96	$0.00	$67.56
	01/01/2017	$39.10	$15.28	$15.71	$0.00	$70.09
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"						
FENCE & GUARD RAIL ERECTOR *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY *OPERATING ENGINEERS LOCAL 4*	05/01/2015	$40.22	$10.00	$14.30	$0.00	$64.52
	11/01/2015	$40.80	$10.00	$14.30	$0.00	$65.10
	05/01/2016	$41.69	$10.00	$14.30	$0.00	$65.99
	11/01/2016	$42.28	$10.00	$14.30	$0.00	$66.58
	05/01/2017	$43.16	$10.00	$14.30	$0.00	$67.46
	11/01/2017	$43.89	$10.00	$14.30	$0.00	$68.19
	05/01/2018	$44.60	$10.00	$14.30	$0.00	$68.90
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY *OPERATING ENGINEERS LOCAL 4*	05/01/2015	$41.65	$10.00	$14.30	$0.00	$65.95
	11/01/2015	$42.24	$10.00	$14.30	$0.00	$66.54
	05/01/2016	$43.13	$10.00	$14.30	$0.00	$67.43
	11/01/2016	$43.73	$10.00	$14.30	$0.00	$68.03
	05/01/2017	$44.62	$10.00	$14.30	$0.00	$68.92
	11/01/2017	$45.35	$10.00	$14.30	$0.00	$69.65
	05/01/2018	$46.07	$10.00	$14.30	$0.00	$70.37
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY *OPERATING ENGINEERS LOCAL 4*	05/01/2015	$21.68	$10.00	$14.30	$0.00	$45.98
	11/01/2015	$22.02	$10.00	$14.30	$0.00	$46.32
	05/01/2016	$22.54	$10.00	$14.30	$0.00	$46.84
	11/01/2016	$22.89	$10.00	$14.30	$0.00	$47.19
	05/01/2017	$23.42	$10.00	$14.30	$0.00	$47.72
	11/01/2017	$23.84	$10.00	$14.30	$0.00	$48.14
	05/01/2018	$24.27	$10.00	$14.30	$0.00	$48.57
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER *ELECTRICIANS LOCAL 103*	03/01/2015	$45.17	$13.00	$15.40	$0.00	$73.57
	09/01/2015	$46.13	$13.00	$15.43	$0.00	$74.56
	03/01/2016	$47.08	$13.00	$15.46	$0.00	$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONING*ELECTRICIANS LOCAL 103*	03/01/2015	$33.88	$13.00	$13.70	$0.00	$60.58
	09/01/2015	$34.60	$13.00	$13.72	$0.00	$61.32
	03/01/2016	$35.31	$13.00	$13.74	$0.00	$62.05
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$35.64	$10.00	$14.55	$0.00	$60.19
	12/01/2015	$36.69	$10.00	$14.55	$0.00	$61.24
	06/01/2016	$37.31	$10.00	$14.55	$0.00	$61.86
	12/01/2016	$38.35	$10.00	$14.55	$0.00	$62.90
	06/01/2017	$39.19	$10.00	$14.55	$0.00	$63.74
	12/01/2017	$40.02	$10.00	$14.55	$0.00	$64.57
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER *LABORERS - ZONE 1*	06/01/2015	$20.50	$7.30	$13.20	$0.00	$41.00
	12/01/2015	$20.50	$7.30	$13.20	$0.00	$41.00
	06/01/2016	$20.50	$7.30	$13.20	$0.00	$41.00
	12/01/2016	$20.50	$7.30	$13.20	$0.00	$41.00
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER *FLOORCOVERERS LOCAL 2168 ZONE 1*	09/01/2014	$40.40	$9.80	$17.21	$0.00	$67.41

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *FLOORCOVERER - Local 2168 Zone I*

Effective Date - 09/01/2014

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

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

FORK LIFT/CHERRY PICKER *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.83	$10.00	$14.55	$0.00	$67.38
	12/01/2015	$44.08	$10.00	$14.55	$0.00	$68.63
	06/01/2016	$44.83	$10.00	$14.55	$0.00	$69.38
	12/01/2016	$46.08	$10.00	$14.55	$0.00	$70.63
	06/01/2017	$47.08	$10.00	$14.55	$0.00	$71.63
	12/01/2017	$48.08	$10.00	$14.55	$0.00	$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GENERATOR/LIGHTING PLANT/HEATERS *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$29.61	$10.00	$14.55	$0.00	$54.16
	12/01/2015	$30.48	$10.00	$14.55	$0.00	$55.03
	06/01/2016	$31.00	$10.00	$14.55	$0.00	$55.55
	12/01/2016	$31.87	$10.00	$14.55	$0.00	$56.42
	06/01/2017	$32.56	$10.00	$14.55	$0.00	$57.11
	12/01/2017	$33.25	$10.00	$14.55	$0.00	$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) *GLAZIERS LOCAL 35 (ZONE 2)*	01/01/2015	$37.16	$7.85	$16.10	$0.00	$61.11
	07/01/2015	$38.06	$7.85	$16.10	$0.00	$62.01
	01/01/2016	$39.01	$7.85	$16.10	$0.00	$62.96
	07/01/2016	$39.96	$7.85	$16.10	$0.00	$63.91
	01/01/2017	$40.91	$7.85	$16.10	$0.00	$64.86

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *GLAZIER - Local 35 Zone 2*

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$18.58	$7.85	$0.00	$0.00	$26.43
2	55	$20.44	$7.85	$3.66	$0.00	$31.95
3	60	$22.30	$7.85	$3.99	$0.00	$34.14
4	65	$24.15	$7.85	$4.32	$0.00	$36.32
5	70	$26.01	$7.85	$14.11	$0.00	$47.97
6	75	$27.87	$7.85	$14.44	$0.00	$50.16
7	80	$29.73	$7.85	$14.77	$0.00	$52.35
8	90	$33.44	$7.85	$15.44	$0.00	$56.73

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$19.03	$7.85	$0.00	$0.00	$26.88
2	55	$20.93	$7.85	$3.66	$0.00	$32.44
3	60	$22.84	$7.85	$3.99	$0.00	$34.68
4	65	$24.74	$7.85	$4.32	$0.00	$36.91
5	70	$26.64	$7.85	$14.11	$0.00	$48.60
6	75	$28.55	$7.85	$14.44	$0.00	$50.84
7	80	$30.45	$7.85	$14.77	$0.00	$53.07
8	90	$34.25	$7.85	$15.44	$0.00	$57.54

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.83	$10.00	$14.55	$0.00	$67.38
	12/01/2015	$44.08	$10.00	$14.55	$0.00	$68.63
	06/01/2016	$44.83	$10.00	$14.55	$0.00	$69.38
	12/01/2016	$46.08	$10.00	$14.55	$0.00	$70.63
	06/01/2017	$47.08	$10.00	$14.55	$0.00	$71.63
	12/01/2017	$48.08	$10.00	$14.55	$0.00	$72.63

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *OPERATING ENGINEERS - Local 4*

Effective Date - 06/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	$23.56	$10.00	$0.00	$0.00	$33.56
2	60	$25.70	$10.00	$14.55	$0.00	$50.25
3	65	$27.84	$10.00	$14.55	$0.00	$52.39
4	70	$29.98	$10.00	$14.55	$0.00	$54.53
5	75	$32.12	$10.00	$14.55	$0.00	$56.67
6	80	$34.26	$10.00	$14.55	$0.00	$58.81
7	85	$36.41	$10.00	$14.55	$0.00	$60.96
8	90	$38.55	$10.00	$14.55	$0.00	$63.10

Effective Date - 12/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	$24.24	$10.00	$0.00	$0.00	$34.24
2	60	$26.45	$10.00	$14.55	$0.00	$51.00
3	65	$28.65	$10.00	$14.55	$0.00	$53.20
4	70	$30.86	$10.00	$14.55	$0.00	$55.41
5	75	$33.06	$10.00	$14.55	$0.00	$57.61
6	80	$35.26	$10.00	$14.55	$0.00	$59.81
7	85	$37.47	$10.00	$14.55	$0.00	$62.02
8	90	$39.67	$10.00	$14.55	$0.00	$64.22

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK) *SHEETMETAL WORKERS LOCAL 17 - A*	02/01/2015	$43.28	$10.20	$20.54	$2.22	$76.24
	08/01/2015	$44.28	$10.20	$20.54	$2.22	$77.24
	02/01/2016	$45.28	$10.20	$20.54	$2.22	$78.24
	08/01/2016	$46.43	$10.20	$20.54	$2.22	$79.39
	02/01/2017	$47.53	$10.20	$20.54	$2.22	$80.49
	08/01/2017	$48.63	$10.20	$20.54	$2.22	$81.59
	02/01/2018	$49.78	$10.20	$20.54	$2.22	$82.74

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS) *ELECTRICIANS LOCAL 103*	03/01/2015	$45.17	$13.00	$15.40	$0.00	$73.57
	09/01/2015	$46.13	$13.00	$15.43	$0.00	$74.56
	03/01/2016	$47.08	$13.00	$15.46	$0.00	$75.54

For apprentice rates see "Apprentice- ELECTRICIAN"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR) *SHEETMETAL WORKERS LOCAL 17 - A*	02/01/2015	$43.28	$10.20	$20.54	$2.22	$76.24
	08/01/2015	$44.28	$10.20	$20.54	$2.22	$77.24
	02/01/2016	$45.28	$10.20	$20.54	$2.22	$78.24
	08/01/2016	$46.43	$10.20	$20.54	$2.22	$79.39
	02/01/2017	$47.53	$10.20	$20.54	$2.22	$80.49
	08/01/2017	$48.63	$10.20	$20.54	$2.22	$81.59
	02/01/2018	$49.78	$10.20	$20.54	$2.22	$82.74
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER) *PIPEFITTERS LOCAL 537*	03/01/2015	$48.69	$9.70	$16.89	$0.00	$75.28
	09/01/2015	$49.69	$9.70	$16.89	$0.00	$76.28
	03/01/2016	$50.69	$9.70	$16.89	$0.00	$77.28
	09/01/2016	$51.69	$9.70	$16.89	$0.00	$78.28
	03/01/2017	$52.69	$9.70	$16.89	$0.00	$79.28
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC *PIPEFITTERS LOCAL 537*	03/01/2015	$48.69	$9.70	$16.89	$0.00	$75.28
	09/01/2015	$49.69	$9.70	$16.89	$0.00	$76.28
	03/01/2016	$50.69	$9.70	$16.89	$0.00	$77.28
	09/01/2016	$51.69	$9.70	$16.89	$0.00	$78.28
	03/01/2017	$52.69	$9.70	$16.89	$0.00	$79.28
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS *LABORERS - ZONE 1*	06/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	12/01/2015	$36.60	$7.30	$13.20	$0.00	$57.10
	06/01/2016	$37.35	$7.30	$13.20	$0.00	$57.85
	12/01/2016	$38.35	$7.30	$13.20	$0.00	$58.85
For apprentice rates see "Apprentice- LABORER"						
INSULATOR (PIPES & TANKS) *HEAT & FROST INSULATORS LOCAL 6 (BOSTON)*	09/01/2014	$43.31	$11.25	$12.60	$0.00	$67.16

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

Effective Date - 09/01/2014

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

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER *IRONWORKERS LOCAL 7 (BOSTON AREA)*	03/16/2015	$42.11	$7.70	$20.25	$0.00	$70.06

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *IRONWORKER - Local 7 Boston*

Effective Date - 03/16/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$25.27	$7.70	$20.25	$0.00	$53.22
2	70	$29.48	$7.70	$20.25	$0.00	$57.43
3	75	$31.58	$7.70	$20.25	$0.00	$59.53
4	80	$33.69	$7.70	$20.25	$0.00	$61.64
5	85	$35.79	$7.70	$20.25	$0.00	$63.74
6	90	$37.90	$7.70	$20.25	$0.00	$65.85

Notes:

** Structural 1:6; Ornamental 1:4

Apprentice to Journeyworker Ratio:**

JACKHAMMER & PAVING BREAKER OPERATOR *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35

For apprentice rates see "Apprentice- LABORER"

LABORER *LABORERS - ZONE 1*	06/01/2015	$35.10	$7.30	$13.20	$0.00	$55.60
	12/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	06/01/2016	$36.60	$7.30	$13.20	$0.00	$57.10
	12/01/2016	$37.60	$7.30	$13.20	$0.00	$58.10

Apprentice - *LABORER - Zone 1*

Effective Date - 06/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$21.06	$7.30	$13.20	$0.00	$41.56
2	70	$24.57	$7.30	$13.20	$0.00	$45.07
3	80	$28.08	$7.30	$13.20	$0.00	$48.58
4	90	$31.59	$7.30	$13.20	$0.00	$52.09

Effective Date - 12/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	$21.51	$7.30	$13.20	$0.00	$42.01
2	70	$25.10	$7.30	$13.20	$0.00	$45.60
3	80	$28.68	$7.30	$13.20	$0.00	$49.18
4	90	$32.27	$7.30	$13.20	$0.00	$52.77

Notes:

Apprentice to Journeyworker Ratio:1:5

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: CARPENTER TENDER *LABORERS - ZONE 1*	06/01/2015	$35.10	$7.30	$13.20	$0.00	$55.60
	12/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	06/01/2016	$36.60	$7.30	$13.20	$0.00	$57.10
	12/01/2016	$37.60	$7.30	$13.20	$0.00	$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER *LABORERS - ZONE 1*	06/01/2015	$35.10	$7.30	$13.20	$0.00	$55.60
	12/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	06/01/2016	$36.60	$7.30	$13.20	$0.00	$57.10
	12/01/2016	$37.60	$7.30	$13.20	$0.00	$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER *LABORERS - ZONE 1*	06/01/2015	$35.25	$7.30	$13.20	$0.00	$55.75
	12/01/2015	$36.00	$7.30	$13.20	$0.00	$56.50
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
LABORER: MULTI-TRADE TENDER *LABORERS - ZONE 1*	06/01/2015	$35.10	$7.30	$13.20	$0.00	$55.60
	12/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	06/01/2016	$36.60	$7.30	$13.20	$0.00	$57.10
	12/01/2016	$37.60	$7.30	$13.20	$0.00	$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER *LABORERS - ZONE 1*	06/01/2015	$35.10	$7.30	$13.20	$0.00	$55.60
	12/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	06/01/2016	$36.60	$7.30	$13.20	$0.00	$57.10
	12/01/2016	$37.60	$7.30	$13.20	$0.00	$58.10
This classification applies to all tree work associated with the removal of standing trees, and trimming and removal of branches and limbs when the work is not done for a utility company for the purpose of operation, maintenance or repair of utility company equipment. For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
MARBLE & TILE FINISHERS *BRICKLAYERS LOCAL 3 - MARBLE & TILE*	02/01/2015	$37.37	$10.18	$17.18	$0.00	$64.73
	08/01/2015	$38.08	$10.18	$17.25	$0.00	$65.51
	02/01/2016	$38.53	$10.18	$17.25	$0.00	$65.96
	08/01/2016	$39.23	$10.18	$17.33	$0.00	$66.74
	02/01/2017	$39.69	$10.18	$17.33	$0.00	$67.20

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

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

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$18.69	$10.18	$17.18	$0.00	$46.05
2	60	$22.42	$10.18	$17.18	$0.00	$49.78
3	70	$26.16	$10.18	$17.18	$0.00	$53.52
4	80	$29.90	$10.18	$17.18	$0.00	$57.26
5	90	$33.63	$10.18	$17.18	$0.00	$60.99

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$19.04	$10.18	$17.25	$0.00	$46.47
2	60	$22.85	$10.18	$17.25	$0.00	$50.28
3	70	$26.66	$10.18	$17.25	$0.00	$54.09
4	80	$30.46	$10.18	$17.25	$0.00	$57.89
5	90	$34.27	$10.18	$17.25	$0.00	$61.70

Notes:

Apprentice to Journeyworker Ratio:1:3

MARBLE MASONS,TILELAYERS & TERRAZZO MECH *BRICKLAYERS LOCAL 3 - MARBLE & TILE*	02/01/2015	$49.00	$10.18	$18.50	$0.00	$77.68
	08/01/2015	$49.90	$10.18	$18.57	$0.00	$78.65
	02/01/2016	$50.47	$10.18	$18.57	$0.00	$79.22
	08/01/2016	$51.37	$10.18	$18.65	$0.00	$80.20
	02/01/2017	$51.94	$10.18	$18.65	$0.00	$80.77

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

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

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.50	$10.18	$18.50	$0.00	$53.18
2	60	$29.40	$10.18	$18.50	$0.00	$58.08
3	70	$34.30	$10.18	$18.50	$0.00	$62.98
4	80	$39.20	$10.18	$18.50	$0.00	$67.88
5	90	$44.10	$10.18	$18.50	$0.00	$72.78

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.95	$10.18	$18.57	$0.00	$53.70
2	60	$29.94	$10.18	$18.57	$0.00	$58.69
3	70	$34.93	$10.18	$18.57	$0.00	$63.68
4	80	$39.92	$10.18	$18.57	$0.00	$68.67
5	90	$44.91	$10.18	$18.57	$0.00	$73.66

Notes:

Apprentice to Journeyworker Ratio:1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MECHANICS MAINTENANCE *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MILLWRIGHT (Zone 1) *MILLWRIGHTS LOCAL 1121 - Zone 1*	04/01/2015	$37.64	$9.80	$16.21	$0.00	$63.65

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *MILLWRIGHT - Local 1121 Zone 1*

Effective Date - 04/01/2015

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

Notes:

Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:5

MORTAR MIXER *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
OILER (OTHER THAN TRUCK CRANES,GRADALLS) *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$21.97	$10.00	$14.55	$0.00	$46.52
	12/01/2015	$22.62	$10.00	$14.55	$0.00	$47.17
	06/01/2016	$23.01	$10.00	$14.55	$0.00	$47.56
	12/01/2016	$23.66	$10.00	$14.55	$0.00	$48.21
	06/01/2017	$24.17	$10.00	$14.55	$0.00	$48.72
	12/01/2017	$24.69	$10.00	$14.55	$0.00	$49.24
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OILER (TRUCK CRANES, GRADALLS) *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$25.68	$10.00	$14.55	$0.00	$50.23
	12/01/2015	$26.43	$10.00	$14.55	$0.00	$50.98
	06/01/2016	$26.89	$10.00	$14.55	$0.00	$51.44
	12/01/2016	$27.64	$10.00	$14.55	$0.00	$52.19
	06/01/2017	$28.24	$10.00	$14.55	$0.00	$52.79
	12/01/2017	$28.85	$10.00	$14.55	$0.00	$53.40
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
OTHER POWER DRIVEN EQUIPMENT - CLASS II *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PAINTER (BRIDGES/TANKS) *PAINTERS LOCAL 35 - ZONE 2*	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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PAINTER Local 35 - BRIDGES/TANKS*

Effective Date - 01/01/2015

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

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.28	$7.85	$0.00	$0.00	$32.13
2	55	$26.71	$7.85	$3.66	$0.00	$38.22
3	60	$29.14	$7.85	$3.99	$0.00	$40.98
4	65	$31.56	$7.85	$4.32	$0.00	$43.73
5	70	$33.99	$7.85	$14.11	$0.00	$55.95
6	75	$36.42	$7.85	$14.44	$0.00	$58.71
7	80	$38.85	$7.85	$14.77	$0.00	$61.47
8	90	$43.70	$7.85	$15.44	$0.00	$66.99

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	01/01/2015	$38.56	$7.85	$16.10	$0.00	$62.51
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.*PAINTERS LOCAL 35 - ZONE 2*	07/01/2015	$39.46	$7.85	$16.10	$0.00	$63.41
	01/01/2016	$40.41	$7.85	$16.10	$0.00	$64.36
	07/01/2016	$41.36	$7.85	$16.10	$0.00	$65.31
	01/01/2017	$42.31	$7.85	$16.10	$0.00	$66.26

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PAINTER Local 35 Zone 2 - Spray/Sandblast - New*

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$19.28	$7.85	$0.00	$0.00	$27.13
2	55	$21.21	$7.85	$3.66	$0.00	$32.72
3	60	$23.14	$7.85	$3.99	$0.00	$34.98
4	65	$25.06	$7.85	$4.32	$0.00	$37.23
5	70	$26.99	$7.85	$14.11	$0.00	$48.95
6	75	$28.92	$7.85	$14.44	$0.00	$51.21
7	80	$30.85	$7.85	$14.77	$0.00	$53.47
8	90	$34.70	$7.85	$15.44	$0.00	$57.99

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$19.73	$7.85	$0.00	$0.00	$27.58
2	55	$21.70	$7.85	$3.66	$0.00	$33.21
3	60	$23.68	$7.85	$3.99	$0.00	$35.52
4	65	$25.65	$7.85	$4.32	$0.00	$37.82
5	70	$27.62	$7.85	$14.11	$0.00	$49.58
6	75	$29.60	$7.85	$14.44	$0.00	$51.89
7	80	$31.57	$7.85	$14.77	$0.00	$54.19
8	90	$35.51	$7.85	$15.44	$0.00	$58.80

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT) *PAINTERS LOCAL 35 - ZONE 2*	01/01/2015	$36.62	$7.85	$16.10	$0.00	$60.57
	07/01/2015	$37.52	$7.85	$16.10	$0.00	$61.47
	01/01/2016	$38.47	$7.85	$16.10	$0.00	$62.42
	07/01/2016	$39.42	$7.85	$16.10	$0.00	$63.37
	01/01/2017	$40.37	$7.85	$16.10	$0.00	$64.32

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint*

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$18.31	$7.85	$0.00	$0.00	$26.16
2	55	$20.14	$7.85	$3.66	$0.00	$31.65
3	60	$21.97	$7.85	$3.99	$0.00	$33.81
4	65	$23.80	$7.85	$4.32	$0.00	$35.97
5	70	$25.63	$7.85	$14.11	$0.00	$47.59
6	75	$27.47	$7.85	$14.44	$0.00	$49.76
7	80	$29.30	$7.85	$14.77	$0.00	$51.92
8	90	$32.96	$7.85	$15.44	$0.00	$56.25

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$18.76	$7.85	$0.00	$0.00	$26.61
2	55	$20.64	$7.85	$3.66	$0.00	$32.15
3	60	$22.51	$7.85	$3.99	$0.00	$34.35
4	65	$24.39	$7.85	$4.32	$0.00	$36.56
5	70	$26.26	$7.85	$14.11	$0.00	$48.22
6	75	$28.14	$7.85	$14.44	$0.00	$50.43
7	80	$30.02	$7.85	$14.77	$0.00	$52.64
8	90	$33.77	$7.85	$15.44	$0.00	$57.06

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (TRAFFIC MARKINGS) *LABORERS - ZONE 1*	06/01/2015	$35.10	$7.30	$13.20	$0.00	$55.60
	12/01/2015	$35.85	$7.30	$13.20	$0.00	$56.35
	06/01/2016	$36.60	$7.30	$13.20	$0.00	$57.10
	12/01/2016	$37.60	$7.30	$13.20	$0.00	$58.10
For Apprentice rates see "Apprentice- LABORER"						
PAINTER / TAPER (BRUSH, NEW) * * If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.*PAINTERS LOCAL 35 - ZONE 2*	01/01/2015	$37.16	$7.85	$16.10	$0.00	$61.11
	07/01/2015	$38.06	$7.85	$16.10	$0.00	$62.01
	01/01/2016	$39.01	$7.85	$16.10	$0.00	$62.96
	07/01/2016	$39.96	$7.85	$16.10	$0.00	$63.91
	01/01/2017	$40.91	$7.85	$16.10	$0.00	$64.86

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PAINTER - Local 35 Zone 2 - BRUSH NEW*

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$18.58	$7.85	$0.00	$0.00	$26.43
2	55	$20.44	$7.85	$3.66	$0.00	$31.95
3	60	$22.30	$7.85	$3.99	$0.00	$34.14
4	65	$24.15	$7.85	$4.32	$0.00	$36.32
5	70	$26.01	$7.85	$14.11	$0.00	$47.97
6	75	$27.87	$7.85	$14.44	$0.00	$50.16
7	80	$29.73	$7.85	$14.77	$0.00	$52.35
8	90	$33.44	$7.85	$15.44	$0.00	$56.73

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$19.03	$7.85	$0.00	$0.00	$26.88
2	55	$20.93	$7.85	$3.66	$0.00	$32.44
3	60	$22.84	$7.85	$3.99	$0.00	$34.68
4	65	$24.74	$7.85	$4.32	$0.00	$36.91
5	70	$26.64	$7.85	$14.11	$0.00	$48.60
6	75	$28.55	$7.85	$14.44	$0.00	$50.84
7	80	$30.45	$7.85	$14.77	$0.00	$53.07
8	90	$34.25	$7.85	$15.44	$0.00	$57.54

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT) *PAINTERS LOCAL 35 - ZONE 2*	01/01/2015	$35.22	$7.85	$16.10	$0.00	$59.17
	07/01/2015	$36.12	$7.85	$16.10	$0.00	$60.07
	01/01/2016	$37.07	$7.85	$16.10	$0.00	$61.02
	07/01/2016	$38.02	$7.85	$16.10	$0.00	$61.97
	01/01/2017	$38.97	$7.85	$16.10	$0.00	$62.92

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PAINTER Local 35 Zone 2 - BRUSH REPAINT*

Effective Date - 01/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$17.61	$7.85	$0.00	$0.00	$25.46
2	55	$19.37	$7.85	$3.66	$0.00	$30.88
3	60	$21.13	$7.85	$3.99	$0.00	$32.97
4	65	$22.89	$7.85	$4.32	$0.00	$35.06
5	70	$24.65	$7.85	$14.11	$0.00	$46.61
6	75	$26.42	$7.85	$14.44	$0.00	$48.71
7	80	$28.18	$7.85	$14.77	$0.00	$50.80
8	90	$31.70	$7.85	$15.44	$0.00	$54.99

Effective Date - 07/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$18.06	$7.85	$0.00	$0.00	$25.91
2	55	$19.87	$7.85	$3.66	$0.00	$31.38
3	60	$21.67	$7.85	$3.99	$0.00	$33.51
4	65	$23.48	$7.85	$4.32	$0.00	$35.65
5	70	$25.28	$7.85	$14.11	$0.00	$47.24
6	75	$27.09	$7.85	$14.44	$0.00	$49.38
7	80	$28.90	$7.85	$14.77	$0.00	$51.52
8	90	$32.51	$7.85	$15.44	$0.00	$55.80

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PANEL & PICKUP TRUCKS DRIVER *TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*	06/01/2015	$32.58	$9.91	$9.33	$0.00	$51.82
	08/01/2015	$32.58	$10.41	$9.33	$0.00	$52.32
	12/01/2015	$32.58	$10.41	$10.08	$0.00	$53.07
	06/01/2016	$33.08	$10.41	$10.08	$0.00	$53.57
	08/01/2016	$33.08	$10.91	$10.08	$0.00	$54.07
	12/01/2016	$33.08	$10.91	$10.89	$0.00	$54.88
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) *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
PILE DRIVER *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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PILE DRIVER - Local 56 Zone 1*

Effective Date - 08/01/2014

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

Effective Date - 08/01/2015

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

Notes:

Apprentice to Journeyworker Ratio:1:3

PIPEFITTER & STEAMFITTER *PIPEFITTERS LOCAL 537*	03/01/2015	$48.69	$9.70	$16.89	$0.00	$75.28
	09/01/2015	$49.69	$9.70	$16.89	$0.00	$76.28
	03/01/2016	$50.69	$9.70	$16.89	$0.00	$77.28
	09/01/2016	$51.69	$9.70	$16.89	$0.00	$78.28
	03/01/2017	$52.69	$9.70	$16.89	$0.00	$79.28

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PIPEFITTER - Local 537*

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$19.48	$9.70	$7.50	$0.00	$36.68
2	45	$21.91	$9.70	$16.89	$0.00	$48.50
3	60	$29.21	$9.70	$16.89	$0.00	$55.80
4	70	$34.08	$9.70	$16.89	$0.00	$60.67
5	80	$38.95	$9.70	$16.89	$0.00	$65.54

Effective Date - 09/01/2015

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

Notes:

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

Apprentice to Journeyworker Ratio:**

PIPELAYER *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
PLUMBERS & GASFITTERS *PLUMBERS & GASFITTERS LOCAL 12*	03/01/2015	$50.21	$10.32	$14.89	$0.00	$75.42
	09/01/2015	$51.21	$10.32	$14.89	$0.00	$76.42
	03/01/2016	$52.36	$10.32	$14.89	$0.00	$77.57
	09/01/2016	$53.41	$10.32	$14.89	$0.00	$78.62
	03/01/2017	$54.41	$10.32	$14.89	$0.00	$79.62

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *PLUMBER/GASFITTER - Local 12*

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	$17.57	$10.32	$5.54	$0.00	$33.43
2	40	$20.08	$10.32	$6.27	$0.00	$36.67
3	55	$27.62	$10.32	$8.42	$0.00	$46.36
4	65	$32.64	$10.32	$9.87	$0.00	$52.83
5	75	$37.66	$10.32	$11.30	$0.00	$59.28

Effective Date - 09/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	$17.92	$10.32	$5.54	$0.00	$33.78
2	40	$20.48	$10.32	$6.27	$0.00	$37.07
3	55	$28.17	$10.32	$8.42	$0.00	$46.91
4	65	$33.29	$10.32	$9.87	$0.00	$53.48
5	75	$38.41	$10.32	$11.30	$0.00	$60.03

Notes:

** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr
Step4 with lic$56.05 Step5 with lic$62.48

Apprentice to Journeyworker Ratio:**

PNEUMATIC CONTROLS (TEMP.) *PIPEFITTERS LOCAL 537*	03/01/2015	$48.69	$9.70	$16.89	$0.00	$75.28
	09/01/2015	$49.69	$9.70	$16.89	$0.00	$76.28
	03/01/2016	$50.69	$9.70	$16.89	$0.00	$77.28
	09/01/2016	$51.69	$9.70	$16.89	$0.00	$78.28
	03/01/2017	$52.69	$9.70	$16.89	$0.00	$79.28
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
PNEUMATIC DRILL/TOOL OPERATOR *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
POWDERMAN & BLASTER *LABORERS - ZONE 1*	06/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	12/01/2015	$36.85	$7.30	$13.20	$0.00	$57.35
	06/01/2016	$37.60	$7.30	$13.20	$0.00	$58.10
	12/01/2016	$38.60	$7.30	$13.20	$0.00	$59.10
For apprentice rates see "Apprentice- LABORER"						
POWER SHOVEL/DERRICK/TRENCHING MACHINE *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.83	$10.00	$14.55	$0.00	$67.38
	12/01/2015	$44.08	$10.00	$14.55	$0.00	$68.63
	06/01/2016	$44.83	$10.00	$14.55	$0.00	$69.38
	12/01/2016	$46.08	$10.00	$14.55	$0.00	$70.63
	06/01/2017	$47.08	$10.00	$14.55	$0.00	$71.63
	12/01/2017	$48.08	$10.00	$14.55	$0.00	$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PUMP OPERATOR (CONCRETE) *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.83	$10.00	$14.55	$0.00	$67.38
	12/01/2015	$44.08	$10.00	$14.55	$0.00	$68.63
	06/01/2016	$44.83	$10.00	$14.55	$0.00	$69.38
	12/01/2016	$46.08	$10.00	$14.55	$0.00	$70.63
	06/01/2017	$47.08	$10.00	$14.55	$0.00	$71.63
	12/01/2017	$48.08	$10.00	$14.55	$0.00	$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$29.61	$10.00	$14.55	$0.00	$54.16
	12/01/2015	$30.48	$10.00	$14.55	$0.00	$55.03
	06/01/2016	$31.00	$10.00	$14.55	$0.00	$55.55
	12/01/2016	$31.87	$10.00	$14.55	$0.00	$56.42
	06/01/2017	$32.56	$10.00	$14.55	$0.00	$57.11
	12/01/2017	$33.25	$10.00	$14.55	$0.00	$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY MIX CONCRETE DRIVERS after 4/30/10 (Drivers Hired After 4/30/2010) *TEAMSTERS LOCAL 25b*	05/01/2015	$27.88	$7.73	$8.92	$0.00	$44.53
	07/01/2015	$27.88	$7.98	$8.92	$0.00	$44.78
	05/01/2016	$28.03	$7.98	$9.31	$0.00	$45.32
	07/01/2016	$28.03	$8.23	$9.31	$0.00	$45.57
	05/01/2017	$28.18	$8.23	$9.72	$0.00	$46.13
	07/01/2017	$28.18	$8.48	$9.72	$0.00	$46.38
READY-MIX CONCRETE DRIVER *TEAMSTERS LOCAL 25b*	05/01/2015	$29.18	$7.73	$8.92	$0.00	$45.83
	07/01/2015	$29.18	$7.98	$8.92	$0.00	$46.08
	05/01/2016	$29.33	$7.98	$9.31	$0.00	$46.62
	07/01/2016	$29.33	$8.23	$9.31	$0.00	$46.87
	05/01/2017	$29.48	$8.23	$9.72	$0.00	$47.43
	07/01/2017	$29.48	$8.48	$9.72	$0.00	$47.68
RECLAIMERS *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RESIDENTIAL WOOD FRAME (All Other Work) *CARPENTERS -ZONE 2 (Residential Wood)*	04/01/2011	$24.24	$8.67	$15.51	$0.00	$48.42
RESIDENTIAL WOOD FRAME CARPENTER ** ** The Residential Wood Frame Carpenter classification applies only to the construction of new, wood frame residences that do not exceed four stories including the basement. *CARPENTERS -ZONE 2 (Residential Wood)*	05/01/2011	$24.24	$6.34	$6.23	$0.00	$36.81

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

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

Effective Date - 05/01/2011

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

Notes:

Apprentice to Journeyworker Ratio:1:5

RIDE-ON MOTORIZED BUGGY OPERATOR *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
ROLLER/SPREADER/MULCHING MACHINE *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg) *ROOFERS LOCAL 33*	02/01/2015	$40.11	$10.50	$11.60	$0.00	$62.21
	08/01/2015	$41.01	$10.50	$11.60	$0.00	$63.11
	02/01/2016	$41.91	$10.50	$11.60	$0.00	$64.01

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *ROOFER - Local 33*

Effective Date - 02/01/2015

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

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$20.51	$10.50	$3.38	$0.00	$34.39
2	60	$24.61	$10.50	$11.60	$0.00	$46.71
3	65	$26.66	$10.50	$11.60	$0.00	$48.76
4	75	$30.76	$10.50	$11.60	$0.00	$52.86
5	85	$34.86	$10.50	$11.60	$0.00	$56.96

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

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE *ROOFERS LOCAL 33*	02/01/2015	$40.36	$10.50	$11.60	$0.00	$62.46
	08/01/2015	$41.26	$10.50	$11.60	$0.00	$63.36
	02/01/2016	$42.16	$10.50	$11.60	$0.00	$64.26
For apprentice rates see "Apprentice- ROOFER"						
SHEETMETAL WORKER *SHEETMETAL WORKERS LOCAL 17 - A*	02/01/2015	$43.28	$10.20	$20.54	$2.22	$76.24
	08/01/2015	$44.28	$10.20	$20.54	$2.22	$77.24
	02/01/2016	$45.28	$10.20	$20.54	$2.22	$78.24
	08/01/2016	$46.43	$10.20	$20.54	$2.22	$79.39
	02/01/2017	$47.53	$10.20	$20.54	$2.22	$80.49
	08/01/2017	$48.63	$10.20	$20.54	$2.22	$81.59
	02/01/2018	$49.78	$10.20	$20.54	$2.22	$82.74

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

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

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$17.31	$10.20	$4.58	$0.00	$32.09
2	40	$17.31	$10.20	$4.58	$0.00	$32.09
3	45	$19.48	$10.20	$9.09	$1.16	$39.93
4	45	$19.48	$10.20	$9.09	$1.16	$39.93
5	50	$21.64	$10.20	$9.91	$1.25	$43.00
6	50	$21.64	$10.20	$10.16	$1.26	$43.26
7	60	$25.97	$10.20	$11.55	$1.43	$49.15
8	65	$28.13	$10.20	$12.38	$1.52	$52.23
9	75	$32.46	$10.20	$14.02	$1.70	$58.38
10	85	$36.79	$10.20	$15.16	$1.86	$64.01

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$17.71	$10.20	$4.58	$0.00	$32.49
2	40	$17.71	$10.20	$4.58	$0.00	$32.49
3	45	$19.93	$10.20	$9.09	$1.18	$40.40
4	45	$19.93	$10.20	$9.09	$1.18	$40.40
5	50	$22.14	$10.20	$9.91	$1.27	$43.52
6	50	$22.14	$10.20	$10.16	$1.28	$43.78
7	60	$26.57	$10.20	$11.55	$1.45	$49.77
8	65	$28.78	$10.20	$12.38	$1.54	$52.90
9	75	$33.21	$10.20	$14.02	$1.72	$59.15
10	85	$37.64	$10.20	$15.16	$1.89	$64.89

Notes:

Steps are 6 mos.

Apprentice to Journeyworker Ratio:1:4

SIGN ERECTOR *PAINTERS LOCAL 35 - ZONE 2*	06/01/2013	$25.81	$7.07	$7.05	$0.00	$39.93

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

Apprentice - *SIGN ERECTOR - Local 35 Zone 2*

Effective Date - 06/01/2013

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

Notes:

Steps are 4 mos.

Apprentice to Journeyworker Ratio:1:1

SPECIALIZED EARTH MOVING EQUIP < 35 TONS *TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*	06/01/2015	$33.04	$9.91	$9.33	$0.00	$52.28
	08/01/2015	$33.04	$10.41	$9.33	$0.00	$52.78
	12/01/2015	$33.04	$10.41	$10.08	$0.00	$53.53
	06/01/2016	$33.54	$10.41	$10.08	$0.00	$54.03
	08/01/2016	$33.54	$10.91	$10.08	$0.00	$54.53
	12/01/2016	$33.54	$10.91	$10.89	$0.00	$55.34
SPECIALIZED EARTH MOVING EQUIP > 35 TONS *TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*	06/01/2015	$33.33	$9.91	$9.33	$0.00	$52.57
	08/01/2015	$33.33	$10.41	$9.33	$0.00	$53.07
	12/01/2015	$33.33	$10.41	$10.08	$0.00	$53.82
	06/01/2016	$33.83	$10.41	$10.08	$0.00	$54.32
	08/01/2016	$33.83	$10.91	$10.08	$0.00	$54.82
	12/01/2016	$33.83	$10.91	$10.89	$0.00	$55.63
SPRINKLER FITTER *SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1*	03/01/2015	$54.43	$8.42	$14.90	$0.00	$77.75
	10/01/2015	$55.58	$8.42	$14.90	$0.00	$78.90
	01/01/2016	$55.58	$8.67	$15.05	$0.00	$79.30
	03/01/2016	$56.58	$8.67	$15.05	$0.00	$80.30
	10/01/2016	$57.73	$8.67	$15.05	$0.00	$81.45
	03/01/2017	$58.73	$8.67	$15.05	$0.00	$82.45

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

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

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	$19.05	$8.42	$8.40	$0.00	$35.87
2	40	$21.77	$8.42	$8.40	$0.00	$38.59
3	45	$24.49	$8.42	$8.40	$0.00	$41.31
4	50	$27.22	$8.42	$8.40	$0.00	$44.04
5	55	$29.94	$8.42	$8.40	$0.00	$46.76
6	60	$32.66	$8.42	$8.40	$0.00	$49.48
7	65	$35.38	$8.42	$8.40	$0.00	$52.20
8	70	$38.10	$8.42	$8.40	$0.00	$54.92
9	75	$40.82	$8.42	$8.40	$0.00	$57.64
10	80	$43.54	$8.42	$8.40	$0.00	$60.36

Effective Date - 10/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	$19.45	$8.42	$8.40	$0.00	$36.27
2	40	$22.23	$8.42	$8.40	$0.00	$39.05
3	45	$25.01	$8.42	$8.40	$0.00	$41.83
4	50	$27.79	$8.42	$8.40	$0.00	$44.61
5	55	$30.57	$8.42	$8.40	$0.00	$47.39
6	60	$33.35	$8.42	$8.40	$0.00	$50.17
7	65	$36.13	$8.42	$8.40	$0.00	$52.95
8	70	$38.91	$8.42	$8.40	$0.00	$55.73
9	75	$41.69	$8.42	$8.40	$0.00	$58.51
10	80	$44.46	$8.42	$8.40	$0.00	$61.28

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

Apprentice to Journeyworker Ratio:1:3

STEAM BOILER OPERATOR *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TELECOMMUNICATION TECHNICIAN *ELECTRICIANS LOCAL 103*	03/01/2015	$33.88	$13.00	$13.70	$0.00	$60.58
	09/01/2015	$34.60	$13.00	$13.72	$0.00	$61.32
	03/01/2016	$35.31	$13.00	$13.74	$0.00	$62.05

Apprentice - *TELECOMMUNICATION TECHNICIAN - Local 103*

Effective Date - 03/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$13.55	$13.00	$0.41	$0.00	$26.96
2	40	$13.55	$13.00	$0.41	$0.00	$26.96
3	45	$15.25	$13.00	$10.87	$0.00	$39.12
4	45	$15.25	$13.00	$10.87	$0.00	$39.12
5	50	$16.94	$13.00	$11.11	$0.00	$41.05
6	55	$18.63	$13.00	$11.38	$0.00	$43.01
7	60	$20.33	$13.00	$11.64	$0.00	$44.97
8	65	$22.02	$13.00	$11.89	$0.00	$46.91
9	70	$23.72	$13.00	$12.15	$0.00	$48.87
10	75	$25.41	$13.00	$12.41	$0.00	$50.82

Effective Date - 09/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	$13.84	$13.00	$0.42	$0.00	$27.26
2	40	$13.84	$13.00	$0.42	$0.00	$27.26
3	45	$15.57	$13.00	$10.88	$0.00	$39.45
4	45	$15.57	$13.00	$10.88	$0.00	$39.45
5	50	$17.30	$13.00	$11.14	$0.00	$41.44
6	55	$19.03	$13.00	$11.39	$0.00	$43.42
7	60	$20.76	$13.00	$11.65	$0.00	$45.41
8	65	$22.49	$13.00	$11.90	$0.00	$47.39
9	70	$24.22	$13.00	$12.17	$0.00	$49.39
10	75	$25.95	$13.00	$12.43	$0.00	$51.38

Notes:

Apprentice to Journeyworker Ratio:1:1

TERRAZZO FINISHERS *BRICKLAYERS LOCAL 3 - MARBLE & TILE*	02/01/2015	$47.90	$10.18	$18.50	$0.00	$76.58
	08/01/2015	$48.80	$10.18	$18.57	$0.00	$77.55
	02/01/2016	$49.37	$10.18	$18.57	$0.00	$78.12
	08/01/2016	$50.27	$10.18	$18.65	$0.00	$79.10
	02/01/2017	$50.84	$10.18	$18.65	$0.00	$79.67

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate

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

Effective Date - 02/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$23.95	$10.18	$18.50	$0.00	$52.63
2	60	$28.74	$10.18	$18.50	$0.00	$57.42
3	70	$33.53	$10.18	$18.50	$0.00	$62.21
4	80	$38.32	$10.18	$18.50	$0.00	$67.00
5	90	$43.11	$10.18	$18.50	$0.00	$71.79

Effective Date - 08/01/2015

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	$24.40	$10.18	$18.57	$0.00	$53.15
2	60	$29.28	$10.18	$18.57	$0.00	$58.03
3	70	$34.16	$10.18	$18.57	$0.00	$62.91
4	80	$39.04	$10.18	$18.57	$0.00	$67.79
5	90	$43.92	$10.18	$18.57	$0.00	$72.67

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER *LABORERS - FOUNDATION AND MARINE*	06/01/2015	$36.45	$7.30	$13.40	$0.00	$57.15
	12/01/2015	$37.20	$7.30	$13.40	$0.00	$57.90
	06/01/2016	$37.95	$7.30	$13.40	$0.00	$58.65
	12/01/2016	$38.95	$7.30	$13.40	$0.00	$59.65
For apprentice rates see "Apprentice- LABORER"						
TEST BORING DRILLER HELPER *LABORERS - FOUNDATION AND MARINE*	06/01/2015	$35.17	$7.30	$13.40	$0.00	$55.87
	12/01/2015	$35.92	$7.30	$13.40	$0.00	$56.62
	06/01/2016	$36.67	$7.30	$13.40	$0.00	$57.37
	12/01/2016	$37.67	$7.30	$13.40	$0.00	$58.37
For apprentice rates see "Apprentice- LABORER"						
TEST BORING LABORER *LABORERS - FOUNDATION AND MARINE*	06/01/2015	$35.05	$7.30	$13.40	$0.00	$55.75
	12/01/2015	$35.80	$7.30	$13.40	$0.00	$56.50
	06/01/2016	$36.55	$7.30	$13.40	$0.00	$57.25
	12/01/2016	$37.55	$7.30	$13.40	$0.00	$58.25
For apprentice rates see "Apprentice- LABORER"						
TRACTORS/PORTABLE STEAM GENERATORS *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.42	$10.00	$14.55	$0.00	$66.97
	12/01/2015	$43.66	$10.00	$14.55	$0.00	$68.21
	06/01/2016	$44.41	$10.00	$14.55	$0.00	$68.96
	12/01/2016	$45.64	$10.00	$14.55	$0.00	$70.19
	06/01/2017	$46.63	$10.00	$14.55	$0.00	$71.18
	12/01/2017	$47.62	$10.00	$14.55	$0.00	$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRAILERS FOR EARTH MOVING EQUIPMENT *TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*	06/01/2015	$33.62	$9.91	$9.33	$0.00	$52.86
	08/01/2015	$33.62	$10.41	$9.33	$0.00	$53.36
	12/01/2015	$33.62	$10.41	$10.08	$0.00	$54.11
	06/01/2016	$34.12	$10.41	$10.08	$0.00	$54.61
	08/01/2016	$34.12	$10.91	$10.08	$0.00	$55.11
	12/01/2016	$34.12	$10.91	$10.89	$0.00	$55.92
TUNNEL WORK - COMPRESSED AIR *LABORERS (COMPRESSED AIR)*	06/01/2015	$47.33	$7.30	$13.80	$0.00	$68.43
	12/01/2015	$48.08	$7.30	$13.80	$0.00	$69.18
	06/01/2016	$48.83	$7.30	$13.80	$0.00	$69.93
	12/01/2016	$49.83	$7.30	$13.80	$0.00	$70.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) *LABORERS (COMPRESSED AIR)*	06/01/2015	$49.33	$7.30	$13.80	$0.00	$70.43
	12/01/2015	$50.08	$7.30	$13.80	$0.00	$71.18
	06/01/2016	$50.83	$7.30	$13.80	$0.00	$71.93
	12/01/2016	$51.83	$7.30	$13.80	$0.00	$72.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR *LABORERS (FREE AIR TUNNEL)*	06/01/2015	$39.40	$7.30	$13.80	$0.00	$60.50
	12/01/2015	$40.15	$7.30	$13.80	$0.00	$61.25
	06/01/2016	$40.90	$7.30	$13.80	$0.00	$62.00
	12/01/2016	$41.90	$7.30	$13.80	$0.00	$63.00
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) *LABORERS (FREE AIR TUNNEL)*	06/01/2015	$41.40	$7.30	$13.80	$0.00	$62.50
	12/01/2015	$42.15	$7.30	$13.80	$0.00	$63.25
	06/01/2016	$42.90	$7.30	$13.80	$0.00	$64.00
	12/01/2016	$43.90	$7.30	$13.80	$0.00	$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL *TEAMSTERS JOINT COUNCIL NO. 10 ZONE A*	06/01/2015	$33.04	$9.91	$9.33	$0.00	$52.28
	08/01/2015	$33.04	$10.41	$9.33	$0.00	$52.78
	12/01/2015	$33.04	$10.41	$10.08	$0.00	$53.53
	06/01/2016	$33.54	$10.41	$10.08	$0.00	$54.03
	08/01/2016	$33.54	$10.91	$10.08	$0.00	$54.53
	12/01/2016	$33.54	$10.91	$10.89	$0.00	$55.34
WAGON DRILL OPERATOR *LABORERS - ZONE 1*	06/01/2015	$35.35	$7.30	$13.20	$0.00	$55.85
	12/01/2015	$36.10	$7.30	$13.20	$0.00	$56.60
	06/01/2016	$36.85	$7.30	$13.20	$0.00	$57.35
	12/01/2016	$37.85	$7.30	$13.20	$0.00	$58.35
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR *OPERATING ENGINEERS LOCAL 4*	06/01/2015	$42.83	$10.00	$14.55	$0.00	$67.38
	12/01/2015	$44.08	$10.00	$14.55	$0.00	$68.63
	06/01/2016	$44.83	$10.00	$14.55	$0.00	$69.38
	12/01/2016	$46.08	$10.00	$14.55	$0.00	$70.63
	06/01/2017	$47.08	$10.00	$14.55	$0.00	$71.63
	12/01/2017	$48.08	$10.00	$14.55	$0.00	$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WATER METER INSTALLER *PLUMBERS & GASFITTERS LOCAL 12*	03/01/2015	$50.21	$10.32	$14.89	$0.00	$75.42
	09/01/2015	$51.21	$10.32	$14.89	$0.00	$76.42
	03/01/2016	$52.36	$10.32	$14.89	$0.00	$77.57
	09/01/2016	$53.41	$10.32	$14.89	$0.00	$78.62
	03/01/2017	$54.41	$10.32	$14.89	$0.00	$79.62
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						
Outside Electrical - East						
CABLE TECHNICIAN (Power Zone) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$25.66	$8.70	$4.48	$0.00	$38.84
For apprentice rates see "Apprentice- LINEMAN"						
CABLEMAN (Underground Ducts & Cables) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$36.55	$8.70	$6.58	$0.00	$51.83
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN CDL *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$29.94	$8.70	$6.05	$0.00	$44.69
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$23.52	$8.70	$5.24	$0.00	$37.46
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class A CDL) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$36.35	$8.70	$9.43	$0.00	$54.48
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class B CDL) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$32.08	$8.70	$6.59	$0.00	$47.37
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$23.52	$8.70	$3.72	$0.00	$35.94
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN -Inexperienced (<2000 Hrs.) *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$19.25	$8.70	$2.85	$0.00	$30.80
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	09/01/2013	$42.77	$8.70	$11.78	$0.00	$63.25

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

Effective Date - 09/01/2013

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

Notes:

Apprentice to Journeyworker Ratio:1:2

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TELEDATA CABLE SPLICER *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	01/01/2015	$28.12	$4.25	$3.09	$0.00	$35.46
	01/01/2016	$28.98	$4.25	$3.12	$0.00	$36.35
TELEDATA LINEMAN/EQUIPMENT OPERATOR *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	01/01/2015	$26.49	$4.25	$3.04	$0.00	$33.78
	01/01/2016	$27.31	$4.25	$3.07	$0.00	$34.63
TELEDATA WIREMAN/INSTALLER/TECHNICIAN *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	01/01/2015	$26.49	$4.25	$3.04	$0.00	$33.78
	01/01/2016	$27.31	$4.25	$3.07	$0.00	$34.63
TREE TRIMMER *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	02/01/2015	$18.05	$3.55	$0.00	$0.00	$21.60
	01/31/2016	$18.51	$3.55	$0.00	$0.00	$22.06
This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is not on the ground. This classification does not apply to wholesale tree removal.						
TREE TRIMMER GROUNDMAN *OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104*	02/01/2015	$15.92	$3.55	$0.00	$0.00	$19.47
	01/31/2016	$16.32	$3.55	$0.00	$0.00	$19.87
This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is on the ground. This classification does not apply to wholesale tree removal.						

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)
Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

** Multiple ratios are listed in the comment field.
*** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.
**** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.