CITY OF NEWTON PURCHASING DEPARTMENT

CONTRACT FOR PUBLIC BUILDINGS

PROJECT MANUAL: POLICE HEADQUARTERS HVAC SYSTEM IMPROVEMENTS INVITATION FOR BID #22-33

Pre-Bid: January 13, 2022 at 9:00 a.m.

Filed Sub-Bid Opening: January 27, 2022 at 10:00 a.m.

General Bid Opening Date: February 3, 2022 at 10:00 a.m.

JANUARY 2022 Ruthanne Fuller, Mayor

CITY OF NEWTON

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POLICE HEADQUARTERS HVAC SYSTEM IMPROVEMENTS

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CITY OF NEWTON

PURCHASING DEPARTMENT

INVITATION FOR BID #22-33

The City of Newton invites sealed bids in accordance with M.G.L. c.149 from Contractors for

POLICE HEADQUARTERS HVAC SYSTEM IMPROVEMENTS

Pre Bid will be held at Police Headquarters, 1321

Washington Street at: 9:00a.m., Thursday, January 13, 2022 (Not Mandatory)

(Pre-bid attendees must observe COVID precuations, i.e., masking, social distancing and providing own writing instruments.)

Filed Sub Bids will be opened at: 10:00 a.m., Thursday, January 27, 2022* Bids will be opened at: 10:00 a.m., Thursday, February 3, 2022*

at the Purchasing Department, Room 108, Newton City Hall, 1000 Commonwealth Ave., Newton, MA 02459. Bids will not be accepted nor may submitted bids be corrected, modified or withdrawn after the dealine for bids. Following the deadline for bids, all bids received within the time specified will be publicly opened and read aloud.

- * To promote the health and safety of City workers and the public, Newton City Hall is still observing COVID restrictions. The City has adopted the following procedures that may affect your participation in this bid:
 - Bidders who wish to attend the Bid Opening can do so by telephone conference call. To attend, call 617.454.5555. When
 prompted, enter Participant Passcode 1220#. There will be no in person meetings.
 - 2. Bids not received at Room 108 by mail or courier may be dropped off in a locked drop box at the top of the stairs to left of the main door to City Hall. The box will be checked at the scheduled submission deadline.
 - Bids results will be scanned and posted as soon as practicable after the opening. Copies of bids will be available on written request.

Contract Documents will be available on line at the City's website: www.newtonma.gov/bids after: 10:00 a.m., January 6, 2022. Bidders are responsible for downloading the specifications from the City's web site at www.newtonma.gov/bids. Bidders are requested to email the Purchasing Department (www.newtonma.gov/bids) their Company Name, Address, Email address, Phone & Facsimile number and what bid # (i.e. #22-33) they have downloaded.

During the bidding period, the City of Newton shall make Police Headquarters available, between the hours of 8:00 a.m. - 3:00 p.m., all facilities for all bidders to visit the facility with designated City personnel. The City strongly encourages each bidder to visit the site; bidders will be responsible for all work under this Contract whether they visit the sites or not. Bidders may contact Art Cabral / Public Buildings to arrange viewing (617) 594-2457.

The project requires bids from **General Contractors** and **Filed Sub Bid Contractors**. Bidders are requested to email the Purchasing Department (<u>purchasing@newtonma.gov</u>) their Company Name, Address, Email address, Phone & Facsimile number and what bid # (i.e. #22-33) they have downloaded.

All General Bids must be accompanied by a copy of a "Certificate of Eligibility" (DCAMM Form CQ-7) issued by the Department of Capital Asset Management and Maintenance (DCAMM) and a "Contractor Update Statement" (DCAMM Form CQ-3). The category of work for which the Bidder must be certified: **HVAC**

All Sub Trade Bids must be accompanied by a copy of a DCAMM "Certificate of Eligibility" and Contractor "Update Statement." The category of work for which the Sub Trade Bidder(s) must be certified in is: **Electrical**

The term of this contract shall extend for eight months from the date of contract execution.

All General ad Filers Sub Bids must be accompanied by a bid deposit in an amount that is not less than five percent (5%) of the value of the bid, including all add alternates. Bid deposits, payable to the City of Newton, shall be either in the form of a bid bond, or cash, or a certified check on, or a treasurer's or cashier's check issued by, a responsible bank or trust company.

Bidders are reminded that the bid deposit covers the City for damages when a bidder withdraws its bid after the bid submisssion date. Be advised that to the extent permitted by the law the City will retain all bid deposits for withdrawn bids.

All bids shall be submitted as one ORIGINAL and one COPY.

All bids are subject to the provisions of M.G.L. Chapter 149, Section 44 A-J. **Wages are subject** to minimum wage rates determined by the Massachusetts Department of Labor Standards pursuant to M.G.L. Chapter 149, Sec. 26 to 27H. The schedule of wage rates applicable to this contract is included in the bidding documents. In addition, the prevailing wage schedule will be updated annually for all public construction projects lasting longer than one (1) year or at each renewal, as applicable. You will be required to pay the rates set out in any updated prevailing wage schedule. Increases in prevailing wage schedules will not be the basis for change order requests. The successful bidder will be required to provide a Certificate of Insurance demonstrating current coverage of the type and amounts set forth in the Project Manual.

In the event that the winning bid is \$150,000 or less, the successful bidder will be required to furnish a **Labor and Materials Payment Bond in the amount of 50%** of the contract total. In the event that the winning bid is over \$150,000, the successful bidder will be required to furnish a **Labor and Materials Payment Bond** and a **Performance Bond**, each in the amount of \$100% of the contract total.

The costs of any bond and any insurance required in this Invitation For Bid are the responsibility of the bidder; such costs will not be reimbursed by City and should be included in your bid.

All City of Newton bids are available on the City's web site, www.newtonma.gov/bids Invitation for Bid. It is the sole responsibility of the contractor downloading these bids to ensure they have received any and all addenda prior to the bid opening. Addenda's will be available online within the original bid document as well as a separate file. If you download bids from the internet site and would like to make it known that your company has done so, you must fax the Purchasing Departmentt (617) 796-1227 or email purchasing@newtonma.gov with your NAME, ADDRESS, PHONE, FAX AND INVITATION FOR BID NUMBER #22-33.

The City will reject any and all bids in accordance with the above referenced General Laws. In addition, the City reserves the right to waive minor informalities in any or all bids, or to reject any or all bids (in whole or in part) if it be in the public interest to do so.

In the event that any person wishes to attend a bid opening or pre-bid meeting, accessible and reasonable accommodations will be provided to persons requiring assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA Coordinator, Jini Fairley, at least two business days in advance of the meeting: **jfairley@newtonma.gov** or (617) 796-1253. For Telecommunications Relay Service, please dial 711.

CITY OF NEWTON

Nicholas Read Chief Procurement Officer January 6, 2022

CITY OF NEWTON DEPARTMENT OF PURCHASING INSTRUCTIONS TO BIDDERS

ARTICLE 1 - BIDDER'S REPRESENTATION

- 1.1 Each General Bidder (hereinafter called the "Bidder") by making a bid (hereinafter called "bid") represents that:
 - 1. The Bidder has read and understands the Bidding Documents, Contract Forms, General Conditions, Conditions of the Contract, General Requirements and Project Specifications (collectively, referred to as the "Contract Documents") and the bid is made in accordance therewith.
 - 2. The Bidder acknowledges that it has been offered the opportunity to visit the work site at 1321 Washington Street, Newton, and that it is familiar with the local conditions under which the work has to be performed.
- 1.2 Failure to so examine the Contract Documents or visit the work site will not relieve any Bidder from any obligation under the bid as submitted.

ARTICLE 2 - REQUEST FOR INTERPRETATION

- 2.1 Bidders shall promptly notify the City of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents, the sites, or local conditions.
- 2.2 Bidders requiring clarification or interpretation of the Contract Documents shall make a written request to the *Chief Procurement Officer*, at purchasing@newtonma.gov or via facsimile (617) 796-1227. The City will only answer such requests with respect to both Filed Sub Bids and General Bids only if received by **Tuesday, January 18, 2022 at 12:00.** In the event that the bid opening date is changed, the deadline for informational requests may also change as provided in an addendum issued by the City.
- 2.3 Interpretation, correction, or change in the Contract Documents will be made by addendum which will become part of the Contract Documents. The City will not be held accountable for any oral communication.
- Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Receipt of all addenda issued must be acknowledged in the Bid Form. YOUR FAILURE TO ACKNOWLEDGE ALL ADDENDA MAY RESULT IN YOUR BID BEING REJECTED AS NON-RESPONSIVE.
- 2.5 Copies of addenda will be made available for inspection at the location listed in the Invitation for Bids where Contract Documents are on file, in addition to being available online at www.newtonma.gov/bids.
- 2.6 Bidders or proposers contacting ANY CITY EMPLOYEE regarding an Invitation for Bid (IFB) or a Request for Proposal (RFP), outside of the Purchasing Department, once an IFB or RFP has been released, may be disqualified from the procurement process.
- Bidders downloading information off the internet web site are solely responsible for obtaining any addenda prior to the bid opening. If the bidder makes itself known to the Purchasing Department, at purchasing@newtonma.gov or via facsimile (617) 796-1227, it shall be placed on the bidder's list. Bidders must provide the Purchasing Department with their company's name, street address, city, state, zip, phone, fax, email address and INVITATION FOR BID #22-33.

ARTICLE 3 - MBE PARTICIPATION

- 3.1 Notice is hereby given that the Mayor's Affirmative Action Plan for the City of Newton in effect at the time of this solicitation is applicable to all construction contracts in excess of \$10,000.00.
- 3.2 Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan and the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program in effect at the time of this solicitation are applicable to all City contracts for goods and services in excess of \$50,000.00.
- 3.3 Copies of the Plans and Program referred to in Sections 3.1 and 3.2 are available at: www.newtonma.gov/purchasing.

ARTICLE 4 - PREPARATION AND SUBMISSION OF BIDS

- 4.1 Bids shall be submitted on the "General Bid Form #22-33" or "Form For Sub Bid #22-33," attached.
- 4.2 All entries on a Bid Form shall be made by typewriter or in ink.
- 4.3 Where so indicated on a Bid Form, sums shall be expressed in both words and figures. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.
- 4.4 Bid Deposits shall be submitted in the amount specified in the Invitation for Bids. They shall be made payable to the City and shall be either in the form of cash, certified check, treasurer's or cashier's check issued by a responsible bank or trust company, or a bid bond issued by a surety licensed to do business in the Commonwealth of Massachusetts; and shall be conditioned upon the faithful performance by the principal of the agreements contained in the bid. Bidders are reminded that the bid deposit covers the City for damages when a bidder withdraws its bid after the bid submisssion date. **Be** advised that to the extent permitted by the law the City will retain all bid deposits for withdrawn bids.

Bid deposits of the three (3) lowest responsible and eligible Bidders shall be retained until the execution and delivery of the City-Contractor agreement.

- 4.5 The Bid, including the bid deposit shall be enclosed in a sealed envelope with the following plainly marked on the outside:
 - * FILED SUB BID or GENERAL BID FOR: #22-33
 - * NAME OF PROJECT: Police Headquarters HVAC System Improvements
 - * BIDDER'S NAME, BUSINESS ADDRESS, AND PHONE NUMBER
- 4.6 Date and time for receipt of bids is set forth in the IFB.
- 4.7 Timely delivery of a bid at the location designated shall be the full responsibility of the Bidder. In the event that Newton City Hall is closed on the date or at the time that bids are due, the date and time for receipt of bids shall be on the next business day following that the Newton City Hall and the Purchasing Department are open.
- 4.8 Bids shall be submitted with one **original** and one **copy.**
- 4.9 Massachusetts law requires all employees who work on Massachusetts public works construction sites must have no Less than 10 hours of OSHA-approved safety and health training. See M.G.L. c.30, §39M(c), M.G.L. c.30, §39S(a)(1), M.G.L. c.149, §44E(2) & M.G.L. c.149, §44F(2).
 - 1. This requirement will apply to any general bid or sub bid submitted.
 - 2. This law directs the Massachusetts Attorney General to restrain the award of construction contracts to any contractor who is in violation to this requirement and to restrain the performance of these contracts by non-complying contractors.
 - 3. The contractor and all subcontractors on this project must certify on the Bid Form compliance with the applicable requirement. Non-compliance with this law will disqualify the bidder.

ARTICLE 5 - ALTERNATES

- 5.1 Each Bidder shall acknowledge alternates (if any) in Section C on the Bid Form.
- 5.2 In the event an alternate does not involve a change in the amount of the base bid, the Bidder shall so indicated by writing "No Change", or "N/C" or "0" in the space provided for that alternate.
- 5.3 Bidders shall enter on the Bid Form a single amount for each alternate which shall consist of the amount for work performed by the Contractor.
- 5.4 The low Bidder will be determined on the basis of the sum of the base bid and the accepted alternates.

ARTICLE 6 - WITHDRAWAL OF BIDS

- Any bid may be withdrawn prior to the time designated for receipt of bids on written or electronic request. Electronic withdrawal of bids must be confirmed over the Bidder's signature by written notice postmarked on or before the date and time set for receipt of bids.
- 6.2 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.
- 6.3 No bids may be withdrawn within sixty (60) days, Saturdays, Sundays and legal holidays excluded, after the opening of the

ARTICLE 7 - CONTRACT AWARD

Sub Bids shall be submitted on Bid Form For Sub-Bid #22-33 at pp. 20-22 below. With respect the Sub-Bid for Electrical, the City has included three (3) Add Alternates¹, which shall also be reflected in the General Bid. General Bidders may, if properly certified in a sub trade, self perform that subtrade. Prior to the the opening of the general bids, the City shall receive and screen all filed sub-bids and provide a tabulation sheets to all contractors that have notified the City that they intend to submit a general bid in order that they may select sub-bidders for inclusion in their bids. The City of Newton will award one (1) the contract to the responsible and eligible General Bidder submitting the lowest Total Base Bid Price or lowest Base Bid plus any Alternate Bids (if any) for labor and materials as set forth in Bid Form For General Bid #22-33 (pp. 10-12 below). A contract will be awarded within sixty (60) days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.

- 7.1 The City reserves the right to waive minor informalities in or to reject any or all Bids if it be in the public interest to do so.
- 7.2 The City reserves the right to reject any bidder who has failed to pay any local taxes, fees, assessments, betterments, or any other municipal charge, unless the bidder has a pending abatement application or has entered into a payment agreement with the collector-treasurer.
- 7.3 As used herein, the term "lowest responsible and eligible Bidder" shall mean the Bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who has met all the requirements of the invitation for bids; (3) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (4) who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder.
- 7.4 Subsequent to the award and within five (5) days, Saturday, Sundays and legal holidays excluded, after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the City a contract in the form included in the Contract Documents in such number of counterparts as the City may require.
- 7.5 In the event that the City receives low bids in identical amount from two or more responsive and responsible Bidders, the City shall select the successful Bidder by a blind selection process chosen by the City such as flipping a coin or drawing names from a hat. The low Bidders who are under consideration will be invited to attend and observe the selection process.

ARTICLE 8 - TAXES

8.1 The Bidder shall not include in this bid any tax imposed upon the sale or rental of tangible personal property in this Commonwealth, such as any and all building materials, supplies, services and equipment required to complete the work.

8.2 The City is exempt from payment of the Massachusetts Sales Tax, and the Bidder shall not include any sales tax on its bid. The City's exemption Number is E-046-001-404.

¹ Alternates are options for which the bidders must submit separate prices that the awarding authority may choose to include in a bid package. The awarding authority reserves the right to select or reject the optional work, based on the prices received. Alternates are permitted only if they are ranked numerically in order of priority. When evaluating the bids, the City may select a specific alternate only after all of the higher ranking alternates have been selected. M.G.L. c. 149, § 44G(B).

ARTICLE 9 - PROPRIETARY SPECIFICATIONS

- 9.1 The City has used a proprietary specification to describe the supply listed in the specifications. Such specifications are permitted under M.G.L. c. 30, §39M(b), provided that the City state in writing that use of the proprietary specification is in its best interest and that it will accept an "equal" of the item specified. An item is considered equal if (i) it is at least equal in quality, durability, appearance, strength, and design; (ii) will perform the intended function at least equally; and (iii) conforms substantially, even with deviations, to the detailed requirements contained in the specifications. Bidders wishing to provide an equal item should do so with their bids. The City shall have the sole right to determine whether or not said item is equal.
- 9.2 The required determination and justification have been duly prepared, and a copy may be requested in accordance with the Massachusetts Public Records Law, M.G.L. c. 66, §10.

END OF SECTION

CITY OF NEWTON

PURCHASING DEPARTMENT

BID FORM FOR GENERAL BID #22-33

POLICE HEADQUARTERS HVAC IMPROVEMENTS PROJECT

TO THE AWARDING AUTHORITY:

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

POLICE HEADQUARTERS HVAC SYSTEM IMPROVEMENTS

in Newton, Massachusetts in accordance with the accompanying plans and specifications for the contract price specified below, subject to additions and deductions according to the terms of the specifications.

В.	This bid includes addenda n	number(s),,,	,	
C.	The TOTAL BASE BID PR	RICE* is: \$		
	TOTAL BASE BID PRICE in	n words		
	* Bidders should include any inc	cremental costs associated with com	pliance in their TOTA	L BID PRICE.
	(O&P) for its work and (ii) a fi allowed a ten percent (10%) m	ive percent (5%) mark up for O&	P on sub-contractors or both the General ((10%) mark up for Overhead and Profit 'work. The sub-contractors will be Contractor and sub-contractors, any
	COMPANY:			<u>.</u>
	The sub-division of the TOTAL	L BASE BID PRICE is as follows	S:	
	Item 1. The work of the Ge	eneral Contractor, being all work of	other than that covere	d by Item 2
	Total of Item 1: \$			
	Item 2. Sub-bids as follows	s:		
	Sub-Trade	Name of Sub-bidder	Amount	Bond Required ? (Yes or No)
	Electrical Work		\$	
	Total of Item 2: \$			
	TOTAL BASE BID PRIC	EE (Sum of Item 1 + Item 2):* \$		
		(TOTAL BASE BID PRICE in w	ords)	_

ADD: \$
Item 4. ALTERNATE #2 – Indoor Firing Range Ventilation Upgrade.
ADD: \$
Item 5. ALTERNATE #3 – Sallyport Ventilation Upgrades.
ADD: \$
COMPANY:
Prompt Payment Discounts. Bidders are encouraged to offer discounts in exchange for an expedited payment. Payments may be issued earlier than the general goal of within 30 days of receipt of the invoice only when in exchange for discounted prices. Discounts will not be considered in determining the lowest responsible bidder.
Prompt Payment Discount%Days
Prompt Payment Discount
The undersigned has completed and submits herewith the following documents:
☐ DCAM Certificate of Eligibilty, Form CQ7 (Supplied by Bidder)
□ DCAM Update Statement, Form CQ-3 (Supplied by Bidder)
☐ Itemized Bid Sheet, 3 page
☐ Bidder's Qualifications and References Form, 2 pages
☐ Certificate of Non-Collusion, 1 page
☐ Certificate of Tax Compliance, 1 page
☐ Certificate of Foreign Corporation, 1 page
☐ Debarment Letter, 1 page
☐ IRS W-9 Form, 1 page
☐ A five percent (5%) bid deposit/bid guarantee.
The undersigned agrees that, if s/he is selected as general contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this bid and furnish a labor and materials or payment bond, each of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority and each in the sum of the contract price the premiums for which are to be paid by the general contractor and are included in the contract price.

d or to be employed on the work and that s/he will comply fully with all laws and regulations applicable to awards made subject to section forty-four A of M.G.L. Chapter 149.

The undersigned agrees to pay the premiums for the performance and payment bonds furnished as requested herein and that all of the cost of all such premiums is included in the amount set forth in the line items of this bid.

The undersigned certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (2) 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 ("OSHA") that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each

employee; and (3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States OSHA that is at least 10 hours in duration. The undersigned understands that any employee found on a worksite subject to this section without documentation of successful completion of a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration shall be subject to immediate removal.

The undersigned further certifies that s/he intends to comply with the City of Newton Minority/Women Business Enterprise Plan, dated December 1999 to further expand business opportunities for minority firms.

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.

ate	
	(Name of General Bidder)
	BY:
	(Printed Name and Title of Signatory)
	(Business Address)
	(City, State Zip)
	(Telephone & FAX)
	(E mail addrass)

NOTE: If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; if an individual, give residential address if different from business address; and, if operating as a d/b/a give full legal identity. Attach additional pages as necessary.

END OF SECTION

CITY OF NEWTON

GENERAL BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the City of Newton for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

WHEN ORGANIZED:	
S YOUR BUSINESS A MBE?YESNO WBE?YESNO or MWBE?YES LIST ALL CONTRACTS CURRENTLY ON HAND, SHOWING CONTRACT AMOUNT AND ANTICIPA DATE OFCOMPLETION: HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU? YESNO F YES, WHERE AND WHY? HAVE YOU EVER DEFAULTED ON A CONTRACT?YESNO F YES, PROVIDE DETAILS.	
LIST ALL CONTRACTS CURRENTLY ON HAND, SHOWING CONTRACT AMOUNT AND ANTICIPAL DATE OF COMPLETION: HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU? YES NO F YES, WHERE AND WHY? HAVE YOU EVER DEFAULTED ON A CONTRACT? YES NO F YES, PROVIDE DETAILS.	
DATE OFCOMPLETION: HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU? YES NO F YES, WHERE AND WHY? HAVE YOU EVER DEFAULTED ON A CONTRACT? YES NO F YES, PROVIDE DETAILS.	YES
YESNO F YES, WHERE AND WHY? HAVE YOU EVER DEFAULTED ON A CONTRACT?YESNO F YES, PROVIDE DETAILS.	CIPATEI -
YESNO F YES, WHERE AND WHY? HAVE YOU EVER DEFAULTED ON A CONTRACT?YESNO F YES, PROVIDE DETAILS.	- - -
HAVE YOU EVER DEFAULTED ON A CONTRACT? YES NO F YES, PROVIDE DETAILS.	
F YES, PROVIDE DETAILS.	_
LIST YOUR VEHICLES/EQUIPMENT AVAILABLE FOR THIS CONTRACT:	_
	_
	- - -
	- -
N THE SPACES FOLLOWING, PROVIDE INFORMATION REGARDING CONTRACTS COMPLETED	- - TED BY
FIRM SIMILAR IN NATURE TO THE PROJECT BEING BID. A MINIMUM OF FOUR (4) CONTRACTS BE LISTED. PUBLICLY BID CONTRACTS ARE PREFERRED, BUT NOT MANDATORY.	
PROJECT NAME:	_
OWNER:CITY/STATE:	_

DOLLAR AMOUNT: \$			DATE COMPLETED:	
PUBLICLY BID?	_YES	NO		
TYPE OF WORK?:				<u> </u>
CONTACT PERSON: _			TELEPHONE #:)	
CONTACT PERSON'S	RELATION TO	PROJECT?: _		
		(i	i.e., contract manager, purchasing agent, etc.)	
				_
PROJECT NAME:				_
OWNER:				
CITY/STATE:				_
DOLLAR AMOUNT: \$			DATE COMPLETED:	
TYPE OF WORK?:				
			TELEPHONE #: ()	
CONTACT PERSON'S	RELATION TO	PROJECT?: _		
		(i	i.e., contract manager, purchasing agent, etc.)	
DDO IECT NAME				_
OWNER:				_
CITY/STATE:			DATE COMPLETED	_
			DATE COMPLETED:	-
PUBLICLY BID?				
TYPE OF WORK?:			TEL EDITORE # (
			TELEPHONE #: ()	
CONTACT PERSON'S	RELATION TO			
		(1	i.e., contract manager, purchasing agent, etc.)	_
PROJECT NAME:				_
				_
			DATE COMPLETED:	
PUBLICLY BID?	_YES	NO		
TYPE OF WORK?:				
CONTACT PERSON: _				
CONTACT PERSON'S	RELATION TO	PROJECT?: _		
			i.e., contract manager, purchasing agent, etc.)	
The undersigned certifies	s that the informa	ation contained	d herein is complete and accurate and hereby author	orizes and
	n, or corporation	to furnish any	information requested by the City of Newton in v	
DATE:	_BIDDER:			
SIGNATURE:				
PRINTED NAME:			TITLE:	-

END OF SECTION

10.

CERTIFICATE OF NON-COLLUSION

(Signature of individual)	
Name of Business	

CERTIFICATION OF TAX COMPLIANCE

Pursuant to M.G.L. c.62C, §49A and requirements of the City, the undersigned acting on behalf of the Contractor certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth relating to taxes including payment of all local taxes, fees, assessments, betterments and any other local or municipal charges (unless the Contractor has a pending abatement application or has entered into a payment agreement with the entity to which such charges were owed), reporting of employees and contractors, and withholding and remitting child support.*

Signature of Individual (Mandatory)	* Contractor's Social Security Number (Voluntary) or Federal Identification Number
Print Name:	Date:
OR	
Company Name	
(Corporation, Partnership, LLC, etc.)	
By:**Corporate Officer (Mandatory)	
Print Name:	
Date:	

^{*} The provision in this Certification relating to child support applies only when the Contractor is an individual.

^{**} Approval of a contract or other agreement will not be granted until the City receives a signed copy of this Certification.

^{***} Your social security number may be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended.

CERTIFICATE OF FOREIGN CORPORATION

The undersigned hereby certifies that it has been duly established, organized, or chartered as a corporation under the laws of:			
(Jurisdiction)			
The undersigned further certifies that it has complied with the requirements of M	.G.L. c. 30, §39L (if applicable) and with		
the requirements of M.G.L. c. 156D, §15.03 relative to the registration and operat	ion of foreign corporations within the		
Commonwealth of Massachusetts.			
Name of person signing proposal			
Signature of person signing proposal			
Name of Business (Please Print or Type)			
Affix Corporate Seal here			

City of Newton



Purchasing Department

Nicholas Read & Chief Procurement Officer

1000 Commonwealth Avenue
Newton Centre, MA 02459-1449
purchasing@newtonma.gov

Telephone (617) 796-1220 Fax: (617) 796-1227 TDD/TTY (617) 796-1089

purchas	sing@newtoiima.go	V			
Mayor Ruthanne Fuller					
Date					
Vendor					
Re: Debarment Letter for Invitation For Bid #22-33	3				
As a potential vendor on the above contract, the City indicating that you are in compliance with the below I completing and signing this form.					
Federal Executive Order (E.O.) 12549 "Debarmen individual awards, using federal funds, and all sub not debarred, suspended, proposed for debarment department or agency from doing business with the	-recipients certif , declared ineligi	y that the ble, or vol	organizatio	n and its pr	incipals are
I hereby certify under pains and penalties of perjury that ne presently debarred, suspended, proposed for debarment, detransaction by any federal department or agency.					
					(Name)
					(Name) _ (Company)
					(Address)
					(Address)
	PHONE		FAX _		
	EMAIL				
					Signature
					Date
If you have questions place and Michael D. 1	Chi of Duc	4 Off.	+ (C17) 70C 1	220	
If you have questions, please contact Nicholas Read,	Ciliei Procuremen	a Officer a	ı (017) 790-1	.220.	

Form (Rev. October 2007) Department of the Treasury

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

	Name (as shown on your income tax return)						
6 2							
on page	Business name, if different from above						
Print or type Instructions	Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership ☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ►						
	Address (number, street, and apt. or suite no.)	Requester's name and ac	Idress (optional)				
Specific	City, state, and ZIP code						
See	List account number(s) here (optional)						
Part	Taxpayer Identification Number (TIN)						
backu	your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to p withholding. For individuals, this is your social security number (SSN). However, for a resi sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entitie	dent	ity number				
your employer identification number (EIN). If you do not have a number, see How to get a TIN on page 3.							
	If the account is in more than one name, see the chart on page 4 for guidelines on whose or to enter.	Employer ide	entification number				
Part	II Certification	***	- -				

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- 3. I am a U.S. citizen or other U.S. person (defined below)

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here	Signature of U.S. person ▶	Date ▶	Name

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301 7701-7)

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

• The U.S. owner of a disregarded entity and not the entity,

Cat. No. 10231X Form **W-9** (Rev. 10-2007)

CITY OF NEWTON PURCHASING DEPARTMENT BID FORM FOR SUB-BID* Bid #22-33

To all Filed Sub Bidders:

((i) BASE BID: \$			
	(ii) ALTERNATE #1 BID:**	Add: \$		
((iii) ALTERNATE #2 BID:***	Add: \$		
((iiv) ALTERNATE #3 BID:***			
* Bidd	ders should include any incremental	costs associated with comp	ance in their TOTAL BID	PRICE.
**Al	Iternate #1 – DDC Head End Wo	ork.		
***A	Alternate #2 – Indoor Firing Ran	ga Vantilatian Ungrada		
	memate #2 maoor rams ram	ge venthation Opgrade.		
On an	*Alternate #3 – Sallyport Ventila ny change order, the General Con P) for its work and (ii) a five perce	tion Upgrades. tractor will be allowed on nt (5%) mark up for O&P	n sub-contractors' work.	The sub-contractors will be
On an (O&P allowe	Alternate #3 – Sallyport Ventila By change order, the General Conc P) for its work and (ii) a five perce ed a ten percent (10%) mark up for ase in the cost of a bond will be ac	tion Upgrades. tractor will be allowed on on (5%) mark up for O&P or O&P for their work. For thed to the change order as	n sub-contractors' work. both the General Contrac	The sub-contractors will be
On an (O&P allowe increa	Alternate #3 – Sallyport Ventila my change order, the General Con P) for its work and (ii) a five perce ed a ten percent (10%) mark up for ase in the cost of a bond will be ac- mis sub-bid includes addenda numl	tion Upgrades. tractor will be allowed on on (5%) mark up for O&P or O&P for their work. For thed to the change order as	n sub-contractors' work. both the General Contrac	The sub-contractors will be
On an (O&P allowe increa	Alternate #3 – Sallyport Ventila By change order, the General Conc P) for its work and (ii) a five perce ed a ten percent (10%) mark up for ase in the cost of a bond will be ac	tion Upgrades. tractor will be allowed on nt (5%) mark up for O&P or O&P for their work. For dded to the change order and bered	n sub-contractors' work. both the General Contrac	The sub-contractors will be

D. The undersigned agrees that, if he is selected as a sub-bidder, he will, within 5 days, Saturdays, Sundays and legal

therefor, or if prequalification is required pursuant to section 44D 3/4,

holidays excluded, after presentation of a subcontract by the general bidder selected as the general contractor, execute with such general bidder a subcontract in accordance with the terms of this sub-bid, and contingent upon the execution of the general contract, and, if requested so to do in the general bid by the general bidder, who shall pay the premiums

furnish a performance and payment bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority, in the full sum of the subcontract price.

E.	The names of all persons, firms and corporations furnishing to the undersigned labor or labor and materials for the class or classes or part thereof of work for which the provisions of the section of the specifications for this sub-trade require a listing in this paragraph, including the undersigned if customarily furnished by persons on his own payroll and in the absence of a contrary provision in the specifications, the name of each such class of work or part thereto and the bid price for such class of work or part thereof are:
	Name Class of Work Bid Price
	[Do not give bid price for any class or part thereof furnished by undersigned.]
F.	The undersigned agrees that the above list of bids to the undersigned represents bona fide bids based on the hereinbefore described plans, specifications and addenda and that, if the undersigned is awarded the contract, they will be used for the work indicated at the amounts stated, if satisfactory to the awarding authority.
G.	The undersigned further agrees to be bound to the general contractor by the terms of the hereinbefore described plans, specifications, including all general conditions stated therein, and addenda, and to assume toward him all the obligations and responsibilities that he, by those documents, assumes toward the owner.
H.	The undersigned offers the following information as evidence of his qualifications to perform the work as bid upon according to all the requirements of the plans and specifications: —
	1. Have been in business under present business name years.
	2. Ever failed to complete any work awarded?
	3. List one or more recent buildings with names of the general contractor and architect on which you served as a sub-contractor for work of similar character as required for the above-named building.
	Building Architect General Contractor Amount of Contract
	(a)
	(b)
	(c)
	4. Bank reference
I.	The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that he will comply fully with all laws and regulations applicable to awards of subcontracts subject to section forty-four F.
	The undersigned further certifies under penalties of perjury that this sub-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 Sub Bidder)
	BY:
	(Signature)
	(Printed Name and Title of Signatory)
	(Business Address)
	(City, State Zip)
	(City, State Zip)
	E-mail address
	(Telephone) (FAX)

CITY OF NEWTON

SUB-BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the City for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

INCORPORATED!_	1E3	NO DA	IE AND SIA	IE OF IN	CORPORATION:	
IS YOUR BUSINESS	S A MBE ?	_YES	NO WBE ?	YES	NO or MWBE ?	YES
LIST ALL CONTRAC		TLY ON HAN	ID, SHOWING	G CONTRA	ACT AMOUNT AND A	ANTICIP
HAVE YOU EVER F YES		MPLETE A C	CONTRACT A	WARDED	TO YOU?	
IF YES, WHERE AN	D WHY?					
HAVE YOU EVER D IF YES, PROVIDE D		N A CONTRA	ACT?	YES	NO	
LIST YOUR VEHICI	LES/EQUIPME	NT AVAILAI	BLE FOR THI	S CONTRA	ACT:	
	NATURE TO TH	HE PROJECT	BEING BID.	A MINIM	G CONTRACTS COM UM OF FOUR (4) COI OT MANDATORY.	
PROJECT NAME:						

DOLLAR AMOUNT: \$			DATE COMPLETED:
PUBLICLY BID?			
TYPE OF WORK?:			
CONTACT PERSON: _			TELEPHONE #:)
CONTACT PERSON'S I	RELATION TO PI	ROJECT?:	
		(i.e	., contract manager, purchasing agent, etc.)
PROJECT NAME:			
CITY/STATE:			
			DATE COMPLETED:
PUBLICLY BID?			
TYPE OF WORK?:			
CONTACT PERSON: _			TELEPHONE #: ()
			., contract manager, purchasing agent, etc.)
PROJECT NAME:			
CITY/STATE:			
DOLLAR AMOUNT: \$			DATE COMPLETED:
PUBLICLY BID?			
CONTACT PERSON:			TELEPHONE #: ()
CONTACT PERSON'S I	RELATION TO PI	ROJECT?:	
		(i.e	., contract manager, purchasing agent, etc.)
OWNER:			
CITY/STATE:			
DOLLAR AMOUNT: \$			DATE COMPLETED:
PUBLICLY BID?	_YES	NO	
TYPE OF WORK?:			
CONTACT PERSON: _			TELEPHONE #:()
CONTACT PERSON'S I	RELATION TO PI		
		(i.e	., contract manager, purchasing agent, etc.)
	, or corporation to	furnish any in	nerein is complete and accurate and hereby authorizes and aformation requested by the City in verification of the recital experience.
DATE:	BIDDER:		
SIGNATURE:			
PRINTED NAME:		_	TITLE:

END OF SECTION

10.

CERTIFICATE OF NON-COLLUSION

submitted in good faith and without collusion	perjury that this bid or proposal has been made and submitted n or fraud with any other person. As used in this certification, tip, corporation, union, committee club, or other organization,	the word "person" shall
	(Signature of individual)	
	Name of Business	

CERTIFICATION OF TAX COMPLIANCE

Pursuant to MG c. 62C, § 49A and requirements of the City of Newton, the undersigned acting on behalf of the Contractor certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth relating to taxes including payment of all local taxes, fees, assessments, betterments and any other local or municipal charges (unless the Contractor has a pending abatement application or has entered into a payment agreement with the entity to which such charges were owed), reporting of employees and contractors, and withholding and remitting child support.*

Signature of Individual or Corporate Contractor (Mandatory)	* Contractor's Social Security Number (Voluntary) or Federal Identification Number
Print Name:	
By: Corporate Officer	Date:
(Mandatory, if applicable) Print Name:	

^{*} The provision in this Certification relating to child support applies only when the Contractor is an individual.

^{**} Approval of a contract or other agreement will not be granted until the City receives a signed copy of this Certification.

^{***} Your social security number may be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended.

CERTIFICATE OF FOREIGN CORPORATION

The undersigned hereby certifies that it has been duly established, organized, or chartered as a corporation under the laws of:		
(Jurisdiction)		
The undersigned further certifies that it has complied with the requirements	of M.G.L. c. 30, §	39L (if applicable) and with
the requirements of M.G.L. c. 156D, §15.03 relative to the registration and op	peration of foreign	corporations within the
Commonwealth of Massachusetts.		
Name of person signing proposal		
Signature of person signing proposal		
Name of Business (Please Print or Type)		
Affix Corporate Seal here		

City of Newton



Purchasing Department

Nicholas Read *⊕ Chief Procurement Officer*1000 Commonwealth Avenue
Newton Centre, MA 02459-1449
purchasing @newtonma.gov

Telephone (617) 796-1220 Fax: (617) 796-1227 TDD/TTY (617) 796-1089

Mayor Ruthanne Fuller
Date
Vendor
Re: Debarment Letter for Invitation For Bid 22-33
As a potential vendor on the above contract, the City requires that you provide a debarment/suspension certification indicating that you are in compliance with the below Federal Executive Order. Certification can be done by completing and signing this form.
Debarment: Federal Executive Order (E.O.) 12549 "Debarment and Suspension" requires that all contractors receiving individual awards, using federal funds, and all sub-recipients certify that the organization and its principals are not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency from doing business with the Federal Government.
I hereby certify under pains and penalties of perjury that neither I nor any principal(s) of the Company identified below is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
(Name
(Company
(Address
PHONEFAX EMAIL_
Signatur
Dat
If you have questions, please contact Nicholas Read, Chief Procurement Officer at (617) 796-1220.

W-9 (Rev. October 2007) Department of the Treasury Internal Revenue Service

Request for Taxpayer **Identification Number and Certification**

Give form to the requester. Do not send to the IRS.

22	Name (as shown on your income tax return)				
on page	Business name, if different from above				
Print or type Specific Instructions	Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership ☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=pa ☐ Other (see instructions) ►	rtnership) 🕨	200001	XExempt payee	
Print lc Inst	Address (number, street, and apt. or suite no.)	Requester's r	name and ad	dress (optional)	
Specifi	City, state, and ZIP code				
See	List account number(s) here (optional)				
Part	Taxpayer Identification Number (TIN)				
backup alien, s	our TIN in the appropriate box. The TIN provided must match the name given on Line 1 to withholding. For individuals, this is your social security number (SSN). However, for a resole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entity inployer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> or	sident ies, it is	iocial securi	ty number or	
	f the account is in more than one name, see the chart on page 4 for guidelines on whose r to enter.	, E	mployer ide	ntification number	
Part	II Certification		*		
Under	penalties of perjury, I certify that:				
	e number shown on this form is my correct taxpayer identification number (or I am waiting			187	

- Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- 3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here	Signature of U.S. person ▶	Date ► Name
--------------	----------------------------	-------------

General Instructions

Section references are to the Internal Revenue Code unless

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued).
 - 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States.
- An estate (other than a foreign estate), or
- · A domestic trust (as defined in Regulations section 301.7701-7)

Special rules for partnerships. Partnerships that conduct a Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your stare of partnership. status and avoid withholding on your share of partnership

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

. The U.S. owner of a disregarded entity and not the entity,

Cat. No. 10231X Form W-9 (Rev. 10-2007)

CONTRACT FORMS

The awarded bidder will be required to complete and submit documents substantially similar in form to the following.
These forms may need to be modified on account of changed circumstances, and are provided for informational purposes only.

CITY - CONTRACTOR AGREEMENT

CONTRACT NO. C-

THIS AGREEMENT made this	_ day of	in the year Two Thousand and Twenty-two by and between the CITY OF
NEWTON, a municipal corporation	n organized a	nd existing under the laws of the Commonwealth of Massachusetts, hereinafter
referred to as the CITY, acting thro	ugh its Chief	Procurement Officer, but without personal liability to him, and

hereinafter referred to as the CONTRACTOR.

The parties hereto for the considerations hereinafter set forth agree as follows:

I. SCOPE OF WORK. The Contractor shall furnish all labor, materials and equipment, and perform all work required in strict accordance with the Contract Documents for the following project:

Police Headquarters HVAC System Improvements

- **II. CONTRACT DOCUMENTS.** The Contract documents consist of the following documents which are either attached to this Agreement or are incorporated herein by referenced:
 - a. This CITY-CONTRACTOR Agreement;
 - b. The City's Invitation For Bid #22-33 issued by the Purchasing Department;
 - c. The Project Manual for **Police Headquarters HVAC System Improvements** including the Instructions to Bidders; Police Station HVAC Upgrades Project Drawings and Technical Specifications; General Conditions; Special Conditions; MWBE/AARequirements, Wage Rate Requirements and Wage Rate Schedule(s) including any updated prevailing wage rate schedules if applicable; The Supplementary Special Conditions; General Requirements and Project Specifications; and Drawings, if included or referenced therein;
 - d. Addenda Number(s) ;
 - e. The Bid Response of the CONTRACTOR submitted for this Project and accompanying documents and certifications;
 - f. Certificate(s) of Insurance and surety bond(s) submitted by the CONTRACTOR in connection with this Project; and
 - g. Duly authorized and executed Amendments, Change Orders or Purchase orders issued by the CITY after execution of this CITY-CONTRACTOR Agreement.

This CITY-CONTRACTOR Agreement, together with the other documents enumerated in this Article, constitute the entire Agreement between the CITY and the CONTRACTOR. The CONTRACTOR represents that its bid was made without condition, qualification or reservation of any kind, except upon the written acknowledgement and consent of the CITY.

- **III. PRIORITY OF DOCUMENTS.** In the event of inconsistency between the terms of this CITY -CONTRACTOR Agreement and the Project Manual, the terms of this Agreement shall prevail.
- IV. APPLICABLE STATUTES. All applicable federal, state and local laws and regulations are incorporated herein by reference and the Contractor agrees to comply with same.
- V. CONTRACT TERM. The term of this contract shall extend from the date of contract execution for eight months
- VI. AUTHORIZATION OF AND PAYMENT FOR WORK PERFORMED. The execution of this contract does not constitute a notice to proceed or authorization to perform work. No work shall be commenced unless authorized by a written Work Order prepared by City of Newton Public Buildings Department specifying the work to be performed. The Contractor will be paid following completion and acceptance of the work authorized in accordance with the Contract. The City will use best efforts to pay within thirty (30) days of receipt of an invoice for the work authorized or acceptance of the work whichever date is later.

- VII. RESPONSIBILITY FOR THE WORK/INDEMNIFICATION. The Contractor shall take all responsibility for the work, and shall take all precautions for preventing injuries to persons and property in or about the work and shall defend, indemnify and hold the City harmless from all loss, cost, damage or expense arising from injuries to persons or property in or about the work. The Contractor shall be responsible for any damage which may be caused by the failure or insufficiency of any temporary works. He shall effectively protect his work and shall be liable for all damage and loss by delay or otherwise caused by his neglect or failure so to do.
- VIII. WARRANTY. Except as may be otherwise provided in the Project Manual, the Contractor shall replace, repair or make good, without cost to the City, any defects or faults arising within one (1) year after date of acceptance of work and materials furnished hereunder (acceptance not to be unreasonably delayed) resulting from imperfect or defective work done or materials furnished by the Contractor.
- IX. PATENT INDEMNIFICATION. The Contractor agrees to assume the defense of and shall indemnify and save harmless the City and all persons acting for or on behalf of it from all suits and claims against them, or any of them, arising from or occasioned by the use of any material, equipment or apparatus, or any part thereof which infringes or is alleged to infringe on any patent rights. In case such material, equipment or apparatus, or any part thereof, in any such suit is held to constitute infringement, the Contractor, within a reasonable time, shall at its own expense, and as the City may elect, replace such material, equipment or apparatus with non-infringing material, equipment or apparatus, or remove the material, equipment, or apparatus and refund the sums paid therefor.
- **X. ASSIGNMENT/SUB-CONTRACTING.** The Contractor agrees that he will not sell, assign or transfer this Contract or any part thereof or interest therein without the prior written consent of the City.
- XI. TERMINATION. If the work to be done under this Contract shall be abandoned, or if this Contract or any part thereof shall be assigned or transferred, without the previous written consent of the City, or if the Contract or any claim hereunder shall be assigned by the Contractor otherwise than as herein specified, or if at any time the City determines that the conditions herein specified as to the rate of progress are not fulfilled, or that the work or any part thereof, is unnecessarily or unreasonably delayed, or that the Contractor has violated any of the provisions of this Contract, the City may terminate this Contract and/or notify the Contractor to discontinue such work or such part thereof as the City may designate, and the City may thereupon by agreement or otherwise, as it may determine, complete the work, or any part thereof; and for such completion the City for itself or for its Contractor may take possession of and use or cause to be used in the completion of the work thereof any of such materials, apparatus, machinery, implements, and tools of every description as may be found upon said work. Termination pursuant to this paragraph shall not entitle the Contractor to any claim for damages on account thereof, nor shall it relieve the Contractor of any liability under this Contract.

XII. INSURANCE REQUIREMENTS

The Contractor shall provide insurance coverage as listed below. This insurance shall be provided at the Contractor's expense and shall be in full force and effect during the full term of this Contract.

WORKER'S COMPENSATION

Worker's Compensation: Per M.G.L. c.. 149, s. 34 and c.. 152 as amended.

COMMERCIAL GENERAL LIABILITY

Personal Injury \$500,000 each occurrence

\$1,000,000 aggregate

Property Damage \$500,000 each occurrence

\$1,000,000 aggregate

VEHICLE LIABILITY

Personal Injury \$500,000 each person

\$1,000,000 aggregate

Property Damage \$300,000 each occurrence

\$500,000 aggregate

- XIII. GOVERNING LAW. This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts.
- **XIV. SEVERABILITY.** The provisions of this Contract are severable. If any section, paragraph, clause or provision of this Contract shall be finally adjudicated by a court of competent jurisdiction to be invalid, the remainder of this Contract shall be unaffected by such adjudication and all of the remaining provisions of this Contract shall remain in full force and

effect as though such section, paragraph, clause or provision, or any part thereof so adjudicated to be invalid, had not been included herein, unless such remaining provisions, standing alone, are incomplete and incapable of being executed in accordance with the intent of the parties to this Contract.

XV. AMENDMENTS TO THIS CONTRACT. This Contract may not be amended except in writing executed in the same manner as this CITY-CONTRACTOR Agreement.

IN WITNESS WHEREOF, the parties have caused this instrument to be executed under seal the day and year first above written.

CONTRACTOR	CITY OF NEWTON
By	By Chief Procurement Officer
Print Name	Date
Title	
Date	By
Affix Corporate Seal Here	Date
Amount of: \$\frac{\\$}{\} in account: AR115- AR11505 -2223CV21 -582500 I futher certify that the Mayor, or her designee, is authorized to execute contracts and approve change orders.	Approved as to Legal Form and Character By
By	Date CONTRACT AND BONDS APPROVED
	By
	Date

CERTIFICATE OF AUTHORITY - CORPORATE

1.	I hereby certify that I am the Clerk/Secretary of	of
	· · ·	(insert full name of Corporation)
2.	corporation, and that	
	corporation, and that (insert the name o	f officer who signed the contract and bonds .)
3.	is the duly elected	
		(insert the title of the officer in line 2)
4.	of said corporation, and that on	
	· ·	a date that is ON OR BEFORE the date the
	office	er signed the <u>contract and bonds</u> .)
at a d	uly authorized meeting of the Board of Directors of said voted that	corporation, at which all the directors were present or waived notice, it was
5.	the	
	(insert name from line 2)	(insert title from line 3)
	corporation, and affix its Corporate Seal thereto, a name and on its behalf, with or without the Corporate Seal thereto, a	execute contracts and bonds in the name and on behalf of said and such execution of any contract of obligation in this corporation's rate Seal, shall be valid and binding upon this corporation; and that the d remains in full force and effect as of the date set forth below.
6.	ATTEST:	AFFIX CORPORATE
	ATTEST:(Signature of Clerk or Secretar	ry)* SEAL HERE
7.	Name: (Please print or type name in line	
	(Please print or type name in line	e 6)*
8.	Date:	
	(insert a date that is ON OR AFTER the officer signed the contract and bonds .)	date the

^{*} The name and signature inserted in lines 6 & 7 must be that of the Clerk or Secretary of the corporation.

CITY OF NEWTON, MASSACHUSETTS

PERFORMANCE BOND

That we,	, as PRINCIP	AL, and	, as SURETY, are held and firmly bound u	ınto
he City of Newton as Oblig	ee, in the sum of	dollars (\$) to be paid to the Obligee, for wh	ich
payments well and truly to b	e made, we bind ourselve	es, our respective heirs,	executors, administrators, successors and assigns	,
ointly and severally, firmly	by these presents.			
Whereas, the said F	PRINCIPAL has made a c	contract with the Oblige	ee, bearing the date of, 2022 for the	
construction of		in Newton, Massac	chusetts. (Project Ti	tle)
Now, the condition o	f this obligation is such the	hat if the PRINCIPAL a	and all Sub-contractors under said contract shall w	vell
and truly keep and perform a	all the undertakings, cove	enants, agreements, term	ns and conditions of said contract on its part to be	kep
and performed during the or	iginal term of said contra	ect and any extensions th	nereof that may be granted by the Obligee, with or	r
without notice to the SURE	ΓY, and during the life an	nd any guarantee require	ed under the contract, and shall also well and truly	y
keep and perform all the unc	lertakings, covenants, agr	reements, terms and con	nditions of any and all duly authorized modification	ons,
alterations, changes or addit	ions to said contract that	may hereafter be made,	notice to the SURETY of such modifications,	
alterations, changes or addit	ions being hereby waived	d, then this obligation sh	nall become null and void; otherwise, it shall rema	ain i
full force, virtue and effect.				
In the event, that the	contract is abandoned by	the PRINCIPAL, or in	the event that the Obligee terminates the employr	ment
of the PRINCIPAL or the au	thority of the PRINCIPA	AL to continue the work	said SURETY hereby further agrees that said	
SURETY shall, if requested	in writing by the Obligee	e, take such action as is	necessary to complete said contract.	
In Witness Whereof,	the PRINCIPAL and SU	RETY have hereto set to	heir hands and seals thisday of 2022.	
PRINCIPAL	SU	<u>JRETY</u>		
BY(SEAL)	BY	(ATTORNEY-IN-	FACT) (SEAL)	
(Title)				
,				
ATTEST:	ATTEST:			

CITY OF NEWTON, MASSACHUSETTS PAYMENT BOND

Know All Men By These Pro	esents:		
That we,	, as PRINCII	PAL, and	, as SURETY, are held and firmly bound unto
the City of Newton as Oblig	ee, in the sum of	dollars (\$) to be paid to the Obligee, for which
payments well and truly to b	e made, we bind oursely	ves, our respective heirs,	executors, administrators, successors and assigns,
jointly and severally, firmly	by these presents.		
Whereas, the said P	RINCIPAL has made a	contract with the Obliged	e, bearing the date of, 2022, for the
construction of		in Newton, Massac	chusetts. (Project Title)
Now, the conditions of the	nis obligation are such th	nat if the PRINCIPAL and	d all Sub-contractors under said contract shall pay for
all labor performed or furnis	hed and for all materials	s used or employed in said	d contract and in any and all duly authorized
modifications, alterations, ex	tensions of time, change	es or additions to said con	ntract that may hereafter be made, notice to the
SURETY of such modificati	ons, alterations, extension	ons of time, changes or a	dditions being hereby waived, the foregoing to
include any other purposes of	or items set out in, and to	be subject to, provisions	s of M.G.L. c.30, §39A, and M.G.L. c.149, §29, as
amended, then this obligatio	n shall become null and	void; otherwise it shall re	emain in full force, virtue and effect.
In Witness Whereof,	the PRINCIPAL and SU	JRETY have hereto set the	heir hands and seals thisday of2022.
<u>PRINCIPAL</u>	<u>SI</u>	URETY	
BY	ВУ		
(SEAL)		(ATTORNEY-IN-	FACT) (SEAL)
(Title)			
ATTEST:		ATTEST:	

CITY OF NEWTON

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

The following provisions shall apply to the extent applicable.

1.0 DEFINITIONS

1.1 THE CONTRACT DOCUMENTS

The term "Contract Documents" sometimes also referred to as the "Contract", means the contract entered into between the City of Newton (hereinafter "City") and the Contractor. It includes the Invitation for Bid, General Bid Form, Contract Form, these General Conditions of the Contract, Supplements and Amendments to the General Conditions (if any), Contract Specifications, Drawings, all addenda issued prior to execution of the contract, the Bid Bond, the Labor and Material Payment Bond, or other assurances of completion, the applicable wage rate determinations, and other documents listed in the Agreement and modifications issued after execution of the contract.

1.2 THE WORK

The term "Work", sometimes also referred to as the "Project", means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligation.

1.3 OWNER

The term "Owner" is the City of Newton.

1.4 CONTRACT OFFICER

The term "Contract Officer" means the person appointed by the Owner to administer the terms of the Contract between the Owner and the Contractor, who is also empowered to take certain actions under this Agreement.

1.5 CONTRACTOR

- 1.5.1 The Contractor, sometimes referred to as the General Contractor, is the person or entity identified as such throughout the Contract Documents as if singular in number. The term Contractor means the Contractor or its authorized representative.
- 1.5.2 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract.

1.6 SUBSTANTIAL COMPLETION

The term "Substantial Completion" means the value of the work remaining to be performed by the Contractor is, in the estimate of the awarding authority, less than one percent (1%) of the original contract price.

2.0 CONTRACT ADMINISTRATION

2.1 PRE-CONSTRUCTION CONFERENCE

- 2.1.1 Prior to commencement of the Work, the Contractor shall meet in conference with representatives of the Owner regarding the Owner's requirements under the Contract for administration of the quality assurance program, safety program, labor provisions, the schedule of work, and other Contract procedures.
- 2.1.2 The Contractor shall begin work upon receipt of a written Notice to Proceed from the Contract Officer or designee. The Contractor shall not begin work prior to receiving such notice.

2.2 CONTRACT PERIOD

The Contractor shall complete all work required under this contract within the timeframe specified elsewhere in this document, or within the time schedule established in the notice to proceed issued by the Contracting Officer.

2.3 REJECTION OF DEFECTIVE MATERIALS AND WORK

The Owner's inspection of the Work shall not relieve the Contractor of any of its responsibilities to fulfill the Contract obligations, and defective work shall be corrected without cost to the Owner. Unsuitable work may be rejected by the Owner, notwithstanding that such work and materials have been previously overlooked or misjudged by the Owner and accepted for payment. If the Work or any part thereof shall be found defective at any time before the final acceptance of the whole Work, the Contractor shall forthwith correct such defect in a manner satisfactory to the Owner, and if any material brought upon the site for use in the Work, or selected for the same, shall be rejected by the Owner as unsuitable or not in conformity with the Contract requirements, the Contractor shall forthwith remove such materials from the vicinity of the Work.

2.4 CHANGES

2.4.1 All changes in the work including any increase, decrease, or other equitable adjustment in the Contract price or in the time for performing the Contract, shall be authorized in writing by the Owner and/or Contract Officer prior to commencement.

2.5 CONTRACT PRICE

The Contract Price is stated in the Contract Form, and including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

2.6 APPLICATIONS FOR PAYMENT

- 2.6.1 Once each month, on a date established by the Owner at the beginning of the Work, the Contractor shall deliver to the Owner an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the Owner may require, and reflecting a minimum of 5% retainage until the final acceptance and payment by the Owner.
- 2.6.2 The Owner shall make payment to the Contractor within 30 days of receipt of said application, less any applicable retainage.
- 2.6.3 The Owner may make changes in any application for payment submitted by the Contractor for:
 - i. Retention based on the value of its claims against the Contractor,
 - ii. Retention of 5% of the approved amount of the Application for Payment.

2.7 FINAL PAYMENT

The acceptance by the Contractor of the last payment due under this Contract or the execution of the Final Certificate of Completion, shall operate as a release to the Owner from all claims and liability related to this Contract.

2.8 GUARANTY AND WARRANTY

2.8.1 WARRANTY

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

2.8.2 GENERAL GUARANTY

If at any time during the period of one (1) year from the date of Substantial Completion of the Work to be performed under this Contract, any part of the Work shall, in the reasonable determination of the Owner, require replacing or repairing due to the fact that it is broken, defective, or otherwise does not conform to the Contract Documents, the Owner will notify the Contractor to make the required repairs or replacement. If the Contractor shall neglect to commence such repairs or replacement to the satisfaction of the Owner within ten (10) days from the date of giving or mailing such notice, then the Owner may employ other persons to make the same.

The Contractor agrees, upon demand, to pay to the Owner all amounts which the Owner expends for such repairs or replacements. During this one year guarantee period any corrective work shall be performed in accordance with the applicable terms of this Contract. For items of work completed after use and occupancy has been taken, the one year guarantee shall commence at the time the Owner accepts such items. This one year guarantee shall not limit any express guaranty or warranty provided elsewhere in the Contract.

2.9 INSURANCE REQUIREMENTS

2.9.1 The Contractor shall provide insurance coverage as listed below. This insurance shall be provided at the Contractor's expense and shall be in full force and effect during the full term of this Contract.

WORKER'S COMPENSATION

Worker's Compensation: Per M.G.L. c.. 149, s. 34 and c.. 152 as amended.

COMMERCIAL GENERAL LIABILITY

Personal Injury \$500,000 each occurrence

\$1,000,000 aggregate

Property Damage \$500,000 each occurrence

\$1,000,000 aggregate

VEHICLE LIABILITY

Personal Injury \$500,000 each person

\$1,000,000 aggregate

Property Damage \$300,000 each occurrence

\$500,000 aggregate

2.9.2 OWNER AS CO-INSURED

The Owner shall be named as additional insureds on the Contractor's Liability Policies.

2.9.3 CERTIFICATES OF INSURANCE, POLICIES

- i. The Contractor shall not commence the work until proof of compliance with this Section 2.9 has been furnished to the Owner by submitting one copy of a properly endorsed insurance certificate issued by a company authorized to write insurance in the Commonwealth. This certificate shall indicate that the contractual liability coverage is in force.
- ii. The Contractor shall file the original and one certified copy of all policies with the Owner within fifteen (15) days after contract award. If the Owner is damaged by the Contractor's failure to maintain such insurance and to so notify the Owner, then the Contractor shall be responsible for all reasonable costs attributable thereto.

2.9.4 CANCELLATION

Cancellation of any insurance required by this contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given by the party proposing cancellation to the other party and Owner at least thirty days prior to the effective date thereof, which shall be expressed in said notice.

2.10 INDEMNIFICATION

The Contractor shall take all responsibility for the Work and take all precautions for preventing injuries to persons and property in or about the Work; shall bear all losses resulting to or on account of the amount or character of the Work. The Contractor shall pay or cause payment to be made for all labor performed or furnished and for all materials used or employed in carrying out this Contract.

The Contractor shall assume the defense of, and indemnify and save harmless the Owner, and the Owner's officers and agents from all claims relating to labor performed or furnished and materials used or employed for the Work; to inventions, patents and patent rights used in and in doing the Work unless such patent infringement is due to a product or process specified by the Owner; to injuries to any person or corporation received or sustained by or from the Contractor and any employees, and subcontractors and employees, in doing the work, or in consequence of any improper materials, implements or labor used or employed therein; and to any act, omission or neglect of the Contractor and any employees therein.

2.11 BONDS

The Contractor shall provide the Owner with a performance and with a payment or labor and materials bond in the form provided by the Owner, executed by a surety company licensed by the Commonwealth of Massachusetts' Division of Insurance. Such bond shall be in an amount equal to at least one half of the Contract price unless otherwise stated in the Contract Documents. All bonds shall be accompanied by a current power of attorney.

2.12 TERMINATION

2.12.1 TERMINATION FOR CAUSE

- i. The Owner may terminate this contract for cause if it determines that any of the following circumstances have occurred:
 - a. The Contractor is adjudged bankrupt or has made a general assignment for the benefit of its creditors.
 - b. A receiver has been appointed of the Contractor's property.
 - c. All or a part of the Work has been abandoned.
 - d. The Contractor has sublet or assigned all or any portion of the Work, the Contract, or claims thereunder, without the prior written consent of the Owner, except as provided in the Contract.
 - e. The Owner has determined that the rate of progress required on the project is not being met.
 - f. The Contractor has substantially violated any provisions of this Contract.
- ii. The Owner may complete the Work, or any part thereof, and charge its expense of so completing the Work or part thereof, to the Contractor.
- iii. The Owner may take possession of and use any materials, machinery, implements and tools found upon the site of said Work. The Owner shall not be liable for any depreciation, loss or damage to said materials, machinery, implements or tools during said use and the Contractor shall be solely responsible for their removal from the Project site after the Owner has no further use for them.

2.12.2 TERMINATION - NO FAULT

- i. In the event that this Contract is terminated by the Owner, prior to the completion of construction and termination is not based on a reason listed in Paragraph 2.12.1, the Contractor shall be compensated for its costs incurred on the Project, including reasonable costs of de-mobilization, covering the period of time between the last approved application for payment and the date of termination.
- ii. Payment by the Owner pursuant to Section 2.7 shall be considered to fully compensate the Contractor for all claims and expenses and those of any consultants, subcontractors, and suppliers, directly or indirectly attributable to the termination, including any claims for lost profits.

2.13 PERMITS, FEES, AND NOTICES

- 2.13.1 The Contractor shall secure and the Owner shall pay for the building permit, if required. The Contractor shall coordinate all efforts required to obtain this permit. All other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work shall be secured and paid for by the Contractor.
- 2.13.2 The Contractor shall comply with and give notices required by laws, ordinances rules, regulations, and lawful orders of public authorities bearing on performance of the Work.
- 2.13.3 If the Contractor performs Work that it knows or reasonably should know is contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Owner, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs.

2.14 SAFETY REQUIREMENTS

2.14.1 The Contractor shall comply with all Federal, State, and local safety laws and regulations applicable to the Work performed under this Contract.

2.15 TEMPORARY HEATING

Not required; do not install Removal & Installation of Gym Flooring in any space which is not heated properly.

2.16 AVAILABILITY AND USE OF UTILITY SERVICES

2.16.1 The City shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the Contract. Unless otherwise provided in the Contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the City or, where the utility is produced by the City, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

2.17 DISPUTES

- 2.17.1 "Claim," as used in this section, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under the Contract, unlike a claim relating to the Contract, is a claim that can be resolved under a Contract clause that provides for the relief sought by the claimant. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim by complying with the requirements of this section, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- 2.17.2 All disputes arising under or relating to this Contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this section.
- 2.17.3 All claims by the Contractor shall be made in writing and submitted to the Contract Officer for a written decision. A claim by the City against the Contractor shall be subject to a written decision by the Contract Officer.
- 2.17.4 The Contract Officer shall, within thirty (30) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
- 2.17.5 The Contract Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in the City, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within thirty (30) days after receipt of the Contract Officer's decision.
- 2.17.6 The Contractor shall proceed diligently with perfo++rmance of this Contract and/or any authorized change thereof, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the Contract and/or any authorized change thereof, and comply with any decision of the Contract Officer.

2.18 LIQUIDATED DAMAGES

- 2.18.1 If the Contractor fails to complete the Work within the time specified in the contract, or any extension thereof, the Contractor shall pay to the City as liquidated damages, the sum of \$250.00 for each day of delay. Completion dates are specified in the Contract for separate phases of the work, and the amount of liquidated damages shall be assessed on each and every phase which is delayed. In the contect of this paragraph, "delay" means failure to complete the work as specified in these documents prior to the duration of the work. To the extent that the Contractor's delay or nonperformance is excused under another section in this Contract, liquidated damages shall not be due the City. The Contractor remains liable for damages caused other than by delay.
- 2.18.2 If the City terminates the Contractor's right to proceed pursuant to section 2.12.1, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final completion of the Work together with any increased costs to the City in completing the Work.
- 2.18.3 If the City does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the Work is completed or accepted.

3.0 SALES TAX EXEMPTION AND OTHER TAXES

- 3.0.1 To the extent that materials and supplies are used or incorporated in the performance of this Contract, the Contractor is considered an exempt purchaser under the Massachusetts Sales Act, Chapter 14 of the Acts of 1966.
- 3.0.2 The Contractor shall be responsible for paying all other taxes and tariffs of any sort, related to the Work.

3.1 PROHIBITION AGAINST LIENS

The Contractor is prohibited from placing a lien on the City's property. This prohibition shall apply to all subcontractors at any tier and all materials suppliers.

3.2 ORDER OF PRECEDENCE

In the event of a conflict between these General Conditions and the Specifications, the General Conditions shall prevail. In the event of a conflict between the Contract and any applicable state or local law or regulation, the state or local law or regulation shall prevail; provided that such state or local law or regulation does not conflict with, or is less restrictive than applicable federal law, regulation, or Executive Order. In the event of such a conflict, applicable federal law, regulation, and Executive Order shall prevail.

3.3 EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS

The City of Newton shall, until three (3) years after final payment under this Contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this Contract for the purpose of making audit, examination, excerpts, and/or transcriptions.

END OF GENERAL CONDITIONS

SPECIAL CONDITIONS

COMMONWEALTH OF MASSACHUSETTS

&

CITY OF NEWTON

INDEX

Article 1 - Method of Paying Subcontractors (MGL. C.30, s.39F)
Article 2 - Method of Paying General Contractors (MGL. C.30, s.39K)
Article 3 - Claims for Unforeseen Conditions (MGL. C.30, s.39N)
Article 4 - Claims for Delay (MGL. C.30, s.390)
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Article 6 - Preference in Employment, Wages (MGL. C.149, s.26)
Article 7 - Hours of Work (MGL. C.149, s.34)
Article 8 - Work by Foreign Corporations (MGL, C.30, s.39L)

SPECIAL CONDITIONS - COMMONWEALTH OF MASSACHUSETTS

Article 1. METHOD OF PAYING SUBCONTRACTORS

(General Laws, Chapter 30, Section 39F as most recently amended by Chapter 450, §76 of the Acts of 1996)

- (1.) Every contract awarded pursuant to section forty-four A to L, inclusive, of chapter one hundred and forty-nine shall contain the following subparagraphs (a) through (i) and every contract awarded pursuant to section thirty-nine M of chapter thirty shall contain the following subparagraphs (a) through (h) and in each case those subparagraphs shall be binding between the general contractor and each subcontractor.
- (a) Forthwith after the general contractor receives payment on account of a periodic estimate, the general contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by the subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.
- (b) Not later than the sixty-fifth day after each subcontractor substantially completes his work in accordance with the plans and specifications, the entire balance due under the subcontract less amounts retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the subcontractor; and the awarding authority shall pay that amount to the general contractor. The general contractor shall forthwith pay to the subcontractor the full amount received from the awarding authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.
- (c) Each payment made by the awarding authority to the general contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a subcontractor shall be made to the general contractor for the account of that subcontractor, and the awarding authority shall take reasonable steps to compel the general contractor to make each such payment to each such subcontractor. If the awarding authority has received a demand for direct payment from a subcontractor for any amount which has already been included in a payment to the general contractor or which is to be included in a payment to the general contractor for payment to the subcontractor as provided in subparagraphs (a) and (b), the awarding authority shall act upon the demand as provided in this section.
- (d) If, within seventy days after the subcontractor has substantially completed the subcontract work, the subcontractor has not received from the general contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, the subcontractor may demand direct payment of the balance from the awarding authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the general contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract work. Any demand made after substantial completion of the subcontract work shall be valid even if delivered or mailed prior to the seventieth day after the subcontractor has substantially completed the subcontract work. Within ten days after the subcontractor has delivered or so mailed the demand to the awarding authority and delivered or so mailed a copy to the general contractor, the general contractor may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the awarding authority and a copy shall be delivered to or sent by certified mail to the subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor and of the amount due for each claim made by the general contractor against the subcontractor.
- (e) Within fifteen days after receipt of the demand by the awarding authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the awarding authority shall make direct payment to the subcontractor of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount (i) retained by the awarding authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the general contractor in the sworn reply; provided, that the awarding authority shall not deduct form a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The awarding authority shall make further direct payments to the subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this subparagraph.
- (f) The awarding authority shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (e) in an interest-bearing joint account in the names of the general contractor and the subcontractor in a bank in Massachusetts selected by the awarding authority or agreed upon by the general contractor and the subcontractor and shall notify the general contractor and the subcontractor of the date of the deposit and the bank receiving the deposit.

The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the general contractor and the subcontractor or as determined by a decree of a court of competent jurisdiction.

- (g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account for accounts in a bank pursuant to subparagraph (f) shall be made out of amounts payable to the general contractor at the time of receipt of a demand for direct payment from a subcontractor and out of amounts which later become payable to the general contractor and in the order of receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the awarding authority to the general contractor to the extent of such payment.
- (h) The awarding authority shall deduct from payments to a general contractor amounts which, together with the deposits in interest-bearing accounts pursuant to subparagraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from subcontractors. All such amounts shall be earmarked for such direct payments, and the subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the general contractor.
- (i) If the subcontractor does not receive payment as provided in subparagraph (a) or if the general contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the subcontractor and the subcontractor does not receive payment for same when due less the deductions provided for in subparagraph (a), the subcontractor may demand direct payment by following the procedure in subparagraph (d) and the general contractor may file a sworn reply as provided in that same subparagraph. A demand made after the first day of the month following that for which the subcontractor performed or furnished the labor and materials for which the subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the general contractor. Thereafter the awarding authority shall proceed as provided in subparagraph (e), (f), (g) and (h).

Article 2. METHOD OF PAYING GENERAL CONTRACTORS

(General Laws, Chapter 30, Section 39K as most recently amended by Chapter 145 of the Acts of 1991 and Chapter 151 of the Acts of 1993.)

Every contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building by the commonwealth, or by any county, city, town, district, board, commission or other public body, when the amount is more than five thousand dollars in the case of the commonwealth and more than two thousand dollars in the case of any county, city, town, district, board, commission or other public body, shall contain the following paragraph: --Within fifteen days (forty-five days in the case of the commonwealth, including local housing authorities) after receipt from the contractor, at the place designated by the awarding authority if such a place is so designated, of a periodic estimate requesting payment of the amount due for the preceding month, the awarding authority will make a periodic payment to the contractor for the work performed during the preceding month and for the materials not incorporated in the work but delivered and suitably stored at the site (or at some location agreed upon in writing) to which the contractor has title or to which a subcontractor has title and has authorized the contractor to transfer title to the awarding authority, less (1) a retention based on its estimate of the fair value of its claims against the contractor and less (2) a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section thirty-nine F, and less (3) a retention not exceeding five per cent of the approved amount of the periodic payment. After the receipt of a periodic estimate requesting final payment and within sixty-five days after (a) the contractor fully completes the work or substantially completes the work so that the value of the work remaining to be done is, in the estimate of the awarding authority, less than one per cent of the original contract price, or (b) the contractor substantially completes the work and the awarding authority takes possession for occupancy, whichever occurs first, the awarding authority shall pay the contractor the entire balance due on the contract less (1) a retention based on its estimate of the fair value of its claims against the contractor and of the cost of completing the incomplete and unsatisfactory items of work and less (2) a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section thirty-nine F, or based on the record of payments by the contractor to the subcontractors under this contract if such record of payment indicates that the contractor has not paid subcontractors as provided in section thirty-nine F. If the awarding authority fails to make payment as herein provided, there shall be added to each such payment daily interest at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston commencing on the first day after said payment is due and continuing until the payment is delivered or mailed to the contractor; provided, that no interest shall be due, in any event, on the amount due on a periodic estimate for final payment until fifteen days (twenty-four days in the case of the commonwealth) after receipt of such a periodic estimate from the contractor, at the place designated by the awarding authority if such a place is so designated. The contractor agrees to pay to each subcontractor a portion of any such interest paid in accordance with the amount due each subcontractor.

The awarding authority may make changes in any periodic estimate submitted by the contractor and the payment due on said periodic estimate shall be computed in accordance with the changes so made, but such changes or any requirement for a corrected periodic estimate shall not affect the due date for the periodic payment or the date for the commencement of interest charges on the amount of the periodic payment computed in accordance with the changes made, as provided herein; provided, that the awarding authority may, within seven days after receipt, return to the contractor for correction, any periodic estimate which is not in the

required form or which contains computations not arithmetically correct and, in that event, the date of receipt of such periodic estimate shall be the date of receipt of the corrected periodic estimate in proper form and with arithmetically correct computations. The date of receipt of a periodic estimate received on a Saturday shall be the first working day thereafter. The provisions of section thirty-nine G shall not apply to any contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building to which this section applies.

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

A certificate of the architect to the effect that the contractor has fully or substantially completed the work shall, subject to the provisions of section thirty-nine J, be conclusive for the purposes of this section.

Article 3. CLAIMS FOR UNFORESEEN CONDITIONS

(General Laws, Chapter 30, Section 39N as most recently amended by Chapter 774 of the Acts of 1972)

Every contract subject to section forty-four A of chapter one hundred and forty-nine or subject to section thirty-nine M of chapter thirty shall contain the following paragraph in its entirety and an awarding authority may adopt reasonable rules or regulations in conformity with that paragraph concerning the filing, investigation and settlement of such claims:

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

Article 4. CLAIMS FOR DELAY

(General Laws, Chapter 30, Section 390 as added by Chapter 116 of the Acts of 1973)

Every contract subject to the provisions of section thirty-nine M of this chapter or subject to section forty-four A of chapter one hundred forty-nine shall contain the following provisions (a) and (b) in their entirety and, in the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other.

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

the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act of failure to act involved in the claim.

Article 5. DECISIONS AND APPROVALS BY ENGINEER OR ARCHITECT

(General Laws, Chapter 30, Section 39P, as added by Chapter 1164 of the Acts of 1973)

Every contract subject to section thirty-nine M of this chapter or section forty-four A of chapter one hundred forty-nine which requires the awarding authority, any official, its architect or engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, shall require that the decision be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the awarding authority, the official, architect or engineer shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made.

Article 6. PREFERENCE IN EMPLOYMENT, WAGES

(General Laws, Chapter 149 Section 26 as most recently amended by Chapter 665 of the Acts of 1986 and Chapter 552 of the Acts of 1991).

In the employment of mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works by the commonwealth, or by a county, town or district, or by persons contracting or subcontracting for such works, preference shall first be given to citizens of the commonwealth who have been residents of the commonwealth for at least six months at the commencement of their employment who are male veterans as defined in clause Forty-third of section seven of chapter four, and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the commonwealth generally who have been residents of the commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States, and every contract for such work shall contain a provision to this effect. Each county, town or district in the construction of public works, or persons contracting or subcontracting for such works, shall give preference to veterans and citizens who are residents of such county, town or district. The rate per hour of the wages paid to said mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works shall not be less than the rate or rates of wages to be determined by the commissioner as hereinafter provided; provided, that the wages paid to laborers employed on said works shall not be less than those paid to laborers in the municipal service of the town or towns where said works are being constructed; provided, further, that where the same public work is to be constructed in two or more towns, the wages paid to laborers shall not be less than those paid to laborers in the municipal service of the town paying the highest rate; provided, further, that if, in any of the towns where the works are to be constructed, a wage rate or wage rates have been established in certain trades and occupations by collective agreements or understandings in the private construction industry between organized labor and employers, the rate or rates to be paid on said works shall not be less than the rates so established, provided, further that in towns where no such rate or rates have been so established, the wages paid to mechanics and apprentices, teamster, chauffeurs and laborers on public works, shall not be less than the wages paid to the employees in the same trades and occupations by private employers engaged in the construction industry. This section shall also apply to regular employees of the commonwealth or of a county, town or district, when such employees are employed in the construction, addition to or alteration of public buildings for which special appropriation of more than One Thousand Dollars are provided. Payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans under collective bargaining agreements or understandings between organized labor and employers shall be included for the purpose of establishing minimum wage rates as herein provided.

Article 7. HOURS OF WORK

(General Laws, Chapter 149 Section 34 as most recently amended by Chapter 552 of the Acts of 1991).

Every contract, except for the purchase of material or supplies, involving the employment of laborers, workmen, mechanics, foremen or inspectors, to which the commonwealth or any county or town, subject to section thirty, is a party, shall contain a stipulation that no laborer, workman, mechanic, foreman or inspector working within the commonwealth, in the employ of the contractor, subcontractor or other person doing or contracting to do the whole or a part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in case of emergency, or, in case any town subject to section thirty-one is a party to such a contract, more than eight hours in any one day, except as aforesaid, provided, that in contracts entered into by the department of highways for the construction or reconstruction of highways there may be inserted in said stipulation a provision that said department, or any contractor or subcontractor for said department, may employ laborers, workmen, mechanics, foremen and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the

commissioner of labor and industries, public necessity so requires. Every such contract not containing the aforesaid stipulation shall be null and void.

Article 8. WORK BY FOREIGN CORPORATIONS

(General Laws, Chapter 30 Section 39L, as most recently amended by Chapter 3 of the Acts of 1967).

The Commonwealth and every county, city, town, district, board, commission or other public body which, as the awarding authority, requests proposals, bids or sub bids for any work in the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or other public works (1) shall not enter into a contract for such work with, and shall not approve as a subcontractor furnishing labor and materials for a part of any such work, a foreign corporation which has not filed with such awarding authority a certificate of the state secretary stating that such corporation has complied with sections three and five of chapter one hundred and eighty-one and the date of such compliance, and (2) shall report to the state secretary and to the department of corporations and taxation any foreign corporation performing work under such contract or subcontract, and any person, other than a corporation, performing work under such contract, and residing or having a principal place of business outside the Commonwealth.

END OF SPECIAL CONDITIONS

CITY OF NEWTON

WAGE RATE REQUIREMENTS

1. GENERAL

- A. This section summarizes the requirements for the payment of wages to laborers and mechanics employed under the Contract.
- **B**. Other duties and requirements of law which may not be specified in this section apply and are inherently a part of the Contract.

2. WAGE RATES

- A. The rate per hour to be paid to mechanics, apprentices, teamsters, chauffeurs, and laborers employed on the Work shall not be less than the rate of wages in the attached "Minimum Wage Rates" as determined by the Commissioner of Labor and Industries. This schedule shall continue to be the minimum rate of wages for said employees during the life of this Contract.
- **B.** Keep posted on the site a legible copy of said schedule. Keep on file the wage rates and classifications of labor employed on this Work in order that they may be available for inspection by the Owner, Administrator, or the Architect.
- **C.** Apprentices employed pursuant to this determination of wage rates must be registered and approved by the State Apprenticeship Council wherever rates for journeymen or apprentices are not listed.
- **D.** Pay reserve police officers employed on the Work the prevailing rate of wages paid to regular police officers as required by M.G.L. c149, Sec. 34B, as amended. Such police officers shall be covered by Workmen's Compensation Insurance and Employers Liability Insurance by the Contractor.
- E. The Contractor and all subcontractors shall, on a weekly basis throughout the term of the contract, provide to the City of Newton certified payroll affidavits verifying compliance with M.G.L. c.149, Sec. 27, 27A and 27B. The Contractor is obiligated to provide such records to the City directly on a weekly basis. The City may assess a penalty of \$100 for each day beyond the required submission date that such records are received, which amount shall be deducted from any amounts to the Contractor from the City. In the event of chronic late submissions, the City shall report the same to the Office of the Attorney General.
- **F.** The Contractor and all subcontractors shall provide a Statement of Compliance within 15 days of the completion of its portion of the work. This statement shall be submitted to the Owner on the form found elsewhere in this section.
- **G.** The Contractor shall maintain accurate and complete records, including payroll records, during the Contract term and for three years thereafter.

END OF SECTION



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 ROSALINACOSIA Schooly MICHAEL FLANAGAN Durcha

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Awarding Authority: City of Newton

Contract Number: 22-33 City/Town: NEWTON

Description of Work: Police Headquarters HVAC System Improvements

Job Location: 1351 Washington St

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 Department of Labor Standards, Division of Apprentice Standards (DLS/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. Any apprentice not registered with DLS/DAS regardless of whether or not they are registered with any other federal, state, local, or private agency must be paid the journeyworker's rate for the trade.
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F "rental of equipment" contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at http://www.mass.gov/dols/pw.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative
 obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who
 perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and
 criminal penalties.

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2021	\$37.05	\$13.41	\$16.01	\$0.00	\$66.47
(3 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2021	\$37.12	\$13.41	\$16.01	\$0.00	\$66.54
(4 & 5 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2021	\$37.24	\$13.41	\$16.01	\$0.00	\$66.66
ADS/SUBMERSIBLE PILOT PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR	12/01/2021	\$41.93	\$9.10	\$17.57	\$0.00	\$68.60
LABORERS - ZONE 1	06/01/2022	\$42.93	\$9.10	\$17.57	\$0.00	\$69.60
	12/01/2022	\$43.93	\$9.10	\$17.57	\$0.00	\$70.60
	06/01/2023	\$44.93	\$9.10	\$17.57	\$0.00	\$71.60
For apprentice rates see "Apprentice- LABORER"	12/01/2023	\$46.18	\$9.10	\$17.57	\$0.00	\$72.85
AIR TRACK OPERATOR (HEAVY & HIGHWAY) LABORERS - ZONE I (HEAVY & HIGHWAY)	12/01/2021	\$41.93	\$9.10	\$17.57	\$0.00	\$68.60
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	12/01/2020	\$38.10	\$12.80	\$9.45	\$0.00	\$60.35
ASPHALT RAKER	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
LABORERS - ZONE 1	06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
	12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
	06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
	12/01/2023	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35
For apprentice rates see "Apprentice- LABORER"						
ASPHALT RAKER (HEAVY & HIGHWAY) LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE OPERATING ENGINEERS LOCAL 4	12/01/2021	\$51.38	\$14.00	\$16.05	\$0.00	\$81.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4	12/01/2021	\$51.38	\$14.00	\$16.05	\$0.00	\$81.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER LABORERS - ZONE 1	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
LABORERS - ZONE 1	06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
	12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
	06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
T	12/01/2023	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35
For apprentice rates see "Apprentice- LABORER"				n1= ==		
BLOCK PAVER, RAMMER / CURB SETTER LABORERS - ZONE 1	12/01/2021	\$41.93	\$9.10	\$17.57	\$0.00	\$68.60
	06/01/2022	\$42.93	\$9.10	\$17.57	\$0.00	\$69.60
	12/01/2022	\$43.93	\$9.10	\$17.57	\$0.00	\$70.60
						P71 60
	06/01/2023 12/01/2023	\$44.93 \$46.18	\$9.10 \$9.10	\$17.57 \$17.57	\$0.00 \$0.00	\$71.60 \$72.85

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY) LABORERS - ZONE 1 (HEAVY & HIGHWAY) For apprentice rates see "Apprentice- LABORER (Heavy and Highway)	12/01/2021	\$41.93	\$9.10	\$17.57	\$0.00	\$68.60	
BOILER MAKER BOILERMAKERS LOCAL 29	01/01/2020	\$46.10	\$7.07	\$17.98	\$0.00	\$71.15	

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	65	\$29.97	\$7.07	\$11.69	\$0.00	\$48.73	
2	65	\$29.97	\$7.07	\$11.69	\$0.00	\$48.73	
3	70	\$32.27	\$7.07	\$12.59	\$0.00	\$51.93	
4	75	\$34.58	\$7.07	\$13.49	\$0.00	\$55.14	
5	80	\$36.88	\$7.07	\$14.38	\$0.00	\$58.33	
6	85	\$39.19	\$7.07	\$15.29	\$0.00	\$61.55	
7	90	\$41.49	\$7.07	\$16.18	\$0.00	\$64.74	
8	95	\$43.80	\$7.07	\$17.09	\$0.00	\$67.96	
Note	s:						
	entice to Journeyworker	Ratio:1:4					

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	Step	ve Date - 08/01/2021 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$28.58	\$11.39	\$22.25	\$0.00	\$62.22	
	2	60	\$34.29	\$11.39	\$22.25	\$0.00	\$67.93	
	3	70	\$40.01	\$11.39	\$22.25	\$0.00	\$73.65	
	4	80	\$45.72	\$11.39	\$22.25	\$0.00	\$79.36	
	5	90	\$51.44	\$11.39	\$22.25	\$0.00	\$85.08	
		ve Date - 02/01/2022				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$28.87	\$11.39	\$22.25	\$0.00	\$62.51	
	2	60	\$34.64	\$11.39	\$22.25	\$0.00	\$68.28	
	3	70	\$40.42	\$11.39	\$22.25	\$0.00	\$74.06	
	4	80	\$46.19	\$11.39	\$22.25	\$0.00	\$79.83	
	5	90	\$51.97	\$11.39	\$22.25	\$0.00	\$85.61	
	Notes:							
	Anne	ntice to Journeyworker Rat	io.1.5					
II I DOZER		R/SCRAPER				016.05	60.00	600.00
ERATING EN	HINEERS LO	OCAL 4	12/01/202	1 \$50.83	3 \$14.00	\$16.05	\$0.00	\$80.88
		Apprentice- OPERATING ENGINE	ERS"					
ORERS - FO	JNDATION	INNING BOTTOM MAN and marine	12/01/202	1 \$42.33	3 \$9.10	\$17.72	\$0.00	\$69.15
		'Apprentice- LABORER"						
		INNING LABORER AND MARINE	12/01/202	1 \$41.18	8 \$9.10	\$17.72	\$0.00	\$68.00
For apprentic	e rates see '	Apprentice- LABORER"						
		INNING TOP MAN AND MARINE	12/01/202	1 \$41.18	\$9.10	\$17.72	\$0.00	\$68.00
For apprentic	e rates see '	Apprentice- LABORER"						
RBIDE CO		LL OPERATOR	12/01/202	1 \$41.43	\$9.10	\$17.57	\$0.00	\$68.10
			06/01/202	2 \$42.43	\$9.10	\$17.57	\$0.00	\$69.10
			12/01/202	2 \$43.43	\$9.10	\$17.57	\$0.00	\$70.10
			06/01/202	3 \$44.43	\$9.10	\$17.57	\$0.00	\$71.10
For apprentic	e rates see '	'Apprentice- LABORER"	12/01/202	3 \$45.68	\$9.10	\$17.57	\$0.00	\$72.35
			09/01/202	1 \$44.18	8 \$8.58	\$19.82	\$0.00	\$72.58
RPENTER	ONE 2 (Eas	tem Massachusetts)	03/01/202			\$19.82	\$0.00	\$73.18
RPENTER			09/01/202	2 \$45.43	88.58	\$19.82	\$0.00	\$73.83

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ENTERS - ZONE 2 (Wood Frame)	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
Samplemental Samplemental Samplemental Samplemental Unemployment Total Rate	1	50	\$22.09	\$8.58	\$1.73	\$0.00	\$32.40	
A	2	60	\$26.51	\$8.58	\$1.73	\$0.00	\$36.82	
Social State	3	70	\$30.93	\$8.58	\$14.63	\$0.00	\$54.14	
6 80 \$35.34 \$8.58 \$16.36 \$0.00 \$60.28 7 90 \$39.76 \$8.58 \$18.09 \$0.00 \$66.43 8 90 \$39.76 \$8.58 \$18.09 \$0.00 \$66.43 \$	4	75	\$33.14	\$8.58	\$14.63	\$0.00	\$56.35	
7 90 \$39.76 \$8.58 \$18.09 \$0.00 \$66.43 8 90 \$39.76 \$8.58 \$18.09 \$0.00 \$66.43 Effective Date - 03/01/2022 Step percent Apprentice Base Wage Health Pension Unemployment Total Rate 1 50 \$22.39 \$8.58 \$1.73 \$0.00 \$32.70 2 60 \$26.87 \$8.58 \$1.73 \$0.00 \$37.18 3 70 \$31.35 \$8.58 \$14.63 \$0.00 \$54.56 4 75 \$33.59 \$8.58 \$14.63 \$0.00 \$56.80 5 80 \$355.82 \$8.58 \$14.63 \$0.00 \$60.76 6 80 \$355.82 \$8.58 \$16.36 \$0.00 \$60.76 6 80 \$355.82 \$8.58 \$16.36 \$0.00 \$60.76 7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 Notes: Step Lindentured After 10/1/17; 45/45/55/55/57/07/0/80/80 Step 1&2 \$30.19/3&4 \$36.28/5&6 \$55.87/7&8 \$62.01 Apprentice to Journeyworker Ratio:1:5	5	80	\$35.34	\$8.58	\$16.36	\$0.00	\$60.28	
8 90 \$39.76 \$8.58 \$18.09 \$0.00 \$66.43 Effective Date - 03/01/2022 Supplemental Unemployment Total Rate 1 50 \$22.39 \$8.58 \$1.73 \$0.00 \$32.70 2 60 \$26.87 \$8.58 \$1.73 \$0.00 \$37.18 3 70 \$31.35 \$8.58 \$14.63 \$0.00 \$54.56 4 75 \$33.59 \$8.58 \$14.63 \$0.00 \$56.80 5 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 6 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 6 80 \$35.82 \$8.58 \$18.09 \$0.00 \$60.76 7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 Notes:	6	80	\$35.34	\$8.58	\$16.36	\$0.00	\$60.28	
Effective Date - 03/01/2022 Step percent Apprentice Base Wage Health Pension Unemployment Total Rate	7	90	\$39.76	\$8.58	\$18.09	\$0.00	\$66.43	
Step percent Apprentice Base Wage Health Pension Unemployment Total Rate	8	90	\$39.76	\$8.58	\$18.09	\$0.00	\$66.43	
1 50 \$22.39 \$8.58 \$1.73 \$0.00 \$32.70 2 60 \$26.87 \$8.58 \$1.73 \$0.00 \$37.18 3 70 \$31.35 \$8.58 \$14.63 \$0.00 \$54.56 4 75 \$33.59 \$8.58 \$14.63 \$0.00 \$56.80 5 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 6 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 Notes:	Effecti	ve Date - 03/01/2022				Supplemental		
2 60 \$26.87 \$8.58 \$1.73 \$0.00 \$37.18 3 70 \$31.35 \$8.58 \$14.63 \$0.00 \$54.56 4 75 \$33.59 \$8.58 \$14.63 \$0.00 \$56.80 5 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 6 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 Notes:	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
3 70 \$31.35 \$8.58 \$14.63 \$0.00 \$54.56 4 75 \$33.59 \$8.58 \$14.63 \$0.00 \$56.80 5 80 \$33.59 \$8.58 \$14.63 \$0.00 \$60.76 6 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$840.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$840.30 \$8.58 \$8.5	1	50	\$22.39	\$8.58	\$1.73	\$0.00	\$32.70	
4 75 \$33.59 \$8.58 \$14.63 \$0.00 \$56.80 \$5 80 \$33.59 \$8.58 \$14.63 \$0.00 \$60.76 6 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 \$8 \$10.00 \$66.97 \$8 \$10.00 \$80.0	2	60	\$26.87	\$8.58	\$1.73	\$0.00	\$37.18	
5 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 6 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$80.00 \$86.97 8 90 \$40.30 \$80.3	3	70	\$31.35	\$8.58	\$14.63	\$0.00	\$54.56	
6 80 \$35.82 \$8.58 \$16.36 \$0.00 \$60.76 7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 Notes: % Indentured After 10/1/17; 45/45/55/55/70/70/80/80 \$18.09 \$0.00 \$66.97 Apprentice to Journeyworker Ratio:1:5 Center Wood Frame 04/01/2021 \$27.87 \$7.21 \$5.80 \$0.00 \$4	4	75	\$33.59	\$8.58	\$14.63	\$0.00	\$56.80	
7 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 Notes:	5	80	\$35.82	\$8.58	\$16.36	\$0.00	\$60.76	
8 90 \$40.30 \$8.58 \$18.09 \$0.00 \$66.97 Notes:	6	80	\$35.82	\$8.58	\$16.36	\$0.00	\$60.76	
Notes: % Indentured After 10/1/17; 45/45/55/55/70/70/80/80 Step 1&2 \$30.19/ 3&4 \$36.28/ 5&6 \$55.87/ 7&8 \$62.01 Apprentice to Journeyworker Ratio:1:5 ENTER WOOD FRAME	7	90	\$40.30	\$8.58	\$18.09	\$0.00	\$66.97	
% Indentured After 10/1/17; 45/45/55/55/70/70/80/80 Step 1&2 \$30.19/ 3&4 \$36.28/ 5&6 \$55.87/ 7&8 \$62.01 Apprentice to Journeyworker Ratio:1:5 ENTER WOOD FRAME 04/01/2021 \$27.87 \$7.21 \$5.80 \$0.00 \$4	8	90	\$40.30	\$8.58	\$18.09	\$0.00	\$66.97	
Step 1&2 \$30.19/ 3&4 \$36.28/ 5&6 \$55.87/ 7&8 \$62.01 Apprentice to Journeyworker Ratio:1:5 ENTER WOOD FRAME 04/01/2021 \$27.87 \$7.21 \$5.80 \$0.00 \$4	Notes:							
ENTER WOOD FRAME 04/01/2021 \$27.87 \$7.21 \$5.80 \$0.00 \$4	į						i	
TERS-ZONE 2 (Wood Frame)	Appre	ntice to Journeyworke	Ratio:1:5					
ITERS - ZONE 2 (Wood Frame)			04/01/202	\$27.87	\$7.21	\$5.80	\$0.00	\$40.88
04/01/2022 \$28.62 \$7.21 \$5.80 \$0.00 \$4	TERS -ZONE 2 (Woo	d Frame)	04/01/2022	\$28.62	\$7.21	\$5.80	\$0.00	\$41.63

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Supplemental Unemployment Total Rate Classification Pension Effective Date Base Wage Health

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rat
1	50	\$13.94	\$7.21	\$0.00	\$0.00	\$21.1
2	50	\$13.94	\$7.21	\$0.00	\$0.00	\$21.1
3	55	\$15.33	\$7.21	\$2.00	\$0.00	\$24.5
4	55	\$15.33	\$7.21	\$2.00	\$0.00	\$24.5
5	70	\$19.51	\$7.21	\$5.80	\$0.00	\$32.5
6	70	\$19.51	\$7.21	\$5.80	\$0.00	\$32.5
7	80	\$22.30	\$7.21	\$5.80	\$0.00	\$35.3
8	80	\$22.30	\$7.21	\$5.80	\$0.00	\$35.3
Effec	tive Date - 04/01/2022				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rat
1	50	\$14.31	\$7.21	\$0.00	\$0.00	\$21.5
2	50	\$14.31	\$7.21	\$0.00	\$0.00	\$21.5
3	55	\$15.74	\$7.21	\$2.00	\$0.00	\$24.9
4	55	\$15.74	\$7.21	\$2.00	\$0.00	\$24.9
5	70	\$20.03	\$7.21	\$5.80	\$0.00	\$33.0
6	70	\$20.03	\$7.21	\$5.80	\$0.00	\$33.0
7	80	\$22.90	\$7.21	\$5.80	\$0.00	\$35.9
8	80	\$22.90	\$7.21	\$5.80	\$0.00	\$35.9
Notes	% Indentured After 10/1	/17; 45/45/55/55/70/70/80/80				
		24.54/ 5&6 \$32.52/ 7&8 \$35.31				
Appr	entice to Journeyworker I	Ratio:1:5				

Step	ive Date - 01/01/2020 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.54	\$12.75	\$15.41	\$0.00	\$52.70
2	60	\$29.44	\$12.75	\$17.41	\$0.62	\$60.22
3	65	\$31.90	\$12.75	\$18.41	\$0.62	\$63.68
4	70	\$34.35	\$12.75	\$19.41	\$0.62	\$67.13
5	75	\$36.80	\$12.75	\$20.41	\$0.62	\$70.58
6	80	\$39.26	\$12.75	\$21.41	\$0.62	\$74.04
7	90	\$44.16	\$12.75	\$22.41	\$0.62	\$79.94

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CHAIN SAW OPERATOR	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
LABORERS - ZONE 1	06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
	12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
	06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
	12/01/2023	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35
For apprentice rates see "Apprentice- LABORER"						
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4	12/01/2021	\$52.38	\$14.00	\$16.05	\$0.00	\$82.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
COMPRESSOR OPERATOR OPERATING ENGINEERS LOCAL 4	12/01/2021	\$33.69	\$14.00	\$16.05	\$0.00	\$63.74
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DELEADER (BRIDGE)	07/01/2021	\$52.86	\$8.45	\$22.90	\$0.00	\$84.21
PAINTERS LOCAL 35 - ZONE 2	01/01/2022	\$53.66	\$8.65	\$23.05	\$0.00	\$85.36
	07/01/2022	\$54.86	\$8.65	\$23.05	\$0.00	\$86.56
	01/01/2023	\$56.06	\$8.65	\$23.05	\$0.00	\$87.76
	07/01/2023	\$57.26	\$8.65	\$23.05	\$0.00	\$88.96
	01/01/2024	\$58.46	\$8.65	\$23.05	\$0.00	\$90.16
	07/01/2024	\$59.66	\$8.65	\$23.05	\$0.00	\$91.36
	01/01/2025	\$60.86	\$8.65	\$23.05	\$0.00	\$92.56

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	Step	ve Date - 07/01/		ice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
-	1	50	тррген						
	2	55		\$26.43	\$8.45	\$0.00	\$0.00	\$34.88	
	3			\$29.07	\$8.45	\$6.22	\$0.00	\$43.74	
		60		\$31.72	\$8.45	\$6.78	\$0.00	\$46.95	
	4	65		\$34.36	\$8.45	\$7.35	\$0.00	\$50.16	
	5	70		\$37.00	\$8.45	\$19.51	\$0.00	\$64.96	
	6	75		\$39.65	\$8.45	\$20.08	\$0.00	\$68.18	
	7	80		\$42.29	\$8.45	\$20.64	\$0.00	\$71.38	
	8	90		\$47.57	\$8.45	\$21.77	\$0.00	\$77.79	
	Effecti	ve Date - 01/01/	2022				~ 1 .1		
	Step	percent		ice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
-	1	50		\$26.83	\$8.65	\$0.00	\$0.00	\$35.48	
	2	55		\$29.51	\$8.65	\$6.27	\$0.00	\$44.43	
	3	60		\$32.20	\$8.65	\$6.84	\$0.00	\$47.69	
	4	65		\$34.88	\$8.65	\$7.41	\$0.00	\$50.94	
	5	70		\$37.56	\$8.65	\$19.63	\$0.00	\$65.84	
	6	75		\$40.25	\$8.65	\$20.20	\$0.00	\$69.10	
	7	80			\$8.65			\$72.35	
	8	90		\$42.93		\$20.77	\$0.00		
		<i>5</i> 0		\$48.29	\$8.65	\$21.91	\$0.00	\$78.85	
į	Notes:	Steps are 750 hrs.	- D. W. da						
		itice to Journeywo	orker Ratio:1:1						
MO: ADZEM CORERS - ZONE .				12/01/2021		\$9.10	\$17.57	\$0.00	\$68.00
				06/01/2022		\$9.10	\$17.57	\$0.00	\$69.00
				12/01/2022		\$9.10	\$17.57	\$0.00	\$70.00
				06/01/2023		\$9.10	\$17.57	\$0.00	\$71.00
For apprentice ra	ates see ".	Apprentice- LABORER	11	12/01/2023	\$45.58	\$9.10	\$17.57	\$0.00	\$72.25
		ADER/HAMMER		12/01/2021	\$42.33	\$9.10	\$17.57	\$0.00	\$69.00
ORERS - ZONE				06/01/2022		\$9.10	\$17.57	\$0.00	\$70.00
				12/01/2022		\$9.10	\$17.57	\$0.00	\$70.00
				06/01/2023		\$9.10	\$17.57	\$0.00	\$72.00
				12/01/2023		\$9.10	\$17.57	\$0.00	\$73.25
For apprentice ra	ates see ".	Apprentice- LABORER	"	12/01/2023	φ40.36	φ2.10	ΨΙΙ.ΟΙ	ψ0.00	φ1.2.23
MO: BURNE				12/01/2021	\$42.08	\$9.10	\$17.57	\$0.00	\$68.75
ORERS - ZONE	Į.			06/01/2022		\$9.10	\$17.57	\$0.00	\$69.75
				12/01/2022		\$9.10	\$17.57	\$0.00	\$70.75
				06/01/2023		\$9.10	\$17.57	\$0.00	\$71.75
				12/01/2023		\$9.10	\$17.57	\$0.00	\$73.00
For apprentice ra	ates see ".	Apprentice- LABORER	"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: CONCRETE CUTTER/SAWYER	12/01/2021	\$42.33	\$9.10	\$17.57	\$0.00	\$69.00
LABORERS - ZONE 1	06/01/2022	\$43.33	\$9.10	\$17.57	\$0.00	\$70.00
	12/01/2022	\$44.33	\$9.10	\$17.57	\$0.00	\$71.00
	06/01/2023	\$45.33	\$9.10	\$17.57	\$0.00	\$72.00
	12/01/2023	\$46.58	\$9.10	\$17.57	\$0.00	\$73.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR LABORERS - ZONE 1	12/01/2021	\$42.08	\$9.10	\$17.57	\$0.00	\$68.75
LABORERS - ZONE I	06/01/2022	\$43.08	\$9.10	\$17.57	\$0.00	\$69.75
	12/01/2022	\$44.08	\$9.10	\$17.57	\$0.00	\$70.75
	06/01/2023	\$45.08	\$9.10	\$17.57	\$0.00	\$71.75
	12/01/2023	\$46.33	\$9.10	\$17.57	\$0.00	\$73.00
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER laborers - zone 1	12/01/2021	\$41.33	\$9.10	\$17.57	\$0.00	\$68.00
	06/01/2022	\$42.33	\$9.10	\$17.57	\$0.00	\$69.00
	12/01/2022	\$43.33	\$9.10	\$17.57	\$0.00	\$70.00
	06/01/2023	\$44.33	\$9.10	\$17.57	\$0.00	\$71.00
	12/01/2023	\$45.58	\$9.10	\$17.57	\$0.00	\$72.25
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR OPERATING ENGINEERS LOCAL 4	12/01/2021	\$50.83	\$14.00	\$16.05	\$0.00	\$80.88
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2020	\$68.70	\$9.40	\$23.12	\$0.00	\$101.22
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59
PILE DRIVER LOCAL 56 (ZONE 1)						
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2020	\$73.60	\$9.40	\$23.12	\$0.00	\$106.12
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
DRAWBRIDGE OPERATOR (Construction) DRAWBRIDGE - SEIU LOCAL 888	07/01/2020	\$26.77	\$6.67	\$3.93	\$0.16	\$37.53
ELECTRICIAN	09/01/2021	\$56.36	\$13.00	\$20.54	\$0.00	\$89.90
ELECTRICIANS LOCAL 103	03/01/2022	\$57.32	\$13.00	\$20.82	\$0.00	\$91.14
	09/01/2022	\$58.76	\$13.00	\$20.86	\$0.00	\$92.62
	03/01/2023	\$60.43	\$13.00	\$20.91	\$0.00	\$94.34

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Step	percent 09/01/2021	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$22.54	\$13.00	\$0.68	\$0.00	\$36.22
2	40	\$22.54	\$13.00	\$0.68	\$0.00	\$36.22
3	45	\$25.36	\$13.00	\$15.36	\$0.00	\$53.72
4	45	\$25.36	\$13.00	\$15.36	\$0.00	\$53.72
5	50	\$28.18	\$13.00	\$15.84	\$0.00	\$57.02
6	55	\$31.00	\$13.00	\$16.31	\$0.00	\$60.31
7	60	\$33.82	\$13.00	\$16.77	\$0.00	\$63.59
8	65	\$36.63	\$13.00	\$17.25	\$0.00	\$66.88
9	70	\$39.45	\$13.00	\$17.71	\$0.00	\$70.16
10	75	\$42.27	\$13.00	\$18.19	\$0.00	\$73.46
Effec	tive Date - 03/01/2022				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	40	\$22.93	\$13.00	\$0.69	\$0.00	\$36.62
2	40	\$22.93	\$13.00	\$0.69	\$0.00	\$36.62
3	45	\$25.79	\$13.00	\$15.62	\$0.00	\$54.41
4	45	\$25.79	\$13.00	\$15.62	\$0.00	\$54.41
5	50	\$28.66	\$13.00	\$16.10	\$0.00	\$57.76
6	55	\$31.53	\$13.00	\$16.58	\$0.00	\$61.11
7	60	\$34.39	\$13.00	\$17.04	\$0.00	\$64.43
8	65	\$37.26	\$13.00	\$17.52	\$0.00	\$67.78
9	70	\$40.12	\$13.00	\$17.98	\$0.00	\$71.10
10	75	\$42.99	\$13.00	\$18.46	\$0.00	\$74.45
Notes		/40/45/50/55/65/70/75/80				
Appr	entice to Journeyworker	Ratio:2:3***				
CONSTR		01/01/2021	\$63.47	\$15.88	\$19.31	\$0.00
vo1KUCIUI	RS LOCAL 4	01/01/2022	\$65.62	\$16.03	\$20.21	\$0.00 \$1

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	Step	ve Date - 01/01/2021 percent	Apprentice	Base Wage	Health		Pension	Supplemental Unemployment	Total Rate	
	1	50		31.74	\$15.88		\$0.00	\$0.00	\$47.62	
	2	55		34.91	\$15.88		\$19.31	\$0.00	\$70.10	
	3	65		341.26	\$15.88		\$19.31	\$0.00	\$76.45	
	4	70		344.43	\$15.88		\$19.31	\$0.00	\$79.62	
	5	80		50.78	\$15.88		\$19.31	\$0.00	\$85.97	
	Effecti	ve Date - 01/01/2022						Supplemental		
	Step	percent	Apprentice	Base Wage	Health		Pension	Unemployment	Total Rate	
	1	50	\$	32.81	\$16.03		\$0.00	\$0.00	\$48.84	
	2	55	\$	36.09	\$16.03		\$20.21	\$0.00	\$72.33	
	3	65	\$	42.65	\$16.03		\$20.21	\$0.00	\$78.89	
	4	70	\$	45.93	\$16.03		\$20.21	\$0.00	\$82.17	
	5	80	\$	552.50	\$16.03		\$20.21	\$0.00	\$88.74	
	Notes:									
		Steps 1-2 are 6 mos.; S	teps 3-5 are 1 year						i	
		ntice to Journeyworker	Ratio:1:1							
LEVATOR CONS. EVATOR CONS.		JCTOR HELPER 5 LOCAL 4		01/01/2021			\$15.88	\$19.31	\$0.00	\$79.62
		Apprentice - ELEVATOR CO	ISTRUCTOR"	01/01/2022	2 \$45	.93	\$16.03	\$20.21	\$0.00	\$82.17
	ARD RA	IL ERECTOR (HEAVY		12/01/2021	1 \$41	.43	\$9.10	\$17.57	\$0.00	\$68.10
		Apprentice- LABORER (Heav	y and Highway)							
		SON-BLDG,SITE,HVY	/HWY	11/01/2021	l \$46	.53	\$13.75	\$15.80	\$0.00	\$76.08
PERATING ENG.	NEERS LC	CAL 4		05/01/2022	2 \$47	.86	\$13.75	\$15.80	\$0.00	\$77.41
For apprentice	rates see "	Apprentice- OPERATING EN	GINEERS"							
ELD ENG.P. Perating eng.		HIEF-BLDG,SITE,HVY	/HWY	11/01/2021	\$48	.06	\$13.75	\$15.80	\$0.00	\$77.61
			on Transu	05/01/2022	2 \$49	.22	\$13.75	\$15.80	\$0.00	\$78.77
		Apprentice- OPERATING EN						01500		
ELD ENG.K PERATING ENG.		SON-BLDG,SITE,HVY)Cal 4	/HWI	11/01/2021			\$13.75	\$15.80	\$0.00	\$52.71
For apprentice	rates see "	Apprentice- OPERATING EN	GINEERS"	05/01/2022	2 \$23	.83	\$13.75	\$15.80	\$0.00	\$53.38
RE ALARM				09/01/2021	1 \$56	.36	\$13.00	\$20.54	\$0.00	\$89.90
ECTRICIANS L	CAL 103			03/01/2022			\$13.00	\$20.82	\$0.00	\$91.14
				09/01/2022			\$13.00	\$20.86	\$0.00	\$92.62
				03/01/2023			\$13.00	\$20.91	\$0.00	\$94.34
For apprentice	rates see "	Apprentice- ELECTRICIAN"			***		*			4
RE ALARM	REPAIR	/ MAINTENANCE		09/01/2021	1 \$43	.40	\$13.00	\$18.37	\$0.00	\$74.77
OCAL 103		/ COMMISSIONING	LECTRICIANS	03/01/2022	2 \$44	.71	\$13.00	\$18.74	\$0.00	\$76.45
				09/01/2022	2 \$46	.42	\$13.00	\$18.87	\$0.00	\$78.29
P		A	CATOMO TECHNICAL SAN	03/01/2023	3 \$48	.34	\$13.00	\$19.01	\$0.00	\$80.35
For apprentice	rates see "	Apprentice- TELECOMMUN	CATIONS TECHNICIAN"							

Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
12/01/2021	\$41.76	\$14.00	\$16.05	\$0.00	\$71.81
12/01/2021	\$24.50	\$9.10	\$17.57	\$0.00	\$51.17
09/01/2021	\$49.38	\$8.58	\$20.12	\$0.00	\$78.08
03/01/2022	\$50.18	\$8.58	\$20.12	\$0.00	\$78.88
	12/01/2021 12/01/2021 09/01/2021	12/01/2021 \$41.76 12/01/2021 \$24.50 09/01/2021 \$49.38	12/01/2021 \$41.76 \$14.00 12/01/2021 \$24.50 \$9.10 09/01/2021 \$49.38 \$8.58	12/01/2021 \$41.76 \$14.00 \$16.05 12/01/2021 \$24.50 \$9.10 \$17.57 09/01/2021 \$49.38 \$8.58 \$20.12	Effective Date Base Wage Health Pension Unemployment 12/01/2021 \$41.76 \$14.00 \$16.05 \$0.00 12/01/2021 \$24.50 \$9.10 \$17.57 \$0.00 09/01/2021 \$49.38 \$8.58 \$20.12 \$0.00

Effec Step	tive Date - percent	09/01/2021 Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	:
1	50	\$24.69	\$8.58	\$1.79	\$0.00	\$35.06	,
2	55	\$27.16	\$8.58	\$1.79	\$0.00	\$37.53	;
3	60	\$29.63	\$8.58	\$14.75	\$0.00	\$52.96	i
4	65	\$32.10	\$8.58	\$14.75	\$0.00	\$55.43	
5	70	\$34.57	\$8.58	\$16.54	\$0.00	\$59.69	1
6	75	\$37.04	\$8.58	\$16.54	\$0.00	\$62.16	i
7	80	\$39.50	\$8.58	\$18.33	\$0.00	\$66.41	
8	85	\$41.97	\$8.58	\$18.33	\$0.00	\$68.88	:
Effec Step	tive Date - percent	03/01/2022 Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	:
1	50	\$25.09	\$8.58	\$1.79	\$0.00	\$35.46	;
2	55	\$27.60	\$8.58	\$1.79	\$0.00	\$37.97	,
3	60	\$30.11	\$8.58	\$14.75	\$0.00	\$53.44	ļ
4	65	\$32.62	\$8.58	\$14.75	\$0.00	\$55.95	i
5	70	\$35.13	\$8.58	\$16.54	\$0.00	\$60.25	i
6	75	\$37.64	\$8.58	\$16.54	\$0.00	\$62.76	;
7	80	\$40.14	\$8.58	\$18.33	\$0.00	\$67.05	i
8	85	\$42.65	\$8.58	\$18.33	\$0.00	\$69.56	i
Notes		50 hrs. 50 hrs					
Appr	entice to Joi	rneyworker Ratio:1:1					
LIFT/CHERRY		12/01/2021	\$51.38	\$14.00	\$16.05	\$0.00	\$81.4

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR	07/01/2021	\$42.36	\$8.45	\$22.90	\$0.00	\$73.71
SYSTEMS) GLAZIERS LOCAL 35 (ZONE 2)	01/01/2022	\$43.16	\$8.65	\$23.05	\$0.00	\$74.86
, ,	07/01/2022	\$44.36	\$8.65	\$23.05	\$0.00	\$76.06
	01/01/2023	\$45.56	\$8.65	\$23.05	\$0.00	\$77.26
	07/01/2023	\$46.76	\$8.65	\$23.05	\$0.00	\$78.46
	01/01/2024	\$47.96	\$8.65	\$23.05	\$0.00	\$79.66
	07/01/2024	\$49.16	\$8.65	\$23.05	\$0.00	\$80.86
	01/01/2025	\$50.36	\$8.65	\$23.05	\$0.00	\$82.06

\$21.18 \$23.30 \$25.42 \$27.53	\$8.45 \$8.45 \$8.45	\$0.00 \$6.22	\$0.00	\$29.0
\$25.42		\$6.22	00.00	
*	\$8.45		\$0.00	\$37.
\$27.52	φυ.45	\$6.78	\$0.00	\$40.
\$27.33	\$8.45	\$7.35	\$0.00	\$43.
\$29.65	\$8.45	\$19.51	\$0.00	\$57.
\$31.77	\$8.45	\$20.08	\$0.00	\$60.
\$33.89	\$8.45	\$20.64	\$0.00	\$62.
\$38.12	\$8.45	\$21.77	\$0.00	\$68.
			Supplemental	
oprentice Base Wag	ge Health	Pension	Unemployment	Total Ra
\$21.58	\$8.65	\$0.00	\$0.00	\$30.
\$23.74	\$8.65	\$6.27	\$0.00	\$38.
\$25.90	\$8.65	\$6.84	\$0.00	\$41.
\$28.05	\$8.65	\$7.41	\$0.00	\$44.
\$30.21	\$8.65	\$19.63	\$0.00	\$58.
\$32.37	\$8.65	\$20.20	\$0.00	\$61.
\$34.53	\$8.65	\$20.77	\$0.00	\$63.
\$38.84	\$8.65	\$21.91	\$0.00	\$69.
				. — — –
	\$33.89 \$38.12 perentice Base Wag \$21.58 \$23.74 \$25.90 \$28.05 \$30.21 \$32.37 \$34.53	\$33.89 \$8.45 \$38.12 \$8.45 perentice Base Wage Health \$21.58 \$8.65 \$23.74 \$8.65 \$25.90 \$8.65 \$28.05 \$8.65 \$30.21 \$8.65 \$32.37 \$8.65 \$34.53 \$8.65	\$33.89 \$8.45 \$20.64 \$38.12 \$8.45 \$21.77 Exprentice Base Wage Health Pension \$21.58 \$8.65 \$0.00 \$23.74 \$8.65 \$6.27 \$25.90 \$8.65 \$6.84 \$28.05 \$8.65 \$7.41 \$30.21 \$8.65 \$19.63 \$32.37 \$8.65 \$20.20 \$34.53 \$8.65 \$20.77	\$33.89 \$8.45 \$20.64 \$0.00 \$38.12 \$8.45 \$21.77 \$0.00 \$0

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Apprentice Base Wage Health

\$14.00

\$14.00

\$14.00

\$28.26

\$30.83

\$33.40

Supplemental Unemployment

\$0.00

\$0.00

\$0.00

Pension

\$0.00

\$16.05

\$16.05

Total Rate

\$42.26

\$60.88

\$63.45

Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 12/01/2021

percent

55

60

65

Step

2

3

	Φ55.40	φ14.00	\$10.05	φ0.00	Ψ	05.45
4 70	\$35.97	\$14.00	\$16.05	\$0.00	\$	66.02
5 75	\$38.54	\$14.00	\$16.05	\$0.00	\$	68.59
6 80	\$41.10	\$14.00	\$16.05	\$0.00	\$	71.15
7 85	\$43.67	\$14.00	\$16.05	\$0.00	\$	73.72
8 90	\$46.24	\$14.00	\$16.05	\$0.00	\$	76.29
Notes:						-
İ						i
Apprentice to Journeyworker Ratio:1:6						
VAC (DUCTWORK) HEETMETAL WORKERS LOCAL 17 - A	08/01/202	1 \$51.95	\$13.80	\$25.60	\$2.74	\$94.09
	02/01/202	2 \$53.70	\$13.80	\$25.60	\$2.79	\$95.89
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
VAC (ELECTRICAL CONTROLS) LECTRICIANS LOCAL 103	09/01/202	1 \$56.36	\$13.00	\$20.54	\$0.00	\$89.90
	03/01/202	2 \$57.32	\$13.00	\$20.82	\$0.00	\$91.14
	09/01/202	2 \$58.76	\$13.00	\$20.86	\$0.00	\$92.62
For apprentice rates see "Apprentice- ELECTRICIAN"	03/01/202	\$60.43	\$13.00	\$20.91	\$0.00	\$94.34
VAC (TESTING AND BALANCING - AIR)	08/01/202	1 \$51.95	\$13.80	\$25.60	\$2.74	\$94.09
HEETMETAL WORKERS LOCAL 17 - A	02/01/202	2 \$53.70	\$13.80	\$25.60	\$2.79	\$95.89
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
VAC (TESTING AND BALANCING -WATER) IPEFIITERS LOCAL 337	03/01/202	1 \$57.94	\$11.70	\$20.24	\$0.00	\$89.88
For apprentice rates see "Apprentice- PIPEFTTTER" or "PLUMBER/PIPEFTTTER"						
VAC MECHANIC PEFITTERS LOCAL 537	03/01/202	1 \$57.94	\$11.70	\$20.24	\$0.00	\$89.88
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
YDRAULIC DRILLS	12/01/202	1 \$41.93	\$9.10	\$17.57	\$0.00	\$68.60
ABORERS - ZONE 1	06/01/202	2 \$42.93	\$9.10	\$17.57	\$0.00	\$69.60
	12/01/202	2 \$43.93	\$9.10	\$17.57	\$0.00	\$70.60
	06/01/202	3 \$44.93	\$9.10	\$17.57	\$0.00	\$71.60
	12/01/202		\$9.10	\$17.57	\$0.00	\$72.85
For apprentice rates see "Apprentice- LABORER"		,				
YDRAULIC DRILLS (HEAVY & HIGHWAY) BORERS - ZONE 1 (HEAVY & HIGHWAY)	12/01/202	1 \$41.93	\$9.10	\$17.57	\$0.00	\$68.60
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
NSULATOR (PIPES & TANKS)	09/01/202	1 \$51.40	\$13.80	\$17.14	\$0.00	\$82.34
EAT & FROST INSULATORS LOCAL 6 (BOSTON)	09/01/202	2 \$53.85	\$13.80	\$17.14	\$0.00	\$84.79
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Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.70	\$13.80	\$12.42	\$0.00	\$51.92
2	60	\$30.84	\$13.80	\$13.36	\$0.00	\$58.00
3	70	\$35.98	\$13.80	\$14.31	\$0.00	\$64.09
4	80	\$41.12	\$13.80	\$15.25	\$0.00	\$70.17
Effecti Step	ive Date - 09/01/2022	Apprentice Base Wage	Haalth	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.93	\$13.80	\$12.42	\$0.00	\$53.15
2	60	\$20.93 \$32.31	\$13.80	\$13.36	\$0.00	\$59.47
3	70	\$37.70	\$13.80	\$14.31	\$0.00	\$65.81
4	80	\$43.08	\$13.80	\$15.25	\$0.00	\$72.13
Notes:						
İ	Steps are 1 year					i
Appre	ntice to Journeyworker Rati	io:1:4				

	Step	ive Date - 09/16/2020 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	60	\$29.20	\$8.10	\$25.10	\$0.00	\$62.40	
	2	70	\$34.06	\$8.10	\$25.10	\$0.00	\$67.26	
	3	75	\$36.50	\$8.10	\$25.10	\$0.00	\$69.70	
	4	80	\$38.93	\$8.10	\$25.10	\$0.00	\$72.13	
	5	85	\$41.36	\$8.10	\$25.10	\$0.00	\$74.56	
	6	90	\$43.79	\$8.10	\$25.10	\$0.00	\$76.99	
	Notes:	** Structural 1:6; Ornamental 1:4						
	Appre	ntice to Journeyworker Ratio:**						
		VING BREAKER OPERATOR	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
RERS - ZO	IVE I		06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
			12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
			06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
			12/01/2023	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35

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ABORER #BORERS - ZONE 1 Apprentice - LABORER - Zone 1 Effective Date - 12/01/2021 Step percent	\$9.10 \$9.10 \$9.10 \$9.10	\$9.10 \$9.10 \$9.10 \$9.10 \$9.10 Pension \$17.57 \$17.57 \$17.57	\$17.57 \$17.57 \$17.57 \$17.57 \$17.57 \$17.57 \$0.00 \$0.00 \$0.00 \$0.00	Total Rate 0 \$51.38 0 \$55.50 0 \$59.61 0 \$63.73	
Apprentice LABORER - Zone 1 Effective Date 12/01/2021 Step percent Apprentice Base Wage 1 60 \$24.71 2 70 \$28.83 3 80 \$32.94 4 90 \$37.06 Effective Date 06/01/2022 Step percent Apprentice Base Wage 2 70 \$28.83 3 80 \$32.94 4 90 \$37.06 Effective Date 06/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	\$43.18 \$44.18 \$45.43 Health \$9.10 \$9.10 \$9.10	\$9.10 \$9.10 \$9.10 Pension \$17.57 \$17.57 \$17.57	\$17.57 \$17.57 \$17.57 Supplemente Unemploymer \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 Total Rate 0 \$51.38 0 \$55.50 0 \$59.61	\$69.85 \$70.85 \$72.10
Apprentice - LABORER - Zone 1	\$44.18 \$45.43 Health \$9.10 \$9.10 \$9.10 \$9.10	\$9.10 \$9.10 Pension \$17.57 \$17.57 \$17.57	\$17.57 \$17.57 Supplementa Unemploymen \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 al at Total Rate 0 \$51.38 0 \$55.50 0 \$59.61 0 \$63.73	\$70.85 \$72.10
Apprentice - LABORER - Zone 1 Effective Date - 12/01/2021 Step percent Apprentice Base Wage 1 60 \$24.71 2 70 \$28.83 3 80 \$32.94 4 90 \$37.06 Effective Date - 06/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	\$45.43 Health \$9.10 \$9.10 \$9.10 \$9.10	\$9.10 Pension \$17.57 \$17.57 \$17.57	\$17.57 Supplemente Unemploymer \$0.00 \$0.00 \$0.00	\$0.00 al	\$72.10
Apprentice - LABORER - Zone 1 Effective Date - 12/01/2021 Step percent Apprentice Base Wage 1 60 \$24.71 2 70 \$28.83 3 80 \$32.94 4 90 \$37.06 Effective Date - 06/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	Health \$9.10 \$9.10 \$9.10 \$9.10	Pension \$17.57 \$17.57 \$17.57 \$17.57	Supplemente Unemploymen \$0.00 \$0.00 \$0.00	al Total Rate 0 \$51.38 0 \$55.50 0 \$59.61 0 \$63.73	
Effective Date - 12/01/2021 Step percent Apprentice Base Wage 1 60 \$24.71 2 70 \$28.83 3 80 \$32.94 4 90 \$37.06 Effective Date - 06/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	\$9.10 \$9.10 \$9.10 \$9.10	\$17.57 \$17.57 \$17.57 \$17.57	\$0.00 \$0.00	Total Rate 0 \$51.38 0 \$55.50 0 \$59.61 0 \$63.73	
Step percent Apprentice Base Wage 1 60 \$24.71 2 70 \$28.83 3 80 \$32.94 4 90 \$37.06 Effective Date - O6/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	\$9.10 \$9.10 \$9.10 \$9.10	\$17.57 \$17.57 \$17.57 \$17.57	\$0.00 \$0.00	Total Rate 0 \$51.38 0 \$55.50 0 \$59.61 0 \$63.73	
1 60 \$24.71 2 70 \$28.83 3 80 \$32.94 4 90 \$37.06 Effective Date - O6/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	\$9.10 \$9.10 \$9.10 \$9.10	\$17.57 \$17.57 \$17.57 \$17.57	\$0.00 \$0.00 \$0.00 \$0.00	0 \$51.38 0 \$55.50 0 \$59.61 0 \$63.73	
2 70 \$28.83 3 80 \$32.94 4 90 \$37.06 Effective Date - 06/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	\$9.10 \$9.10 \$9.10 Health	\$17.57 \$17.57 \$17.57	\$0.00 \$0.00 \$0.00 Supplementa	0 \$55.50 0 \$59.61 0 \$63.73	
3 80 \$32.94 4 90 \$37.06 Effective Date - 06/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	\$9.10 \$9.10 Health	\$17.57 \$17.57	\$0.00 \$0.00 Supplementa	0 \$59.61 0 \$63.73	
4 90 \$37.06 Effective Date - 06/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	\$9.10 Health	\$17.57	\$0.00 Supplements	0 \$63.73	
Effective Date - 06/01/2022 Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96	Health		Supplementa		
Step percent Apprentice Base Wage 1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96		Pension		al	
1 60 \$25.31 2 70 \$29.53 3 80 \$33.74 4 90 \$37.96		Pension			
2 70 \$29.53 3 80 \$33.74 4 90 \$37.96			Unemploymen		
3 80 \$33.74 4 90 \$37.96	\$9.10	\$17.57	\$0.00		
4 90 \$37.96	\$9.10	\$17.57	\$0.00	0 \$56.20	
	\$9.10	\$17.57	\$0.00	0 \$60.41	
Notes:	\$9.10	\$17.57	\$0.00	0 \$64.63	
Apprentice to Journeyworker Ratio:1:5				'	
BORER (HEAVY & HIGHWAY) 12/01/2021 ORERS - ZONE 1 (HEAVY & HIGHWAY)	\$41.18	\$9.10	\$17.57	\$0.00	\$67.85

Apprentice - LABORER (Heavy & Highway) - Zone 1

	Effect	ive Date - 12/01	2021			Supplemental		
	Step	percent	Apprentice Base Wa	ige Health	Pension	Unemployment	Total	Rate
	1	60	\$24.71	\$9.10	\$17.57	\$0.00	\$5	1.38
	2	70	\$28.83	\$9.10	\$17.57	\$0.00	\$5	5.50
	3	80	\$32.94	\$9.10	\$17.57	\$0.00	\$5	9.61
	4	90	\$37.06	\$9.10	\$17.57	\$0.00	\$6	3.73
	Notes:							_
	i							i
	Appre	ntice to Journeyw	orker Ratio:1:5					
		TER TENDER	12/01/2	2021 \$41.1	8 \$9.10	\$17.57	\$0.00	\$67.85
ABORERS - ZC	INE I		06/01/2	2022 \$42.1	8 \$9.10	\$17.57	\$0.00	\$68.85
			12/01/2	2022 \$43.1	8 \$9.10	\$17.57	\$0.00	\$69.85
			06/01/2	2023 \$44.1	8 \$9.10	\$17.57	\$0.00	\$70.85
			12/01/2	2023 \$45.4	3 \$9.10	\$17.57	\$0.00	\$72.10
For apprent	ice rates see	"Apprentice- LABOREF	U.					
ssue Date:	12/28/20	21	Wage Request Number: 2021	11228-021				Page 16 of 3

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: CEMENT FINISHER TENDER	12/01/2021	\$41.18	\$9.10	\$17.57	\$0.00	\$67.85
LABORERS - ZONE 1	06/01/2022	\$42.18	\$9.10	\$17.57	\$0.00	\$68.85
	12/01/2022	\$43.18	\$9.10	\$17.57	\$0.00	\$69.85
	06/01/2023	\$44.18	\$9.10	\$17.57	\$0.00	\$70.85
	12/01/2023	\$45.43	\$9.10	\$17.57	\$0.00	\$72.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS - ZONE 1	12/01/2021	\$41.33	\$9.10	\$17.57	\$0.00	\$68.00
MADONSKO - ZOMB I	06/01/2022	\$42.33	\$9.10	\$17.57	\$0.00	\$69.00
	12/01/2022	\$43.33	\$9.10	\$17.57	\$0.00	\$70.00
	06/01/2023	\$44.33	\$9.10	\$17.57	\$0.00	\$71.00
	12/01/2023	\$45.58	\$9.10	\$17.57	\$0.00	\$72.25
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER LABORERS - ZONE 1	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
	06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
	12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
	06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
	06/01/2024	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35
For apprentice rates see "Apprentice- LABORER" LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
LABORER: MULTI-TRADE TENDER	12/01/2021	\$41.18	\$9.10	\$17.57	\$0.00	\$67.85
LABORERS - ZONE 1	06/01/2022	\$42.18	\$9.10	\$17.57	\$0.00	\$68.85
	12/01/2022	\$43.18	\$9.10	\$17.57	\$0.00	\$69.85
	06/01/2023	\$44.18	\$9.10	\$17.57	\$0.00	\$70.85
	12/01/2023	\$45.43	\$9.10	\$17.57	\$0.00	\$72.10
For apprentice rates see "Apprentice- LABORER"	12/01/2023	Ψ-υ-υ-υ	Ψ2.10	Ψ17.57	ψ0.00	ψ12.10
LABORER: TREE REMOVER	12/01/2021	\$41.18	\$9.10	\$17.57	\$0.00	\$67.85
LABORERS - ZONE 1	06/01/2022	\$42.18	\$9.10	\$17.57	\$0.00	\$68.85
	12/01/2022	\$43.18	\$9.10	\$17.57	\$0.00	\$69.85
	06/01/2023	\$44.18	\$9.10	\$17.57	\$0.00	\$70.85
	12/01/2023	\$45.43	\$9.10	\$17.57	\$0.00	\$72.10
This classification applies to the removal of standing trees, and the trimming and remov clearance incidental to construction . For apprentice rates see "Apprentice-LABORER"	al of branches and lim			s construction		4 · - · · ·
LASER BEAM OPERATOR	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
LABORERS - ZONE 1	06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
	12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
	06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
	12/01/2023	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35
For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR (HEAVY & HIGHWAY) laborers - zone 1 (heavy & highway)	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
MARBLE & TILE FINISHERS BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2021	\$43.69	\$11.39	\$20.30	\$0.00	\$75.38
DIGGERAL DIGGER 5 - NIMEROLD & TILD	02/01/2022	\$44.16	\$11.39	\$20.30	\$0.00	\$75.85

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Appr	entice - M	4RBLE & TILE FINISHER -	Local 3 Marble & Tile					
	tive Date -	08/01/2021	Ati D W/	TT141-	Pension	Supplemental Unemployment	Total Rate	
Step	percent		Apprentice Base Wage	неани	Pension	Unemployment	Total Rate	
1	50		\$21.85	\$11.39	\$20.30	\$0.00	\$53.54	
2	60		\$26.21	\$11.39	\$20.30	\$0.00	\$57.90	
3	70		\$30.58	\$11.39	\$20.30	\$0.00	\$62.27	
4	80		\$34.95	\$11.39	\$20.30	\$0.00	\$66.64	
5	90		\$39.32	\$11.39	\$20.30	\$0.00	\$71.01	
Effec	tive Date -	02/01/2022				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$22.08	\$11.39	\$20.30	\$0.00	\$53.77	
2	60		\$26.50	\$11.39	\$20.30	\$0.00	\$58.19	
3	70		\$30.91	\$11.39	\$20.30	\$0.00	\$62.60	
4	80		\$35.33	\$11.39	\$20.30	\$0.00	\$67.02	
5	90		\$39.74	\$11.39	\$20.30	\$0.00	\$71.43	
Notes	 s:							
i							i	
Appr	entice to Joi	ırneyworker Ratio:1:3						
·		S & TERRAZZO MECH	08/01/2021	\$57.17	\$11.39	\$22.24	\$0.00	\$90.80
RICKLAYERS LOCAL 3 - 1	MARBLE & TIL.	E	02/01/2022	\$57.74	\$11.39	\$22.24	\$0.00	\$91.37

Step	percent		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50		\$28.59	\$11.39	\$22.24	\$0.00	\$62.22
2	60		\$34.30	\$11.39	\$22.24	\$0.00	\$67.93
3	70		\$40.02	\$11.39	\$22.24	\$0.00	\$73.65
4	80		\$45.74	\$11.39	\$22.24	\$0.00	\$79.37
5	90		\$51.45	\$11.39	\$22.24	\$0.00	\$85.08
Effect	ive Date -	02/01/2022				Supplemental	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50		\$28.87	\$11.39	\$22.24	\$0.00	\$62.50
2	60		\$34.64	\$11.39	\$22.24	\$0.00	\$68.27
3	70		\$40.42	\$11.39	\$22.24	\$0.00	\$74.05
4	80		\$46.19	\$11.39	\$22.24	\$0.00	\$79.82
5	90		\$51.97	\$11.39	\$22.24	\$0.00	\$85.60
Notes							

Classification				Effective Da	te Base Wage	e Health	Pension	Supplemental Unemployment	Total Rate
MECH. SWEE			(ON CONST. SITES)	12/01/202	1 \$50.83	\$14.00	\$16.05	\$0.00	\$80.88
For apprentic	e rates see	"Apprentice-	OPERATING ENGINEERS"						
MECHANICS OPERATING ENG				12/01/202	\$50.83	\$14.00	\$16.05	\$0.00	\$80.88
For apprentic	e rates see	"Apprentice-	OPERATING ENGINEERS"						
MILLWRIGHT				03/01/202	1 \$43.77	\$8.58	\$21.57	\$0.00	\$73.92
MILLWRIGHTS LO	OCAL 1121	' - Zone 1		01/03/202	2 \$45.52	\$8.58	\$21.57	\$0.00	\$75.67
				01/02/202	3 \$47.27	\$8.58	\$21.57	\$0.00	\$77.42
		ntice - Mive Date -	ULLWRIGHT - Local 1121 Z 03/01/2021	one 1			Guardan antal		
	Step	percent		Apprentice Base Wage	Health	Pension	Supplemental Unemployment		
	1	55		\$24.07	\$8.58	\$5.72	\$0.00	\$38.37	
	2	65		\$28.45	\$8.58	\$17.93	\$0.00	\$54.96	
	3	75		\$32.83	\$8.58	\$18.98	\$0.00	\$60.39	
	4	85		\$37.20	\$8.58	\$20.01	\$0.00	\$65.79	
	Effect Step	ive Date -	01/03/2022	Apprentice Base Wage	Health	Pension	Supplemental Unemployment		
	1	55		\$25.04	\$8.58	\$5.72	\$0.00	\$39.34	
	2	65		\$29.59	\$8.58	\$17.93	\$0.00	\$56.10	
	3	75		\$34.14	\$8.58	\$18.98	\$0.00		
	4	85		\$38.69	\$8.58	\$20.01	\$0.00	\$67.28	
	Notes	but do re	Appr. indentured after 1/6/2 ceive annuity. (Step 1 \$5.72, 2,000 hours						
	Appre	entice to Jo	urneyworker Ratio:1:5						
MORTAR MIX				12/01/202	1 \$41.43	\$9.10	\$17.57	\$0.00	\$68.10
LABORENS - ZON	12. 1			06/01/202	2 \$42.43	\$9.10	\$17.57	\$0.00	\$69.10
				12/01/202	2 \$43.43	\$9.10	\$17.57	\$0.00	\$70.10
				06/01/202	3 \$44.43	\$9.10	\$17.57	\$0.00	\$71.10
For apprentic	e rates see	"Apprentice-	LABORER"	12/01/202	3 \$45.68	\$9.10	\$17.57	\$0.00	\$72.35
	ER THAI	N TRUCK	CRANES,GRADALLS)	12/01/202	1 \$23.48	\$14.00	\$16.05	\$0.00	\$53.53
For apprentic	e rates see	"Apprentice-	OPERATING ENGINEERS"						
OILER (TRUC			DALLS)	12/01/202	1 \$28.44	\$14.00	\$16.05	\$0.00	\$58.49
For apprentic	e rates see	"Apprentice-	OPERATING ENGINEERS"						
OTHER POWI			PMENT - CLASS II	12/01/202	1 \$50.83	\$14.00	\$16.05	\$0.00	\$80.88
For apprentic	e rates see	"Apprentice-	OPERATING ENGINEERS"						

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Classification			Effective Da	te Base Wag	e Health	Pension	Supplemental Unemployment	Total Rate
AINTER (BRID AINTERS LOCAL 35 -		*	07/01/2021	\$52.86	\$8.45	\$22.90	\$0.00	\$84.21
IIIVI BRO LOCAL 33 -	- ZOIVE	2	01/01/2022	\$53.66	\$8.65	\$23.05	\$0.00	\$85.36
			07/01/2022	\$54.86	\$8.65	\$23.05	\$0.00	\$86.56
			01/01/2023	\$56.06	\$8.65	\$23.05	\$0.00	\$87.76
			07/01/2023	\$ \$57.26	\$8.65	\$23.05	\$0.00	\$88.96
			01/01/2024	\$58.46	\$8.65	\$23.05	\$0.00	\$90.16
			07/01/2024	\$59.66	\$8.65	\$23.05	\$0.00	\$91.36
			01/01/2025	\$60.86	\$8.65	\$23.05	\$0.00	\$92.56
E	ffectiv	tice - PAINTER Local 35 - BRII ve Date - 07/01/2021				Supplementa		
	step	percent	Apprentice Base Wage	Health	Pension	Unemploymen	t Total Rate	
1	1	50	\$26.43	\$8.45	\$0.00	\$0.00	34.88	
2	2	55	\$29.07	\$8.45	\$6.22	\$0.00	\$43.74	
3	3	60	\$31.72	\$8.45	\$6.78	\$0.0	\$46.95	
2	4	65	\$34.36	\$8.45	\$7.35	\$0.0	\$50.16	
5	5	70	\$37.00	\$8.45	\$19.51	\$0.0	\$64.96	
(5	75	\$39.65	\$8.45	\$20.08	\$0.0	\$68.18	
5	7	80	\$42.29	\$8.45	\$20.64	\$0.00	\$71.38	
8	3	90	\$47.57	\$8.45	\$21.77	\$0.00) \$ 77.79	
S	step	ve Date - 01/01/2022 percent	Apprentice Base Wage	Health	Pension	Supplementa Unemploymen		
	1	50	\$26.83	\$8.65	\$0.00	\$0.00	35.48	
2	2	55	\$29.51	\$8.65	\$6.27	\$0.00	944.43	
3	3	60	\$32.20	\$8.65	\$6.84	\$0.0	\$47.69	
2	4	65	\$34.88	\$8.65	\$7.41	\$0.0	\$50.94	
4	5	70	\$37.56	\$8.65	\$19.63	\$0.00	\$65.84	
(5	75	\$40.25	\$8.65	\$20.20	\$0.00	\$69.10	
:	7	80	\$42.93	\$8.65	\$20.77	\$0.0	\$72.35	
8	3	90	\$48.29	\$8.65	\$21.91	\$0.00	\$78.85	
N	otes:							
i		Steps are 750 hrs.						
A	ppren	tice to Journeyworker Ratio:1:1						
		SANDBLAST, NEW) *	07/01/2021	\$43.76	\$8.45	\$22.90	\$0.00	\$75.11
		faces to be painted are new constru used.PAINTERS LOCAL 35 - ZONE 2	o1/01/2022	\$44.56	\$8.65	\$23.05	\$0.00	\$76.26
rana rate on			07/01/2022	\$45.76	\$8.65	\$23.05	\$0.00	\$77.46
			01/01/2023	\$46.96	\$8.65	\$23.05	\$0.00	\$78.66
			07/01/2023	\$48.16	\$8.65	\$23.05	\$0.00	\$79.86
			01/01/2024	\$49.36	\$8.65	\$23.05	\$0.00	\$81.06
			07/01/2024	\$50.56	\$8.65	\$23.05	\$0.00	\$82.26

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01/01/2025

\$51.76 \$8.65

\$23.05

\$0.00

\$83.46

Step	ive Date - 07/01/2021 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rat	е
1	50	\$21.88	\$8.45	\$0.00	\$0.00	\$30.33	3
2	55	\$24.07	\$8.45	\$6.22	\$0.00	\$38.7	4
3	60	\$26.26	\$8.45	\$6.78	\$0.00	\$41.49	9
4	65	\$28.44	\$8.45	\$7.35	\$0.00	\$44.2	4
5	70	\$30.63	\$8.45	\$19.51	\$0.00	\$58.59)
6	75	\$32.82	\$8.45	\$20.08	\$0.00	\$61.3	5
7	80	\$35.01	\$8.45	\$20.64	\$0.00	\$64.10)
8	90	\$39.38	\$8.45	\$21.77	\$0.00	\$69.60)
	ive Date - 01/01/2022				Supplemental		
Step	percent	Apprentice Base Wage		Pension	Unemployment	Total Rat	
1	50	\$22.28	\$8.65	\$0.00	\$0.00	\$30.93	
2	55	\$24.51	\$8.65	\$6.27	\$0.00	\$39.43	3
3	60	\$26.74	\$8.65	\$6.84	\$0.00	\$42.23	3
4	65	\$28.96	\$8.65	\$19.06	\$0.00	\$56.6	7
5	70	\$31.19	\$8.65	\$19.63	\$0.00	\$59.4	7
6	75	\$33.42	\$8.65	\$20.20	\$0.00	\$62.2	7
7	80	\$35.65	\$8.65	\$20.77	\$0.00	\$65.0	7
8	90	\$40.10	\$8.65	\$21.91	\$0.00	\$70.60	5
Notes							
	Steps are 750 hrs.					i	
Appro	entice to Journeyworker Ratio:	1:1					
	SANDBLAST, REPAINT)	07/01/2021	\$41.82	\$8.45	\$22.90	\$0.00	\$73.1
IRS LOCAL 35 - ZON	E 2	01/01/2022	\$42.62	\$8.65	\$23.05	\$0.00	\$74.3
		07/01/2022	\$43.82	\$8.65	\$23.05	\$0.00	\$75.5
		01/01/2023	\$45.02	\$8.65	\$23.05	\$0.00	\$76.7
		07/01/2023	\$46.22	\$8.65	\$23.05	\$0.00	\$77.9
		01/01/2024	\$47.42	\$8.65	\$23.05	\$0.00	\$79.1
		07/01/2024	\$48.62	\$8.65	\$23.05	\$0.00	\$80.3
		01/01/2025	\$49.82	\$8.65	\$23.05	\$0.00	\$81.5

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Step	ive Date - 07/01/2021 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50						
2	55	\$20.91	\$8.45	\$0.00	\$0.00	\$29.36	
3		\$23.00	\$8.45	\$6.22	\$0.00	\$37.67	
4	60	\$25.09	\$8.45	\$6.78	\$0.00	\$40.32	
5	65	\$27.18	\$8.45	\$7.35	\$0.00	\$42.98	
6	70	\$29.27	\$8.45	\$19.51	\$0.00	\$57.23	
	75	\$31.37	\$8.45	\$20.08	\$0.00	\$59.90	
7	80	\$33.46	\$8.45	\$20.64	\$0.00	\$62.55	
8	90	\$37.64	\$8.45	\$21.77	\$0.00	\$67.86	5
	ive Date - 01/01/2022	Apprentice Base Wage	Haalth	Pension	Supplemental Unemployment	Total Rate	
Step 1	percent 50						
2	55	\$21.31	\$8.65	\$0.00	\$0.00	\$29.96	
3		\$23.44	\$8.65	\$6.27	\$0.00	\$38.36	
	60	\$25.57	\$8.65	\$6.84	\$0.00	\$41.06	
4	65	\$27.70	\$8.65	\$7.41	\$0.00	\$43.76	
5	70	\$29.83	\$8.65	\$19.63	\$0.00	\$58.11	
6	75	\$31.97	\$8.65	\$20.20	\$0.00	\$60.82	
7	80	\$34.10	\$8.65	\$20.77	\$0.00	\$63.52	2
8	90	\$38.36	\$8.65	\$21.91	\$0.00	\$68.92	!
Notes							
	Steps are 750 hrs.						
Appr	entice to Journeyworker Ratio:1:1						
NTER / TAPER (B	· · ·	07/01/2021	\$42.36	\$8.45	\$22.90	\$0.00	\$73.71
	% or more of surfaces to be painted are new construction, raint rate shall be used. PAINTERS LOCAL 35 - ZONE 2		\$43.16	\$8.65	\$23.05	\$0.00	\$74.8
7 pariti rate silan 0	CHOCK LANGE TO LOCAL 33 - ZOIVE 2	07/01/2022	\$44.36	\$8.65	\$23.05	\$0.00	\$76.0
		01/01/2023	\$45.56	\$8.65	\$23.05	\$0.00	\$77.2
		07/01/2023	\$46.76	\$8.65	\$23.05	\$0.00	\$78.40
		01/01/2024	\$47.96	\$8.65	\$23.05	\$0.00	\$79.6
		07/01/2024	\$49.16	\$8.65	\$23.05	\$0.00	\$80.8

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Step	tive Date - 07/01/202 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$21.18	\$8.45	\$0.00	\$0.00	\$29.63	
2	55	\$23.30	\$8.45	\$6.22	\$0.00	\$37.97	
3	60	\$25.42	\$8.45	\$6.78	\$0.00	\$40.65	
4	65	\$27.53	\$8.45	\$7.35	\$0.00	\$43.33	
5	70	\$29.65	\$8.45	\$19.51	\$0.00	\$57.61	
6	75	\$31.77	\$8.45	\$20.08	\$0.00	\$60.30	
7	80	\$33.89	\$8.45	\$20.64	\$0.00	\$62.98	
8	90	\$38.12	\$8.45	\$21.77	\$0.00	\$68.34	
Effec Step	tive Date - 01/01/202	2 Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$21.58	\$8.65	\$0.00	\$0.00	\$30.23	
2	55	\$23.74	\$8.65	\$6.27	\$0.00	\$38.66	
3	60	\$25.90	\$8.65	\$6.84	\$0.00	\$41.39	
4	65	\$28.05	\$8.65	\$7.41	\$0.00	\$44.11	
5	70	\$30.21	\$8.65	\$19.63	\$0.00	\$58.49	
6	75	\$32.37	\$8.65	\$20.20	\$0.00	\$61.22	
7	80	\$34.53	\$8.65	\$20.77	\$0.00	\$63.95	
8	90	\$38.84	\$8.65	\$21.91	\$0.00	\$69.40	
Notes							
i	Steps are 750 hrs.					i	
Appr	entice to Journeyworks	er Ratio:1:1					
	BRUSH, REPAINT)	07/01/2021	\$40.42	\$8.45	\$22.90	\$0.00	\$71.7
RS LOCAL 35 - ZON	VE 2	01/01/2022	\$41.22	\$8.65	\$23.05	\$0.00	\$72.9
		07/01/2022	\$42.42	\$8.65	\$23.05	\$0.00	\$74.1
		01/01/2023	\$43.62	\$8.65	\$23.05	\$0.00	\$75.3
		07/01/2023	\$44.82	\$8.65	\$23.05	\$0.00	\$76.5
		01/01/2024	\$46.02	\$8.65	\$23.05	\$0.00	\$77.7
		07/01/2024	\$47.22	\$8.65	\$23.05	\$0.00	\$78.9

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Step	ve Date - 07/01/2021 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$20.21	\$8.45	\$0.00	\$0.00	\$28.66	
2	55	\$22.23	\$8.45	\$6.22	\$0.00	\$36.90	
3	60	\$24.25	\$8.45	\$6.78	\$0.00	\$39.48	
4	65	\$26.27	\$8.45	\$7.35	\$0.00	\$42.07	
5	70	\$28.29	\$8.45	\$19.51	\$0.00	\$56.25	
6	75	\$30.32	\$8.45	\$20.08	\$0.00	\$58.85	
7	80	\$32.34	\$8.45	\$20.64	\$0.00	\$61.43	
8	90	\$36.38	\$8.45	\$21.77	\$0.00	\$66.60	
Effecti Step	ve Date - 01/01/2022 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$20.61	\$8.65	\$0.00	\$0.00	\$29.26	
2	55	\$22.67	\$8.65	\$6.27	\$0.00	\$37.59	
3	60	\$24.73	\$8.65	\$6.84	\$0.00	\$40.22	
4	65	\$26.79	\$8.65	\$7.41	\$0.00	\$42.85	
5	70	\$28.85	\$8.65	\$19.63	\$0.00	\$57.13	
6	75	\$30.92	\$8.65	\$20.20	\$0.00	\$59.77	
7	80	\$32.98	\$8.65	\$20.77	\$0.00	\$62.40	
8	90	\$37.10	\$8.65	\$21.91	\$0.00	\$67.66	
Notes:							
i	Steps are 750 hrs.					i	
Appre	ntice to Journeyworker Ratio:	1:1					
TER TRAFFIC M PERS - ZONE 1 (HEAV)	ARKINGS (HEAVY/HIGHWA ′ & HIGHWAY)	Y) 12/01/2021	\$41.18	\$9.10	\$17.57	\$0.00	\$67.85
or apprentice rates see "	Apprentice- LABORER (Heavy and Hig	thway)					
L & PICKUP TRU TERS JOINT COUNC.		12/01/202	\$36.88	\$13.41	\$16.01	\$0.00	\$66.30
K) PRIVER LOCAL 56 (ZC	STRUCTOR (UNDERPINNIN NE 1) Apprentice- PILE DRIVER"	IG AND 08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59

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Supplemental Unemployment Total Rate Classification Effective Date Base Wage Health Pension

ve Date - 08/01/2020 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
50	\$24.54	\$9.40	\$23.12	\$0.00	\$57.06
60	\$29.44	\$9.40	\$23.12	\$0.00	\$61.96
70	\$34.35	\$9.40	\$23.12	\$0.00	\$66.87
75	\$36.80	\$9.40	\$23.12	\$0.00	\$69.32
80	\$39.26	\$9.40	\$23.12	\$0.00	\$71.78
80	\$39.26	\$9.40	\$23.12	\$0.00	\$71.78
90	\$44.16	\$9.40	\$23.12	\$0.00	\$76.68
90	\$44.16	\$9.40	\$23.12	\$0.00	\$76.68
	50 60 70 75 80 80	\$24.54 60 \$29.44 70 \$34.35 75 \$36.80 80 \$39.26 80 \$39.26 90 \$44.16	50 \$24.54 \$9.40 60 \$29.44 \$9.40 70 \$34.35 \$9.40 75 \$36.80 \$9.40 80 \$39.26 \$9.40 80 \$39.26 \$9.40 90 \$44.16 \$9.40	50 \$24.54 \$9.40 \$23.12 60 \$29.44 \$9.40 \$23.12 70 \$34.35 \$9.40 \$23.12 75 \$36.80 \$9.40 \$23.12 80 \$39.26 \$9.40 \$23.12 80 \$39.26 \$9.40 \$23.12 90 \$44.16 \$9.40 \$23.12	percent Apprentice Base Wage Health Pension Unemployment 50 \$24.54 \$9.40 \$23.12 \$0.00 60 \$29.44 \$9.40 \$23.12 \$0.00 70 \$34.35 \$9.40 \$23.12 \$0.00 75 \$36.80 \$9.40 \$23.12 \$0.00 80 \$39.26 \$9.40 \$23.12 \$0.00 80 \$39.26 \$9.40 \$23.12 \$0.00 90 \$44.16 \$9.40 \$23.12 \$0.00

PIPEFITTER & STEAMFITTER \$57.94 \$11.70 \$20.24 \$0.00 03/01/2021 \$89.88 PIPEFITTERS LOCAL 537

	ctive Date - 03/01/2021				Supplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	;
1	40	\$23.18	\$11.70	\$8.25	\$0.00	\$43.13	
2	45	\$26.07	\$11.70	\$20.24	\$0.00	\$58.01	
3	60	\$34.76	\$11.70	\$20.24	\$0.00	\$66.70)
4	70	\$40.56	\$11.70	\$20.24	\$0.00	\$72.50)
5	80	\$46.35	\$11.70	\$20.24	\$0.00	\$78.29	1
Note	** 1:3; 3:15; 1:10 there	after / Steps are 1 yr.					
<u></u>	** 1:3; 3:15; 1:10 there	1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:1	7;9:20;10:23(1	Max)			
Appi	** 1:3; 3:15; 1:10 there: Refrig/AC Mechanic **	1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:1			\$17.57	\$0.00	\$68.10
Appi	** 1:3; 3:15; 1:10 there: Refrig/AC Mechanic **	1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:1; Ratio:**	1 \$41.43	\$9.10	\$17.57 \$17.57	\$0.00	\$68.10 \$69.10
Appi	** 1:3; 3:15; 1:10 there: Refrig/AC Mechanic **	11:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:1 Ratio: **	1 \$41.43 2 \$42.43	\$9.10 \$9.10		*****	*
į	** 1:3; 3:15; 1:10 there: Refrig/AC Mechanic **	11:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:1 Ratio: ** 12/01/202 06/01/202	1 \$41.43 2 \$42.43 2 \$43.43	\$9.10 \$9.10 \$9.10	\$17.57	\$0.00	\$69.10
Appi PELAYER BORERS - ZONE 1	** 1:3; 3:15; 1:10 there: Refrig/AC Mechanic **	11:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:1 Ratio: ** 12/01/202 06/01/202 12/01/202	1 \$41.43 2 \$42.43 2 \$43.43 3 \$44.43	\$9.10 \$9.10 \$9.10 \$9.10	\$17.57 \$17.57	\$0.00 \$0.00	\$69.10 \$70.10

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PLUMBERS & GASFITTERS	09/01/2021	\$61.79	\$13.57	\$17.26	\$0.00	\$92.62
PLUMBERS & GASFITTERS LOCAL 12	02/27/2022	\$63.39	\$13.57	\$17.26	\$0.00	\$94.22
	09/04/2022	\$65.09	\$13.57	\$17.26	\$0.00	\$95.92
	02/26/2023	\$66.79	\$13.57	\$17.26	\$0.00	\$97.62
	09/03/2023	\$68.54	\$13.57	\$17.26	\$0.00	\$99.37
	03/03/2024	\$70.34	\$13.57	\$17.26	\$0.00	\$101.17
	09/01/2024	\$72.14	\$13.57	\$17.26	\$0.00	\$102.97
	03/02/2025	\$73.94	\$13.57	\$17.26	\$0.00	\$104.77

	Effecti Step	ve Date - 09/01/2021 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	35	\$21.63	\$13.57	\$6.24	\$0.00	\$41.44	
	2	40	\$24.72	\$13.57	\$7.08	\$0.00	\$45.37	
	3	55	\$33.98	\$13.57	\$9.63	\$0.00	\$57.18	
	4	65	\$40.16	\$13.57	\$11.33	\$0.00	\$65.06	
	5	75	\$46.34	\$13.57	\$13.03	\$0.00	\$72.94	
	Effecti	ve Date - 02/27/2022				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	35	\$22.19	\$13.57	\$6.24	\$0.00	\$42.00	
	2	40	\$25.36	\$13.57	\$7.08	\$0.00	\$46.01	
	3	55	\$34.86	\$13.57	\$9.63	\$0.00	\$58.06	
	4	65	\$41.20	\$13.57	\$11.33	\$0.00	\$66.10	
	5	75	\$47.54	\$13.57	\$13.03	\$0.00	\$74.14	
	Notes:							
	Ĺ.	** 1:2; 2:6; 3:10; 4:14; 5:19/Ste Step4 with lic\$69.00, Step5 wit					i	
	Appre	ntice to Journeyworker Ratio:*	*					
EUMATIC (Efitters loc		OLS (TEMP.)	03/01/2021	\$57.94	\$11.70	\$20.24	\$0.00	\$89.88
For apprentice	e rates see "	Apprentice- PIPEFTTTER" or "PLUMBE	R/PIPEFITTER"					
		OOL OPERATOR	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
ORERS - ZON	E I		06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
			12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
			06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
			12/01/2023	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35

HIGHWAY)

LABORERS - ZONE 1 (HEAVY & HIGHWAY)

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)

PNEUMATIC DRILL/TOOL OPERATOR (HEAVY &

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12/01/2021 \$41.43 \$9.10 \$17.57

\$0.00

\$68.10

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWDERMAN & BLASTER	12/01/2021	\$42.18	\$9.10	\$17.57	\$0.00	\$68.85
LABORERS - ZONE 1	06/01/2022	\$43.18	\$9.10	\$17.57	\$0.00	\$69.85
	12/01/2022	\$44.18	\$9.10	\$17.57	\$0.00	\$70.85
	06/01/2023	\$45.18	\$9.10	\$17.57	\$0.00	\$71.85
	12/01/2023	\$46.43	\$9.10	\$17.57	\$0.00	\$73.10
For apprentice rates see "Apprentice- LABORER"						
POWDERMAN & BLASTER (HEAVY & HIGHWAY) LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/01/2021	\$42.18	\$9.10	\$17.57	\$0.00	\$68.85
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4	12/01/2021	\$51.38	\$14.00	\$16.05	\$0.00	\$81.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4	12/01/2021	\$51.38	\$14.00	\$16.05	\$0.00	\$81.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4	12/01/2021	\$33.69	\$14.00	\$16.05	\$0.00	\$63.74
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER	05/01/2021	\$25.00	\$11.51	\$8.00	\$0.00	\$44.51
TEAMSTERS 170 - Rosenfeld (Walpole)	01/01/2022	\$25.00	\$11.96	\$8.00	\$0.00	\$44.96
	05/01/2022	\$25.75	\$11.96	\$8.00	\$0.00	\$45.71
	01/01/2023	\$25.75	\$12.46	\$8.00	\$0.00	\$46.21
	05/01/2023	\$26.40	\$12.46	\$8.00	\$0.00	\$46.86
	01/01/2024	\$26.40	\$12.96	\$8.00	\$0.00	\$47.36
	05/01/2024	\$27.00	\$12.96	\$8.00	\$0.00	\$47.96
	01/01/2025	\$27.00	\$13.46	\$8.00	\$0.00	\$48.46
	05/01/2025	\$27.60	\$13.46	\$8.25	\$0.00	\$49.31
	01/01/2026	\$27.60	\$13.96	\$8.25	\$0.00	\$49.81
RECLAIMERS OPERATING ENGINEERS LOCAL 4	12/01/2021	\$50.83	\$14.00	\$16.05	\$0.00	\$80.88
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RIDE-ON MOTORIZED BUGGY OPERATOR	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
LABORERS - ZONE 1	06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
	12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
	06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
	12/01/2023	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35
For apprentice rates see "Apprentice- LABORER"					•	
ROLLER/SPREADER/MULCHING MACHINE OPERATING ENGINEERS LOCAL 4	12/01/2021	\$50.83	\$14.00	\$16.05	\$0.00	\$80.88
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
ROOFER (Inc.Roofer Waterproofing &Roofer Damproofg)	08/01/2021	\$47.03	\$12.28	\$18.15	\$0.00	\$77.46
ROOFERS LOCAL 33	02/01/2022	\$48.46	\$12.28	\$18.15	\$0.00	\$78.89

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Ste	fective Date - p percent	08/01/2021	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50		\$23.52	\$12.28	\$4.56	\$0.00	\$40.36	
2	60		\$28.22	\$12.28	\$18.15	\$0.00	\$58.65	
3	65		\$30.57	\$12.28	\$18.15	\$0.00	\$61.00	
4	75		\$35.27	\$12.28	\$18.15	\$0.00	\$65.70	
5	85		\$39.98	\$12.28	\$18.15	\$0.00	\$70.41	
Eff	fective Date -	02/01/2022				Supplemental		
Ste	p percent		apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$24.23	\$12.28	\$4.56	\$0.00	\$41.07	
2	60		\$29.08	\$12.28	\$18.15	\$0.00	\$59.51	
3	65		\$31.50	\$12.28	\$18.15	\$0.00	\$61.93	
4	75		\$36.35	\$12.28	\$18.15	\$0.00	\$66.78	
5	85		\$41.19	\$12.28	\$18.15	\$0.00	\$71.62	
Ĺ	Step 1 is (Hot Pit	6-10, the 1:10; Reroofing: 1:4, 2000 hrs.; Steps 2-5 are 1000 h ch Mechanics' receive \$1.00 hr.	ITS.					
•	•	ourneyworker Ratio:**						
FER SLATE / ' Ers local 33	TILE / PREC	AST CONCRETE	08/01/2021	\$47.28	\$12.28	\$18.15	\$0.00	\$77.71
or apprentice rates	see "Apprentice-	ROOFER"	02/01/2022	\$48.7	1 \$12.28	\$18.15	\$0.00	\$79.14
ETMETAL WO			08/01/2021	. \$51.93	5 \$13.80	\$25.60	\$2.74	\$94.09
TMETAL WORKER	RS LOCAL 17 - A		02/01/2022			\$25.60	\$2.79	\$95.89

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S	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
_	1	42	\$21.82	\$13.80	\$6.01	\$0.00	\$41.63	
:	2	42	\$21.82	\$13.80	\$6.01	\$0.00	\$41.63	
:	3	47	\$24.42	\$13.80	\$11.26	\$1.48	\$50.96	
	4	47	\$24.42	\$13.80	\$11.26	\$1.48	\$50.96	
	5	52	\$27.01	\$13.80	\$12.23	\$1.59	\$54.63	
	6	52	\$27.01	\$13.80	\$12.48	\$1.60	\$54.89	
	7	60	\$31.17	\$13.80	\$13.87	\$1.77	\$60.61	
;	8	65	\$33.77	\$13.80	\$14.84	\$1.87	\$64.28	
:	9	75	\$38.96	\$13.80	\$16.77	\$2.09	\$71.62	
	10	85	\$44.16	\$13.80	\$18.20	\$2.28	\$78.44	
		ve Date - 02/01/2022		** 11		Supplemental	m . 1 n .	
_	Step	percent	Apprentice Base Wage		Pension	Unemployment	Total Rate	
	1	42	\$22.55	\$13.80	\$6.01	\$0.00	\$42.36	
	2	42	\$22.55	\$13.80	\$6.01	\$0.00	\$42.36	
	3	47	\$25.24	\$13.80	\$11.26	\$1.51	\$51.81	
	4	47	\$25.24	\$13.80	\$11.26	\$1.51	\$51.81	
	5	52	\$27.92	\$13.80	\$12.23	\$1.62	\$55.57	
	6	52	\$27.92	\$13.80	\$12.48	\$1.63	\$55.83	
	7	60	\$32.22	\$13.80	\$13.87	\$1.80	\$61.69	
	8	65	\$34.91	\$13.80	\$14.84	\$1.91	\$65.46	
!	9	75	\$40.28	\$13.80	\$16.77	\$2.13	\$72.98	
	10	85	\$45.65	\$13.80	\$18.20	\$2.33	\$79.98	
1	Notes:							
		Steps are 6 mos.					ĺ	
Ā	Appren	tice to Journeyworker Ratio:1:	4					
		MOVING EQUIP < 35 TONS LNO. 10 ZONE A	12/01/202	1 \$37.	.34 \$13.41	\$16.01	\$0.00	\$66.70
ALIZED E	ARTH	MOVING EQUIP > 35 TONS	12/01/202	1 \$37.	.63 \$13.41	\$16.01	\$0.00	\$67.0

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Арг	orentice - Si	PRINKLER FITTER - Loca	! 550 (Section A) Zone 1					
Effe Step	ective Date -	03/01/2021	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rat	e
1	35		\$21.86	\$10.00	\$11.99	\$0.00	\$43.8	5
2	40		\$24.98	\$10.00	\$12.70	\$0.00	\$47.6	3
3	45		\$28.10	\$10.00	\$13.41	\$0.00	\$51.5	l
4	50		\$31.23	\$10.00	\$14.13	\$0.00	\$55.3	5
5	55		\$34.35	\$10.00	\$14.84	\$0.00	\$59.1	9
6	60		\$37.47	\$10.00	\$15.55	\$0.00	\$63.0	2
7	65		\$40.59	\$10.00	\$16.26	\$0.00	\$66.8	5
8	70		\$43.72	\$10.00	\$16.98	\$0.00	\$70.7)
9	75		\$46.84	\$10.00	\$17.69	\$0.00	\$74.5	3
10	80		\$49.96	\$10.00	\$18.40	\$0.00	\$78.3	5
Not	40/45/50	e entered prior 9/30/10: /55/60/65/70/75/80/85 850 hours					 	
App	prentice to Jo	urneyworker Ratio:1:3						
EAM BOILER O Erating engineer			12/01/202	1 \$50.8	\$14.00	\$16.05	\$0.00	\$80.88
For apprentice rates s	see "Apprentice-	OPERATING ENGINEERS"						
MPERS, SELF-P Erating engineer		OR TRACTOR DRAWN	12/01/202	1 \$50.8	\$14.00	\$16.05	\$0.00	\$80.88
For apprentice rates s	see "Apprentice-	OPERATING ENGINEERS"						
LECOMMUNICA		NICIAN	09/01/202	1 \$43.4	10 \$13.00	\$18.37	\$0.00	\$74.77
ECTRICIANS LOCAL .	103		03/01/202	2 \$44.7	1 \$13.00	\$18.74	\$0.00	\$76.45
			09/01/202	2 \$46.4	\$13.00	\$18.87	\$0.00	\$78.29
			03/01/202	3 \$48.3	34 \$13.00	\$19.01	\$0.00	\$80.35

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Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$19.53	\$13.00	\$0.59	\$0.00	\$33.12
2	45	\$19.53	\$13.00	\$0.59	\$0.00	\$33.12
3	50	\$21.70	\$13.00	\$14.75	\$0.00	\$49.45
4	50	\$21.70	\$13.00	\$14.75	\$0.00	\$49.45
5	55	\$23.87	\$13.00	\$15.12	\$0.00	\$51.99
6	60	\$26.04	\$13.00	\$15.47	\$0.00	\$54.51
7	65	\$28.21	\$13.00	\$15.84	\$0.00	\$57.05
8	70	\$30.38	\$13.00	\$16.20	\$0.00	\$59.58
9	75	\$32.55	\$13.00	\$16.57	\$0.00	\$62.12
10	80	\$34.72	\$13.00	\$16.92	\$0.00	\$64.64
Effect	ive Date - 03/01/2022				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	45	\$20.12	\$13.00	\$0.60	\$0.00	\$33.72
2	45	\$20.12	\$13.00	\$0.60	\$0.00	\$33.72
3	50	\$22.36	\$13.00	\$15.02	\$0.00	\$50.38
4	50	\$22.36	\$13.00	\$15.02	\$0.00	\$50.38
5	55	\$24.59	\$13.00	\$15.39	\$0.00	\$52.98
6	60	\$26.83	\$13.00	\$15.74	\$0.00	\$55.57
7	65	\$29.06	\$13.00	\$16.11	\$0.00	\$58.17
8	70	\$31.30	\$13.00	\$16.48	\$0.00	\$60.78
9	75	\$33.53	\$13.00	\$16.85	\$0.00	\$63.38
10	80	\$35.77	\$13.00	\$17.20	\$0.00	\$65.97
Notes:						
Notes:						

02/01/2022 \$56.68 \$11.39 \$22.25 \$0.00

\$90.32

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	Effectiv Step	percent	08/01/2021		Apprentice I	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50			\$2	8.05	\$11.39	\$22.25	\$0.00	\$61.69	1
	2	60			\$3	33.65	\$11.39	\$22.25	\$0.00	\$67.29	
	3	70			\$3	9.26	\$11.39	\$22.25	\$0.00	\$72.90	
	4	80			\$4	14.87	\$11.39	\$22.25	\$0.00	\$78.51	
	5	90			\$5	50.48	\$11.39	\$22.25	\$0.00	\$84.12	
	Effectiv	e Date -	02/01/2022						Supplemental		
	Step	percent			Apprentice I	Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50			\$2	28.34	\$11.39	\$22.25	\$0.00	\$61.98	
	2	60			\$3	34.01	\$11.39	\$22.25	\$0.00	\$67.65	
	3	70			\$3	9.68	\$11.39	\$22.25	\$0.00	\$73.32	
	4	80			\$4	15.34	\$11.39	\$22.25	\$0.00	\$78.98	
	5	90			\$5	51.01	\$11.39	\$22.25	\$0.00	\$84.65	
	Notes:										
	Appren	tice to Jo	urneyworker R	Catio:1:3							
EST BORING BORERS - FOU			E			12/01/2021	1 \$42.58	\$9.10	\$17.72	\$0.00	\$69.40
For apprentice	rates see "A	Apprentice- I	LABORER"								
EST BORING Borers - fou						12/01/2021	1 \$41.30	\$9.10	\$17.72	\$0.00	\$68.12
For apprentice	rates see "A	Apprentice- I	LABORER"								
EST BORING BORERS - FOU			E			12/01/2021	1 \$41.18	\$9.10	\$17.72	\$0.00	\$68.00
For apprentice	rates see "A	Apprentice- I	ABORER"								
RACTORS/PO PERATING ENGL			I GENERATOF	RS		12/01/2021	1 \$50.83	\$14.00	\$16.05	\$0.00	\$80.88
For apprentice	rates see "A	Apprentice- (OPERATING ENGI	NEERS"							
RAILERS FO			IG EQUIPMEN NE A	ľΤ		12/01/2021	1 \$37.92	\$13.41	\$16.01	\$0.00	\$67.34
UNNEL WOF			D AIR			12/01/2021	1 \$53.41	\$9.10	\$18.17	\$0.00	\$80.68
For apprentice	rates see "A	Apprentice- I	LABORER"								
JNNEL WOF			D AIR (HAZ. V	WASTE)		12/01/2021	1 \$55.41	\$9.10	\$18.17	\$0.00	\$82.68
For apprentice	rates see "A	Apprentice- I	ABORER"								
JNNEL WOF Borers (free						12/01/2021	1 \$45.48	\$9.10	\$18.17	\$0.00	\$72.75
For apprentice	rates see "A	Apprentice- I	ABORER"								
JNNEL WOF Borers (free			AZ. WASTE)			12/01/2021	1 \$47.48	\$9.10	\$18.17	\$0.00	\$74.75
For apprentice	rates see "A	Apprentice- I	ABORER"								

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
VAC-HAUL TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2021	\$37.34	\$13.41	\$16.01	\$0.00	\$66.76
WAGON DRILL OPERATOR	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
LABORERS - ZONE 1	06/01/2022	\$42.43	\$9.10	\$17.57	\$0.00	\$69.10
	12/01/2022	\$43.43	\$9.10	\$17.57	\$0.00	\$70.10
	06/01/2023	\$44.43	\$9.10	\$17.57	\$0.00	\$71.10
	12/01/2023	\$45.68	\$9.10	\$17.57	\$0.00	\$72.35
For apprentice rates see "Apprentice- LABORER"						
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/01/2021	\$41.43	\$9.10	\$17.57	\$0.00	\$68.10
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
WASTE WATER PUMP OPERATOR OPERATING ENGINEERS LOCAL 4	12/01/2021	\$51.38	\$14.00	\$16.05	\$0.00	\$81.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER	09/01/2021	\$61.79	\$13.57	\$17.26	\$0.00	\$92.62
PLUMBERS & GASFITTERS LOCAL 12	02/27/2022	\$63.39	\$13.57	\$17.26	\$0.00	\$94.22
	09/04/2022	\$65.09	\$13.57	\$17.26	\$0.00	\$95.92
	02/26/2023	\$66.79	\$13.57	\$17.26	\$0.00	\$97.62
	09/03/2023	\$68.54	\$13.57	\$17.26	\$0.00	\$99.37
	03/03/2024	\$70.34	\$13.57	\$17.26	\$0.00	\$101.17
	09/01/2024	\$72.14	\$13.57	\$17.26	\$0.00	\$102.97
	03/02/2025	\$73.94	\$13.57	\$17.26	\$0.00	\$104.77
For apprentice rates see "Apprentice- PLUMBER/PIPEFTTTER" or "PLUMBER/GASFI	ITTER"					
Outside Electrical - East						
CABLE TECHNICIAN (Power Zone) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$29.67	\$9.25	\$1.89	\$0.00	\$40.81
For apprentice rates see "Apprentice- LINEMAN"						
CABLEMAN (Underground Ducts & Cables) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$42.03	\$9.25	\$10.27	\$0.00	\$61.55
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN CDL OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$34.62	\$9.25	\$10.07	\$0.00	\$53.94
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$27.20	\$9.25	\$1.82	\$0.00	\$38.27
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class A CDL) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$42.03	\$9.25	\$14.35	\$0.00	\$65.63
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class B CDL) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$37.09	\$9.25	\$10.87	\$0.00	\$57.21
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$27.20	\$9.25	\$1.82	\$0.00	\$38.27
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN -Inexperienced (<2000 Hrs.) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$22.25	\$9.25	\$1.82	\$0.00	\$33.32
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	08/30/2020	\$49.45	\$9.25	\$17.48	\$0.00	\$76.18

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

Apprentice -	LINEMAN	(Outside Electrical) - East Local 104

Ties		08/30/2020						
Ette Step	ctive Date - percent	08/30/2020	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	2
1	60		\$29.67	\$9.25	\$3.39	\$0.00	\$42.31	
2	65		\$32.14	\$9.25	\$3.46	\$0.00	\$44.85	
3	70		\$34.62	\$9.25	\$3.54	\$0.00	\$47.41	
4	75		\$37.09	\$9.25	\$5.11	\$0.00	\$51.45	5
5	80		\$39.56	\$9.25	\$5.19	\$0.00	\$54.00)
6	85		\$42.03	\$9.25	\$5.26	\$0.00	\$56.54	ļ
7	90		\$44.51	\$9.25	\$7.34	\$0.00	\$61.10)
Note								
Арр	rentice to Jo	urneyworker Ratio:1:2						
TELEDATA CABLE		T LOCAL 104	02/04/2019	\$30.73	3 \$4.70	\$3.17	\$0.00	\$38.60
TELEDATA LINEM.	•		02/04/2019	\$28.93	\$4.70	\$3.14	\$0.00	\$36.77
TELEDATA WIREM			02/04/2019	\$28.93	\$4.70	\$3.14	\$0.00	\$36.77

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.

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

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.

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The Massachusetts Prevailing Wage Law

M.G.L. ch. 149, §§ 26 – 27

NOTICE TO AWARDING AUTHORITIES

- > 'The enclosed wage schedule applies only to the specific project listed at the top and will remain in effect for the duration of the project.
- ➤ 'You should request an updated wage schedule from the Division of Occupational Safety if you have not opened bids or selected a contractor within 90 days of the date of issuance of the enclosed wage schedule.
- > The wage schedule shall be incorporated in any advertisement or call for bids for the project for which it has been issued.
- ➤ 'Once a contractor has been selected by the awarding authority, the wage schedule shall be made a part of the contract for that project.

NOTICE TO CONTRACTORS

- ➤ The enclosed wage schedule must be posted in a conspicuous place at the work site during the life of the project.
- ➤ The wages listed on the enclosed wage schedule must be paid to employees on public works projects regardless of whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- The enclosed wage schedule applies to all phases of the project including the final clean-up. Contractors whose only role is to perform final clean-up must pay their employees according to this wage schedule.
- All apprentices must be registered with the Massachusetts Division of Apprentice Training in order to be paid at the reduced apprentice rates. If a worker is not registered with the Division of Apprentice Training, they must be paid the "total rate" listed on the wage schedule regardless of experience or skill level. For further information, please call (617) 727-3486 or write to the Division of Apprentice Training, 399 Washington Street, 4th Floor, Boston, MA 02108

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority. This is required to be done on a weekly basis. Once collected, the awarding authority is also required to preserve those records for three years.

In addition, each such contractor, subcontractor or public body shall furnish to the Department of Labor & Workforce Development/Division of Occupational Safety within fifteen days after completion of its portion of the work a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

		, 2022
I		
(Name of signatory party) (Title)		_
do hereby state:		
That I pay or supervise the payment of the persons employed by		
on the		_
(Contractor, subcontractor or public body) (Building or project) and that all mechanics and apprentices, teamsters, chauffeurs and I said project have been paid in accordance with wages determined of sections twenty-six and twenty-seven of chapter one hundred and General Laws.	under the provisions	
	Signature	
	Title	

DIVISION OF OCCUPATIONAL SAFETY, 399 WASHINGTON STREET, 5TH FL., BOSTON, MA. 02108

WEEKLY PAYROLL REPORT FORM

Company Name: Project Name: Awarding Auth.:

Work Week Ending:

Prime Contractor

Subcontractor
List Prime Contractor:

Employer Signature:

Print Name & Title:

							Employee Name & Address	
		U					Work Classification	
					S			
					Z			
					Н		Но	
					×		urs Wo	
					Н		rked	
					'n			
					S			
							Tot. Hrs.	(A)
							Hourly Base Wage	(A) (B)
						(C) Health & Welfare	=	Employ
						(D) Pension		Employer Contributions
						(E) Supp. Unemp		tions
			- 1	4.4			Hourly Total Wage (prev. wage)	(F)
12	J.						Weekly Total Amount	(G)
						M T W T F	M T W T F S Health & Supp. Welfare Pension Unemp	Work Classification Hours Worked Tot. Base Hourly Tot. Wage (C) (D) Health & Pension

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

BUILDING MAINTENANCE SERVICE CONTRACT

SPECIAL CONDITIONS

The following provisions supplement the General Conditions of the Contract for Non-Technical Services. In the event of conflict or discrepancy between the General Conditions and these Special Conditions, the provisions of the Special Conditions shall govern.

1.0 SUMMARY OF WORK

- A. The Work under the Contract consists of:
 - 1. Furnishing all labor, materials, tools, equipment and supervision necessary to accomplish the work described herein,in accordance with all specifications and requirements of the Project Manual.
 - All work either shown on the Drawings (if any) or included in the specifications unless specifically indicated as not to be done.
- B. In addition, the work under the Contract includes:
 - 1. Work outside the Project Site as called for in the Contract Documents and as required for the performance of the Work.
 - 2. The restoration of any items damaged or destroyed by encroaching upon areas outside the Project Site.
 - 3. Providing and restoring, where appropriate, all temporary facilities.
- C. The Proposed Contract Price shall be complete costs, including overhead, profit, insurance, transportation, and all other costs connected with, or incidental to, the work described.

2.0 PROJECT SITE

A. The area of work for this contract shall be the Newton Main Libary Newton as specified on Purchase orders to be issued from time to time during the term of this Contract.

3.0 NOTICE TO PROCEED/FAILURE TO COMMENCE WORK

- A. From time to time during the term of this Contract, the Contractor shall be issued notice to proceed in the form of a written Work Order issued by the Public Building Department listing specific work items to be performed in accordance with this Contract. The Contractor shall commence performance of the work within the time specified in the Work Order, and in no event within less than the time limits stated in the Work Specifications contained in the Project Manual.
- B. In the event the contractor fails to commence performance within the specified time, and/or notifies the City of its inability to do so, the City shall call upon the second Contractor awarded pursuant to this bid (if any) to perform the required work.
- C. In the event the second Contractor awarded pursuant to this bid is unable to commence performance within the required time, or if there is no second Contractor, the City reserves the right to contract for the work on the open market at the then prevailing rate and to deduct from any monies due or that may thereafter become due to the contractor the difference between the price stated for the work in the contract and the actual cost thereof to the City.
- D. In the event of Contractor's repeated failure to commence work within the time required by these specifications, the City shall exercise all provisions contained in the General Conditions regarding default, suspension or termination of this contract.

4.0 PAYMENT

A. Upon completion of the work specified in the Work Order, the Contractor may submit an invoice to the Public Building Department for the work performed. The Contractor will be paid only upon accepted completion of the work authorized. It shall be Contractor's responsibility to notify the Public Building Department upon completion of the work and to insure the work is promptly inspected by a Building Department representative.

5.0 COMMUNICATIONS

- A. All notices, demands, requests, instructions, approvals and claims must be in writing.
- B. Any such notice shall be deemed to have been given as of the time of delivery, or of actual receipt in the case of telegrams or, in the case of mailing, when it should have been received in due course of post.
- C. For communicating purposes, the office address of the Contractor shall be that stated on the signature page of the contract; that of the City shall be as stated in the Invitation for Bids. Any subsequent change in address of either party shall be communicated to the other in writing.

6.0 PLANS AND SPECIFICATIONS

A. The City will furnish to the Contractor, without charge, all copies of the specifications reasonably necessary in the performance of the contract work.

7.0 COORDINATION

The Contractor shall:

- A. Supply to the City the name and telephone number of a responsible person who may be contacted during off-hour emergencies during the term of the Contract.
- B. Cooperate at all times with the City and the Project Manager, and ensure the cooperation of his key personnel and that of his subcontractors.

8.0 CONDUCT OF THE WORK

- A. The work must be completed in a continuous uninterrupted operation. The Contractor must use sufficient workforce and adequate equipment to complete all the necessary work requirements within a minimum period of time.
- B. The work shall be conducted between the hours of 8:00 a.m. and 5:00 p.m. on Monday through Friday. No work shall be done on holidays, Saturdays or Sundays except as specifically requested and authorized by the City.
- C. Under no circumstances will the contractor be paid at a premium or overtime rate for any work performed without the express advance authorization of the City.
- D. The Contractor is responsible for the security of partially completed work until the project is finally accepted by the City.

9.0 ALTERATION

A. The Contractor shall patch, repair and/or replace all existing materials and surfaces remaining exposed after installation of new work which have been affected by alteration or removal of existing work. All patch and repair work shall match existing.

10.0 GENERAL DIRECTIONS

A. Damage to Persons and Property

Any damage to buildings, roads, public roads, bituminous concrete areas, fences, lawn areas, trees, shrubbery, electric or telephone poles, underground utilities, etc., shall be repaired by the Contractor at his own expense.

Damaged property shall be returned to its original condition prior to the damages within a reasonable time period, except all utility outages shall be repaired immediately.

B. Protection of Persons and Property

The Contractor shall, at all times, leave an unobstructed way along the roadways and walks, and shall maintain barriers and lights for the protection of all persons and property in all locations where he has materials stored or work going on, and during the entire time such work is going on or material is stored.

C. Shutdown of Services

The Contractor's attention is especially called to the fact that continuous operation of building utilities and services is mandatory. During the period of construction of the new work and/or alterations to the existing work, the progress and sequence of installation shall be carefully planned and approved by the City. If any building is to be left without heat, hot water, city water, electricity, gas, sanitary facilities, or any other services, the Contractor shall provide reasonable written notice to the City before proceeding.

D. Care of Work

All work is to be carefully protected so that no injury will come to it from water, frost, accident, or any other cause and any injury which may come to any of the work shall be repaired immediately by the Contractor at his own expense and without additional cost to the City. This shall also apply to any abutting or adjoining work on premises. The Contractor shall be responsible for any damage and in the event of such damage, the Contractor shall repair the damage immediately at his own cost and without additional cost to the City.

E. Removal of Debris

Debris of any nature shall be completely removed from the site at the end of each days work and disposed of in accordance with all Federal, State and local regulations.

F. The Contractor is responsible for the security of all work until it is accepted by the City.

11.0 TEMPORARY UTILITIES

A. Prior to execution of the Work, the Contractor shall confer with a representative of the Public Building Department regarding the use of utilities and facilities at the worksite. No City utilities or facilities are to be used by the Contractor in the performance of this Contract without the prior approval of the City.

12.0 SUBMISSION OF PAYROLLS

A. The Contractor shall, with each invoice submitted during the term of this Contract, submit to the City two (2) legible copies of his payrolls documenting the wages paid to all employees performing on site labor relating to the work of this Contract. These copies shall be prepared on forms supplied by the City.

13.0 DRAWINGS (IF APPLICABLE)

- A. The drawings attached herein and such drawings as may be issued per addendum, shall constitute an integral part of this section and shall serve as the working drawings.
- B. Drawings shall not be scaled. Field verification is directed since actual locations, dimensions and levels are existing.
- C. All items not specifically mentioned in the specifications or noted on the drawings, but which are obviously necessary to make a complete working installation, shall be included.

14.0 MATERIALS

A. Unless specifically so stated to the contrary the use of a manufacturer's name or style number is not restrictive, and is intended solely as an identification of the type and quality of the materials and services required. In all cases, the words "or approved equal" if not inserted are implied.

- B. An item equal to that named or described in the specifications may upon written approval of the City be furnished by the Contractor. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased; (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications.
- C. The name and identification of all materials other than the one specifically named shall be submitted to the City in writing for approval, prior to purchase, use or fabrication of such items. Approval shall be at the sole discretion of the City, shall be in writing to be effective, and the decision of the City shall be final. The City may require tests of all materials so submitted to establish quality standards at the Contractor's expense.
- D. For the use of material other than the one specified, the Contractor shall assume the cost of and responsibility for satisfactorily accomplishing all changes that may be required in the work as shown. All directions, specifications and recommendations by manufacturers for the installation, handling, storing, adjustment, and operation of their equipment shall be complied with and responsibility for proper performance shall continue to rest with the Contractor.
- E. The Contractor shall not have any right of appeal from the decision of the City condemning any materials furnished if the Contractor fails to obtain the approval for substitution in accordance with these provisions. If any substitution is more costly, the Contracotr shall pay for such costs

15.0 WARRANTY AND INDEMNIFICATION

- A. In addition to other guarantees or warranties required under law or other sections of the specification, the Contractor warrants all materials furnished and labor performed under this Contract to be free from defects or errors in workmanship or installation for a period of one year from the date of Completion of the work, as certified by the Project Manager. The Contractor shall indemnify the Authority for the full cost of any damage to the property that may result by reason of such defects or errors and shall indemnify the Authority from and against any and all claims, demands. losses, costs, expenses, liabilities and damages, including reasonable attorney's fees and expenses, arising out of or on account of this Contract, including but not limited to claims brought against the Authority for alleged infringement of patents based upon any methods of construction or application of materials furnished under the Contract.
- B. The Contractor shall indemnify, hold harmless and defend the City and its departments, officers, employees, servants, and agents from and against all actions, causes of actions, claims, demands, damages, costs, loss of services, expenses and compensation, including attorney's fees and interest arising out of or resulting directly or indirectly from the services rendered pursuant to this Contract, provided that any such action, cause of action, claim, demand, damage, cost, loss of service, expense, compensation (1) in any way grows out of bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, which (2) is caused in whole or in part by any act or omission of the Contractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

END OF SECTION

POLICE HEADQUARTERS HVAC SYSTEM IMPROVEMENTS SPECIFICATIONS INSERT CA CROWLEY SPECIFICATION HERE

END OF SPECIFICATION

DRAWING PACKAGE NEEDS TO BE ATTACHED AFTER THE SPECS

POLICE STATION HVAC UPGRADES PROJECT

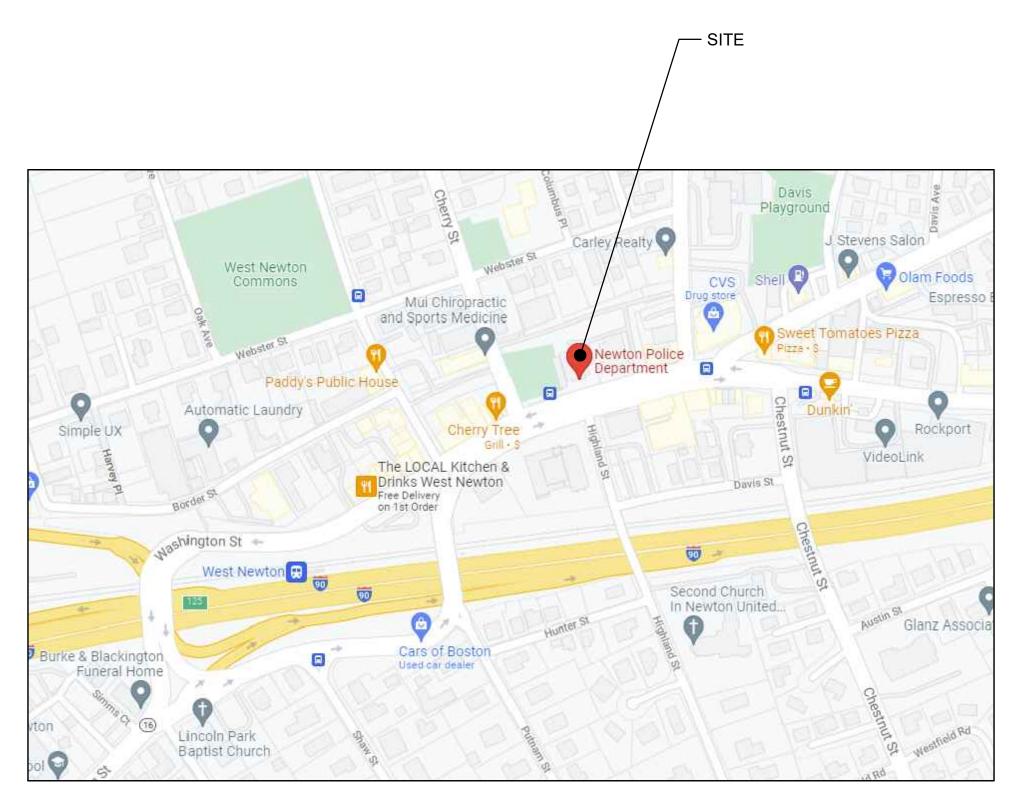
PREPARED FOR:

CITY OF NEWTON

NEWTON POLICE DEPARTMENT

1321 WASHINGTON STREET NEWTON, MA 02465





NEWTON POLICE DEPARTMENT - LOCUS PLAN ADDRESS: 1321 WASHINGTON STREET, NEWTON, MA 02465

MECHANICAL ENGINEER

C.A. CROWLEY ENGINEERING, INC. 645 COUNTY STREET, UNIT 6 TAUNTON, MA 02780 TELEPHONE NO. (508) 884-5094

ELECTRICAL ENGINEER

NANGLE ENGINEERING, INC. 32 PRINCE STREET DANVERS, MA 01923 PHONE (978) 777-7650

JANUARY 5, 2020

LIST OF DRAWINGS

T-1 TITLE SHEET HVAC

HVAC M-1.1 BASEMENT HVAC (

M-1.2 BASEMENT HVAC NEW WORK PLAN

M-1.3 BOILER ROOM DEMO & NEW WORK PART PLANS

M-2.1 FIRST FLOOR & MEZZANINE HVAC DEMOLITION PLAN

M-2.2 FIRST FLOOR & MEZZANINE HVAC NEW WORK I M-3.1 SECOND FLOOR HVAC DEMOLITION PLAN

M-3.2 SECOND FLOOR HVAC NW WORK PLAN

M-4.1 ROOF HVAC DEMOLITION PLAN

M-4.2 ROOF HVAC NEW WORK PLAN

M-5.0 FIRING RANGE HVAC WORK PLAN

M-6.1 HVAC HOT WATER RISER DIAGRAM

M-6.2 HVAC CHILLED WATER RISER DIAGRAM
M-6.3 OUTSIDE AIR & EXHAUST RISER DIAGRAM

M-6.3 OUTSIDE AIR & EXHAUST RISEI
M-7.0 HVAC LEGEND & SCHEDULES

M-7.0 HVAC LEGEND & SCHEDULE
M-8.1 HVAC AIRSIDE DETAILS

M-8.2 HVAC WATERSIDE DETAILS

M-9.0 HVAC PIPING SCHEMATICS ELECTRICAL

E-1 ELECTRICAL LEGEND, NOTES, AND SCHEDULES

E-2 ELECTRICAL BASEMENT PLAN

E-3 ELECTRICAL FIRST FLOOR PLANS

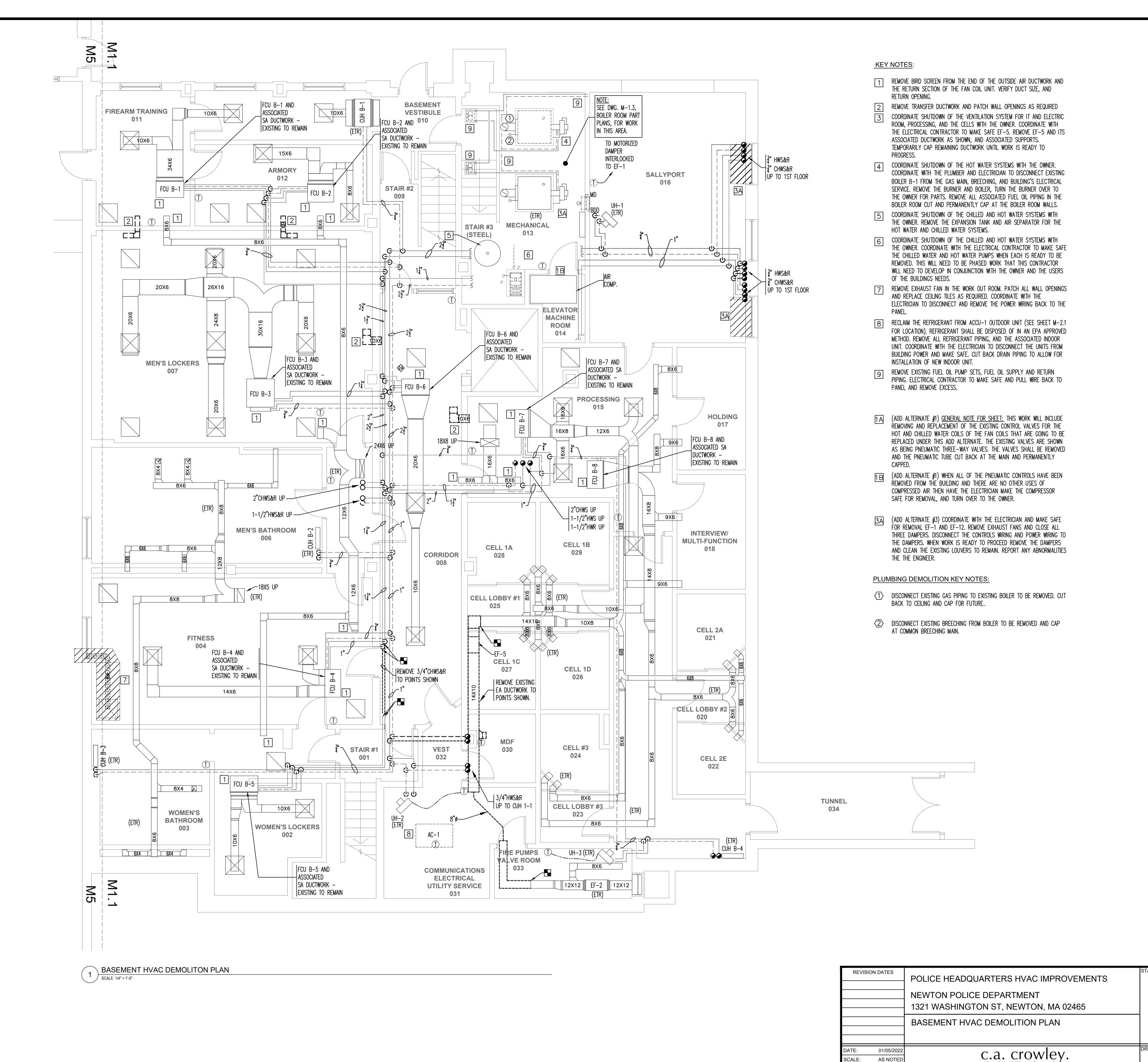
E-4 ELECTRICAL SECOND FLOOR PLAN E-5 ELECTRICAL ROOF PLANS

- CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING AND ASSOCIATED ACCESSORIES WITH EXISTING CONDITIONS IN THE FIELD.

 DRAWINGS ARE DIAGRAMMATIC AND INDICATE APPROXIMATE LOCATIONS OF THE APPARATUS. ANY DISCREPANCIES IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- 2. ALL ELECTRICAL WORK RELATED TO THE CONNECTION OR DISCONNECTIONS OF EQUIPMENT TO OR FROM THE BUILDING'S ELECTRICAL SYSTEM SHALL BE DONE BY THE ELECTRICAL SUB—CONTRACTOR. THE ELECTRICIAN SHALL MAKE SAFE ALL EQUIPMENT TO BE DEMO'ED. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION AND EXTENT OF WORK.
- 3. ALL MECHANICAL EQUIPMENT FEED COMPONENT SHORT CIRCUIT CURRENT RATINGS (SCCR) SHALL MEET OR EXCEED THE MAXIMUM AIC RATING OF THE ELECTRICAL PANEL FROM WHICH IT IS SERVED.
- 4. MAINTAIN SERVICE CLEARANCES IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ROUTED ABOVE ELECTRICAL ROOMS OR EQUIPMENT.
- 5. REMOVE EQUIPMENT, PIPING, DUCTWORK, CONTROLS AND OTHER ACCESSORIES AS SHOWN. THIS SHALL INCLUDE ALL BASES, HANGERS, SUPPORTS, ANCHORS, ETC. ASSOCIATED WITH THE DEMOLISHED ITEMS. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MATTER. ALL WALL, CEILING, FLOOR, AND ROOF OPENINGS ASSOCIATED WITH THE REMOVED APPARATUS SHALL BE PROPERLY IN FILLED, CAPPED, AND/OR PATCHED TO MATCH EXISTING.
- 6. THE CONTRACTOR SHALL REMOVE THE ASSOCIATED SENSORS, THERMOSTATS, ACTUATORS, METERS, VALVES OR DAMPERS, TIMERS, AND SWITCHES. REMOVE ALL CONTROL WIRING AND MAKE SAFE. REMOVE COMPRESSED AIR PIPING BACK TO THE NEAREST BRANCH OR MAIN. CUT AND CAP THE COMPRESSED AIR PIPING ENSURING THAT IT IS SEALED AIR TIGHT.

DEMOLITION NOTES:

- 1. THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. INFORMATION CONTAINED ON THIS DRAWING WAS OBTAIN FROM THE BEST AVAILABLE INFORMATION AND IS NOT INTENDED TO LIMIT THE SCOPE OF WORK.
- 2. DEMOLITION WORK SHALL COMPLY WITH OSHA AND ALL APPLICABLE STATE AND LOCAL CODES.
- 3. REMOVE AND LEGALLY DISPOSE OF ITEMS ASSOCIATED WITH THIS PROJECT AREA, UNLESS OTHERWISE NOTED. CONSTRUCTION MANAGER SHALL CLARIFY WITH OWNER ALL ITEMS THAT SHALL REMAIN THE PROPERTY OF THE OWNER PRIOR TO DISPOSAL. ITEMS TO BE SALVAGED MAY BE REMOVED FROM THE SITE AS WORK PROGRESSES. SALVAGED ITEMS MUST BE TRANSPORTED FROM THE SITE AS THEY ARE REMOVED.
- 4. PROTECTION: ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE MEASURES TO PREVENT WINDBLOWN DUST. ANY PROPERTY OR ITEMS DAMAGED DURING THE PROGRESS OF THE DEMOLITION WORK, INCLUDING ANY DAMAGE CAUSED BY THE TRANSPORTING OF MATERIALS OR EQUIPMENT, SHALL BE REPAIRED AND/OR REPLACED.
- 5. UTILITIES: MAINTAIN UTILITIES EXCEPT THOSE REQUIRING REMOVAL OR RELOCATION. KEEP UTILITIES IN SERVICE AND PROTECT FROM DAMAGE. DO NOT INTERRUPT UTILITIES SERVING USED AS OCCUPIED AREAS WITHOUT FIRST OBTAINING PERMISSION FROM THE UTILITY COMPANY AND THE OWNER. BE SURE THAT LOCATIONS OF UTILITIES IN VICINITY ARE KNOWN AND IDENTIFIED AS "IN SERVICE" OR "SHUTDOWN". PROVIDE TEMPORARY SERVICES AS REQUIRED.
- 6. DISCONNECT, DEMOLISH, AND REMOVE MECHANICAL SYSTEMS, EQUIPMENT, AND COMPONENTS INDICATED TO BE REMOVED.
- a. PIPING TO BE REMOVED: REMOVE ALL REFRIGERANT AND CONDENSATE DRAIN PIPING ASSOCIATED WITH SPLIT SYSTEMS TO BE REMOVED. COORDINATE ANY SHUTDOWNS REQUIRED WITH OWNER PRIOR TO COMMENCING.
- b. PIPING TO BE ABANDONED IN PLACE SHALL BE DRAINED & CAPPED WITH SAME OR COMPATIBLE PIPING MATERIAL. ONLY PIPING WHICH IS ASSOCIATED WITH SYSTEMS TO REMAIN ACTIVE SHALL BE MAINTAINED. REFER TO THE PLANS AND SPECIFICATIONS FOR PATCHING WALLS.
- c. DUCTS TO BE REMOVED: REMOVE PORTION OF DUCTS INDICATED TO BE REMOVED AND CAP REMAINING DUCTS WITH SAME OR COMPATIBLE DUCTWORK MATERIAL AS REQUIRED. REFER TO THE PLANS AND SPECIFICATIONS FOR PATCHING WALLS.
- d. DUCTS TO BE ABANDONED IN PLACE: CAP DUCTS WITH SAME OR COMPATIBLE DUCTWORK MATERIAL.
- e. EQUIPMENT TO BE REMOVED: DISCONNECT AND CAP SERVICES AND REMOVE EQUIPMENT. EQUIPMENT SHALL BE REMOVED FROM PREMISES AND LEGALLY DISPOSED OF.
- f. EQUIPMENT TO BE REMOVED AND REINSTALLED: DISCONNECT AND CAP SERVICES AND REMOVE, CLEAN, AND STORE EQUIPMENT; WHEN APPROPRIATE, REINSTALL, RECONNECT, AND MAKE EQUIPMENT OPERATIONAL.
- g. EQUIPMENT TO BE REMOVED AND SALVAGED: DISCONNECT AND CAP SER VICES AND REMOVE EQUIPMENT AND DELIVER TO OWNER. COORDINATE WITH OWNER PRIOR TO DEMOLITION WORK COMMENCES REGARDING ANY ITEMS TO BE TURNED OVER TO THE OWNER.

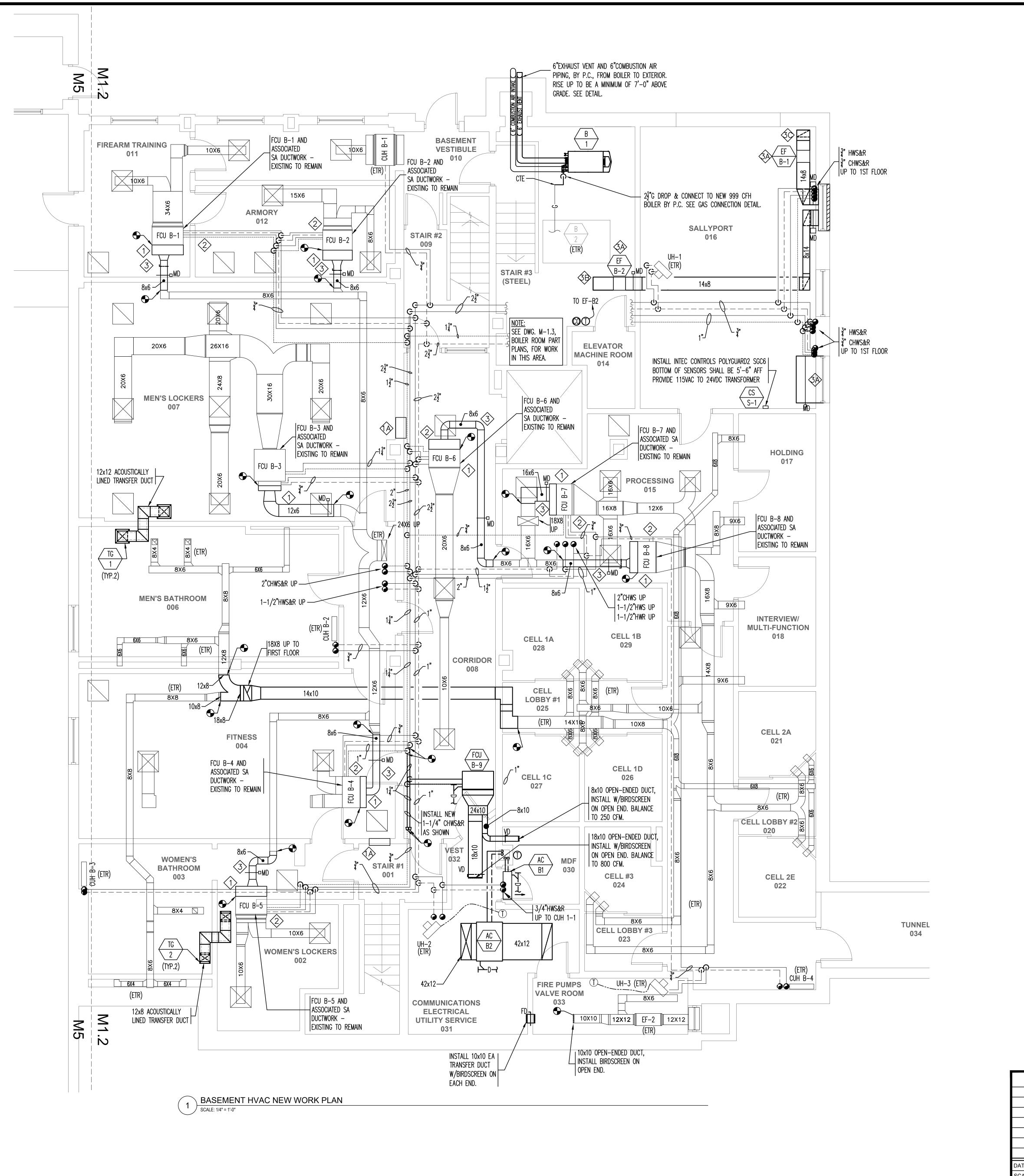


ENGINEERING, INC. 645 County Street . Suite 6

Taunton, MA 02780 tel. (508) 884.5094 WWW.CROWLEYENG.COM fax. (508) 884.5099

HECKED BY:

ROJECT NO. 21025.00



- 1. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING AND ASSOCIATED ACCESSORIES WITH EXISTING CONDITIONS IN THE FIELD.

 DRAWINGS ARE DIAGRAMMATIC AND INDICATE APPROXIMATE LOCATIONS OF THE APPARATUS. ANY DISCREPANCIES IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- 2. ALL ELECTRICAL WORK RELATED TO THE CONNECTION OR DISCONNECTIONS OF EQUIPMENT TO OR FROM THE BUILDING'S ELECTRICAL SYSTEM SHALL BE DONE BY A LICENSED ELECTRICIAN. THE ELECTRICIAN SHALL MAKE SAFE ALL EQUIPMENT TO BE DEMO'ED. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION AND EXTENT OF WORK
- 3. ALL MECHANICAL EQUIPMENT FEED COMPONENT SHORT CIRCUIT CURRENT RATINGS (SCCR) SHALL MEET OR EXCEED THE MAXIMUM AIC RATING OF THE ELECTRICAL PANEL FROM WHICH IT IS SERVED.
- 4. MAINTAIN SERVICE CLEARANCES IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ROUTED ABOVE ELECTRICAL ROOMS OR EQUIPMENT.
- 5. THE EXISTING EQUIPMENT, PIPING, DUCTWORK, CONTROLS, AND OTHER ACCESSORIES SHALL BE REMOVED COMPLETELY UNLESS OTHERWISE NOTED. THIS SHALL INCLUDE ALL BASES, HANGERS, SUPPORTS, ANCHORS, ETC. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MATTER. ALL WALL, CEILING, FLOOR, AND ROOF OPENINGS ASSOCIATED WITH THE REMOVED APPARATUS SHALL BE PROPERLY IN FILLED, CAPPED, AND/OR PATCHED TO MATCH EXISTING.
- 6. THE CONTRACTOR SHALL REMOVE THE ASSOCIATED SENSORS, THERMOSTATS, ACTUATORS, METERS, VALVES OR DAMPERS, TIMERS, AND SWITCHES. REMOVE ALL CONTROL WIRING AND MAKE SAFE. REMOVE COMPRESSED AIR PIPING BACK TO THE NEAREST BRANCH OR MAIN. CUT AND CAP THE COMPRESSED AIR PIPING ENSURING THAT IT IS SEALED AIR TIGHT.

KEY NOTES:

- MOUNT A NEW RETURN AIR PLENUM TO THE RETURN AIR COLLAR OF THIS FAN COIL. CONNECT THE EXISTING OUTDOOR AIR DUCTWORK TO THE NEW RETURN AIR PLENUM. REPLACE THE EXISTING BALANCING DAMPERS WITH NEW, AND INSTALL A MODULATING OPPOSABLE BLADE DAMPER AS SHOWN IN THE DETAIL ON SHEET M8.1.
- REPLACE THE EXISTING THREE—WAY CONTROL VALVE WITH A NEW TWO WAY CONTROL VALVE. CUT BACK OR REMOVE THE PIPING ATTACHED TO THE THIRD LEG AND PERMANENTLY CAP. VALVE ACTUATOR SHALL BE FULLY MODULATING AND COMPLY THE REQUIREMENTS OF THE SPECIFICATION.
- BALANCE THE OUTSIDE AIRFLOW AS SHOWN ON THE OUTSIDE AIR (VENTILATION AIR) FLOW DIAGRAM ON M-6.3. BALANCE THE HEATING HOT WATER AND CHILLED WATER FLOWS THROUGH THE COILS. FLOW REQUIREMENTS FOR HOT WATER ARE SHOWN ON THE HW RISER DIAGRAM ON DWG M-6.1. FLOW REQUIREMENTS FOR CHILLED WATER ARE SHOWN ON THE CHW DIAGRAM ON DWG. 6.2.
- REPLACE THE EXISTING T-STAT THAT CONTROLS THIS FAN COIL WITH A NEW T-STAT, HUMIDITY, CARBON DIOXIDE MONITOR. INSTALL AN OCCUPANCY IN A CORNER AT THE CEILING LEVEL. WIRE BOTH BACK TO THE NEW FCU OR NEARBY CONTROLLER. PATCH THE WALL AND ENSURE THAT THE RATING OF THE WALL IS MAINTAINED.
- COORDINATED LOCATION OF NEW DDC CONTROLLER (ADD ALTERNATE #1)
- INSTALL NEW EXHAUST DUCTWORK AND CONNECT TO NEW EXHAUST FAN EF B-1. DUCT THE DISCHARGE SIDE OF THE FAN OVER AND DOWN TO THE EXISTING LOUVER IN THE UPPER HALF OF THE WINDOW. INSTALL A NEW LOW LEAKAGE DAMPER IN THE DUCTWORK AT THE LOUVER. INTERLOCK THE EF WITH INTAKE DAMPER SO THAT THE FAN WILL NOT OPERATE WITH THE EXHAUST AND INLET LOUVER DAMPERS CLOSED. (SEE SEQUENCE OF OPERATIONS) (ADD ALTERNATE #3).
- INSTALL 1/2" X 1/2" BIRD SCREEN TO THE OPENING. ATTACH A FIXED LOUVER REGISTER TO THE END OF THE EXHAUST DUCTWORK. SEE DETAIL AND SPECIFICATION FOR FURTHER INFORMATION.
- EXTEND DUCT TIGHT AGAINST THE OUTSIDE WALL AND DROP DOWN TO 36 INCHES A.F.F. ADD SUPPORT FROM THE FLOOR FOR THE DUCTWORK PER THE DETAIL AND SPECIFICATION. INSTALL 1/2" X 1/2" BIRD SCREEN BEHIND THE REGISTER.

POLICE HEADQUARTERS HVAC IMPROVEMENTS

NEWTON POLICE DEPARTMENT

1321 WASHINGTON ST, NEWTON, MA 02465

BASEMENT HVAC NEW WORK PLAN

TE: 01/05/2022
ALE: AS NOTED
AWN BY: FV/JC

ENGINEERING, INC. ²
645 County Street . Suite 6
Taunton, MA 02780
tel . (508) 884.5094
WWW.CROWLEYENG.COM fax . (508) 884.5099

CHECKED BY: TS/MV

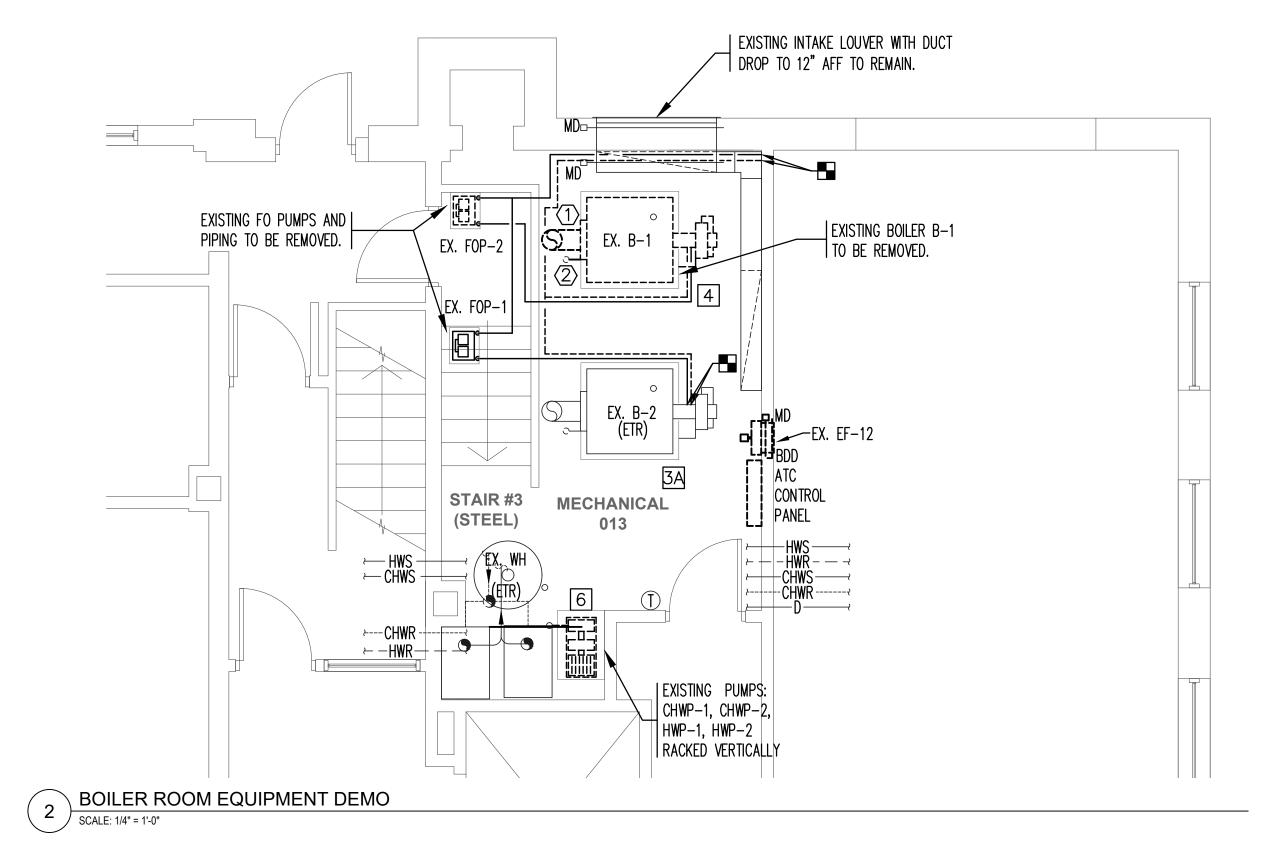
ROJECT NO. 21025.00

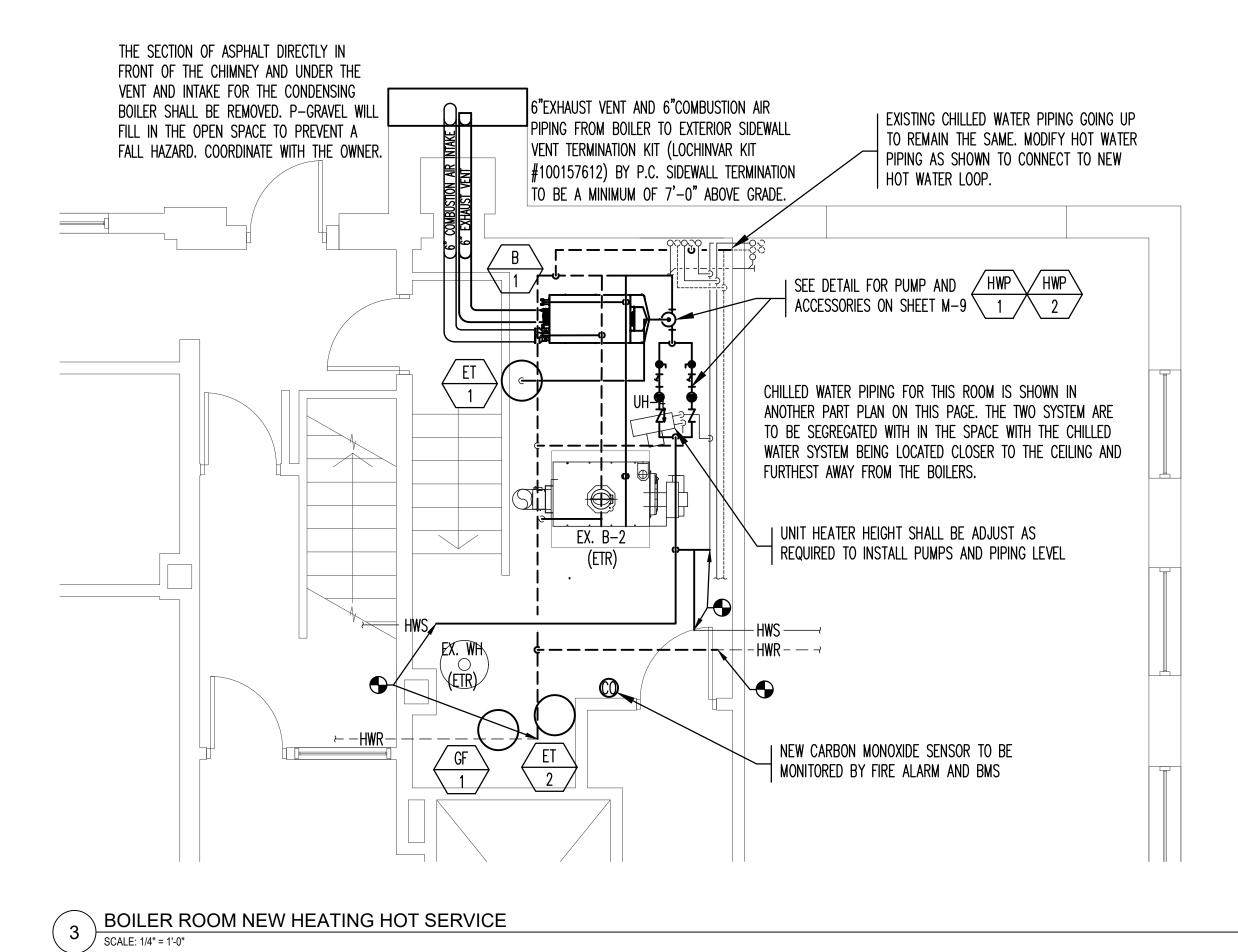
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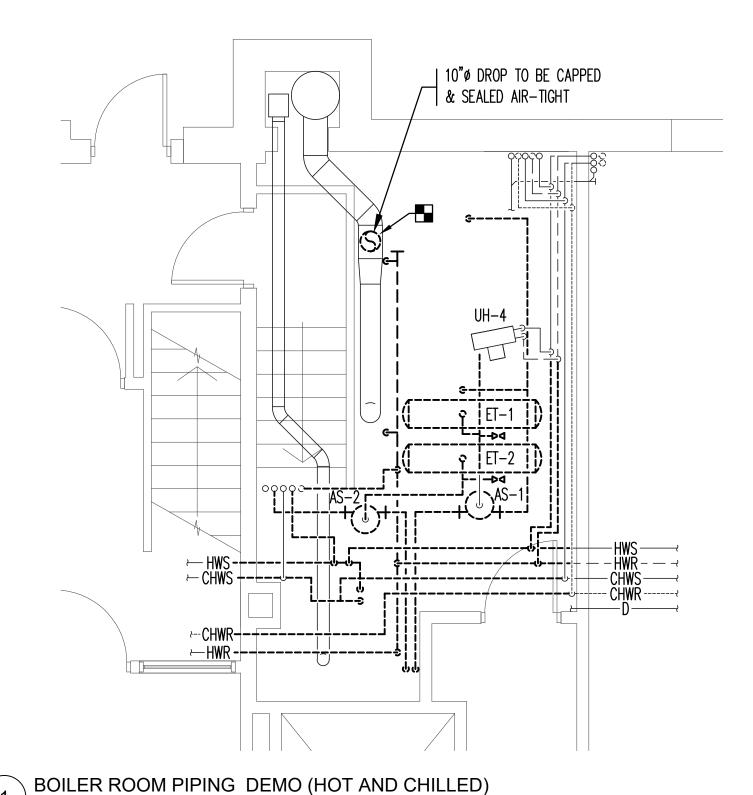
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- 3. ALL MECHANICAL EQUIPMENT FEED COMPONENT SHORT CIRCUIT CURRENT RATINGS (SCCR) SHALL MEET OR EXCEED THE MAXIMUM AIC RATING OF THE ELECTRICAL PANEL FROM WHICH IT IS SERVED.
- 4. MAINTAIN SERVICE CLEARANCES IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ROUTED ABOVE ELECTRICAL ROOMS OR EQUIPMENT.
- 5. THE EXISTING EQUIPMENT, PIPING, DUCTWORK, CONTROLS, AND OTHER ACCESSORIES SHALL BE REMOVED COMPLETELY UNLESS OTHERWISE NOTED. THIS SHALL INCLUDE ALL BASES, HANGERS, SUPPORTS, ANCHORS, ETC. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MATTER. ALL WALL, CEILING, FLOOR, AND ROOF OPENINGS ASSOCIATED WITH THE REMOVED APPARATUS SHALL BE PROPERLY IN FILLED, CAPPED, AND/OR PATCHED TO MATCH EXISTING.
- 6. THE CONTRACTOR SHALL REMOVE THE ASSOCIATED SENSORS, THERMOSTATS, ACTUATORS, METERS, VALVES OR DAMPERS, TIMERS, AND SWITCHES. REMOVE ALL CONTROL WRING AND MAKE SAFE. REMOVE COMPRESSED AIR PIPING BACK TO THE NEAREST BRANCH OR MAIN. CUT AND CAP THE COMPRESSED AIR PIPING ENSURING THAT IT IS SEALED AIR TIGHT.

KEY NOTES:

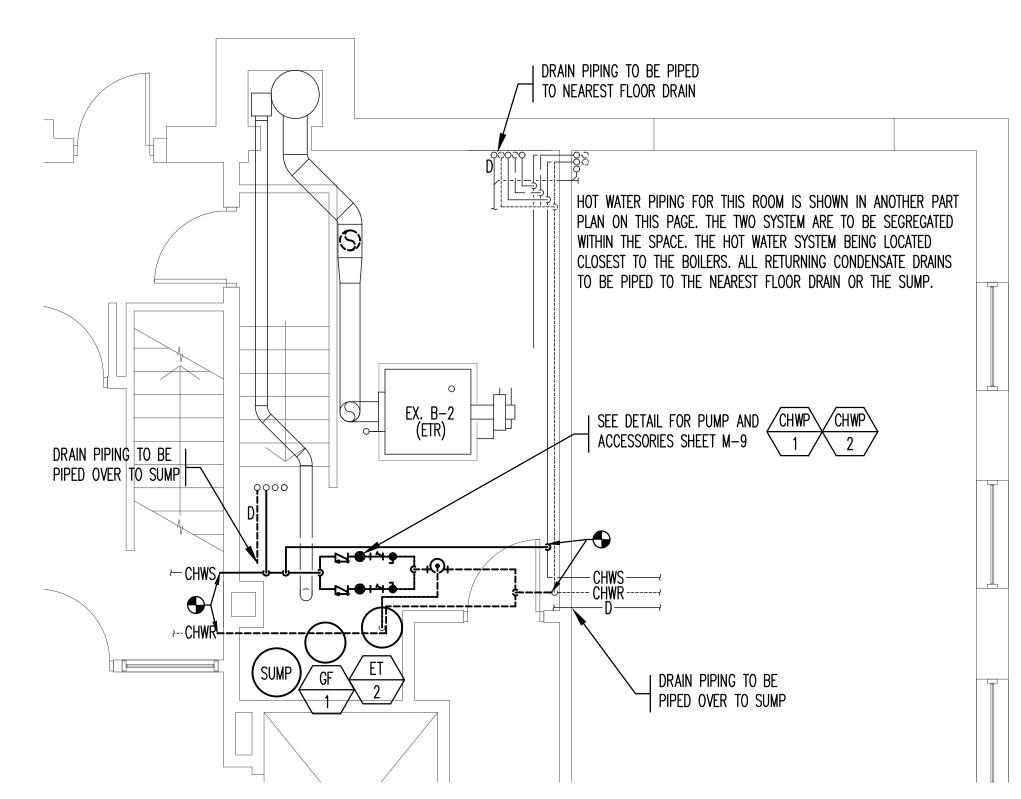
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- REPLACE THE EXISTING THREE—WAY CONTROL VALVE WITH A NEW TWO WAY CONTROL VALVE. CUT BACK OR REMOVE THE PIPING ATTACHED TO THE THIRD LEG AND PERMANENTLY CAP. VALVE ACTUATOR SHALL BE FULLY MODULATING AND COMPLY THE REQUIREMENTS OF THE SPECIFICATION.
- BALANCE THE OUTSIDE AIRFLOW AS SHOWN ON THE OUTSIDE AIR (VENTILATION AIR) FLOW DIAGRAM ON M-6.3. BALANCE THE HEATING HOT WATER AND CHILLED WATER FLOWS THROUGH THE COILS. FLOW REQUIREMENTS FOR HOT WATER ARE SHOWN ON THE HW RISER DIAGRAM ON DWG M-6.1. FLOW REQUIREMENTS FOR CHILLED WATER ARE SHOWN ON THE CHW DIAGRAM ON DWG. 6.2.
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- COORDINATED LOCATION OF NEW DDC CONTROLLER (ADD ALTERNATE #1)
- INSTALL NEW EXHAUST DUCTWORK AND CONNECT TO NEW EXHAUST FAN EF B-1. DUCT THE DISCHARGE SIDE OF THE FAN OVER AND DOWN TO THE EXISTING LOUVER IN THE UPPER HALF OF THE WINDOW. INSTALL A NEW LOW LEAKAGE DAMPER IN THE DUCTWORK AT THE LOUVER. INTERLOCK THE EF WITH INTAKE DAMPER SO THAT THE FAN WILL NOT OPERATE WITH THE EXHAUST AND INLET LOUVER DAMPERS CLOSED. (SEE SEQUENCE OF OPERATIONS) (ADD ALTERNATE #3).







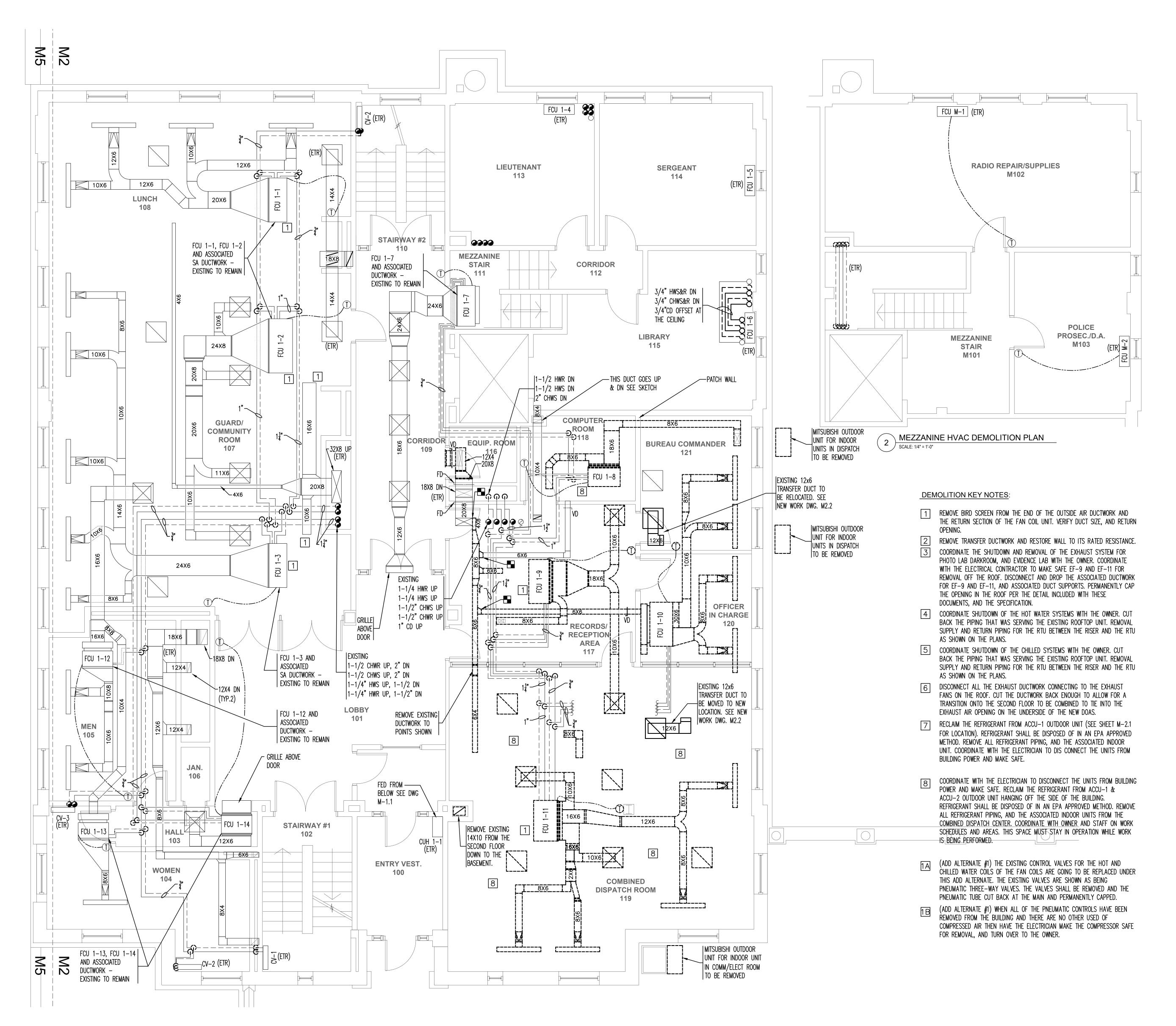
SCALE: 1/4" = 1'-0"



BOILER ROOM NEW CHILLED WATER PIPING

SCALE: 1/4" = 1'-0"

REVISION	I DATES	POLICE HEADQUARTER	S HVAC IMPRO	OVEMENTS	STAMP
		NEWTON POLICE DEPA 1321 WASHINGTON ST,)2465	
		BOILER ROOM DEMO &	NEW WORK PA	ART PLANS	
DATE:	01/05/2022	6.2	crowlov		DRAWING NUMBER
SCALE:	AS NOTED	C.d.	Crowley NEERING, INC.	•	
DRAWN BY:	FV/JC				∣M-1.3
CHECKED BY:	: TS/MV		ounty Street . Suite 6 Inton, MA 02780		IVI - I .J
PROJECT NO.	. 21025.00		CROWLEYENG.COM	fax . (508) 884.5099	



1 FIRST FLOOR HVAC DEMOLITION PLAN

GENERAL NOTES:

- 1. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING AND ASSOCIATED ACCESSORIES WITH EXISTING CONDITIONS IN THE FIELD.

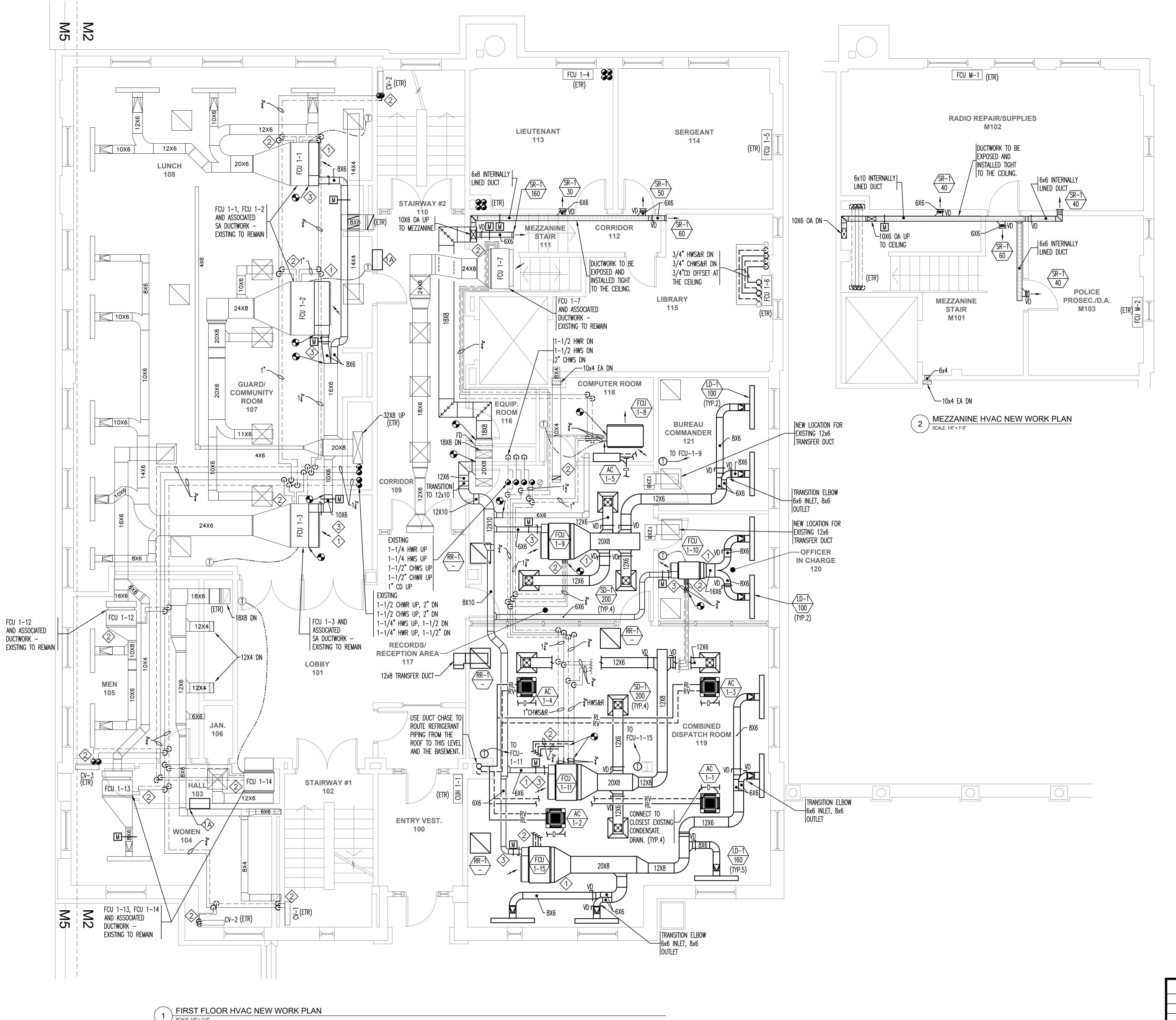
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- 2. ALL ELECTRICAL WORK RELATED TO THE CONNECTION OR DISCONNECTIONS OF EQUIPMENT TO OR FROM THE BUILDING'S ELECTRICAL SYSTEM SHALL BE DONE BY A LICENSED ELECTRICIAN. THE ELECTRICIAN SHALL MAKE SAFE ALL EQUIPMENT TO BE DEMO'ED. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION AND EXTENT OF WORK.
- 3. ALL MECHANICAL EQUIPMENT FEED COMPONENT SHORT CIRCUIT CURRENT RATINGS (SCCR) SHALL MEET OR EXCEED THE MAXIMUM AIC RATING OF THE ELECTRICAL PANEL FROM WHICH IT IS SERVED.
- 4. MAINTAIN SERVICE CLEARANCES IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ROUTED ABOVE ELECTRICAL ROOMS OR EQUIPMENT.
- 5. THE EXISTING EQUIPMENT, PIPING, DUCTWORK, CONTROLS, AND OTHER ACCESSORIES SHALL BE REMOVED COMPLETELY UNLESS OTHERWISE NOTED. THIS SHALL INCLUDE ALL BASES, HANGERS, SUPPORTS, ANCHORS, ETC. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MATTER. ALL WALL, CEILING, FLOOR, AND ROOF OPENINGS ASSOCIATED WITH THE REMOVED APPARATUS SHALL BE PROPERLY IN FILLED, CAPPED, AND/OR PATCHED TO MATCH EXISTING.
- 6. THE CONTRACTOR SHALL REMOVE THE ASSOCIATED SENSORS, THERMOSTATS, ACTUATORS, METERS, VALVES OR DAMPERS, TIMERS, AND SWITCHES. REMOVE ALL CONTROL WIRING AND MAKE SAFE. REMOVE COMPRESSED AIR PIPING BACK TO THE NEAREST BRANCH OR MAIN. CUT AND CAP THE COMPRESSED AIR PIPING ENSURING THAT IT IS SEALED AIR TIGHT.

DEMOLITION NOTES:

- 1. THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. INFORMATION CONTAINED ON THIS DRAWING WAS OBTAIN FROM THE BEST AVAILABLE INFORMATION AND IS NOT INTENDED TO LIMIT THE SCOPE OF WORK.
- 2. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE EXECUTION OF THE WORK. AFTER VISITING THE SITE, REQUEST SUCH FURTHER INFORMATION AND/OR CLARIFICATION AS NECESSARY TO UNDERSTAND THE WORK REQUIRED AND TO PROPERLY ESTIMATE THE COST. CONTRACTORS, BY SUBMITTING A BID, ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITION OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED.
- 3. DEMOLITION WORK SHALL COMPLY WITH OSHA AND ALL APPLICABLE STATE AND LOCAL CODES.
- 4. REMOVE AND LEGALLY DISPOSE OF ITEMS ASSOCIATED WITH THIS PROJECT AREA, UNLESS OTHERWISE NOTED. CONSTRUCTION MANAGER SHALL CLARIFY WITH OWNER ALL ITEMS THAT SHALL REMAIN THE PROPERTY OF THE OWNER PRIOR TO DISPOSAL. ITEMS TO BE SALVAGED MAY BE REMOVED FROM THE SITE AS WORK PROGRESSES. SALVAGED ITEMS MUST BE TRANSPORTED FROM THE SITE AS THEY ARE REMOVED.
- 5. PROTECTION: ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE MEASURES TO PREVENT WINDBLOWN DUST. ANY PROPERTY OR ITEMS DAMAGED DURING THE PROGRESS OF THE DEMOLITION WORK, INCLUDING ANY DAMAGE CAUSED BY THE TRANSPORTING OF MATERIALS OR EQUIPMENT, SHALL BE REPAIRED AND/OR REPLACED.
- 6. UTILITIES: MAINTAIN UTILITIES EXCEPT THOSE REQUIRING REMOVAL OR RELOCATION. KEEP UTILITIES IN SER VICE AND PROTECT FROM DAMAGE. DO NOT INTERRUPT UTILITIES SERVING USED AS OCCUPIED AREAS WITHOUT FIRST OBTAINING PERMISSION FROM THE UTILITY COMPANY AND THE OWNER. BE SURE THAT LOCATIONS OF UTILITIES IN VICINITY ARE KNOWN AND IDENTIFIED AS "IN SERVICE" OR "SHUTDOWN". PROVIDE TEMPORARY SERVICES AS REQUIRED.
- 7. DISCONNECT, DEMOLISH, AND REMOVE MECHANICAL SYSTEMS, EQUIPMENT, AND COMPONENTS INDICATED TO BE REMOVED.
- a. PIPING TO BE REMOVED: REMOVE ALL REFRIGERANT AND CONDENSATE DRAIN PIPING ASSOCIATED WITH SPLIT SYSTEMS TO BE REMOVED. COORDINATE ANY SHUTDOWNS REQUIRED WITH OWNER PRIOR TO COMMENCING.
- b. PIPING TO BE ABANDONED IN PLACE SHALL BE DRAINED & CAPPED WITH SAME OR COMPATIBLE PIPING MATERIAL. ONLY PIPING WHICH IS ASSOCIATED WITH SYSTEMS TO REMAIN ACTIVE SHALL BE MAINTAINED. REFER TO THE PLANS AND SPECIFICATIONS FOR PATCHING WALLS.
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- d. DUCTS TO BE ABANDONED IN PLACE: CAP DUCTS WITH SAME OR COMPATIBLE DUCTWORK MATERIAL.
- e. EQUIPMENT TO BE REMOVED: DISCONNECT AND CAP SER VICES AND REMOVE EQUIPMENT. EQUIPMENT SHALL BE REMOVED FROM PREMISES AND LEGALLY DISPOSED OF.
- f. EQUIPMENT TO BE REMOVED AND REINSTALLED: DISCONNECT AND CAP SERVICES AND REMOVE, CLEAN, AND STORE EQUIPMENT; WHEN APPROPRIATE, REINSTALL, RECONNECT, AND MAKE EQUIPMENT OPERATIONAL.
- g. EQUIPMENT TO BE REMOVED AND SALVAGED: DISCONNECT AND CAP SER VICES AND REMOVE EQUIPMENT AND DELIVER TO OWNER. COORDINATE WITH OWNER PRIOR TO DEMOLITION WORK COMMENCES REGARDING ANY ITEMS TO BE TURNED OVER TO THE OWNER.
- 8. IF PIPE, INSULATION, OR EQUIPMENT TO REMAIN IS DAMAGED IN APPEARANCE OR IS UNSERVICEABLE, REMOVE DAMAGED OR UNSERVICEABLE PORTIONS AND REPLACE WITH NEW PRODUCTS OF EQUAL CAPACITY AND QUALITY.

REVISION	N DATES	POLICE HEADQUARTERS HVAC IMPROVEMENTS	STAMP
		NEWTON POLICE DEPARTMENT 1321 WASHINGTON ST, NEWTON, MA 02465	
		FIRST FLOOR & MEZZANINE HVAC DEMOLITION PLAN	
DATE:	01/05/2022	c a crowley	DRAWING NUMBER
SCALE:	AS NOTED	C.a. crowley. ENGINEERING, INC.	
DRAWN BY:	FV/JC		∣M-2.1
CHECKED BY	': TS/MV	645 County Street . Suite 6 Taunton, MA 02780	

PROJECT NO. 21025.00 tel. (508) 884.5094 WWW.CROWLEYENG.COM fax. (508) 884.5099



- 1. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING AND ASSOCIATED ACCESSORIES WITH EXISTING CONDITIONS IN THE FIELD.

 DRAWINGS ARE DIAGRAMMATIC AND INDICATE APPROXIMATE LOCATIONS OF THE APPARATUS. ANY DISCREPANCIES IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- 2. ALL ELECTRICAL WORK RELATED TO THE CONNECTION OR DISCONNECTIONS OF EQUIPMENT TO OR FROM THE BUILDING'S ELECTRICAL SYSTEM SHALL BE DONE BY A LICENSED ELECTRICIAN. THE ELECTRICIAN SHALL MAKE SAFE ALL EQUIPMENT TO BE DEMO'ED. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION AND EXTENT OF
- 3. ALL MECHANICAL EQUIPMENT FEED COMPONENT SHORT CIRCUIT CURRENT RATINGS (SCCR) SHALL MEET OR EXCEED THE MAXIMUM AIC RATING OF THE ELECTRICAL PANEL FROM WHICH IT IS SERVED.
- 4. MAINTAIN SERVICE CLEARANCES IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ROUTED ABOVE ELECTRICAL ROOMS OR EQUIPMENT.
- 5. THE EXISTING EQUIPMENT, PIPING, DUCTWORK, CONTROLS, AND OTHER ACCESSORIES SHALL BE REMOVED COMPLETELY UNLESS OTHERWISE NOTED. THIS SHALL INCLUDE ALL BASES, HANGERS, SUPPORTS, ANCHORS, ETC. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MATTER. ALL WALL, CEILING, FLOOR, AND ROOF OPENINGS ASSOCIATED WITH THE REMOVED APPARATUS SHALL BE PROPERLY IN FILLED, CAPPED, AND/OR PATCHED TO MATCH EXISTING.
- 6. THE CONTRACTOR SHALL REMOVE THE ASSOCIATED SENSORS, THERMOSTATS, ACTUATORS, METERS, VALVES OR DAMPERS, TIMERS, AND SWITCHES. REMOVE ALL CONTROL WIRING AND MAKE SAFE. REMOVE COMPRESSED AIR PIPING BACK TO THE NEAREST BRANCH OR MAIN. CUT AND CAP THE COMPRESSED AIR PIPING ENSURING THAT IT IS SEALED AIR TIGHT.

KEY NOTES:

- MOUNT A NEW RETURN AIR PLENUM TO THE RETURN AIR COLLAR OF THIS FAN COIL. CONNECT THE EXISTING OUTDOOR AIR DUCTWORK TO THE NEW RETURN AIR PLENUM. REPLACE THE EXISTING BALANCING DAMPERS WITH NEW, AND INSTALL A MODULATING OPPOSABLE BLADE DAMPER AS SHOWN IN THE DETAIL ON SHEET M9.X.
- REPLACE THE EXISTING THREE—WAY CONTROL VALVE WITH A NEW TWO WAY CONTROL VALVE. CUT BACK OR REMOVE THE PIPING ATTACHED TO THE THIRD LEG AND PERMANENTLY CAP. VALVE ACTUATOR SHALL BE FULLY MODULATING AND COMPLY THE REQUIREMENTS OF THE SPECIFICATION.
- BALANCE THE OUTSIDE AIRFLOW AS SHOWN ON THE OUTSIDE AIR (VENTILATION AIR) FLOW DIAGRAM ON M-6.3. BALANCE THE HEATING HOT WATER AND CHILLED WATER FLOWS THROUGH THE COILS. FLOW REQUIREMENTS FOR HOT WATER ARE SHOWN ON THE HW RISER DIAGRAM ON DWG M-6.1. FLOW REQUIREMENTS FOR CHILLED WATER ARE SHOWN ON THE CHW DIAGRAM ON DWG. 6.2.
- REPLACE THE EXISTING T-STAT THAT CONTROLS THIS FAN COIL WITH A NEW T-STAT, HUMIDITY, CARBON DIOXIDE MONITOR. INSTALL AN OCCUPANCY IN A CORNER AT THE CEILING LEVEL. WIRE BOTH BACK TO THE NEW FCU OR NEARBY CONTROLLER. PATCH THE WALL AND ENSURE THAT THE RATING OF THE WALL IS MAINTAINED.
- COORDINATED LOCATION OF NEW DDC CONTROLLER (ADD ALTERNATE #1)

POLICE HEADQUARTERS HVAC IMPROVEMENTS

NEWTON POLICE DEPARTMENT
1321 WASHINGTON ST, NEWTON, MA 02465

FIRST FLOOR & MEZZANINE HVAC NEW WORK PLAN

CATE: 01/05/2022
GALE: AS NOTED
RAWN BY: FV/JC
HECKED BY: TS/MV

POLICE HEADQUARTERS HVAC IMPROVEMENTS

NEWTON POLICE DEPARTMENT
1321 WASHINGTON ST, NEWTON, MA 02465

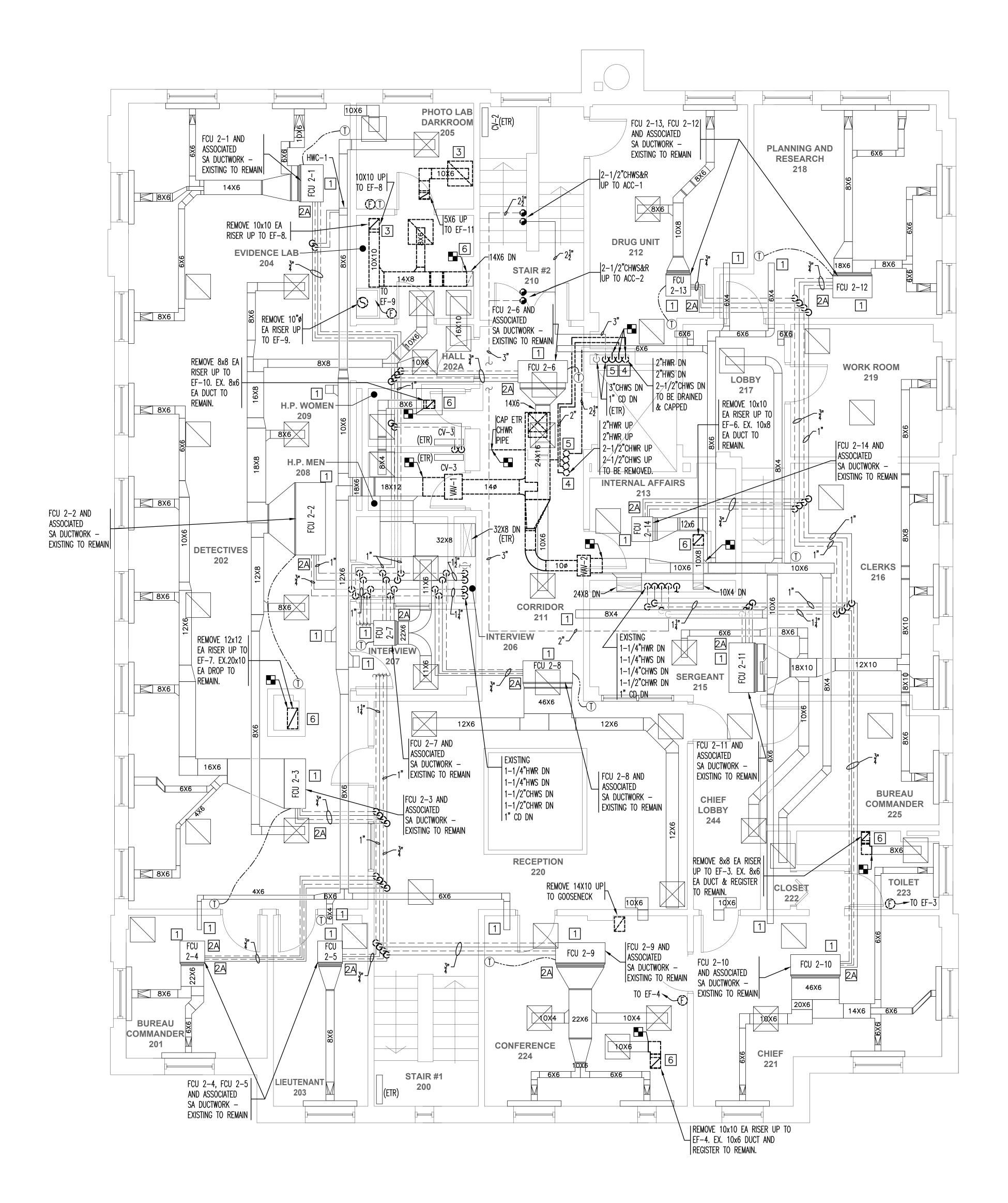
FIRST FLOOR & MEZZANINE HVAC NEW WORK PLAN

DRAWING NUMBER

M-2.2

tel . (508) 884.5094 WWW.CROWLEYENG.COM fax . (508) 884.5099

ROJECT NO. 21025.00



- 1. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING AND ASSOCIATED ACCESSORIES WITH EXISTING CONDITIONS IN THE FIELD. DRAWINGS ARE DIAGRAMMATIC AND INDICATE APPROXIMATE LOCATIONS OF THE APPARATUS. ANY DISCREPANCIES IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- 2. ALL ELECTRICAL WORK RELATED TO THE CONNECTION OR DISCONNECTIONS OF EQUIPMENT TO OR FROM THE BUILDING'S ELECTRICAL SYSTEM SHALL BE DONE BY A LICENSED ELECTRICIAN. THE ELECTRICIAN SHALL MAKE SAFE ALL EQUIPMENT TO BE DEMO'ED. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION AND EXTENT OF
- ALL MECHANICAL EQUIPMENT FEED COMPONENT SHORT CIRCUIT CURRENT RATINGS (SCCR) SHALL MEET OR EXCEED THE MAXIMUM AIC RATING OF THE ELECTRICAL PANEL FROM WHICH IT IS SERVED.
- MAINTAIN SERVICE CLEARANCES IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ROUTED ABOVE ELECTRICAL ROOMS OR EQUIPMENT.
- 5. THE EXISTING EQUIPMENT, PIPING, DUCTWORK, CONTROLS, AND OTHER ACCESSORIES SHALL BE REMOVED COMPLETELY UNLESS OTHERWISE NOTED. THIS SHALL INCLUDE ALL BASES, HANGERS, SUPPORTS, ANCHORS, ETC. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MATTER. ALL WALL, CEILING, FLOOR, AND ROOF OPENINGS ASSOCIATED WITH THE REMOVED APPARATUS SHALL BE PROPERLY IN FILLED, CAPPED, AND/OR PATCHED TO MATCH EXISTING.
- 6. THE CONTRACTOR SHALL REMOVE THE ASSOCIATED SENSORS, THERMOSTATS, ACTUATORS, METERS, VALVES OR DAMPERS, TIMERS, AND SWITCHES. REMOVE ALL CONTROL WIRING AND MAKE SAFE. REMOVE COMPRESSED AIR PIPING BACK TO THE NEAREST BRANCH OR MAIN. CUT AND CAP THE COMPRESSED AIR PIPING ENSURING THAT IT IS SEALED AIR TIGHT.

DEMOLITION KEY NOTES:

- 1 REMOVE BIRD SCREEN FROM THE END OF THE OUTSIDE AIR DUCTWORK AND THE RETURN SECTION OF THE FAN COIL UNIT. VERIFY DUCT SIZE, AND RETURN
- REMOVE TRANSFER DUCTWORK AND RESTORE WALL TO ITS RATED RESISTANCE. COORDINATE THE SHUTDOWN AND REMOVAL OF THE EXHAUST SYSTEM FOR PHOTO LAB DARKROOM, AND EVIDENCE LAB WITH THE OWNER. COORDINATE
- WITH THE ELECTRICAL CONTRACTOR TO MAKE SAFE EF-9 AND EF-11 FOR REMOVAL OFF THE ROOF. DISCONNECT AND DROP THE ASSOCIATED DUCTWORK FOR EF-9 AND EF-11, AND ASSOCIATED DUCT SUPPORTS. PERMANENTLY CAP THE OPENING IN THE ROOF PER THE DETAIL INCLUDED WITH THESE DOCUMENTS, AND THE SPECIFICATION.
- COORDINATE SHUTDOWN OF THE HOT WATER SYSTEMS WITH THE OWNER. CUT BACK THE PIPING THAT WAS SERVING THE EXISTING ROOFTOP UNIT. REMOVAL SUPPLY AND RETURN PIPING FOR THE RTU BETWEEN THE RISER AND THE RTU AS SHOWN ON THE PLANS. DRAIN & CAP PERMANENTLY REMAINING PIPE.
- COORDINATE SHUTDOWN OF THE CHILLED SYSTEMS WITH THE OWNER. CUT BACK THE PIPING THAT WAS SERVING THE EXISTING ROOFTOP UNIT. REMOVAL SUPPLY AND RETURN PIPING FOR THE RTU BETWEEN THE RISER AND THE RTU AS SHOWN ON THE PLANS. DRAIN AND CAP PERMANENTLY REMAINING PIPE.
- DISCONNECT ALL THE EXHAUST DUCTWORK CONNECTING TO THE EXHAUST FANS ON THE ROOF. CUT THE DUCTWORK BACK ENOUGH TO ALLOW FOR A TRANSITION ONTO THE SECOND FLOOR TO BE COMBINED TO TIE INTO THE EXHAUST AIR OPENING ON THE UNDERSIDE OF THE NEW DOAS.
- [2A] (ADD ALTERNATE #2) THE EXISTING CONTROL VALVES FOR THE HOT AND CHILLED WATER COILS OF THE FAN COILS ARE GOING TO BE REPLACED UNDER THIS ADD ALTERNATE. THE EXISTING VALVES ARE SHOWN AS BEING PNEUMATIC THREE-WAY VALVES. THE VALVES SHALL BE REMOVED AND THE PNEUMATIC TUBE CUT BACK AT THE MAIN AND PERMANENTLY CAPPED.
- (ADD ALTERNATE #2) WHEN ALL OF THE PNEUMATIC CONTROLS HAVE BEEN REMOVED FROM THE BUILDING AND THERE ARE NO OTHER USED OF COMPRESSED AIR THEN HAVE THE ELECTRICIAN MAKE THE COMPRESSOR SAFE FOR REMOVAL, AND TURN OVER TO THE OWNER.

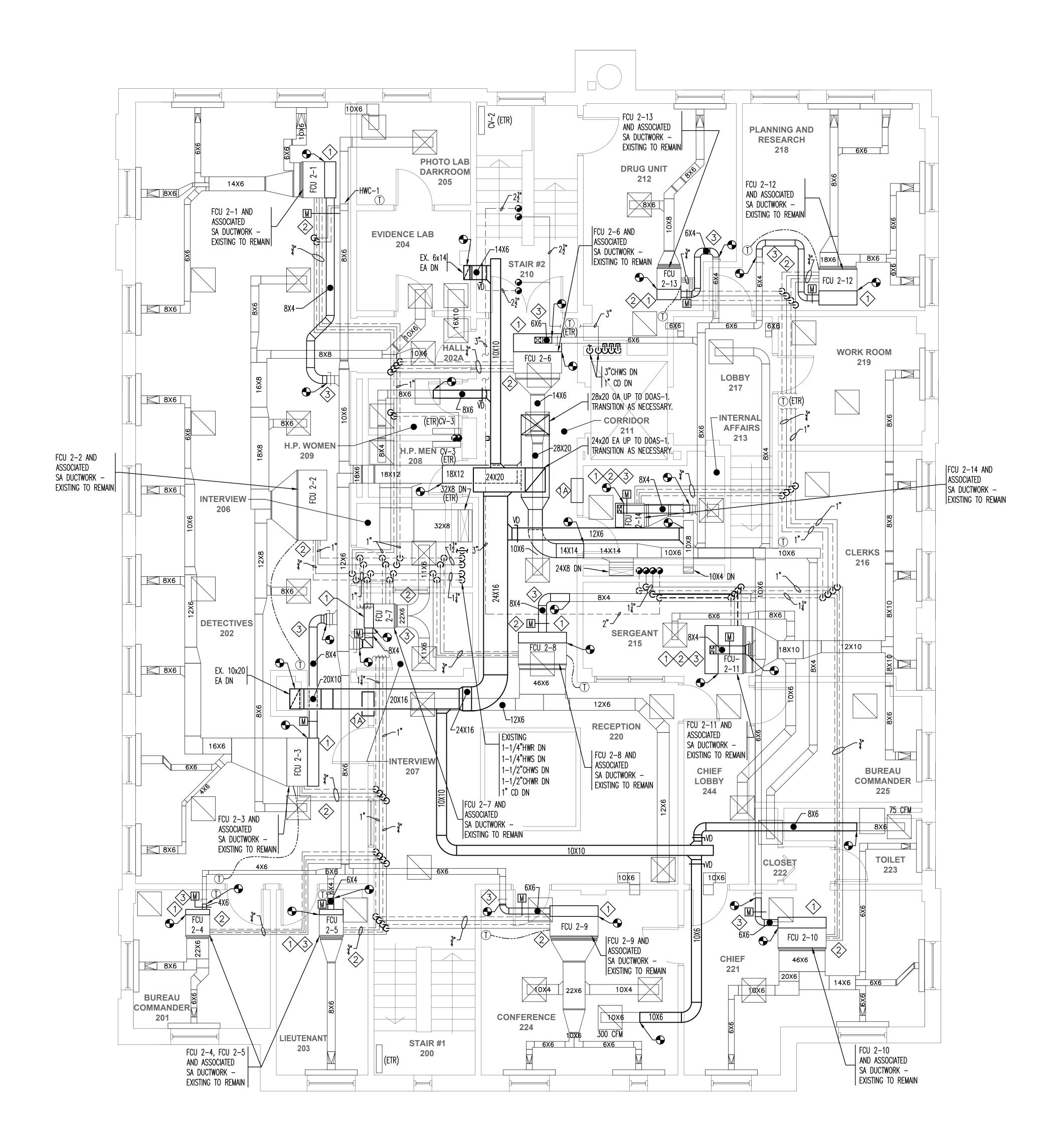
DEMOLITION NOTES:

- 1. THIS PROJECT INVOLVES CONSTRUCTION INSIDE AN EXISTING STRUCTURE. INFORMATION CONTAINED ON THIS DRAWING WAS OBTAIN FROM THE BEST AVAILABLE INFORMATION AND IS NOT INTENDED TO LIMIT THE SCOPE OF WORK.
- CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE EXECUTION OF THE WORK. AFTER VISITING THE SITE, REQUEST SUCH FURTHER INFORMATION AND/OR CLARIFICATION AS NECESSARY TO UNDERSTAND THE WORK REQUIRED AND TO PROPERLY ESTIMATE THE COST. CONTRACTORS, BY SUBMITTING A BID, ARE DEEMED TO BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITION OF THE BUILDING AS IT INFLUENCES THE WORK DESCRIBED.
- 3. DEMOLITION WORK SHALL COMPLY WITH OSHA AND ALL APPLICABLE STATE AND LOCAL CODES.
- REMOVE AND LEGALLY DISPOSE OF ITEMS ASSOCIATED WITH THIS PROJECT AREA. UNLESS OTHERWISE NOTED. CONSTRUCTION MANAGER SHALL CLARIFY WITH OWNER ALL ITEMS THAT SHALL REMAIN THE PROPERTY OF THE OWNER PRIOR TO DISPOSAL. ITEMS TO BE SALVAGED MAY BE REMOVED FROM THE SITE AS WORK PROGRESSES. SALVAGED ITEMS MUST BE TRANSPORTED FROM THE SITE AS THEY ARE REMOVED.
- PROTECTION: ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE MEASURES TO PREVENT WINDBLOWN DUST. ANY PROPERTY OR ITEMS DAMAGED DURING THE PROGRESS OF THE DEMOLITION WORK, INCLUDING ANY DAMAGE CAUSED BY THE TRANSPORTING OF MATERIALS OR EQUIPMENT, SHALL BE REPAIRED AND/OR REPLACED.
- UTILITIES: MAINTAIN UTILITIES EXCEPT THOSE REQUIRING REMOVAL OR RELOCATION. KEEP UTILITIES IN SER VICE AND PROTECT FROM DAMAGE. DO NOT INTERRUPT UTILITIES SERVING USED AS OCCUPIED AREAS WITHOUT FIRST OBTAINING PERMISSION FROM THE UTILITY COMPANY AND THE OWNER. BE SURE THAT LOCATIONS OF UTILITIES IN VICINITY ARE KNOWN AND IDENTIFIED AS "IN SERVICE" OR "SHUTDOWN". PROVIDE TEMPORARY SERVICES AS REQUIRED.
- 7. DISCONNECT, DEMOLISH, AND REMOVE MECHANICAL SYSTEMS, EQUIPMENT, AND COMPONENTS INDICATED TO BE REMOVED.
- a. PIPING TO BE REMOVED: REMOVE ALL REFRIGERANT AND CONDENSATE DRAIN PIPING ASSOCIATED WITH SPLIT SYSTEMS TO BE REMOVED. COORDINATE ANY SHUTDOWNS REQUIRED WITH OWNER PRIOR TO COMMENCING.
- b. PIPING TO BE ABANDONED IN PLACE SHALL BE DRAINED & CAPPED WITH SAME OR COMPATIBLE PIPING MATERIAL. ONLY PIPING WHICH IS ASSOCIATED WITH SYSTEMS TO REMAIN ACTIVE SHALL BE MAINTAINED. REFER TO THE PLANS AND SPECIFICATIONS FOR PATCHING WALLS.
- c. DUCTS TO BE REMOVED: REMOVE PORTION OF DUCTS INDICATED TO BE REMOVED AND CAP REMAINING DUCTS WITH SAME OR COMPATIBLE DUCTWORK MATERIAL AS REQUIRED. REFER TO THE PLANS AND SPECIFICATIONS FOR PATCHING WALLS.
- d. DUCTS TO BE ABANDONED IN PLACE: CAP DUCTS WITH SAME OR COMPATIBLE DUCTWORK MATERIAL.
- e. EQUIPMENT TO BE REMOVED: DISCONNECT AND CAP SER VICES AND REMOVE EQUIPMENT. EQUIPMENT SHALL BE REMOVED FROM PREMISES AND LEGALLY DISPOSED OF.
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- g. EQUIPMENT TO BE REMOVED AND SALVAGED: DISCONNECT AND CAP SER VICES AND REMOVE EQUIPMENT AND DELIVER TO OWNER. COORDINATE WITH OWNER PRIOR TO DEMOLITION WORK COMMENCES REGARDING ANY ITEMS TO BE TURNED OVER TO THE OWNER.
- IF PIPE, INSULATION, OR EQUIPMENT TO REMAIN IS DAMAGED IN APPEARANCE OR IS UNSERVICEABLE, REMOVE DAMAGED OR UNSERVICEABLE PORTIONS AND REPLACE WITH NEW PRODUCTS OF EQUAL CAPACITY AND QUALITY.

SECOND FLOOR HVAC DEMOLITION PLAN

REVISION DATES POLICE HEADQUARTERS HVAC IMPROVEMENTS NEWTON POLICE DEPARTMENT 1321 WASHINGTON ST, NEWTON, MA 02465 SECOND FLOOR HVAC DEMOLITION PLAN 01/05/2022 c.a. crowley. AS NOTED ENGINEERING, INC. RAWN BY: 645 County Street . Suite 6 CHECKED BY: TS/MV Taunton, MA 02780 tel. (508) 884.5094 WWW.CROWLEYENG.COM fax. (508) 884.5099

ROJECT NO. 21025.00



- 1. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING AND ASSOCIATED ACCESSORIES WITH EXISTING CONDITIONS IN THE FIELD.

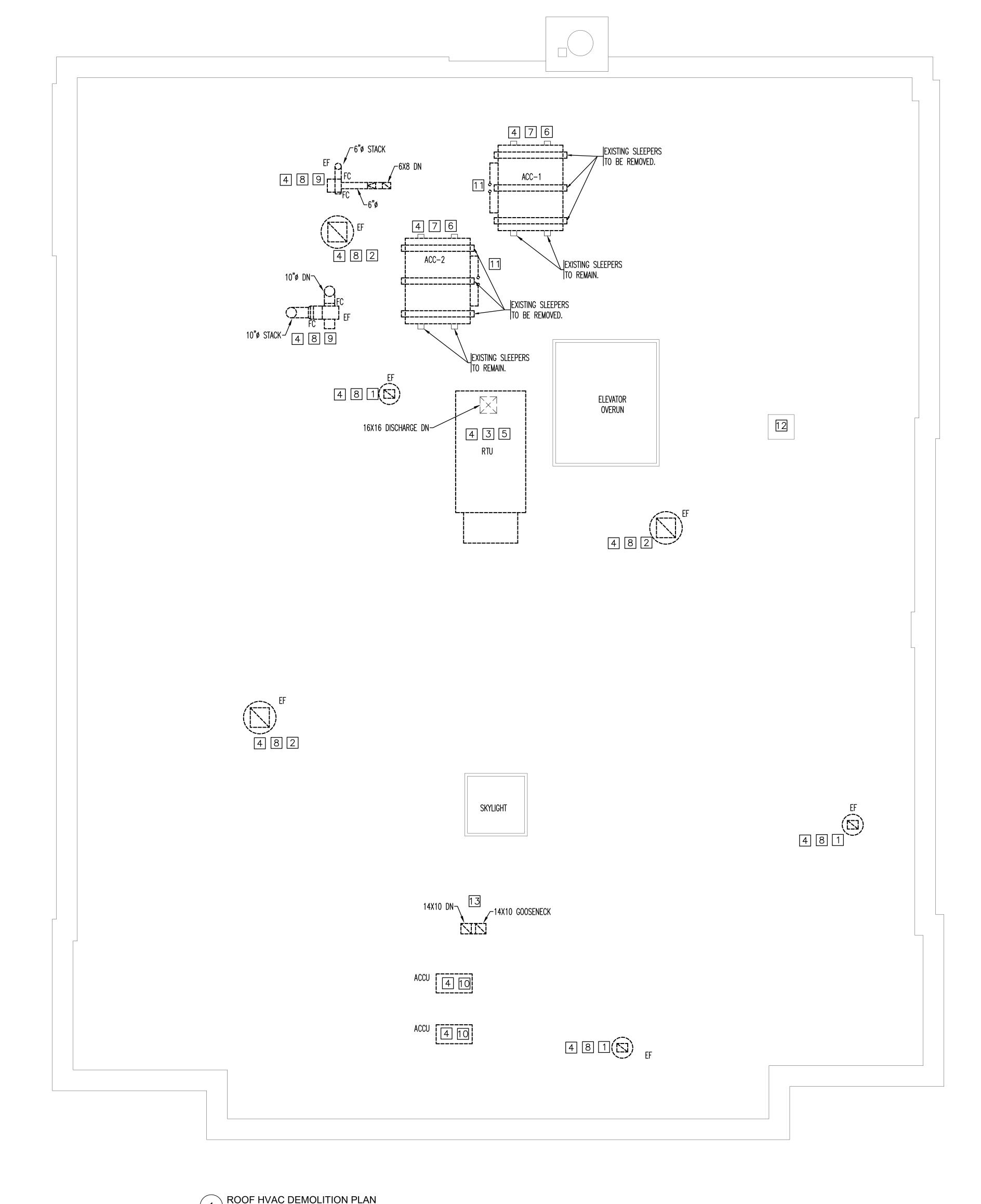
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- 3. ALL MECHANICAL EQUIPMENT FEED COMPONENT SHORT CIRCUIT CURRENT RATINGS (SCCR) SHALL MEET OR EXCEED THE MAXIMUM AIC RATING OF THE ELECTRICAL PANEL FROM WHICH IT IS SERVED.
- 4. MAINTAIN SERVICE CLEARANCES IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ROUTED ABOVE ELECTRICAL ROOMS OR EQUIPMENT.
- 5. THE EXISTING EQUIPMENT, PIPING, DUCTWORK, CONTROLS, AND OTHER ACCESSORIES SHALL BE REMOVED COMPLETELY UNLESS OTHERWISE NOTED. THIS SHALL INCLUDE ALL BASES, HANGERS, SUPPORTS, ANCHORS, ETC. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MATTER. ALL WALL, CEILING, FLOOR, AND ROOF OPENINGS ASSOCIATED WITH THE REMOVED APPARATUS SHALL BE PROPERLY IN FILLED, CAPPED, AND/OR PATCHED TO MATCH EXISTING.
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- 7. PATCH ALL OPENINGS IN THE SHAFT WALL AND MAKE SURE THAT THE FIRE RATING IS MAINTAINED.

KEY NOTES:

- MOUNT A NEW RETURN AIR PLENUM TO THE RETURN AIR COLLAR OF THIS FAN COIL. CONNECT THE EXISTING OUTDOOR AIR DUCTWORK TO THE NEW RETURN AIR PLENUM. REPLACE THE EXISTING BALANCING DAMPERS WITH NEW, AND INSTALL A MODULATING OPPOSABLE BLADE DAMPER AS SHOWN IN THE DETAIL ON SHEET M9.X.
- REPLACE THE EXISTING THREE—WAY CONTROL VALVE WITH A NEW TWO WAY CONTROL VALVE. CUT BACK OR REMOVE THE PIPING ATTACHED TO THE THIRD LEG AND PERMANENTLY CAP. VALVE ACTUATOR SHALL BE FULLY MODULATING AND COMPLY THE REQUIREMENTS OF THE SPECIFICATION.
- BALANCE THE OUTSIDE AIRFLOW AS SHOWN ON THE OUTSIDE AIR (VENTILATION AIR) FLOW DIAGRAM ON M-6.3. BALANCE THE HEATING HOT WATER AND CHILLED WATER FLOWS THROUGH THE COILS. FLOW REQUIREMENTS FOR HOT WATER ARE SHOWN ON THE HW RISER DIAGRAM ON DWG M-6.1. FLOW REQUIREMENTS FOR CHILLED WATER ARE SHOWN ON THE CHW DIAGRAM ON DWG. 6.2.
- REPLACE THE EXISTING T-STAT THAT CONTROLS THIS FAN COIL WITH A NEW T-STAT, HUMIDITY, CARBON DIOXIDE MONITOR. INSTALL AN OCCUPANCY IN A CORNER AT THE CEILING LEVEL. WIRE BOTH BACK TO THE NEW FCU OR NEARBY CONTROLLER. PATCH THE WALL AND ENSURE THAT THE RATING OF THE WALL IS MAINTAINED.
- COORDINATED LOCATION OF NEW DDC CONTROLLER (ADD ALTERNATE #1)

REVISION	DATES	POLICE HEADQUARTERS HVAC IMPROVEMENTS NEWTON POLICE DEPARTMENT 1321 WASHINGTON ST, NEWTON, MA 02465 SECOND FLOOR HVAC NEW WORK PLAN	STAMP
DATE:	01/05/2022	$C \supset CrOW/OV$	DRAWING NUMBER
SCALE:	AS NOTED	C.a. crowley. ENGINEERING, INC.	
DRAWN BY:	FV/JC	ENGINEERING, INC.	
CHECKED BY:	TS/MV	645 County Street . Suite 6	∣M-3.2
PROJECT NO.	21025.00	Taunton, MA 02780 tel . (508) 884.5094 WWW.CROWLEYENG.COM fax . (508) 884.5099	

1 SECOND FLOOR HVAC NEW WORK PLAN
SCALE: 1/4" = 1'-0"



KEY NOTES:

- 1 18" X 18" X 12" CURB DIMENSION
- 2 24" X 24" X 12" CURB DIMENSION
- 3 9'-8" X 8'-4" X 1'-7" CURB DIMENSION
- COORDINATE WITH ELECTRICAL CONTRACTOR AND DISCONNECT AND MAKE SAFE POWERED MECHANICAL EQUIPMENT ON THE ROOF. DISCONNECT ALL POWER WIRING, COIL IT UP AND LEAVE INSIDE THE DISCONNECT ENCLOSURE. IF NEW FEEDERS ARE NEED TO BE PULLED, COORDINATE ALL WORK WITH THE ELECTRIC DRAWINGS FOR SCOPE, SIZING, MATERIAL PROPERTIES, ETC.
- DRAIN DOWN THE EXISTING AIR—HANDLING UNIT'S CHILLED AND HOT WATER COILS TO BELOW THE LEVEL OF THE PIPING IN THE CEILING OF THE SECOND FLOOR.

 DISCONNECT THE COILS FROM THE CHILLED AND HEATING HOT WATER SUPPLY AND RETURN PIPING INSIDE THE UNIT'S PIPING CHASE. REMOVE CHILLED WATER RETURN PIPING BACK TO THE BRANCH. REMOVE THE CHILLED WATER SUPPLY, THE HEATING HOT WATER SUPPLY AND RETURN PIPING BACK TO THE RISER. PERMANENTLY CAP.
- DRAIN THE CHILLED WATER OUT OF BOTH EXISTING AIR-COOLED CHILLERS.

 DISCONNECT THE CHILLER FROM THE CHILLED WATER PIPING AT THE CHILLER'S ISOLATION VALVE. TEMPORARILY CAP THE CHILLED WATER PIPING.
- RECOVER THE REFRIGERANT FROM BOTH OF THE EXISTING AIR-COOLED CHILLERS PRIOR TO THEIR REMOVAL FROM THE ROOF. CONFIRM WITH OWNER IF THEY WANT THE REFRIGERANT OR NOT. IF NOT DISPOSE OF THE REFRIGERANT IN ACCORDANCE WITH MA D.E.P. RULES AND REGULATIONS.
- REMOVE EXISTING ROOFTOP EXHAUST FANS AND ASSOCIATED BACKDRAFT DAMPERS. CUT DUCTWORK BACK TO LIMIT OF DEMOLITION AS SHOWN. PULL ALL POWER AND CONTROLS WIRING BACK TO DISTRIBUTION PANEL OR CONTROL PANEL. INSTALL AN INSULATED CURB COVER TO PERMANENTLY CAP AND MAKE AIR TIGHT ALL EXHAUST FAN CURB ASSEMBLIES. TURN ALL EXHAUST FANS OVER TO THE OWNER.
- 9 EF-9 AND EF-11 DISASSEMBLE THE EXHAUST STACKS. REMOVE THE UTILITY FAN SET AND SUPPORT BASE FROM ITS BASE/CURB. DISCONNECT INLET DUCTWORK FROM FAN INLET AND REMOVE ALL DUCTWORK ON THE ROOF AND BACK DOWN TO THE SECOND FLOOR CEILING SPACE. PERMANENTLY CAP THE REMAIN CURBS AIR TIGHT.
- RECLAIM THE REFRIGERANT FROM ACCU-1 AND ACCU-2 OUTDOOR UNITS.

 REFRIGERANT SHALL BE DISPOSED OF IN AN EPA APPROVED METHOD. REMOVE ALL REFRIGERANT PIPING, AND THE ASSOCIATED INDOOR UNITS. COORDINATE WITH THE ELECTRICIAN TO DISCONNECT THE UNITS FROM BUILDING POWER AND MAKE SAFE.
- CUT BACK EXISTING CHILLED WATER PIPING TO THE ISOLATION VALVES. REMOVE ENOUGH OF THE PIPING TO MINIMIZE THE AMOUNT OF PIPING REWORK IN ORDER TO CONNECT TO THE NEW CHILLERS. TEMPORARILY CAP THE CHILLED WATER RISER PIPING. LEAVE THE ITEMS REMOVED IN A NEAT STACK.
- 12 ACCESS HATCH TO THE ROOF. HATCH IS ACCESSED FROM THE MEZZANINE LEVEL ROOM 103.
- REMOVE 14X10 GOOSENECK, ASSOCIATED DUCTWORK AND ACCESSORIES TO BELOW ROOF LINE. PERMANENTLY CAP ABANDONED DUCTWORK. PATCH ROOF, INSULATION, AND ROOFING MEMBRANE. CAP BOTTOM OF DUCT RISER ON THE BASEMENT LEVEL IN ROOM B30/31.

DEMOLITION NOTES:

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- 3. DEMOLITION WORK SHALL COMPLY WITH OSHA AND ALL APPLICABLE STATE AND LOCAL CODES.
- 4. REMOVE AND LEGALLY DISPOSE OF ITEMS ASSOCIATED WITH THIS PROJECT AREA, UNLESS OTHERWISE NOTED. CONSTRUCTION MANAGER SHALL CLARIFY WITH OWNER ALL ITEMS THAT SHALL REMAIN THE PROPERTY OF THE OWNER PRIOR TO DISPOSAL. ITEMS TO BE SALVAGED MAY BE REMOVED FROM THE SITE AS WORK PROGRESSES. SALVAGED ITEMS MUST BE TRANSPORTED FROM THE SITE AS THEY ARE REMOVED.
- 5. PROTECTION: ENSURE THE SAFE PASSAGE OF PERSONS IN AND AROUND THE BUILDING DURING DEMOLITION. PREVENT INJURY TO PERSONS AND DAMAGE TO PROPERTY. PROVIDE ADEQUATE SHORING AND BRACING TO PREVENT COLLAPSE. IMMEDIATELY REPAIR DAMAGED PROPERTY TO THE CONDITION BEFORE BEING DAMAGED. TAKE EFFECTIVE MEASURES TO PREVENT WINDBLOWN DUST. ANY PROPERTY OR ITEMS DAMAGED DURING THE PROGRESS OF THE DEMOLITION WORK, INCLUDING ANY DAMAGE CAUSED BY THE TRANSPORTING OF MATERIALS OR EQUIPMENT, SHALL BE REPAIRED AND/OR REPLACED.
- 6. UTILITIES: MAINTAIN UTILITIES EXCEPT THOSE REQUIRING REMOVAL OR RELOCATION. KEEP UTILITIES IN SER VICE AND PROTECT FROM DAMAGE. DO NOT INTERRUPT UTILITIES SERVING USED AS OCCUPIED AREAS WITHOUT FIRST OBTAINING PERMISSION FROM THE UTILITY COMPANY AND THE OWNER. BE SURE THAT LOCATIONS OF UTILITIES IN VICINITY ARE KNOWN AND IDENTIFIED AS "IN SERVICE" OR "SHUTDOWN". PROVIDE TEMPORARY SERVICES AS REQUIRED.
- 7. DISCONNECT, DEMOLISH, AND REMOVE MECHANICAL SYSTEMS, EQUIPMENT, AND COMPONENTS INDICATED TO BE REMOVED.
- a. PIPING TO BE REMOVED: REMOVE ALL REFRIGERANT AND CONDENSATE DRAIN PIPING ASSOCIATED WITH SPLIT SYSTEMS TO BE REMOVED. COORDINATE ANY SHUTDOWNS REQUIRED WITH OWNER PRIOR TO COMMENCING.
- b. PIPING TO BE ABANDONED IN PLACE SHALL BE DRAINED & CAPPED WITH SAME OR COMPATIBLE PIPING MATERIAL. ONLY PIPING WHICH IS ASSOCIATED WITH SYSTEMS TO REMAIN ACTIVE SHALL BE MAINTAINED. REFER TO THE PLANS AND SPECIFICATIONS FOR PATCHING WALLS.

c. Ducts to be removed: remove portion of ducts indicated to be removed

- AND CAP REMAINING DUCTS WITH SAME OR COMPATIBLE DUCTWORK MATERIAL AS REQUIRED. REFER TO THE PLANS AND SPECIFICATIONS FOR PATCHING WALLS.
- d. DUCTS TO BE ABANDONED IN PLACE: CAP DUCTS WITH SAME OR COMPATIBLE DUCTWORK MATERIAL.
- e. EQUIPMENT TO BE REMOVED: DISCONNECT AND CAP SER VICES AND REMOVE EQUIPMENT. EQUIPMENT SHALL BE REMOVED FROM PREMISES AND LEGALLY DISPOSED OF.

f. EQUIPMENT TO BE REMOVED AND REINSTALLED: DISCONNECT AND CAP SERVICES

- AND REMOVE, CLEAN, AND STORE EQUIPMENT; WHEN APPROPRIATE, REINSTALL, RECONNECT, AND MAKE EQUIPMENT OPERATIONAL.
- g. EQUIPMENT TO BE REMOVED AND SALVAGED: DISCONNECT AND CAP SER VICES AND REMOVE EQUIPMENT AND DELIVER TO OWNER. COORDINATE WITH OWNER PRIOR TO DEMOLITION WORK COMMENCES REGARDING ANY ITEMS TO BE TURNED OVER TO THE OWNER.
- 8. IF PIPE, INSULATION, OR EQUIPMENT TO REMAIN IS DAMAGED IN APPEARANCE OR IS UNSERVICEABLE, REMOVE DAMAGED OR UNSERVICEABLE PORTIONS AND REPLACE WITH NEW PRODUCTS OF EQUAL CAPACITY AND QUALITY.

POLICE HEADQUARTERS HVAC IMPROVEMENTS

NEWTON POLICE DEPARTMENT

1321 WASHINGTON ST, NEWTON, MA 02465

ROOF HVAC DEMOLITION PLAN

DATE: 01/05/2022
SCALE: AS NOTED
DRAWN BY: FV/JC
CHECKED BY: TS/MV

POLICE HEADQUARTERS HVAC IMPROVEMENTS

NEWTON POLICE DEPARTMENT

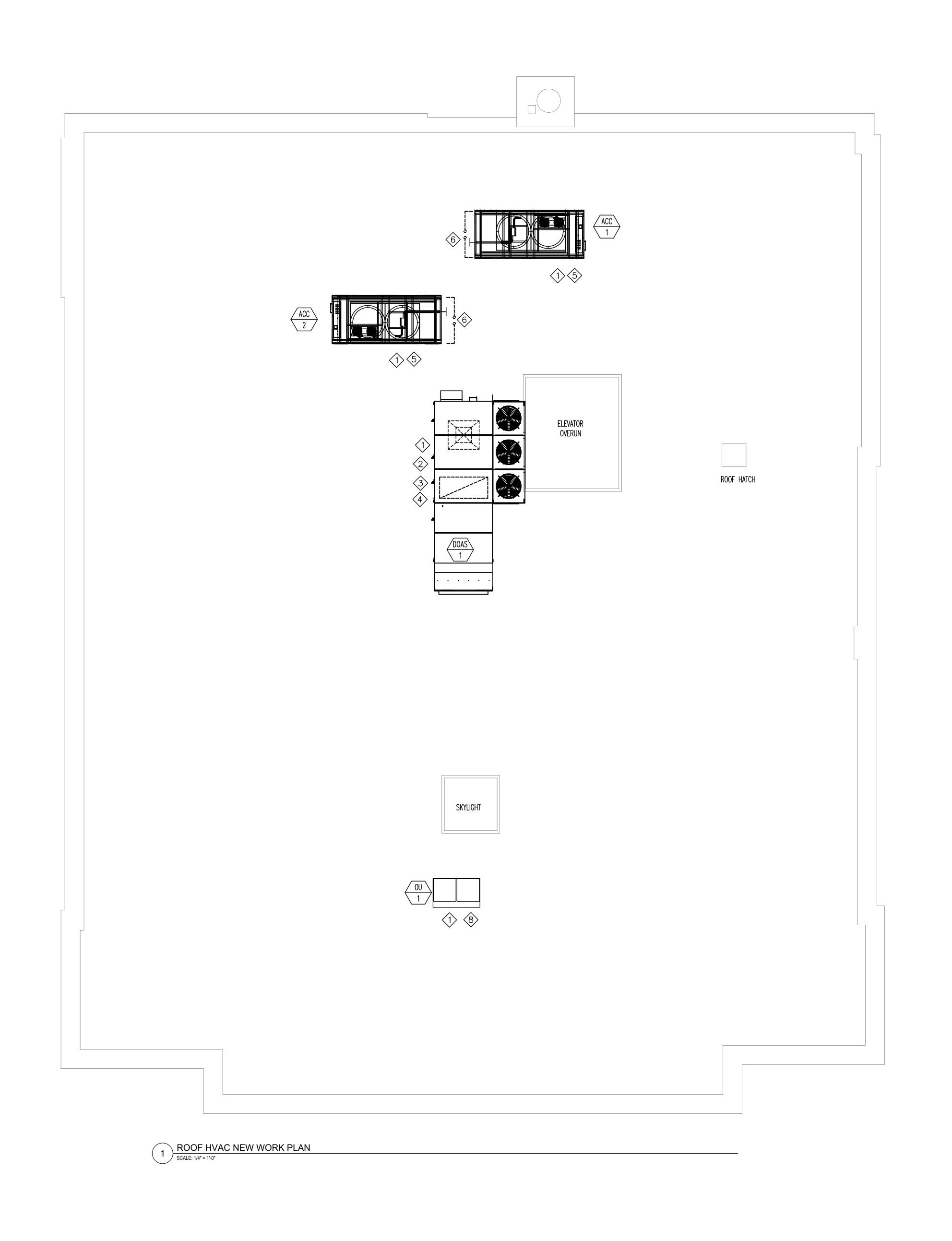
1321 WASHINGTON ST, NEWTON, MA 02465

ROOF HVAC DEMOLITION PLAN

DRAWING NUMBER

M-4.

ROJECT NO. 21025.00



NEW WORK KEY NOTES:

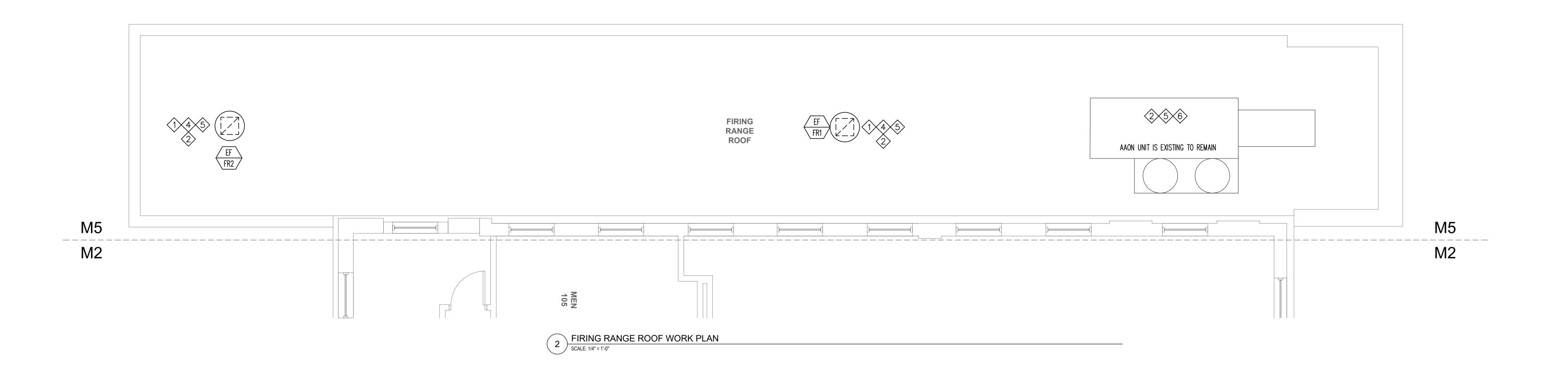
- COORDINATE WITH A LICENSED ELECTRICIAN TO CONNECT POWERED MECHANICAL EQUIPMENT ON THE ROOF TO THE BUILDING'S ELECTRICAL SYSTEM. ELECTRICAL WORK IS OUTLINED ON THE E SHEETS.
- INSTALL INSULATED CURB EXTENSION FOR THE NEW DOAS. THE EXTENSION IS TO HAVE A POSITIVE ATTACHMENT TO EXISTING CURB AND THE NEW UNIT TO WITHSTAND WIND SPEEDS UP TO 110 MPH. REFER TO SPECIFICATION FOR FURTHER REQUIREMENTS.
- ALL DUCTWORK, ELECTRICAL CONDUIT AND CABLING, AS WELL AS THE COMMUNICATIONS WIRING FOR THE BUILDING MANAGEMENT SYSTEM SHALL ALL BE LOCATED INTERNAL TO THE CURB. SUPPLY AND EXHAUST DUCTWORK SHALL HAVE SMACNA STANDARD TRANSITION AS REQUIRED TO CONNECT TO THE UNIT. ELECTRICAL AND BMS WIRING SHALL UTILIZE RACEWAYS PROVIDED BY THE UNIT MANUFACTURER. DO NOT DRILL OR CUT ANY NEW PATHWAYS INTO THE UNIT WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER.
- CONNECT THE CONDENSATE DRAIN PIPING TO THE UNIT AND PIPE TO THE NEAREST ROOF DRAIN. USE DURA-BLOCK OR SIMILAR TO SUPPORT THE PIPING.
- INSTALL NEW STEEL DUNNAGE MEMBERS THAT WILL BE POSITIVELY ATTACHED TO THE ROOF VIA THE EXISTING SUPPORTS. DO NOT REUSE THE EXISTING WOOD SLEEPERS. SET THE VIBRATION ISOLATORS / WIND RESTRAINTS ON THE DUNNAGE PER THE SPECIFICATIONS.
- INSTALL THE AIR-COOLED CHILLERS PER THE DETAIL IN THESE DOCUMENTS AND ATTACHED SPECIFICATION. ENSURE THERE IS ENOUGH SPACE TO INSTALL ALL THE COMPONENT WITH REQUIRED SPACING.
- THE ATC CONTRACTOR SHALL COORDINATE WITH THE ELECTRICIAN AND MECHANICAL CONTRACTORS TO CONNECT INTO THE BMS COMMUNICATIONS TRUNK. ANY CONDUIT ON THE ROOF MUST BE RUN ON SUPPORTS.
- INSTALL THE MANUFACTURER'S STAND FOR OU-1 TO THE EXISTING SUPPORTS FOR ACCU-1 AND ACCU-2. MODIFY AS REQUIRED TO ENSURE THE STAND IS POSITIVELY ATTACHED TO THE SUPPORTS AND THE OUTSIDE UNIT IS LEVEL.

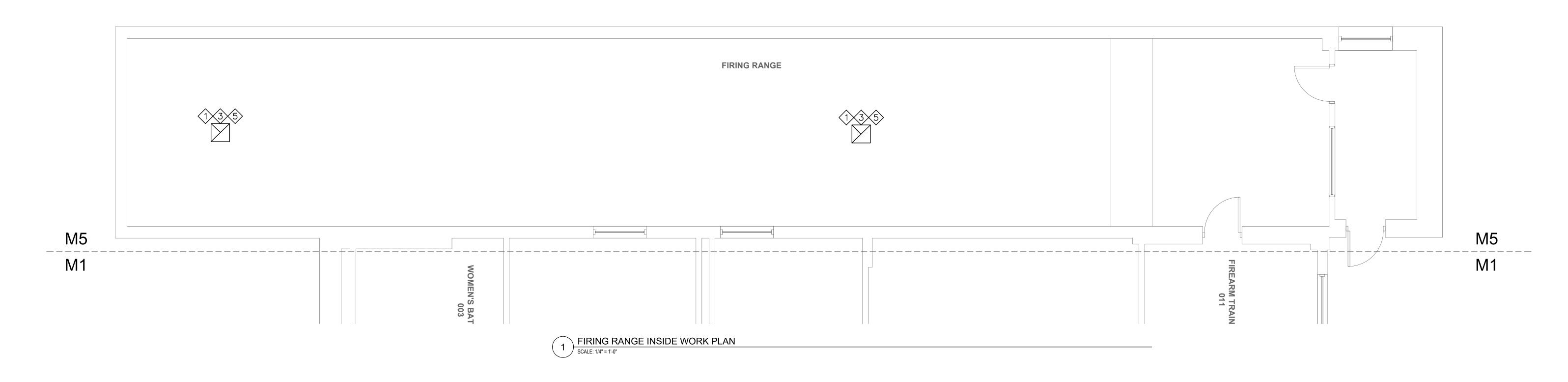
GENERAL NOTES:

- 1. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING AND ASSOCIATED ACCESSORIES WITH EXISTING CONDITIONS IN THE FIELD.

 DRAWINGS ARE DIAGRAMMATIC AND INDICATE APPROXIMATE LOCATIONS OF THE APPARATUS. ANY DISCREPANCIES IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- 2. ALL ELECTRICAL WORK RELATED TO THE CONNECTION OR DISCONNECTIONS OF EQUIPMENT TO OR FROM THE BUILDING'S ELECTRICAL SYSTEM SHALL BE DONE BY A LICENSED ELECTRICIAN. THE ELECTRICIAN SHALL MAKE SAFE ALL EQUIPMENT TO BE DEMO'ED. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION AND EXTENT OF WORK.
- 3. MAINTAIN SERVICE CLEARANCES IN FRONT OF AND ABOVE ELECTRICAL EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ROUTED ABOVE ELECTRICAL ROOMS OR EQUIPMENT.
- 4. THE EXISTING EQUIPMENT, PIPING, DUCTWORK, CONTROLS, AND OTHER ACCESSORIES SHALL BE REMOVED COMPLETELY UNLESS OTHERWISE NOTED. THIS SHALL INCLUDE ALL BASES, HANGERS, SUPPORTS, ANCHORS, ETC. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF IN A PROPER AND LEGAL MATTER. ALL WALL, CEILING, FLOOR, AND ROOF OPENINGS ASSOCIATED WITH THE REMOVED APPARATUS SHALL BE PROPERLY IN FILLED, CAPPED, AND/OR PATCHED TO MATCH EXISTING.
- 5. THE CONTRACTOR SHALL REMOVE THE ASSOCIATED SENSORS, THERMOSTATS, ACTUATORS, METERS, VALVES OR DAMPERS, TIMERS, AND SWITCHES. REMOVE ALL CONTROL WIRING AND MAKE SAFE. REMOVE COMPRESSED AIR PIPING BACK TO THE NEAREST BRANCH OR MAIN. CUT AND CAP THE COMPRESSED AIR PIPING ENSURING THAT IT IS SEALED AIR TIGHT.

REVISION DATES	POLICE HEADQUARTERS HVAC IMPROVEMENTS	STAMP
	NEWTON POLICE DEPARTMENT 1321 WASHINGTON ST, NEWTON, MA 02465	
	ROOF HVAC NEW WORK PLAN	
DATE: 01/05/2022	c = crowlov	DRAWING NUMBER
SCALE: AS NOTED	C.a. crowley. ENGINEERING, INC.	
DRAWN BY: FV/JC		M-4.2
CHECKED BY: TS/MV	645 County Street . Suite 6 Taunton, MA 02780	171 7.2
PROJECT NO. 21025.00	· ·	





KEY NOTES: (ADD ALTERNATE #2 UPGRADE FIRING RANGE CONTROLS)

- REMOVE EXISTING EXHAUST FAN, BACKDRAFT DAMPER AND INSTALL NEW FILTRATION BOX CURB ADAPTOR, NEW EXHAUST FAN WITH NEW CLASS I MOTORIZED DAMPER WITH AMCA 500D LABEL. DAMPER ACTUATOR SHALL BE SHIPPED PRE-WIRED TO THE EXHAUST FAN, AND THE EXHAUST FAN CONTROLLER SHALL BE CONFIGURED TO PROVIDE A CONSTANT PRESSURE DROP ACROSS THE FILTER. EXHAUST FANS SHALL BE GREENHECK, LORNE COOK, ACME, PENNBARRY, TWIN CITY OR APPROVED EQUAL AND AS CALLED FOR BY THE EXHAUST FAN SCHEDULE.
- ALL POWER AND CONTROL WIRING SHALL RUN EXTERNAL TO THE BUILDING AND BE INSTALLED IN ACCORDANCE WITH MA ELECTRICAL CODE, SEE ELECTRICAL DRAWINGS FOR ELECTRICAL REQUIREMENTS.
- 3> ADD A NEW THERMOSTAT ON THE INSIDE FACE OF THE EXHAUST AIR DUCTWORK AS SHOWN IN THE EXHAUST FAN DETAIL ON THIS PAGE.
- ALL NEW CURB ADAPTOR/EXTENSIONS AND FILTER BOXES SHALL BE INSULATED TO A R-VALUE OF 25. SEAL THE EXISTING CURB TO THE INTERNAL STRUCTURE AIR TIGHT. FILTER BOX SHALL
- BE CAMFIL MAGNA/PACK OR EQUAL.

 S BALANCE EXHAUST FAN TO THE VALUES SHOWN IN THE EXHAUST FAN SCHEDULE. RE-BALANCE THE EXISTING AAON UNIT TO 2,500 CFM.
- © REVIEW EXISTING CONTROLLER AND ENSURE THAT CONTROLLER IS COMPATIBLE WITH EXECUTING THE SEQUENCE OF OPERATIONS FOR THIS SPACE AS SPECIFIED IN THE SPECIFICATIONS. UPDATE CONTROLLER AS REQUIRED.

EQUIPMENT NOTE:

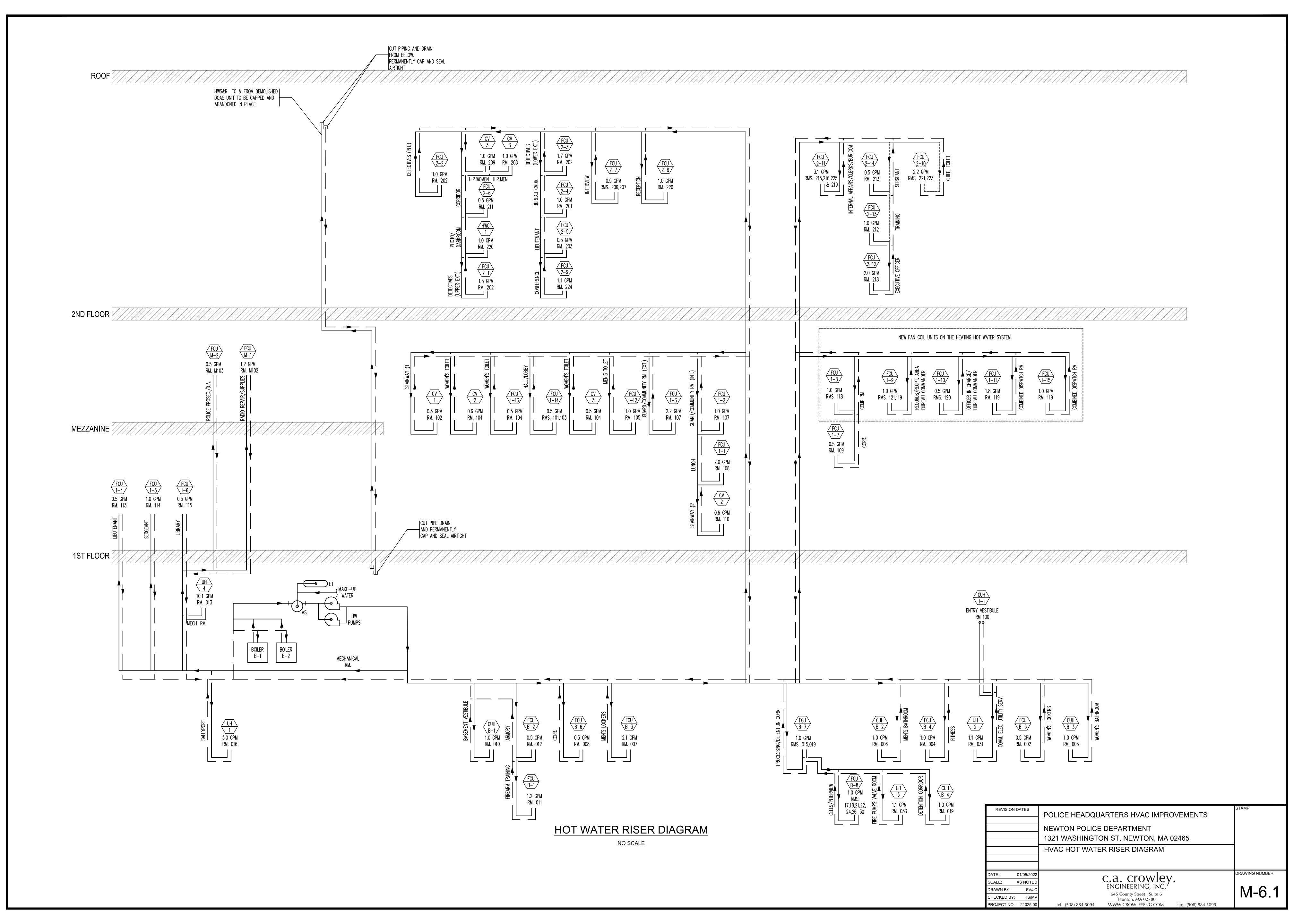
FURNISH AND INSTALL ONE (1) HEPA FILTER HOUSING, INCLUDE TWO (2) HEPA 99.97% HC HEPAS, AND ONE (1) 30/30 PRE-FILTER, PER EXHAUST FAN. COORDINATE WITH THE ATC CONTRACTOR THE LOCATION OF THE MOTORIZED DAMPER, AND TEMPERATURE AND HUMIDITY SENSOR.

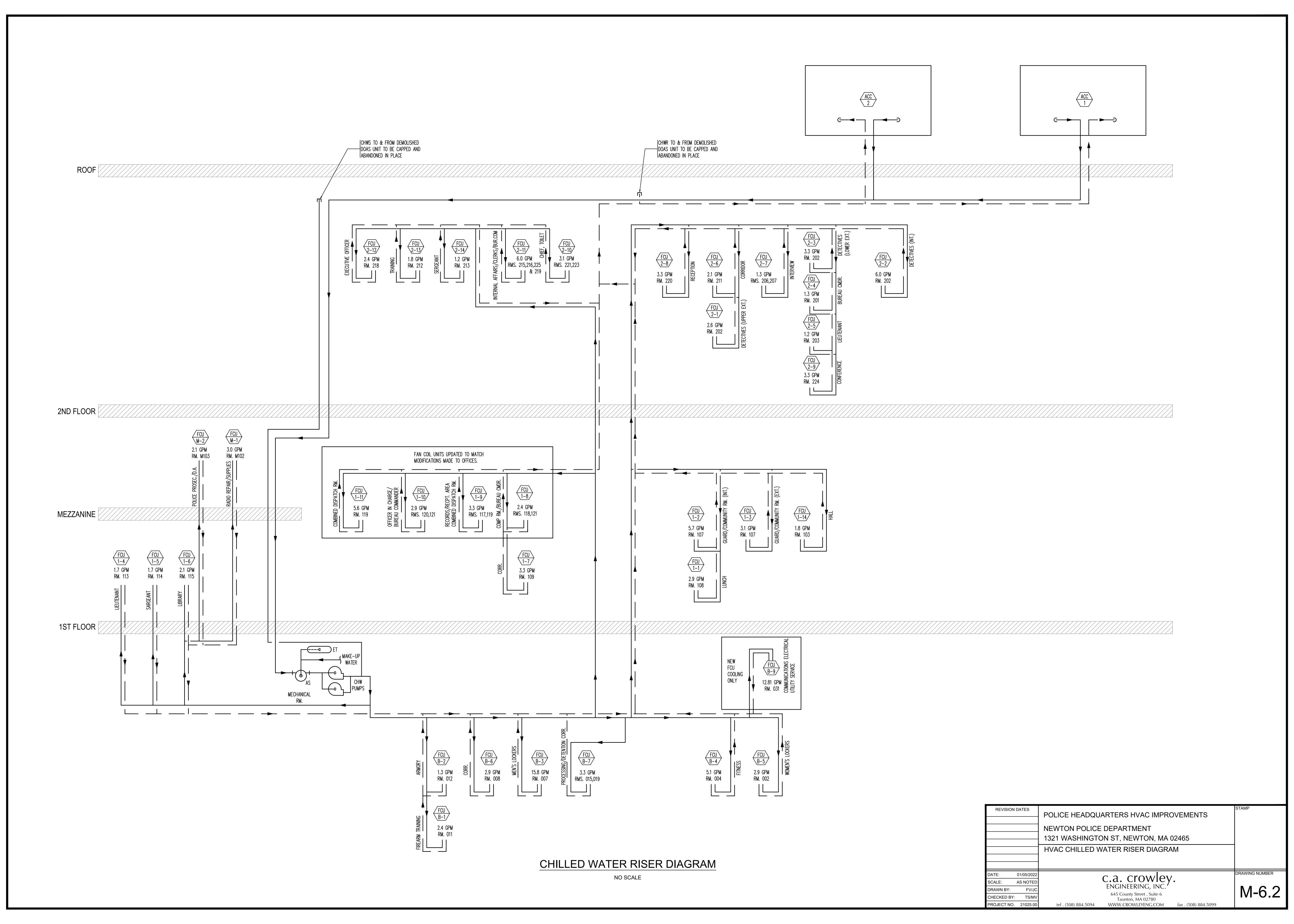
FILTER HOUSING: PART NUMBER 7073204; MAGNA PACK 1X2 HEPA HOUSING WITH PRE-FILTER TRACK.

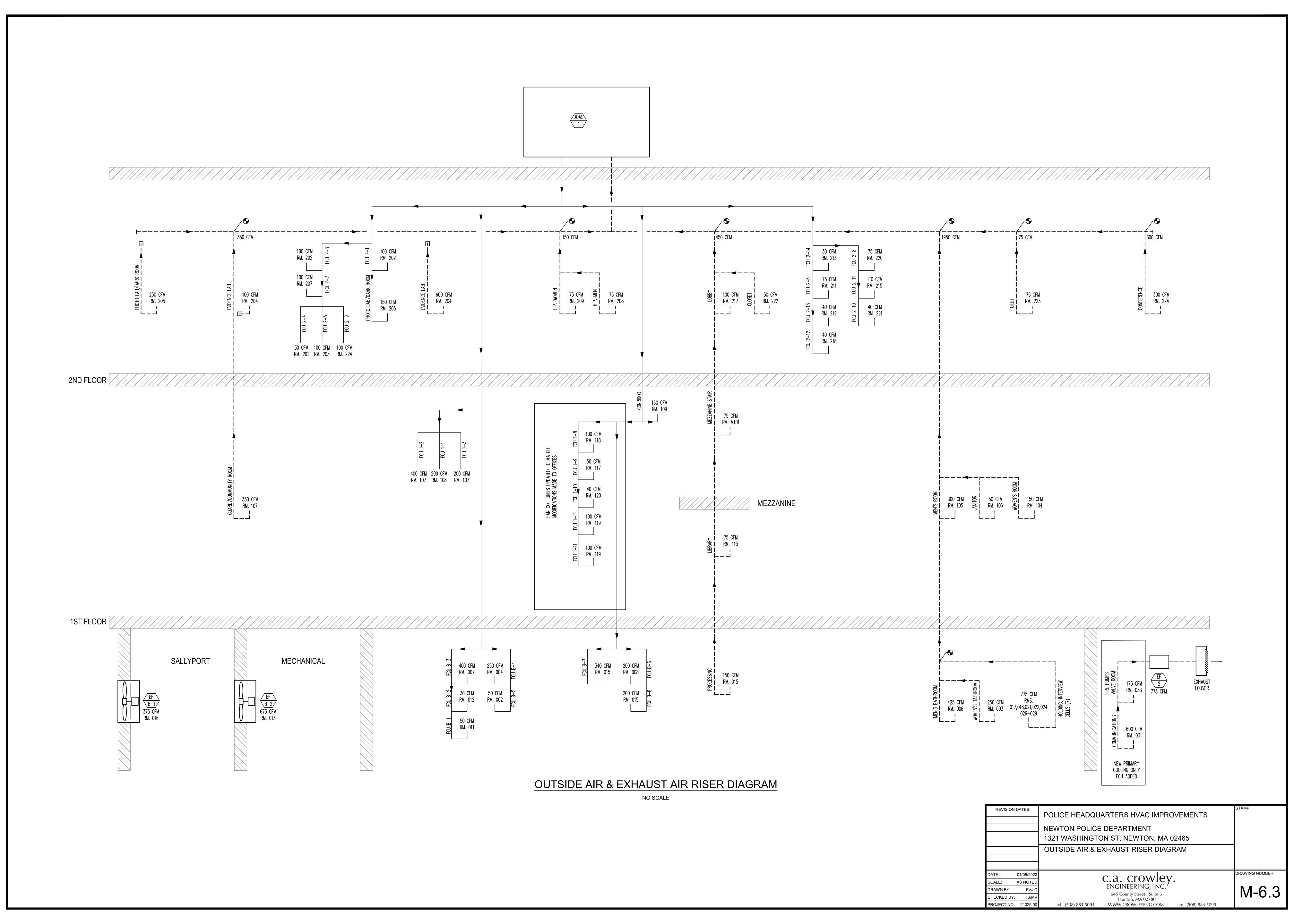
FILTER 24X24X2 30/30 PRE-FILTER.

24X24X11-1/2 99.97% HC HEPA.

REVISION DATES	POLICE HEADQUARTERS HVAC IMPROVEMENTS NEWTON POLICE DEPARTMENT 1321 WASHINGTON ST, NEWTON, MA 02465 FIRING RANGE HVAC WORK PLAN	STAMP
DATE: 01/05/2022	c a crowlov	DRAWING NUMBER
SCALE: AS NOTED	c.a. crowley. ENGINEERING, INC.	
DRAWN BY: FV/JC		M-5
CHECKED BY: TS/MV	645 County Street . Suite 6 Taunton, MA 02780	
PROJECT NO. 21025.00	· · · · · · · · · · · · · · · · · · ·	







	DEDICATED OUTDOOR AIR SYSTEMS SCHEDULE (BASE BID)																																								
ITEM NO.	MODEL	SERVICE	CFM	SUPPLY F ESP HF	AN P I BHP	CFM	EXHAUST LESP L F	FAN 1P I BHP	EAT I	ERGY WHEE	EL SUMMER ITOTAL MBH	II EFF. %	TOT.MBH	HE SEN.MBH	EAT PUMP (I EDB/EWE	COOLING BILDB/LW	B I FLUID	EAT	ENERGY W	WHEEL WINTE TOTAL MBH	ER I EFF. %	HEAT SENS MBH	PUMP HE	ATING DB I CO	P KW I	REHEAT CO	I APD	HEATING KW E	COIL (BA	ACKUP)	EXHAUST A	FILTERS PD OUTSI	DE AIR I	APD E	NERGY W		ELECTRI V/PH/HZ	ICAL I MCA I MO	WEIGHT OCP (LBS)	RE	MARKS
DOAS-1	OAKE180A3-C1B400JN	DOAS	4,000	1.5 3	2.13	3,600	1.0	3 1.47	91/73	79.7/66.3	95.96	76.0	168.8	119.3	79.7/66.	3 52.7/52	2.3 REFRIG	0.0	47.8	277.25	78.0	89.4	47.8	67.1 2.3	3 –		-	30 5	3.1 72.	1 0.01	MERV-8).5 MERV-8	3 & 13 0.	.5 0.8	0.25	2.3	208/3/60	173.1 175	5.0 4,660	1 2	345
	_	_	_								_							$\widehat{}$										$\overline{}$													

BASED ON TRANE ① STAINLESS STEEL PANS ② PROVIDE NON-FUSED DISCONNECT SWITCH WITH TWO 2-PLUG 115V OUTLET RATED FOR 10A ③ PROVIDE CURB ADAPTOR WITH WIND AND VIBRATION ISOLATION. ④ PROVIDE UNIT REFRIGERANT COILS WITH MANUFACTURER'S SALT SPRAY PROTECTIVE COATING. ⑤ PROVIDE OUTSIDE COIL WITH HAIL GUARD.

	G	LYCOL	FILL SC	HEDULI	E (BASE	BID)	
ITE No	I M())+	TANK VOLUME (GAL.)	PRESSURE RANGE (PSIG)	GLYCOL %	WEIGHT (LB)	ELECTRICAL	REMARKS
GF-	-1 GMPD-23050	50	10-50	40	153	120/1/60	1)2

AIR AND DIRT SEPARATOR SCHEDULE

4.3

BASED ON SPIROTHERM 1 PROVIDE UNIT WITH AN AUTO AIR VENT AND BLOWDOWN / BLOWOUT VALVE.

COMBINATION AIR & DIRT SEPARATOR

COMBINATION AIR & DIRT SEPARATOR

DEDICATED OUTDOOR AIR SYSTEM

BASED ON WESSELS 1 UNIT SHALL BE ABLE TO SIGNAL AN ALARM TO THE BAS. 2) UNIT SHALL BE FACTORY ASSEMBLED AND SHIPPED AS A SINGLE PACKAGE.

FLOW PIPE VELOCITY P.D. RATE (GPM) SIZE (IN.) (FT/SEC) (FT.)

					AIR-	AIR-COOLED CHILLER SCHEDULE (BASE BID)														
ITEM NO.	MODEL	TYPE	CAPACITY (TONS)	AMBIANT TEMP. RANGE (F/F)	FLUID	ENTERING CHILLED WATER (°F)	LEAVING CHILLED WATER (*F)	CHILLED WATER MAX GPM	CHILLED WATER MIN GPM	CHILLED WATER PD. FT.	COMPRESSOR TYPE	STAGES OF COOLING	REFRIGERANT	EER	IPLV	MCA	MOCP	V/PH/HZ		
ACC-1	CGAM020A2**2AXD2	AIR-COOLED	19	95/0	40% P.G.	54	44	49.14	23.20	20.8	SCROLL	2	R-410A	9.976	14.42	104	125	208/3/60		
ACC-2	CGAM020A2**2AXD2	AIR-COOLED	19	95/0	40% P.G.	54	44	49.14	23.20	20.8	SCROLL	2	R-410A	9.976	14.42	104	125	208/3/60		

BASED	ON	TRANE	
_			

- 1) PROVIDE CHILLER CURB/STAND WHICH SHALL COMPLY WITH WIND RESTRAINT SECTION OF THE SPECIFICATIONS.
- 2) PROVIDE CONDENSER COILS WITH HAIL GUARD.
- 3 PROVIDE CONDENSER COILS WITH MANUFACTURER'S SALT SPRAY PROTECTIVE COATING.

	BOILER SCHEDULE (BASE BID)												
ITEM NO.													
D 1	VDV1000N	LIEATING	1 000	000	07	0.47	25.1	100	7.5	NC	567	115 /1 /60	15

- BASED ON LOCHINVAR 1) PROVIDE CONDENSATE ACID NEUTRALIZATION KIT AND PIPE THE EFFLUENT TO THE NEAREST FLOOR DRAIN (PIPING TERMINATING ABOVE THE DRAIN COVER). 2) PROVIDE A MICROPROCESSOR BOILER CONTROLLER CAPABLE OF OPERATING THE BOILER(S) AND PRIMARY VARIABLE FLOW PUMPS. (SEE SPECS FOR MORE REQUIREMENTS)
 - $\boxed{3}$ DIRECT VENT SHALL BE HORIZONTAL RUN AS SHOWN ON DRAWINGS AND DETAIL ON SHEET M-8.2. 4) WEIGHT GIVEN IS THE SHIPPING WEIGHT. BOILER HOLDS APPROXIMATELY 100 GALLONS OF FLUID WHICH NEED TO BE ACCOUNTED FOR IN THE INSTALLED WEIGHT.
- 5) CONTROLS AND SAFETY DEVICES FOR AUTOMATIC FIRED BOILERS SHALL MEET THE REQUIREMENTS OF ASME: CSD-1. ADD FLOW SWITCH ON BOILER OUTLET (6) ATC CONTRACTOR TO INSTALL EMERGENCY SHUTDOWN SWITCHES AT ALL MEANS OF EGRESS. SWITCH SHALL OPEN A RELAY IN THE BOILER ENABLE/DISABLE WIRING.
- TO ATC CONTRACTOR TO PROVIDE A CARBON MONOXIDE SENSOR TO BE INSTALLED IN THE SPACE. THE SENSOR SHALL BE HARDWIRED, AND SHUTDOWN THE BOILERS WHEN CO IS PRESENT. RESET MUST BE DONE MANUALLY. SIGNAGE SHALL MEET REQUIREMENTS OF 527 CMR 1.00 (CHAPTER 32). SEE SPECS FOR MORE INFO. 8 BOILER SHALL COMMUNICATE WITH THE BUILDING MANAGEMENT SYSTEM VIA BACNET MSTP (COORDINATE WITH THE ATC CONTRACTOR)

ITEM		SUPF	PLY FAN						CHII	LLED WATE	R COIL					HOT V	WATER CO	L				ELECTR	ICAL	FILTERS	DEMARKO
NO.	MODEL	CFM	ESP	HP	BHP	TOT. MBH	SEN. MBH	EDB/ EWB	LDB/ LWB	FLUID	GPM	ROWS	EWT/ LWT	W.P.D (FT W.C.)	MBH	EWT/LWT	EAT/LAT (°F)	GPM	W.P.D (FT W.C.)	FLUID	MCA	MOCP	V/PH/HZ	TYPE	REMARKS
FCU B-9	BCHD004	1050	0.5	1/2	0.451	29.6	24.8	80/67	58.6/58.2	40% P.G.	12.81	4	45/50	2.99	_	-/-	-/-	-	-	ı	5.33	15	208/1/60	MERV 13	W/ANGLE FILTER MIXING BOX
FCU 1-8	FCCB080	800	0.01	154W	0.211	16.00	15.56	80/67	62.2/60.8	40% P.G.	3.77	4	45/54.52	9.06	10.10	180/157	60/72	0.95	0.38	40% P.G.	2.25	15	208/1/60	MERV 13	W/ANGLE FILTER MIXING BOX
FCU 1-9	FCCB080	800	0.01	154W	0.211	16.00	15.56	80/67	62.2/60.8	40% P.G.	3.77	4	45/54.52	9.06	10.10	180/157	60/72	0.95	0.38	40% P.G.	2.25	15	208/1/60	MERV 13	W/ANGLE FILTER MIXING BOX
FCU 1-10	FCCB020	200	0.01	35W	0.142	6.40	4.93	80/67	57.4/56.8	40% P.G.	2.05	4	45/52	9.88	2.96	180/167	60/74	0.50	0.07	40% P.G.	1.75	15	208/1/60	MERV 13	W/ANGLE FILTER MIXING BOX
FCU 1-11	FCCB080	800	0.01	154W	0.211	16.00	15.56	80/67	62.2/60.8	40% P.G.	3.77	4	45/54.52	9.06	10.10	180/157	60/72	0.95	0.38	40% P.G.	2.25	15	208/1/60	MERV 13	W/ANGLE FILTER MIXING BOX
FCU 1-15	FCCB080	800	0.01	154W	0.211	16.00	15.56	80/67	62.2/60.8	40% P.G.	3.77	4	45/54.52	9.06	10.10	180/157	60/72	0.95	0.38	40% P.G.	2.25	15	208/1/60	MERV 13	W/ANGLE FILTER MIXING BOX

FAN COIL UNIT SCHEDULE (BASE BID)

ITEM MODEL

AS-1 VDT-300

AS-2 | VDT-300 |

BASED ON TRANE 1.) PROVIDE WITH ECM MOTOR AND SPEED CONTROLLER COORDINATE COMMUNICATION PROTOCOL WITH THE ATC CONTRACTOR.

ROUND AIR DUCT UP

——**M** MOTORIZED DAMPER

PROJECT NO. 21025.00

CONNECTION SIZE (IN.)

ASME TANK

ASME TANK

ITEM NO.	MODEL	TYPE	SERVING	GPM	HEAD (FT)	EFFICIENCY %	RPM	HP	BHP	V/PH/HZ	REMARKS
HWP-1	CRE-DP 32-1	INLINE	BLDG. HEATING	100	60	70.0	3109	5	2.83	208/3/60	VFD 1 2 3 4
HWP-2	CRE-DP 32-1	INLINE	BLDG. HEATING	100	60	70.0	3109	5	2.83	208/3/60	VFD 1 2 3 4
CHWP-1	CRE-DP 32-1	INLINE	BLDG. COOLING	100	60	67.49	3124	5	2.83	208/3/60	VFD 1 2 3 4
CHWP-2	CRE-DP 32-1	INLINE	BLDG. COOLING	100	60	67.49	3124	5	2.83	208/3/60	VFD 1 2 3 4
BP-1	MAGNA3 65-150F	INLINE	BOILER 1	96	36	87.0	3869	1.4 KW	6.1A	208/1/60	VFD 1 2 3 4
BP-2	MAGNA3 65-150F	INLINE	BOILER 2	110	45	87.0	3869	1.4 KW	6.1A	208/1/60	VFD 1 2 3 4

PUMP SCHEDULE (BASE BID)

BASED ON GRUNDFOS

- (1) PUMPS IN PRIMARY/STAND-BY ARRANGEMENT. DDC SHALL ALTERNATE PUMPS TO ENSURE EVEN NUMBER OF OPERATING HOURS.
- 2) PROVIDE GROUNDING PLATE FOR ALL PUMPS SERVED BY A VFD.

SERVICE

SALLYPORT

BOILER ROOM

SQ-98-VG

EF B-2 | SQ-98-VG

- MOTORS FOR ALL PUMPS WITH VFDs SHALL BE PREMIUM EFFICIENCY, INVERTER DUTY READY FOR USE WITH. VARIABLE FREQUENCY DRIVES OR VARIABLE SPEED ECM WITH 0-10 VDC SPEED SIGNAL INPUT.
- (4) INLINE PUMPS SHALL BE HUNG FROM THE STRUCTURE AND NOT THE ATTACHED PIPING. PUMPS SHALL BE CONNECTED TO PIPING VIA FLEXIBLE PIPE.

ITEM NO.	MODEL	SERVING	SUP CFM (LO-MID-HI)	PLY FAN WATTS		MOCP	COOLING COIL TOT. MBH	WEIGHT (LBS)	REMARKS	
AC B-1	PKFY-P24NKMU-E2	RM 031	570-920	70.0	0.63	15	24.00	46	1234	R410A
AC 1-5	PKFY-P24NKMU-E2	RM 118	570-920	70.0	0.63	15	24.00	46	1.2.3.4	R410A
AC 1-4	PLFY-P12NFMU-E	RM 119	315-390-460	50.0	0.5	15	12.00	36.6	1.2.3.4	R410A
AC 1-3	PLFY-P12NFMU-E	RM 119	315-390-460	50.0	0.5	15	12.00	36.6	1.2.3.4	R410A
AC 1-2	PLFY-P12NFMU-E	RM 119	315-390-460	50.0	0.5	15	12.00	36.6	1.2.3.4	R410A
AC 1-1	PLFY-P12NFMU-E	RM 119	315-390-460	50.0	0.5	15	12.00	36.6	1.2.3.4	R410A
AC B-2	PEAD-A24AA7	RM 030	667-572-461	121	2.63	15	24.00	70.0	1,2,3,4,	R410A

BASED ON MITSUBISHI - COOLING ONLY (1)	POWER SOURCE 208V/1P/60HZ	2. PROVIDE HARDWIF	RED TYPE CONDENSATE	PUMP RATED FOR PLENUM U
3)	PROVIDE ONBOARD TEMPERATUR	E SENSOR (4.) PROVIDE	ONBOARD OCCUPANCY	/ SENSOR

300

INLINE

	AIR COOLED CONDENSING UNIT SCHEDULE (BASE BID)												
ITEM NO.	I MUUFI I I												
0U-1	PUHY-EP144YNU-A	12.0	-10/115	15/22.3	208/3/60	47-44	60	680	123456				
-													

BASED ON MITSUBISHI (1) PROVIDE LOW AMBIENT CONTROLS TO -10°F. ② PROVIDE MANUFACTURERS 24" MOUNTING STAND (SS100M-24). 3 COMPRESSOR w/DC-INVERTER-DRIVEN TWIN ROTARY 4) PROVIDE COILS WITH MANUFACTURER'S SALT SPRAY PROTECTIVE COATING. 5 PROVIDE HAIL GUARD (6) PROVIDE TWINNED UNIT WITH OPERATING RANGE 15% TO 100%

	TRANSFER GRILLE SCHEDULE													
	ITEM MODEL TYPE SIZE REMARKS													
)		TG-1	635	SURFACE MOUNTED	16"x16"	-								
		TG-2	635	SURFACE MOUNTED	12"x12"	-								
	·	BASED	ON PRICE											

EXPANSION TANK SCHEDULE

ET-1 B-500LA

ET-2 B-800LA

BASED ON BELL & GOSSETT

CHILLED

211

TANK ACCEPTANCE TANK TANK
VOLUME (GAL.) DIAMETER (IN.) HEIGHT (IN.)

NOTE: PROVIDE DUCT TRANSITIONS TO REGISTERS AS REQUIRED.

S	SUPPLY DIFFUSER SCHEDULE												
ITEM NO.													
SD-1	SMD	LAY IN	9"x9"	4W	-								
LD-1	TBD2100	LAY IN	8"ø	ı	(2) 1" SLOTS								
SR-1	520	SIDEWALL	6"x6"	-	-								
DACED ON DDICE													

BASED ON PRICE NOTE: PROVIDE DUCT TRANSITIONS TO DIFFUSERS & REGISTERS AS REQUIRED.

EXH.	/RET./	TRNS	8. RE	G. SCHEDULE
ITEM NO.	MODEL	TYPE	SIZE	REMARKS
RR-1	80	LAY IN	24"x24"	-
BASED ON F	PRICE			

REMARKS

12456

	EXHAUST FAN SCHEDULE (ADD ALTERNATE #2)											
ITEM NO.	MODEL	SERVICE	TYPE	CFM	ESP. In.	HP	BHP	SONES	V/PH/HZ			
EF-FR1	CUBE-240XP-VGD	FIRING RANBE	ROOF UPBLAST	2,400	2.75	2.0	1.84	19.2	208/3/60			
EF-FR2	CUE-140HP-VG	FIRING RANGE	ROOF UPBLAST	1,200	2.75	1.0	0.88	19.4	115/1/60	(

BASED ON GREENHECK 3 CONTROLLED BY GAS SENSING CONTROLLER 1. COORDINATE INSTALLATION OF DUCTWORK WITH EXISTING CONDITIONS. (2.) FAN MUST CARRY A UL1203 LISTING. 2. PROVIDE VIBRATION ISOLATION HANGERS AND FLEXIBLE DUCT CONNECTIONS. 4. ALL DAMPERS MUST BE LABEL AMCA 500D 6. HEPA FILTRATION BOX

1/4

1.0 1/4 0.15

BHP SONES

12.1

11.3 115/1/60

0.17

REMARKS

12457

12457

(7.) UNIT SHALL BE PROVIDE WITH A DIRECT DRIVE EC MOTOR

EXHAUST FAN SCHEDULE (ADD ALTERNATE #3)

BASED ON GREENHECK (1.) PROVIDE WITH MANUFACTURER'S BIRD SCREEN AND MOTORIZED DAMPER. (3.) FAN MUST CARRY A UL1203 LISTING. (2.) PROVIDE WITH MANUFACTURER'S 14" TALL INSULATED ROOF CURB. (4.) ALL DAMPERS MUST BE LABEL AMCA 500D (6.) HEPA FILTRATION BOX 7.) UNIT SHALL BE PROVIDE WITH A DIRECT DRIVE EC MOTOR

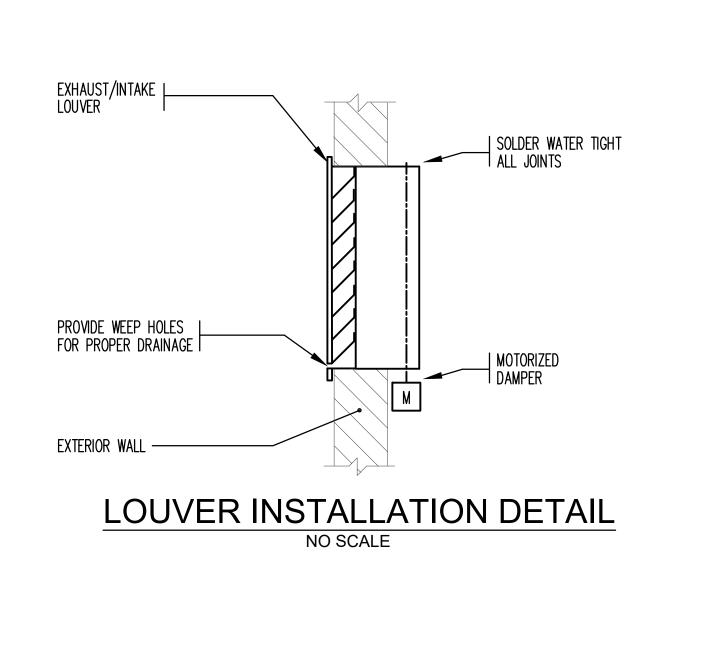
	TOOTIE THE BOOT OF	(FE) \ - /	1.001 101 01111	\ \ - \	DEDICATED COTDOCK AND CHOICEM
	ROUND AIR DUCT DOWN	EF _	EXHAUST FAN	ACC _	AIR-COOLED CHILLER
	SUPPLY AIR DUCT UP	${}$	OUTDOOR CONDENSING UNIT	ACCU -	AIR-COOLED CONDENSING UNIT
	SUPPLY AIR DUCT DOWN	-	INDOOR EVAPORATIVE UNIT	FCU _	FAN COIL UNIT
	RETURN/EXHAUST AIR DUCT UP	${}$	CEILING DIFFUSER	HWP -	HOT WATER PUMP
	RETURN/EXHAUST AIR DUCT DOWN	RR V	RETURN AIR REGISTER	CHWP	CHILLED WATER PUMP
<u></u>	ACOUSTICALLY LINED DUCTWORK (1")	ER -	EXHAUST AIR REGISTER	$\overline{\qquad}$ $\overline{\qquad}$ $\overline{\qquad}$ $\overline{\qquad}$	BOILER
	FLEXIBLE CONNECTION	lacktriangle	THERMOSTAT	TG	TRANSFER GRILLE
₩	CEILING DIFFUSER	\oplus	HUMIDISTAT		
→	RETURN REGISTER	S	TEMPERATURE SENSOR		
←	SUPPLY DIFFUSER—SIDEWALL	©	CARBON MONOXIDE DETECTOR		
	SQUARE TO ROUND DUCT TRANSITION	©	CARBON DIOXIDE DETECTOR		
₹	INCLINED RISE OR DROP, IN DIRECTION OF ARROW	(SP)	STATIC PRESSURE SENSOR		
	LINEAR SUPPLY DIFFUSER	(3)	SMOKE DETECTOR		
G-Mm	CEILING DIFFUSER W/FLEXIBLE CONNECTION	/ was	LINES OUT DOOD		
-H= /	RETURN AIR EGGCRATE-24X24	-∪ - / UCD	UNDER CUT DOOR		
	RETURN AIR EGGCRATE-48X24	FC0	CONDENSATE DRAIN FLOOR CLEAN-C	UT	
	VOLUME DAMPER	PC	PLUMBING CONTRACTOR		
→	FIRE DAMPER	HVAC	HEATING, VENTILATING & AIR CONDIT	IONING	
	MOTORIZED DAMPER	EC	ELECTRICAL CONTRACTOR		
→ MD	WIOTONIZED DAWN EN	GC	GENERAL CONTRACTOR		
— D——	CONDENSATE DRAIN	UCD	UNDER CUT DOOR		
► REFGL —	REFRIGERANT LIQUID	DOV	DRAIN-OFF VALVE		
► — REFGV — →	REFRIGERANT VAPOR	CO	DUCT CLEAN-OUT		
·O	PIPE UP	RR	RETURN AIR REGISTER		
·	PIPE DOWN	ER	EXHAUST AIR REGISTER		
	PIPE TEE DROP	GPM	GALLONS PER MINUTE		
	LIMIT OF DEMOLITION	CFM	CUBIC FEET PER MINUTE		
•	CONNECT NEW TO EXISTING	OA	OUTDOOR AIR		
	MOTODIZED DAMDED	ETR	EXISTING TO REMAIN		

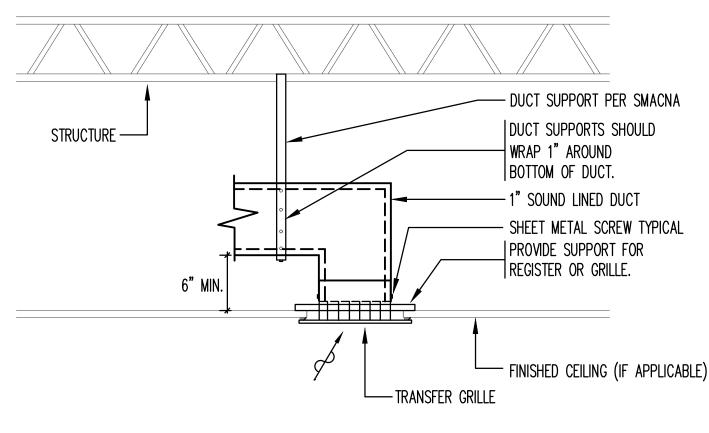
LEGEND

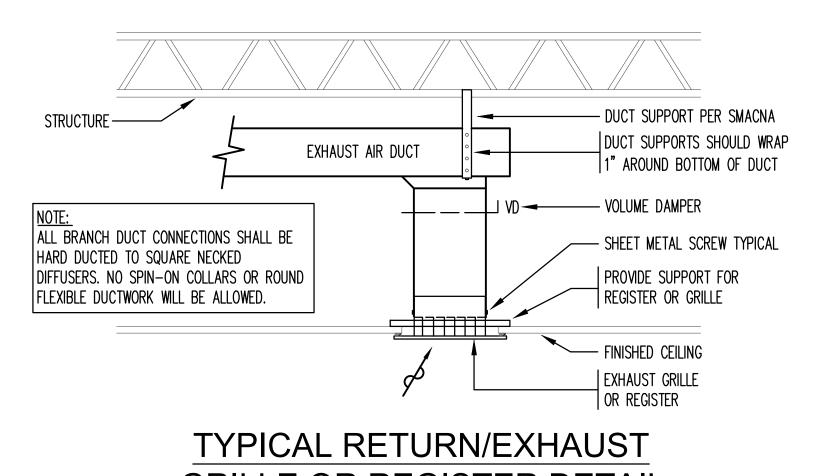
REVISION	N DATES	POLICE HEADQUARTERS HVAC IMPROVEMENTS	STAMP
		NEWTON POLICE DEPARTMENT 1321 WASHINGTON ST, NEWTON, MA 02465	
		HVAC LEGEND & SCHEDULES	
DATE:	01/05/2022	c a crowlov	DRAWING NUMBE
SCALE:	AS NOTED	C.a. crowley. ENGINEERING, INC.	
DRAWN BY:	FV/JC		N/1_7
CHECKED BY	/. TC/M//	645 County Street . Suite 6	

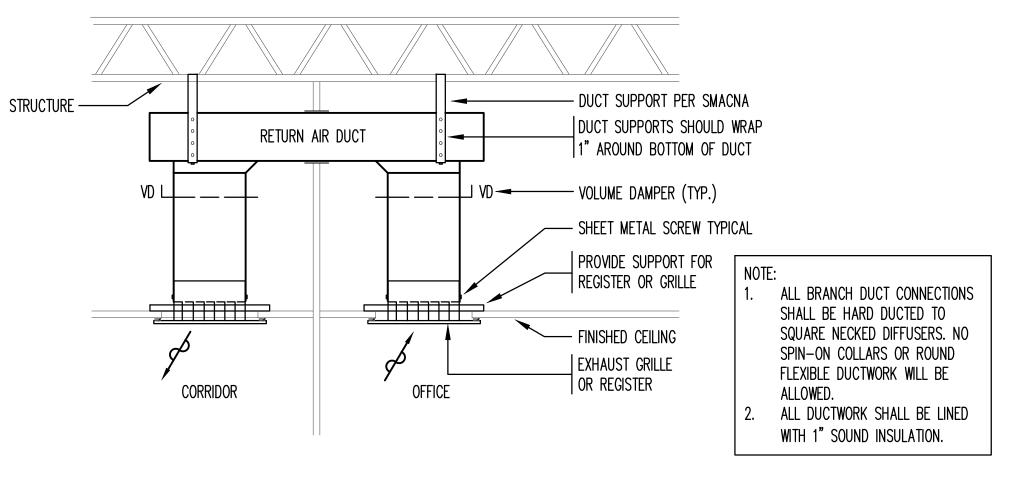
Taunton, MA 02780

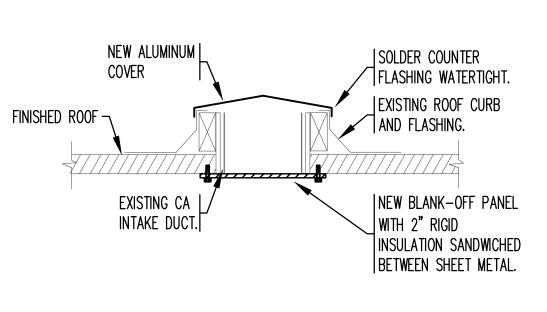
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ROOF CAP DETAIL NO SCALE

SOLDER ALL SEAMS WATER TIGHT.

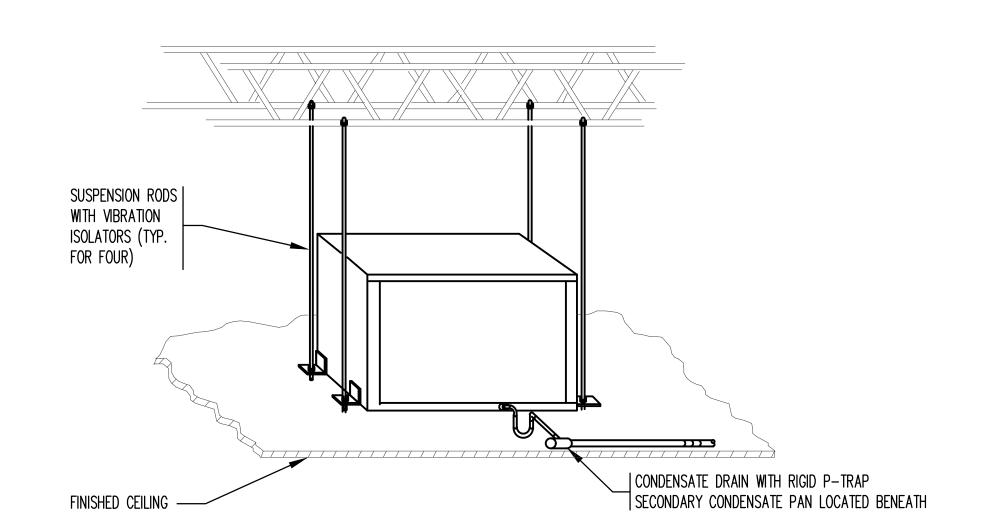
PENETRATING ROOF.

| SUPPLY, RETURN & EXHAUST DUCT

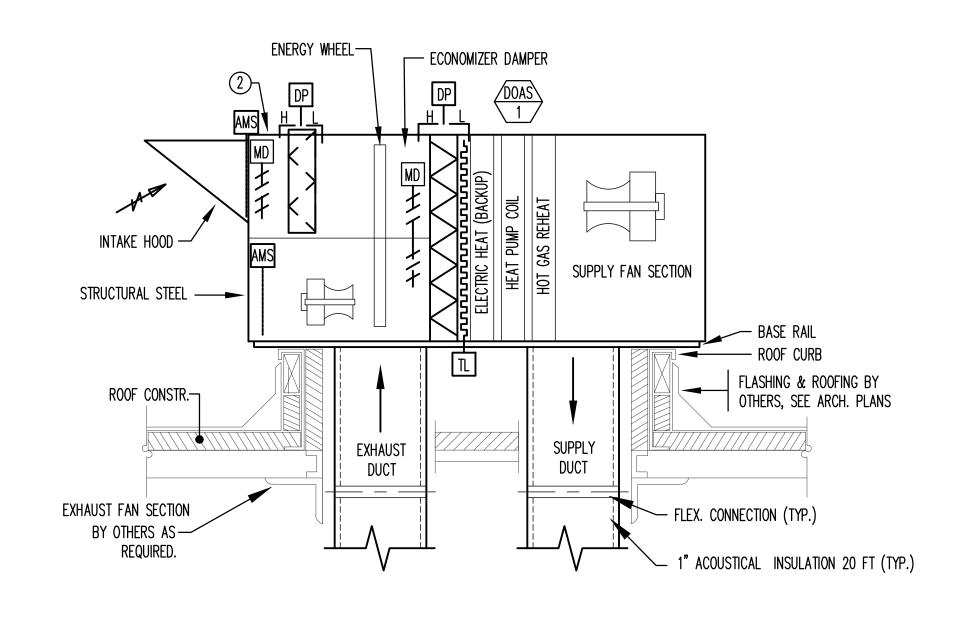
TYPICAL TRANSFER GRILL DETAIL NO SCALE

GRILLE OR REGISTER DETAIL NO SCALE

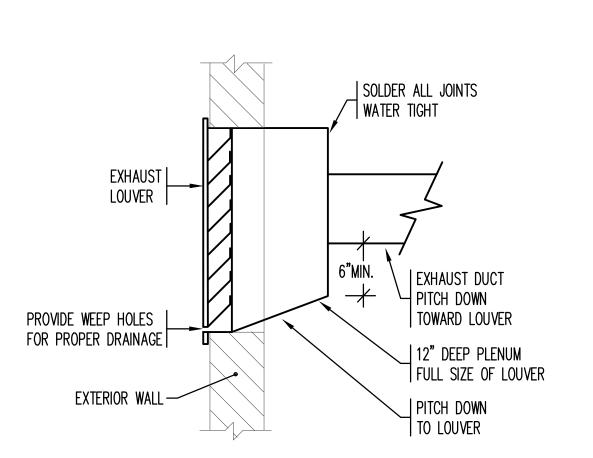
TYPICAL TRANSFER **GRILLE DETAIL** NO SCALE



FAN COIL UNIT DETAIL NO SCALE

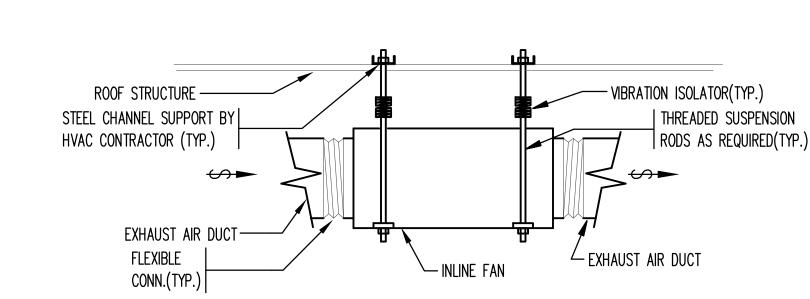


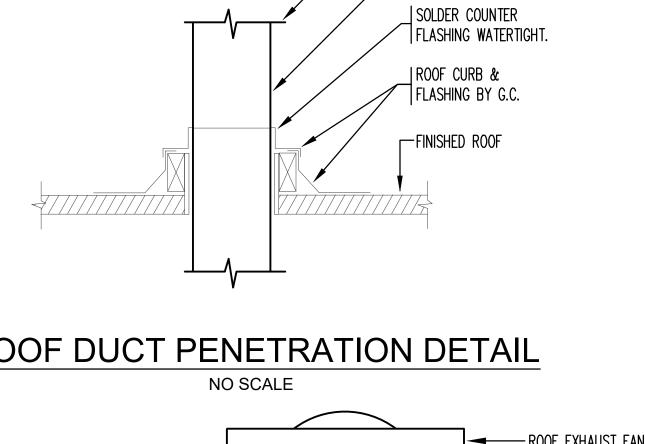
ERV UNIT DETAIL NO SCALE



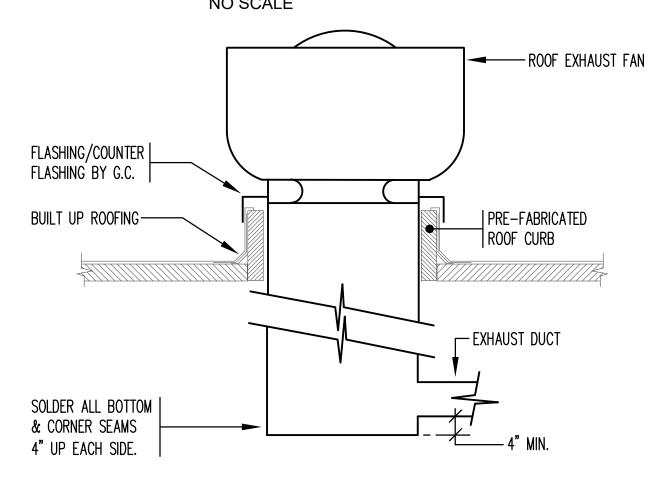
FURNISH AND INSTALL INTAKE AIR LOUVERS AS HEREINAFTER SPECIFIED AND CONTRACTOR. LOUVER SHALL BE STATIONARY TYPE ENTIRELY CONTAINED IN 4" FRAME. LOUVER DESIGN SHALL INCORPORATE STRUCTURAL SUPPORTS TO WITHSTAND A WIND LOAD OF 20 LBS. 2. LOUVERS SHALL BE CONSTRUCTION SPECIALITIES, MODEL #A4105 OR APPROVED SCREEN. ALL BLADES FOR HORIZONTAL PUBLISHED LOUVER PERFORMANCE DATA BEARING AMCA CERTIFIED RATINGS SEAL FOR AIR PERFORMANCE AND WATER PENETRATION MUST BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION AND MUST DEMONSTRATE PRESSURE DROP AND WATER PENETRATION EQUAL TO OR LESS THAN THE CONSTRUCTION SPECIALTIES MODEL A4105. LOUVER TO HAVE KYNAR 500 FINISH COLOR TO BE SELECTED BY ARCHITECT.

LOUVER INSTALLATION DETAIL NO SCALE





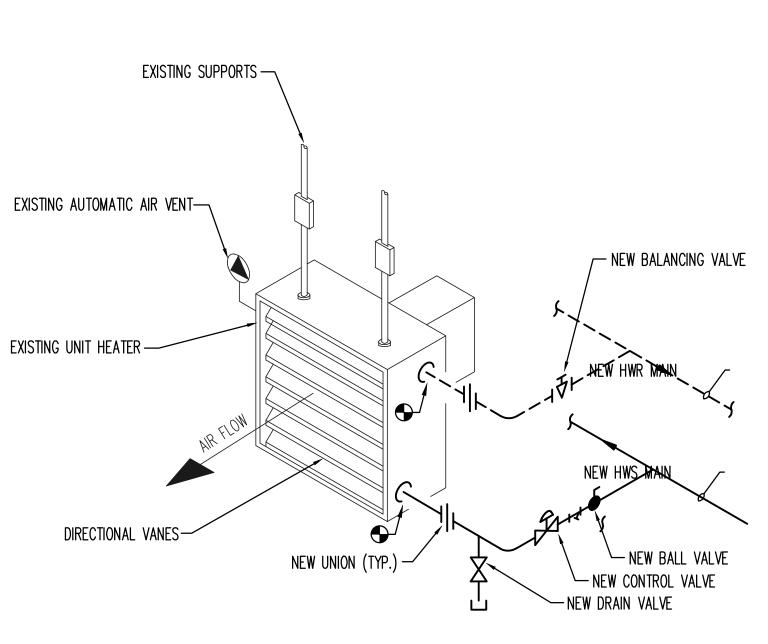
ROOF DUCT PENETRATION DETAIL



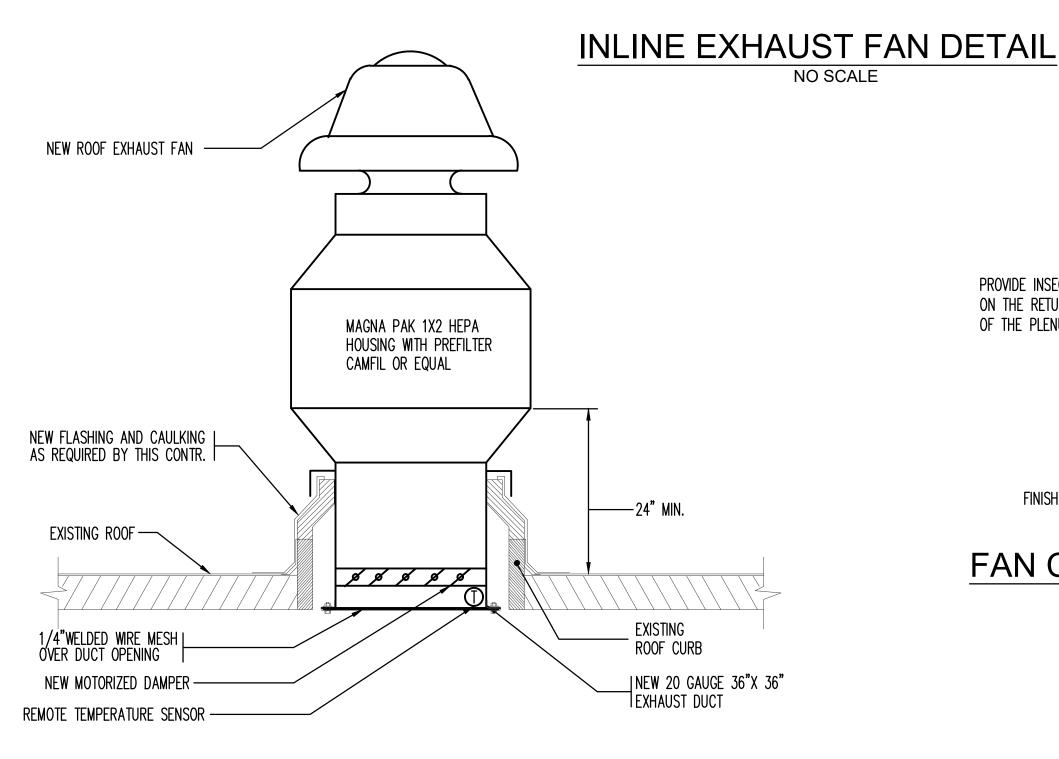
UPBLAST ROOF EXHAUST FAN DETAIL NO SCALE

-ROOFTOP UNIT _CONDENSATE DRAIN CONNECTION TO UNIT PROVIDE SCHEDULE 40 PVC P-TRAP NEW 2" ACOUSTICAL INSULATION -NEW CURB ADAPTOR APPLIED TO INSIDE OF CURB -PROVIDE NEW FLASHING AS REQUIRED WITH WELD CLIPS BY H&V CONTRACTOR. -EXISTING COUNTER FLASHING -EXISTING ROOFING MEMBRANE EXISTING ROOF CURB — -EXISTING CANT STRIP -EXISTING RIGID ROOF INSULATION NEW 2" ACOUSTICAL INSULATION | INSTALLED ON TOP OF THE ROOF DECK BY HVAC CONTRACTOR. CONTRACTOR SHALL PROVIDE A ROOF CURB ADAPTER IF REQUIRED. THE NEW RTU SHALL BE SECURED RIGIDLY TO THE ROOF ADAPTER AND ROOF CURB.

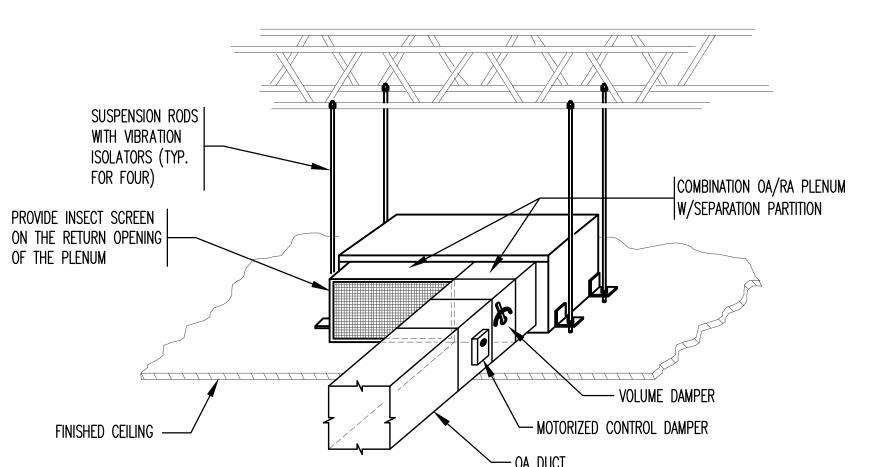
ROOFTOP UNIT CURB MOUNTING DETAIL (EXISTING CURB W/CURB ADAPTER)



HORIZONTAL UNIT HEATER DETAIL

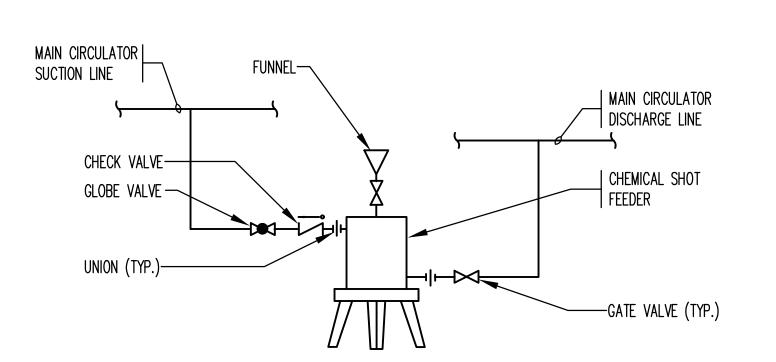


ROOF EXHAUST FAN DETAIL NO SCALE

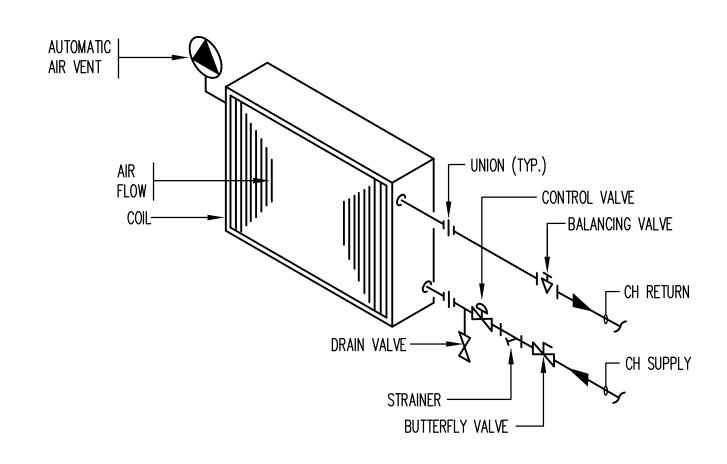


FAN COIL UNIT RETURN/OUTSIDE AIR PLENUM DETAIL

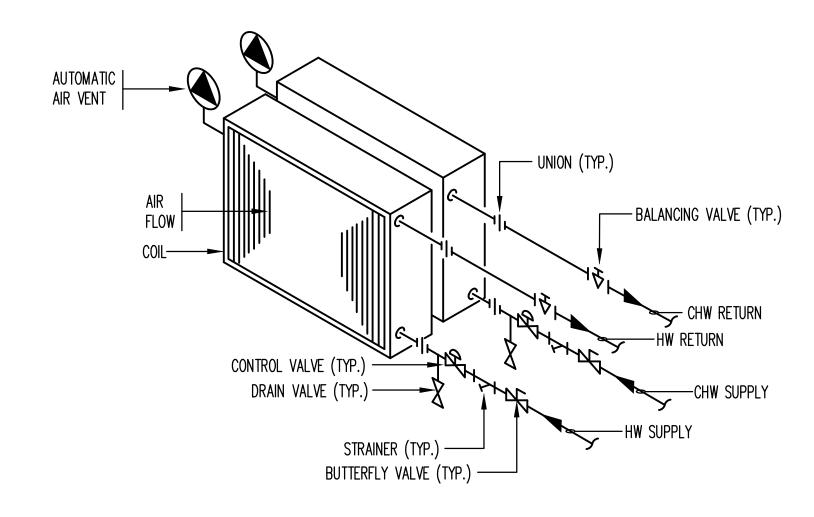
REVISION DA	TES	NEWTON POLICE	ON ST, NEWTON, MA		STAMP
DATE: 01/	/05/2022		ca crowlov	1	DRAWING NUMBER
SCALE: AS	NOTED		c.a. crowley engineering, inc.	•	
DRAWN BY:	FV/JC				∣M-8.1
CHECKED BY:	TS/MV		645 County Street . Suite 6 Taunton, MA 02780		101-0.
PROJECT NO. 2	21025.00	tel . (508) 884.5094	WWW.CROWLEYENG.COM	fax . (508) 884.5099	



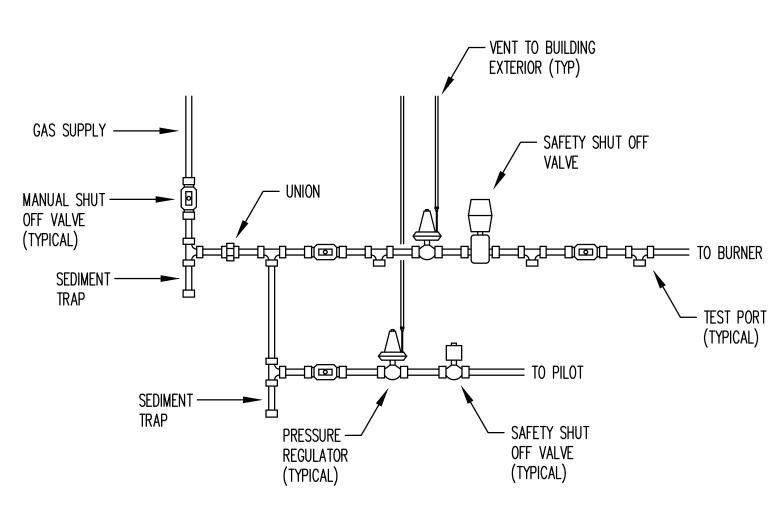
CHEMICAL SHOT FEEDER PIPING DETAIL (TYP. 2) NO SCALE



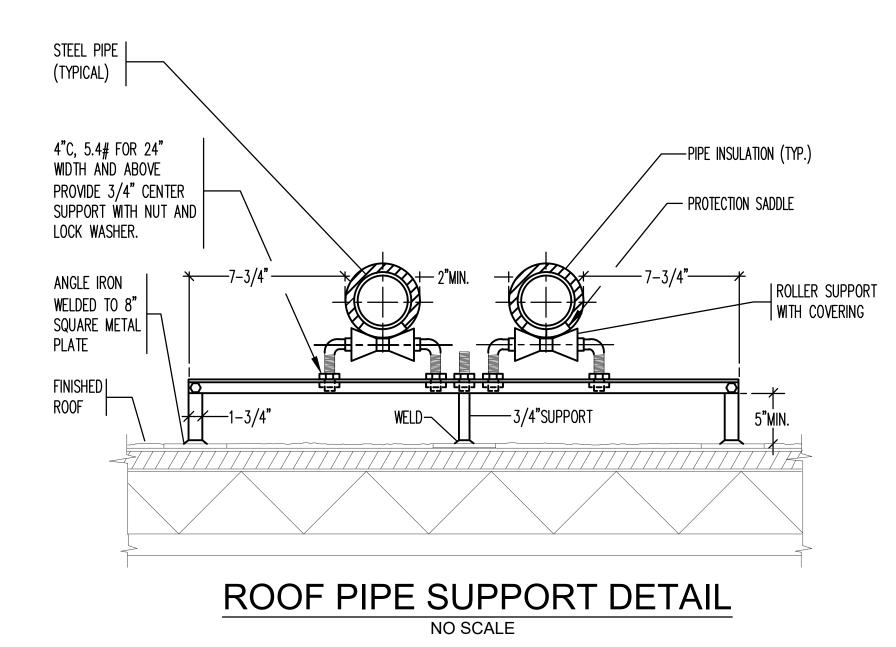
CHILLED WATER COIL PIPING DETAIL FOR FCU B-9 NO SCALE



4 PIPE CHILLED AND HOT WATER COIL PIPING DETAIL NO SCALE

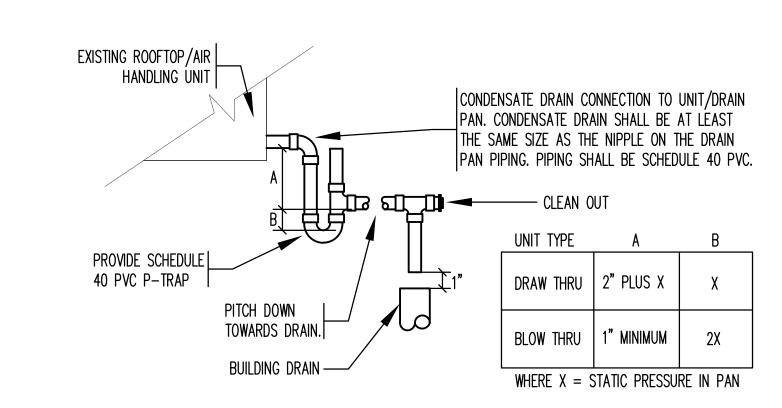


GAS TRAIN DETAIL (BY P.C.) 400,000 TO LESS THAN 1,000,000 BTUH

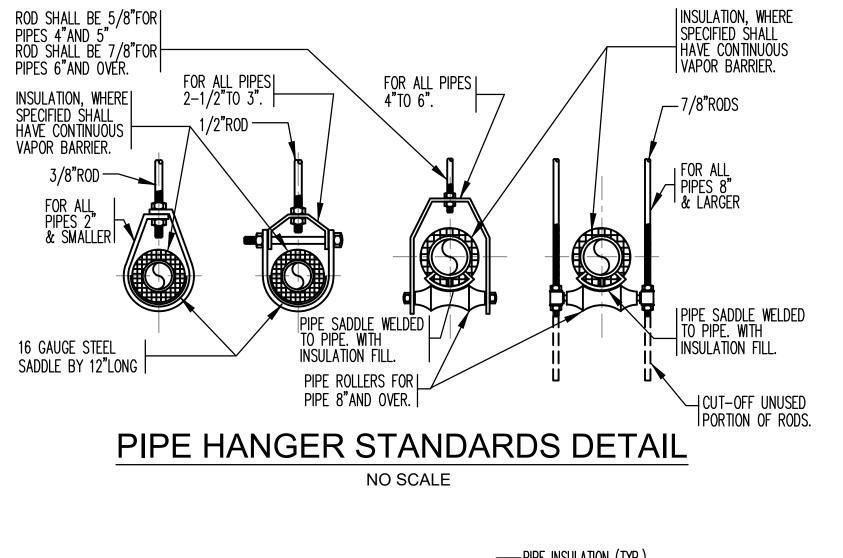


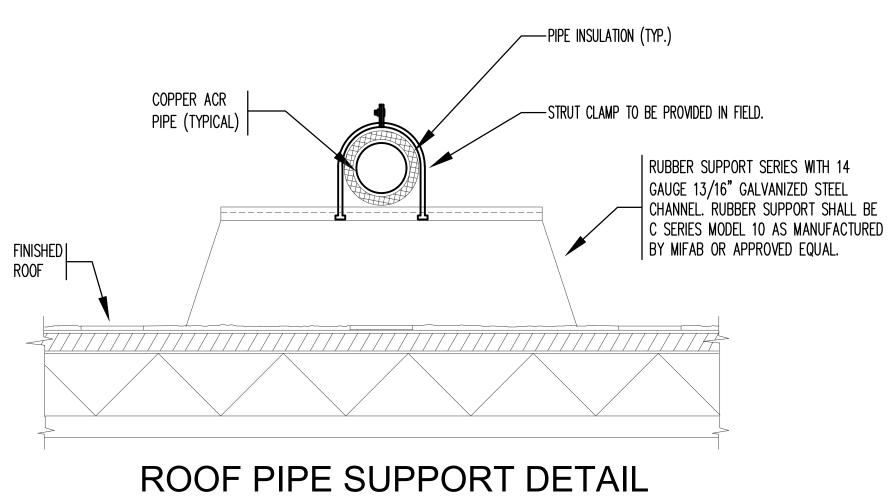
MAKE-UP WATER HOSE BIBB BY THIS CONTRACTOR
METER PROVIDED BY ATC CONTRACTOR AND
INSTALLED BY THIS CONTRACTOR GLYCOL FEEDER SKID DUAL PUMP SKID GLYCOL FEEDER PIPING DETAIL

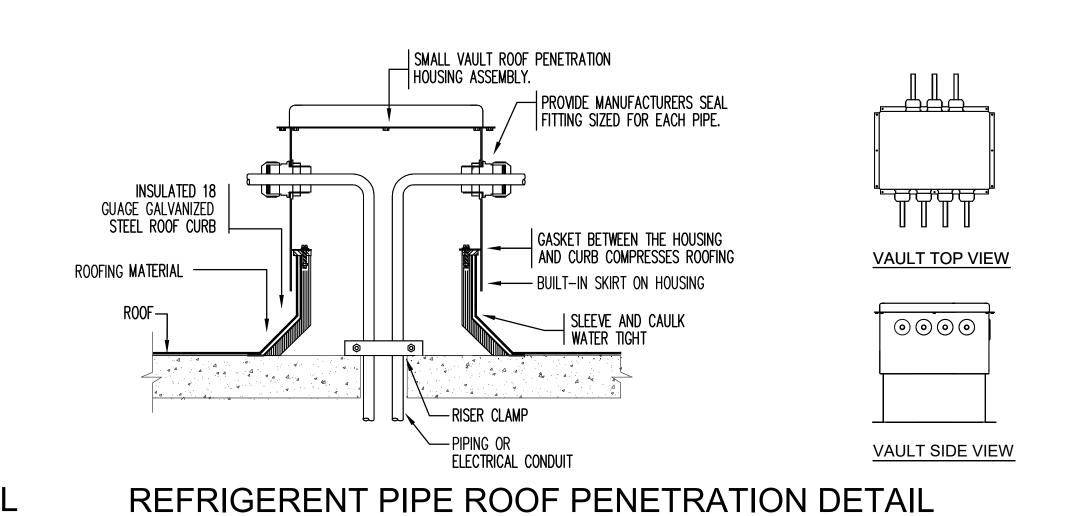
NO SCALE



ROOFTOP/AIR HANDLING UNIT CONDENSATE DRAIN DETAIL NO SCALE



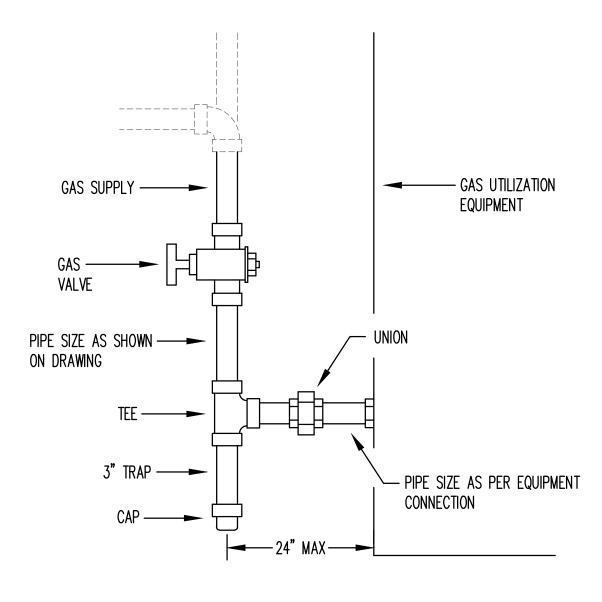




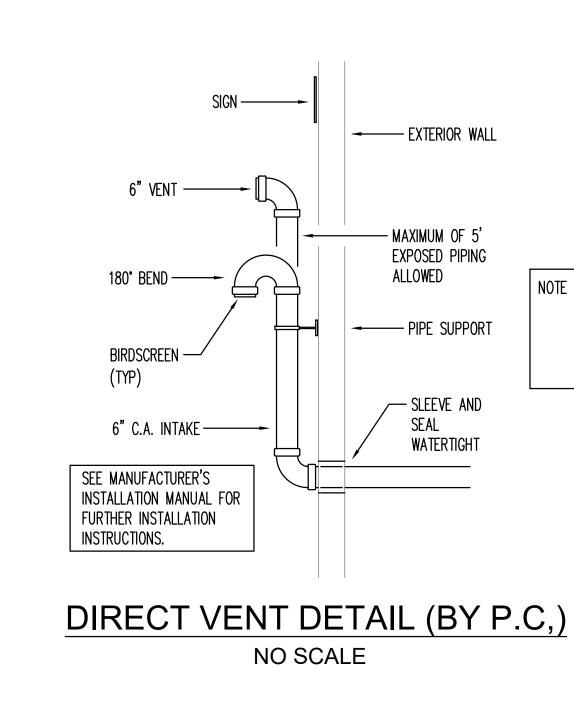
HECKED BY:

ROJECT NO. 21025.00

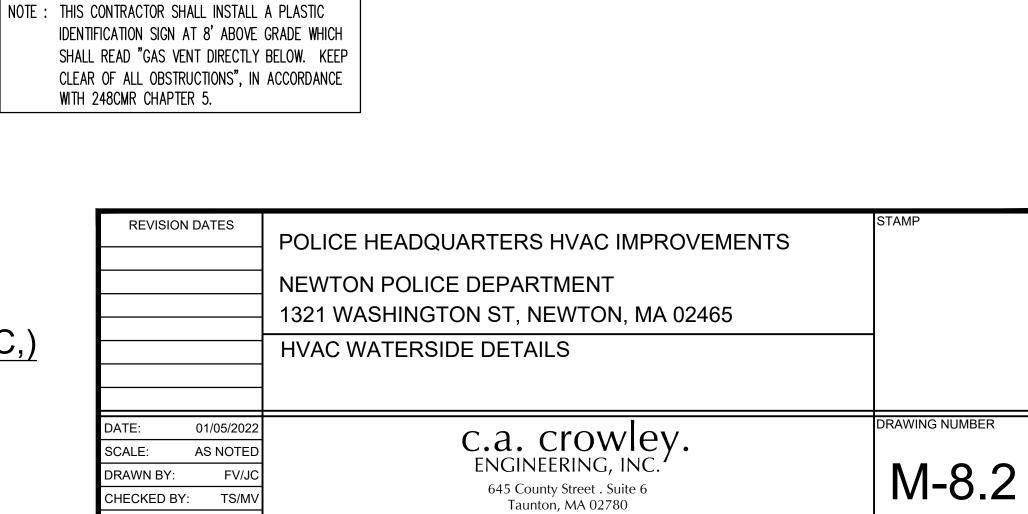
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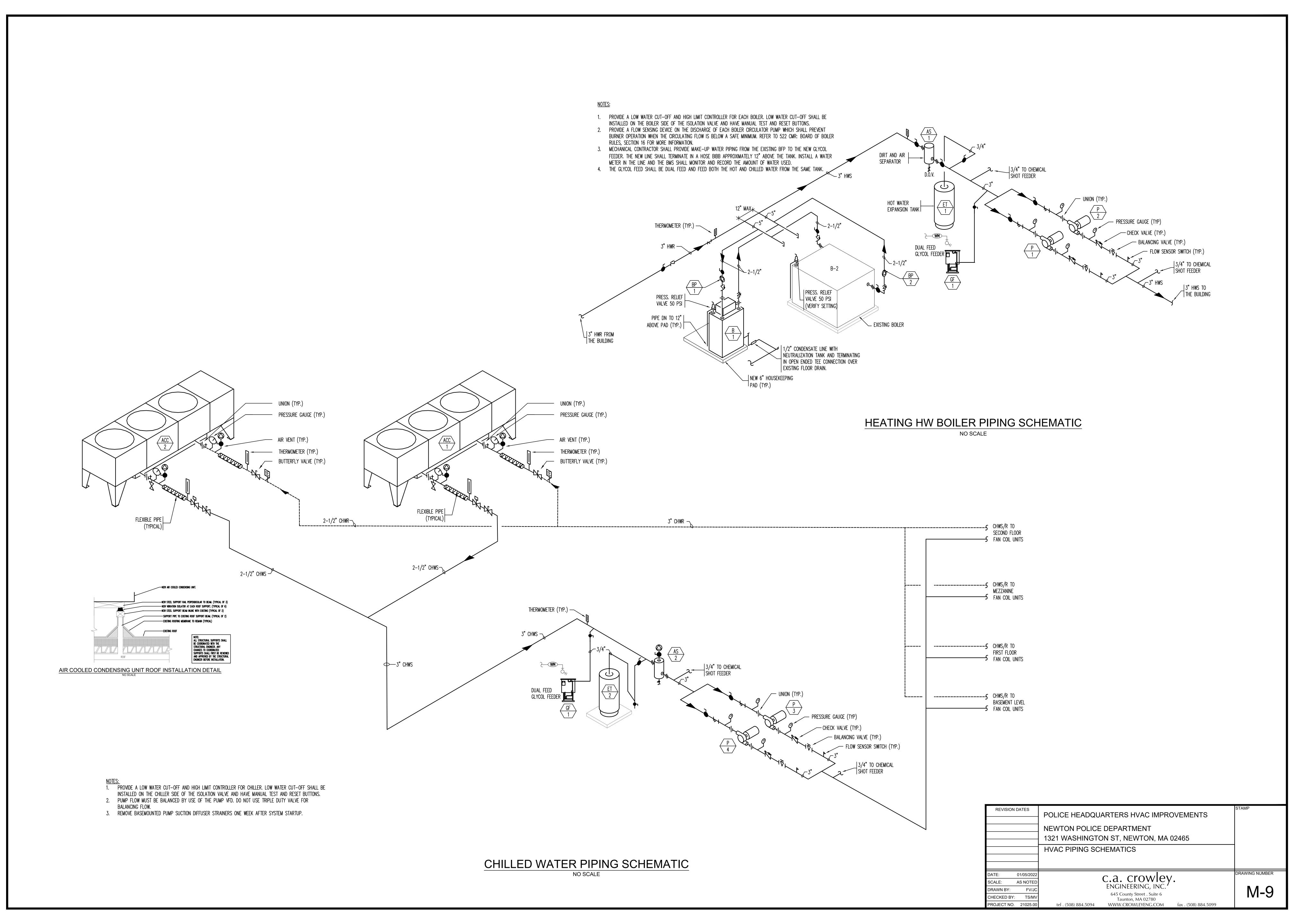
GAS CONNECTION DETAIL (BY P.C.) NO SCALE



NO SCALE



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		RANCH CIRCUIT A	—	
		INDICATES NOMINAL AMPACITY	-	
	X	INDICATES QUANTITY OF PHAS AND/OR NEUTRAL CONDUCTO		
NOM.	QTY. OF	PHASE AND/OR NEUTRAL	RACEWAY SIZE	
AMPACITY	COND.	CONDUCTORS AND GROUND	EMT	RGS
	2	(2)#12 & 1#12 GND.	3/4"	3/4"
20	3	(3)#12 & 1#12 GND.	3/4"	3/4"
	4	(4)#12 & 1#12 GND.	3/4"	3/4"
	2	(2)#10 & 1#10 GND.	3/4"	3/4"
30	3	(3)#10 & 1#10 GND.	3/4"	3/4"
	4	(4)#10 & 1#10 GND.	3/4"	3/4"
	2	(2)#8 & 1#10 GND.	3/4"	3/4"
40	3	(3)#8 & 1#10 GND.	3/4"	3/4"
	4	(4)#8 & 1#10 GND.	3/4"	3/4"
ΕO	2	(2)#8 & 1#10 GND.	3/4"	3/4"
50	3	(3)#8 & 1#10 GND.	3/4"	3/4"
	4	(4)#8 & 1#10 GND.	3/4"	3/4"
	2	(2)#6 & 1#10 GND.	3/4"	3/4"
60	3	(3)#6 & 1#10 GND.	3/4"	3/4"
	4	(4)#6 & 1#10 GND.	1"	1"
	2	(2)#4 & 1#8 GND.	1"	1"
70	3	(3)#4 & 1#8 GND.	1"	1"
	4	(4)#4 & 1#8 GND.	1 1/4"	1 1/4"
	2	(2)#3 & 1#8 GND.	1"	1"
100	3	(3)#3 & 1#8 GND.	1 1 / 1 / 2	1"
	3	(4)#3 & 1#8 GND.	1 1/4"	1 1/4"
125		(3)#1 & 1#6 GND. (4)#1 & 1#6 GND.	1 1/4"	1 1/4"
	3	(3)#1/0 & 1#6 GND.	1 1/2" 1 1/2"	1 1/2" 1 1/4"
150	4	(4)#1/0 & 1#6 GND.	1 1/2"	
	3	(3)#2/0 & 1#6 GND.	1 1/2"	1 1/2" 1 1/2"
175	4	(4)#2/0 & 1#6 GND.	2"	2"
	3	(3)#3/0 & 1#6 GND.	2"	2"
200	4	(4)#3/0 & 1#6 GND.	2"	2"
	3	(3)#4/0 & 1#4 GND.	2"	2"
225	4	(4)#4/0 & 1#4 GND.	2 1/2"	2 1/2"
	3	(3)-250 KCMIL & 1#4 GND.	2"	2"
250	4	(4)-250 KCMIL & 1#4 GND.	2 1/2"	2 1/2"
	3	(3)-350 KCMIL & 1#4 GND.	2 1/2"	2 1/2"
300	4	(4)-350 KCMIL & 1#4 GND.	2 1/2"	3"
750	3	(3)-500 KCMIL & 1#3 GND.	2 1/2"	3"
350	4	(4)-500 KCMIL & 1#3 GND.	3"	3"
400	3	(3)-500 KCMIL & 1#3 GND.	2 1/2"	3"
400	4	(4)-500 KCMIL & 1#3 GND.	3"	3"
500	3	(6)-250 KCMIL & $2#1/0$ GND.	(2)2 1/2"	(2)2 1/2
500	4	(8)-250 KCMIL & $2#1/0$ GND.	(2)2 1/2"	(2)2 1/2
600	3	(6)-350 KCMIL & 2#2/0 GND.		(2)2 1/2
600	4	(8)-350 KCMIL & $2#2/0$ GND.		(2) 3"
800	3	(6)-500 KCMIL & 2#2/0 GND.	(2) 3"	(2) 3"
<u> </u>	4	(8)-500 KCMIL & 2#2/0 GND.		$(2) \ 3 \ 1/2$
1000	3	(9)-400 KCMIL & 3#3/0 GND.		
1000	4	(12)-400 KCMIL & 3#3/0 GND		(3) 3"
1200	3	(9)-600 KCMIL & 3#250 GND.		(3) 3"
1200	4	(12)-600 KCMIL & 3#250 GND	\-/- ·/ =	(3)3 1/2
1600	3	(12)-600 KCMIL & 4#300 GND	(4) 3"	(4) 3 1/2

NOTES -1. RACEWAY SIZE BASED ON EMT/RGS TYPE THWN COPPER CONDUCTORS. ADJUST AS REQUIRED FOR OTHER RACEWAY OR CONDUCTOR TYPES. 2. BASED ON 75°C TERMINATIONS. ADJUST FOR OTHER TERMINATION

TEMPERATURE LIMITATIONS AS REQUIRED.

ELECTRICAL CONTRACTOR AND

INSTALLED BY ROOFING

CONTRACTOR

ABBREVIATIONS 3R NEMA 3R ENCLOSURE GC GENERAL CONTRACTOR GE GENERAL ELECTRIC A AMPERE(S) GF, GFCI GROUND FAULT CIRCUIT AC ALTERNATING CURRENT, AIR CONDITIONING UNIT INTERRUPTING HP HORSE POWER ACC AIR COOLED CHILLER HVAC HEATING, VENTILATING AND AIR ACCU AIR COOLED CONDENSING UNIT CONDITIONING AF AMPERE FRAME AFF ABOVE FINISH FLOOR HWP HOT WATER PUMP KVA KILO-VOLT AMPERE AFG ABOVE FINISH GRADE AHJ AUTHORITY HAVING JURISDICTION LED LIGHT EMITTING DIODE LFMC LIQUID-TIGHT FLEXIBLE METAL AHU AIR HANDLING UNIT AT AMPERE TRIP CONDUIT MAX MAXIMUM ATC AUTOMATIC TEMPERATURE MC METAL CLAD CONTROLS MIN MINIMUM ATS AUTOMATIC TRANSFER SWITCH MOCP MAXIMUM OVERCURRENT AWG AMERICAN WIRE GAUGE PROTECTION B BOILER MSB MAIN SWITCHBOARD BFG BELOW FINISHED GRADE MTD MOUNTED C CONDUIT, CELSIUS NEMA NATIONAL ELECTRICAL CB CIRCUIT BREAKER CHWP CHILLED WATER PUMP MANUFACTURERS ASSOCIATION NFD NEWTON FIRE DEPARTMENT CKT CIRCUIT NOM NOMINAL CO CARBON MONOXIDE NOx NITROGEN OXIDES COND CONDUCTOR OL OVERLOAD CTs CURRENT TRANSFORMERS OU OUTDOOR UNIT CU CONDENSING UNIT, COPPER DDC DIRECT DIGITAL CONTROLS DIST DISTRIBUTION POLE(S) PH PHASE(S) DO DAMPER OPERATOR PVC POLYVIŇÝL CHLORIDE CONDUIT DOAS DEDICATED OUTDOOR AIR SYSTEM QTY QUANTITY EF EXHAUST FAN RDP REGISTERED DESIGN EMT ELECTRICAL METALLIC TUBING PROFESSIONAL ESC ELECTRICAL SUB-CONTRACTOR RGS RIGID GALVANIZED STEEL ETR EXISTING TO REMAIN RTS REMOTE TEST STATION ETRR EXISTING TO BE REMOVED AND RTU ROOFTOP UNIT REPLACED TBD TO BE DISCONNECTED FA FIRE ALARM TBR TO BE REMOVED TYP TYPICAL FACP FIRE ALARM CONTROL PANEL FBO FURNISHED BY OWNER UNO UNLESS NOTED OTHERWISE FCU FAN COIL UNIT V VOLT(S) FLA FULL LOAD AMPERES VA VOLTAMPERE(S) FMC FLEXIBLE METAL CONDUIT VAV VARIABLE AIR VOLUME FOP FUEL OIL PUMP VFD VARIABLE FREQUENCY DRIVE FUS FUSIBLE G,GND GROUND WP WEATHERPROOF

-DISCONNECT TO BE PROVIDED BY ESC /-DISCONNECT INTEGRAL $\langle X \rangle$ WITH EQUIPMENT

PROVIDED BY GC.

DISCONNECT DETAIL N.T.S.

<u>LEGEND</u>

- NEMA 5-20R DUPLEX RECEPTACLE MOTOR, NUMERAL INDICATES HP, F INDICATES FRACTIONAL HP
- MANUAL MOTOR STARTER, W/OL SM PROTECTION 20 AMP, 1 POLE UNO
- MANUAL MOTOR STARTER, W/OL PROTECTION 20 AMP, 3 POLE UNO
- ENCLOSED CIRCUIT BREAKER, AMPERE RATING AS INDICATED AMPERE RATING AS INDICATED
- FUSED DISCONNECT, 30 AMP, 3 POLE, UNO
- COMBINATION DISCONNECT-STARTER
- VARIABLE FREQUENCY DRIVE (BY HVAC)
- J JUNCTION BOX, SIZE AS SHOWN OR PER CODE
- TRANSFORMER PANELBOARD
- HOMERUN TO PANELBOARD 'P', CIRCUIT WIRING AS BELOW. CIRCUIT WIRING. NO HASHES
- INDICATES (2)#12AWG, (1)#12AWG GND, (1)3/4"C. QTY. OF HASHES INDICATES QTY. OF WIRES IF MORE THAN 2 PLUS GND.
- FEEDER TAG, REFER TO BRANCH CIRCUIT AND FEEDER SCHEDULE
- EQUIPMENT TAG
- KEY NOTE TAG
- DAMPER OPERATOR, BY HVAC
- CP CONTROL PANEL, BY HVAC
- FACP | FIRE ALARM CONTROL PANEL DUCT MOUNTED SMOKE DETECTOR,
- PHOTO TYPE UNO REMOTE TEST STATION
- REMOTE ALARM INDICATOR
- CARBON MONOXIDE DETECTOR, BY HVAC
- LINEWEIGHT DENOTES EXISTING LINEWEIGHT DENOTES PROPOSED

-PROVIDE METAL CHANNEL WHERE REQUIRED. WEATHERPROOF LIGHTING FIXTURE, GLOBE AND GUARD TYPE, HUBBELL VWGL-1 OR EQUAL MECHANICAL CONDUCTORS IN RIGID METAL CONDUIT EQUIPMENT √120 VOLT DUPLEX, GROUND FAULT RECEPTACLE AND LIGHT SWITCH IN WEATHERPROOF WHILE-IN-USE BOX -ROOF CURB -ROOF MEMBRANE AND INSULATION -ROOF DECK PITCH POCKET FURNISHED BY--REFER TO DRAWINGS FOR

ROOF TOP MECHANICAL EQUIPMENT LIGHTING AND RECEPTACLE DETAIL
N.T.S.

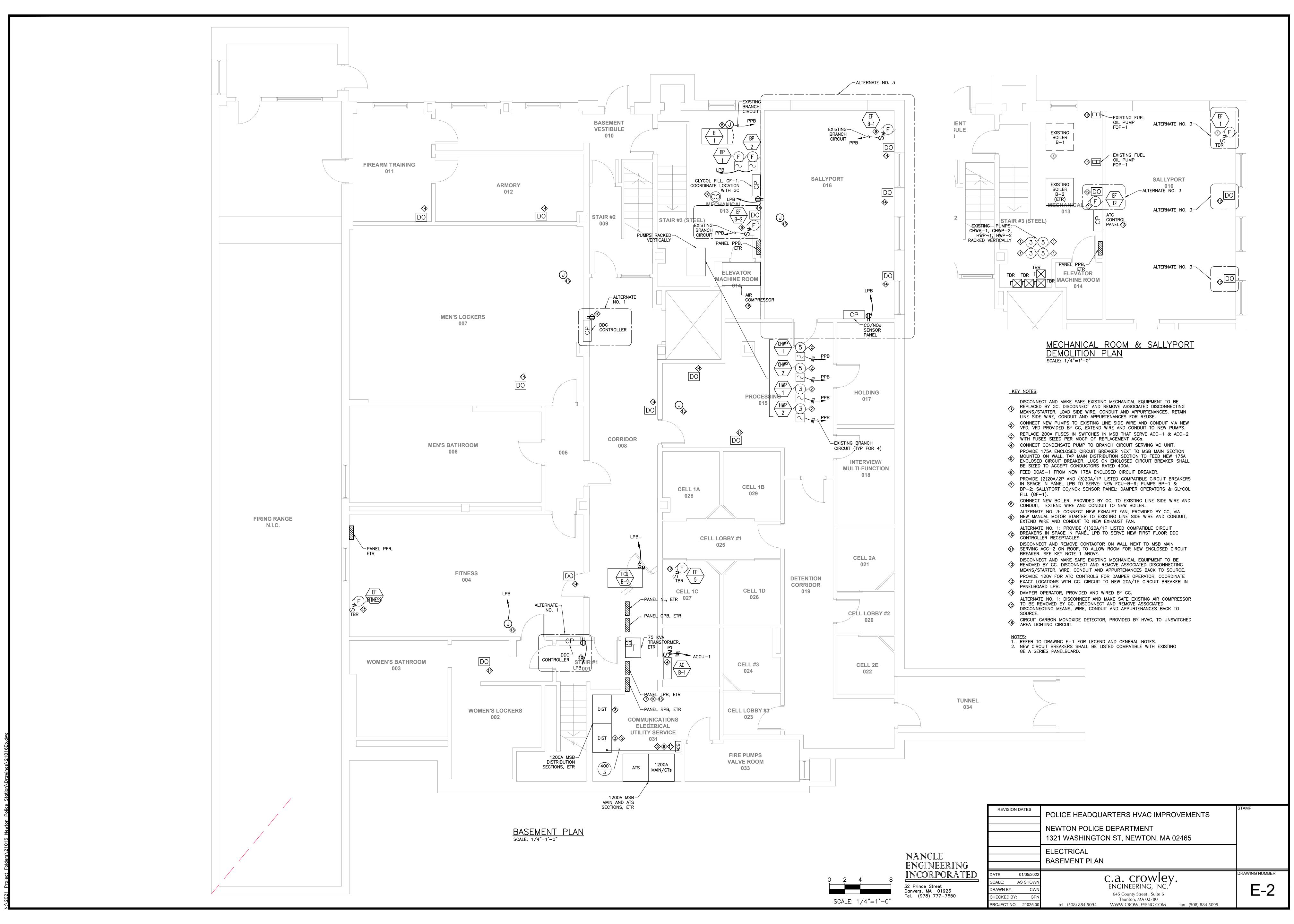
BRANCH CIRCUIT HOMERUN

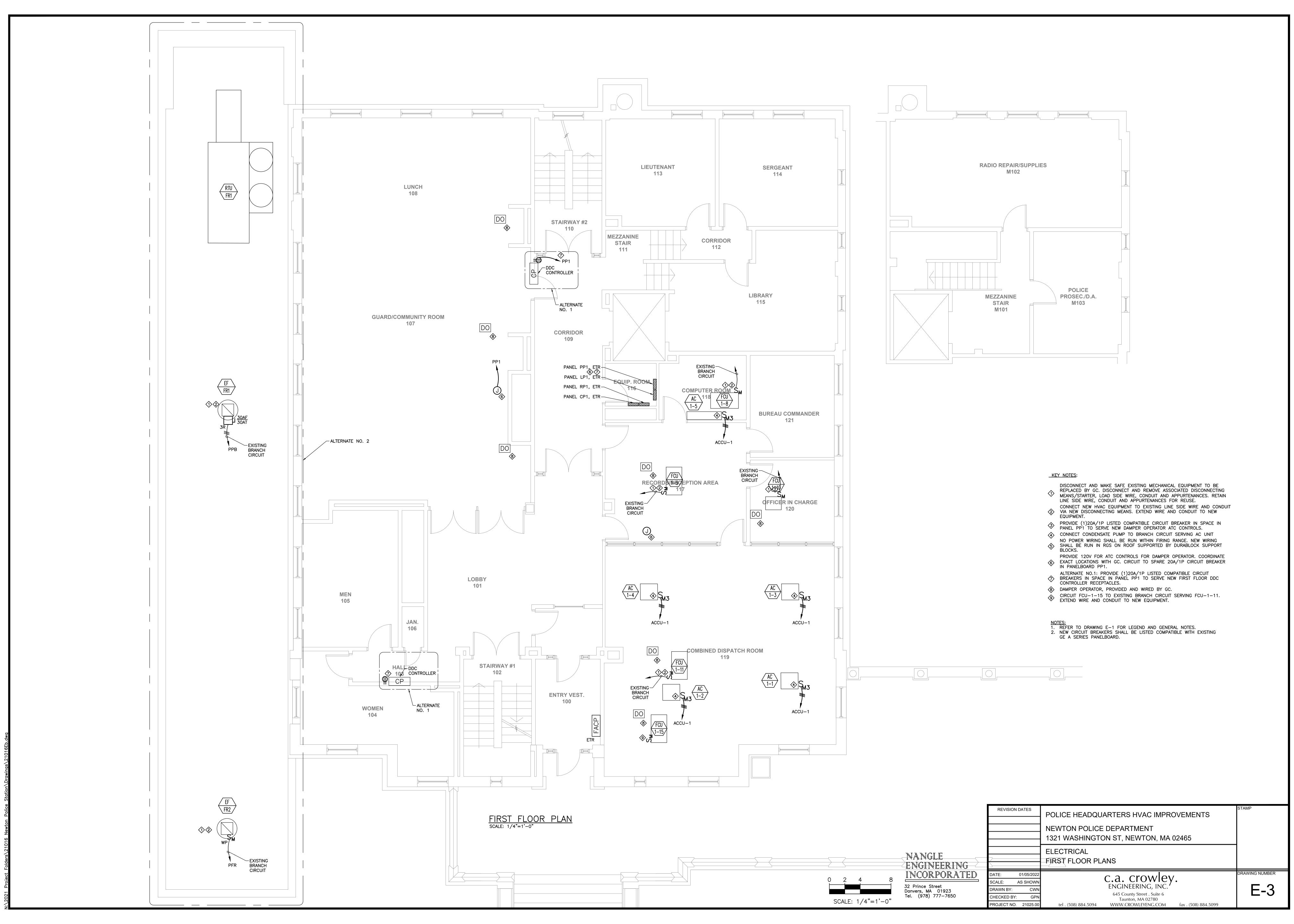
GENERAL NOTES

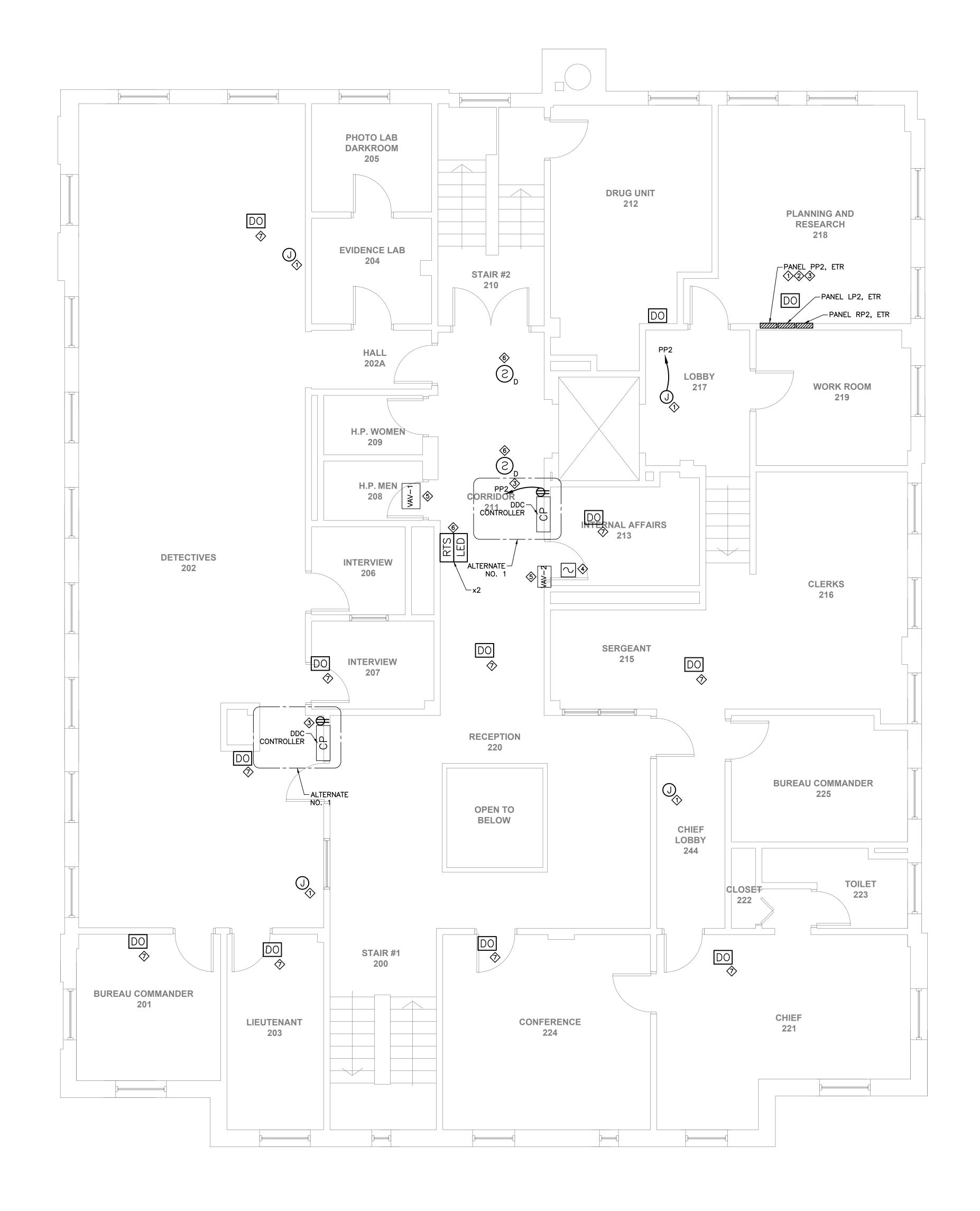
- 1. ALL WORK SHALL COMPLY COMPLETELY WITH THE MASSACHUSETTS ELECTRICAL CODE (MEC) AND ALL LOCAL ORDINANCES AND REQUIREMENTS. 2. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC. PROVIDE ALL MATERIAL, LABOR AND EQUIPMENT FOR INSTALLATION OF COMPLETE AND OPERATIONAL
- 3. APPLY FOR AND OBTAIN ALL REQUIRED PERMITS FOR THE WORK SHOWN. REQUEST, SCHEDULE AND ATTEND ALL REQUIRED INSPECTIONS BY THE AUTHORITY(IES) HAVING JURISDICTION (AHJ) AND OBTAIN ALL APPROVALS. 4. REFER TO DRÁWINGS OF ALL TRADES AND ADJUST WORK AND ROUGH-IN
- AS REQUIRED, BASED ON EQUIPMENT APPROVED AND INSTALLED, AND FIELD CONDITIONS. 5. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIAL AND
- WORKMANSHIP FOR MINIMUM ONE (1) YEAR FOLLOWING ACCEPTANCE OF THE WORK BY THE OWNER.
- 6. ALL MATERIAL INCORPORATED IN THE WORK SHALL BE LISTED FOR THE USE, OR ACCEPTED BY THE AHJ(s). BIDDERS ARE ADVISED TO VISIT THE SITE PRIOR TO SUBMITTING A BID TO NOTE SCOPE OF ANY DEMOLITION, AND CONDITIONS UNDER WHICH NEW WORK MUST BE INSTALLED.
- 8. WORK UNDER CONSTRUCTION CONTROL MUST BE INSTALLED AS SHOWN ON THE APPROVED CONSTRUCTION DOCUMENTS. ANY CHANGES MUST BE APPROVED BY THE REGISTERED DESIGN PROFESSIONAL (RDP) IN ADVANCE. COSTS FOR CHANGES TO DOCUMENTS SHALL BE BORNE BY THE PARTY REQUIRING THE CHANGE. FAILURE TO INSTALL THE WORK AS SHOWN WILL PREVENT ISSUANCE OF A FINAL CONSTRUCTION CONTROL DOCUMENT.

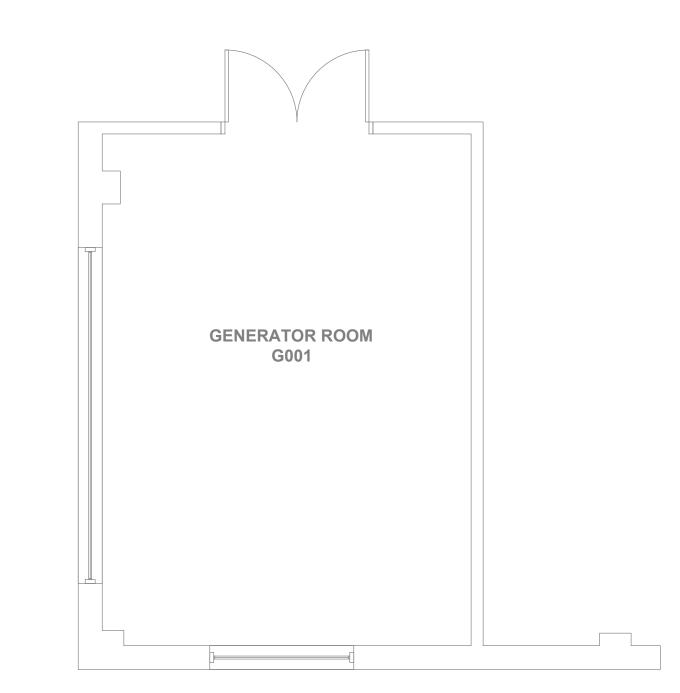
NANGLE ENGINEERING INCORPORATE 32 Prince Street Danvers, MA 01923 Tel. (978) 777—7650

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	REVISION DATES	POLICE HEADQUARTERS HVAC IMPROVEMENTS	STAMP
		NEWTON POLICE DEPARTMENT 1321 WASHINGTON ST, NEWTON, MA 02465	
		ELECTRICAL LEGEND, NOTES AND SCHEDULES	
	DATE: 01/05/2022 SCALE: NONE DRAWN BY: CWN CHECKED BY: GPN PROJECT NO. 21025.00	C.a. Crowley. ENGINEERING, INC. 645 County Street . Suite 6 Taunton, MA 02780	DRAWING NUMBE









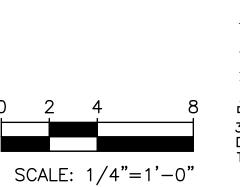
KEY NOTES:

- PROVIDE 120V FOR ATC CONTROLS FOR DAMPER OPERATORS. COORDINATE EXACT LOCATIONS WITH GC. CIRCUIT TO SPARE 20A/1P CIRCUIT BREAKER IN PANELBOARD PP2.
- AT PANEL PP2, REPLACE (1) SPARE 40A/3P CIRCUIT BREAKER WITH (1)60A/2P AND (1)20A/1P (SPARE) LISTED COMPATIBLE CIRCUIT BREAKERS TO SERVE NEW OU-1.
- ALTERNATE NO.1: CIRCUIT NEW SECOND FLOOR DDC CONTROLLER RECEPTACLES TO SPARE 20A/1P BREAKER IN PANEL PP2.
- ♠ DISCONNECT AND REMOVE VFD THAT SERVES RTU-1.
- DISCONNECT AND MAKE SAFE EXISTING MECHANICAL EQUIPMENT TO BE REMOVED BY GC. DISCONNECT AND REMOVE ASSOCIATED DISCONNECTING MEANS/STARTER, WIRE, CONDUIT AND APPURTENANCES BACK TO SOURCE. FURNISH AND WIRE DUCT SMOKE DETECTORS, HOUSINGS AND SAMPLING
- TUBES COMPATIBLE WITH EXISTING EST ADDRESSABLE FACP. DETECTORS 6 AND SAMPLING TUBES TO BE INSTALLED BY GC. PROVIDE RTS/LEDs AND LOCATE AS DIRECTED BY NFD. PROVIDE ALL WIRING, DEVICES, PROGRAMMING AND TESTING AS REQUIRED TO SHUT DOWN ASSOCIATED RTU
- UPON DUCT SMOKE DETECTOR ALARM. DAMPER OPERATOR, PROVIDED AND WIRED BY GC.

NOTES:

1. REFER TO DRAWING E-1 FOR LEGEND AND GENERAL NOTES.

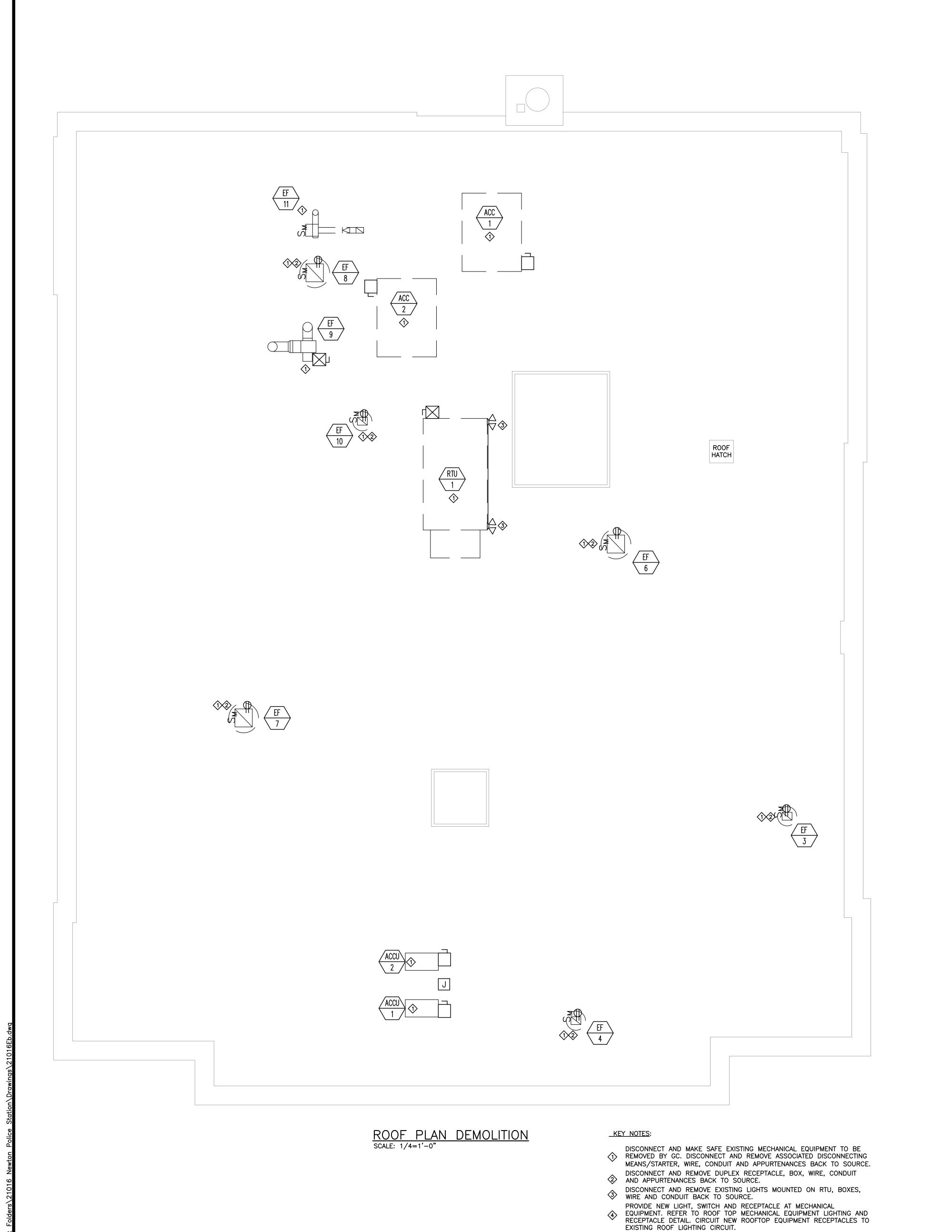
2. NEW CIRCUIT BREAKERS SHALL BE LISTED COMPATIBLE WITH EXISTING GE A SERIES PANELBOARD.

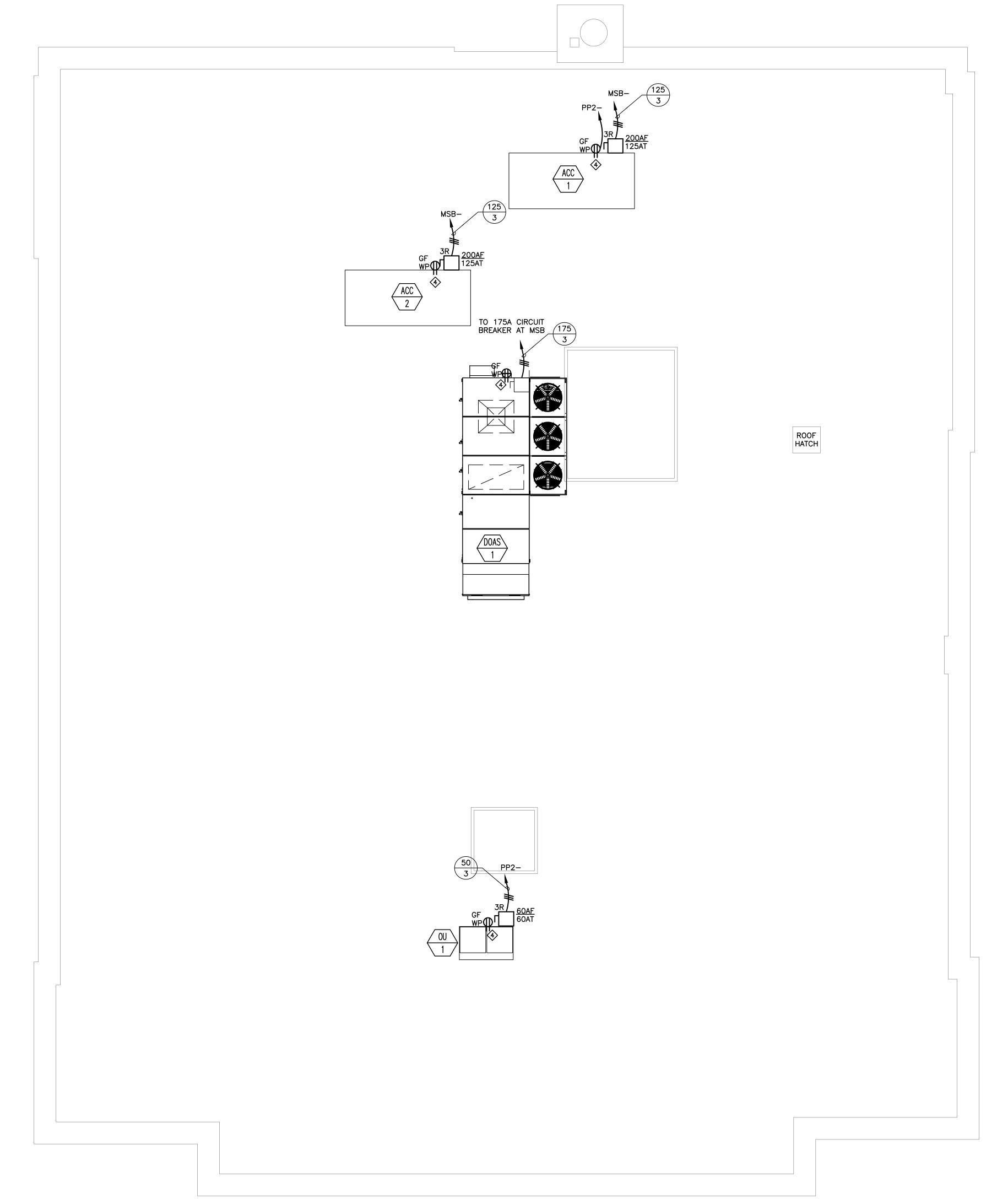


NANGLE ENGINEERING INCORPORATED 32 Prince Street Danvers, MA 01923 Tel. (978) 777-7650

REVISION DATES	POLICE HEADQUARTERS HVAC IMPROVEMENTS	STAMP
	NEWTON POLICE DEPARTMENT	
	1321 WASHINGTON ST, NEWTON, MA 02465	
	ELECTRICAL SECOND FLOOR PLAN	
DATE: 01/05/2022	c = crowlov	DRAWING NUMBI
SCALE: AS SHOWN	c.a. crowley. ENGINEERING, INC.	<u> </u>
DRAWN BY: CWN		I F _2
CHECKED BY: GPN	645 County Street . Suite 6 Taunton, MA 02780	🗕 –
PROJECT NO. 21025.00	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	

SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"





ROOF PLAN NEW WORK
SCALE: 1/4"=1'-0"

NOTES: 1. REFER TO DRAWING E-1 FOR LEGEND AND GENERAL NOTES.

NANGLE ENGINEERING INCORPORATED 32 Prince Street Danvers, MA 01923 Tel. (978) 777-7650 SCALE: 1/4"=1'-0"

DRAWN BY:

CHECKED BY: GPN

PROJECT NO. 21025.00

	REVISION DATES	POLICE HEADQUARTERS HVAC IMPROVEMENTS	STAMP
		NEWTON POLICE DEPARTMENT 1321 WASHINGTON ST, NEWTON, MA 02465	
		ELECTRICAL ROOF PLANS	
<u>)</u>	DATE: 01/05/2022 SCALE: AS SHOWN DRAWN BY: CWN	c.a. crowley.	DRAWING NUMB

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