

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE <b>J</b>	PAGE OF PAGES <b>1   2</b>
2. AMENDMENT/MODIFICATION NO. <b>0003</b>		3. EFFECTIVE DATE <b>01-Jul-2004</b>	4. REQUISITION/PURCHASE REQ. NO. <b>W13G86-4113-6534</b>		5. PROJECT NO.(if applicable)
6. ISSUED BY U S ARMY ENGR DISTRICT, NEW ENGLAND 696 VIRGINIA RD CONCORD MA 01742-2751		CODE <b>W912WJ</b>	7. ADMINISTERED BY (If other than item 6)  <b>See Item 6</b>		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				<input checked="" type="checkbox"/> X	9A. AMENDMENT OF SOLICITATION NO. <b>W912WJ-04-B-0005</b>
				<input checked="" type="checkbox"/> X	9B. DATED (SEE ITEM 11) <b>11-Jun-2004</b>
					10A. MOD. OF CONTRACT/ORDER NO.
					10B. DATED (SEE ITEM 13)
CODE		FACILITY CODE			
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>					
<input checked="" type="checkbox"/> X The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> X is not extended.					
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>					
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.					
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).					
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:					
D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Amendment is necessary to delete and revise Drawing Sheets 12 and 13. There is no change to the bid opening date or time as a result of this amendment.					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
			TEL:	EMAIL:	
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
_____ (Signature of person authorized to sign)			BY _____ (Signature of Contracting Officer)		<b>01-Jul-2004</b>

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

**SUMMARY OF CHANGES**

SECTION SF 30 - BLOCK 14 CONTINUATION PAGE

The following have been added by full text:

DRAWING REVISIONS

1.1 CHANGES TO DRAWINGS

1.1.1 Revised and Reissued Drawings

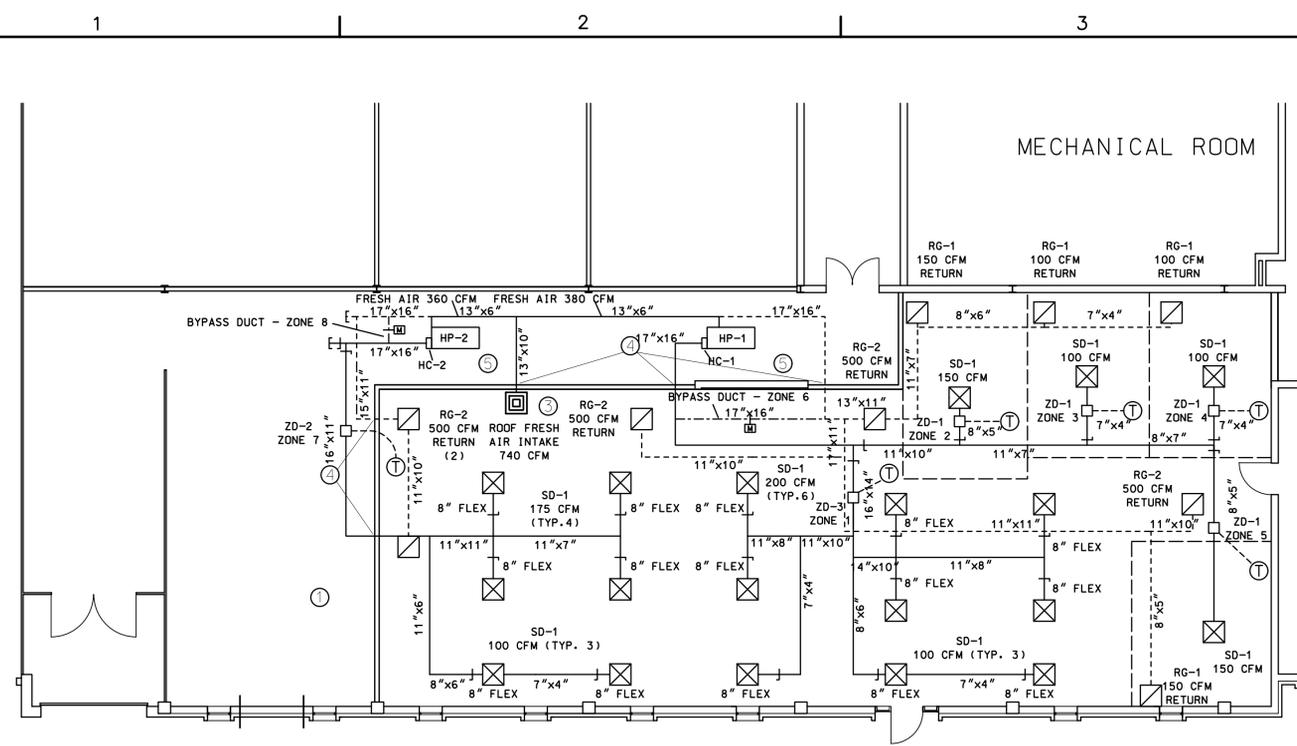
The drawing sheets listed below are deleted and are replaced by revised drawings of the same sheet number with revisions dated 07/01/04. Copies of the revised drawings accompany this amendment:

U.S. ARMY SOLDER SYSTEMS CENTER  
NATICK MASSACHUSETTS  
BUILDING 45 OFFICE RENOVATION

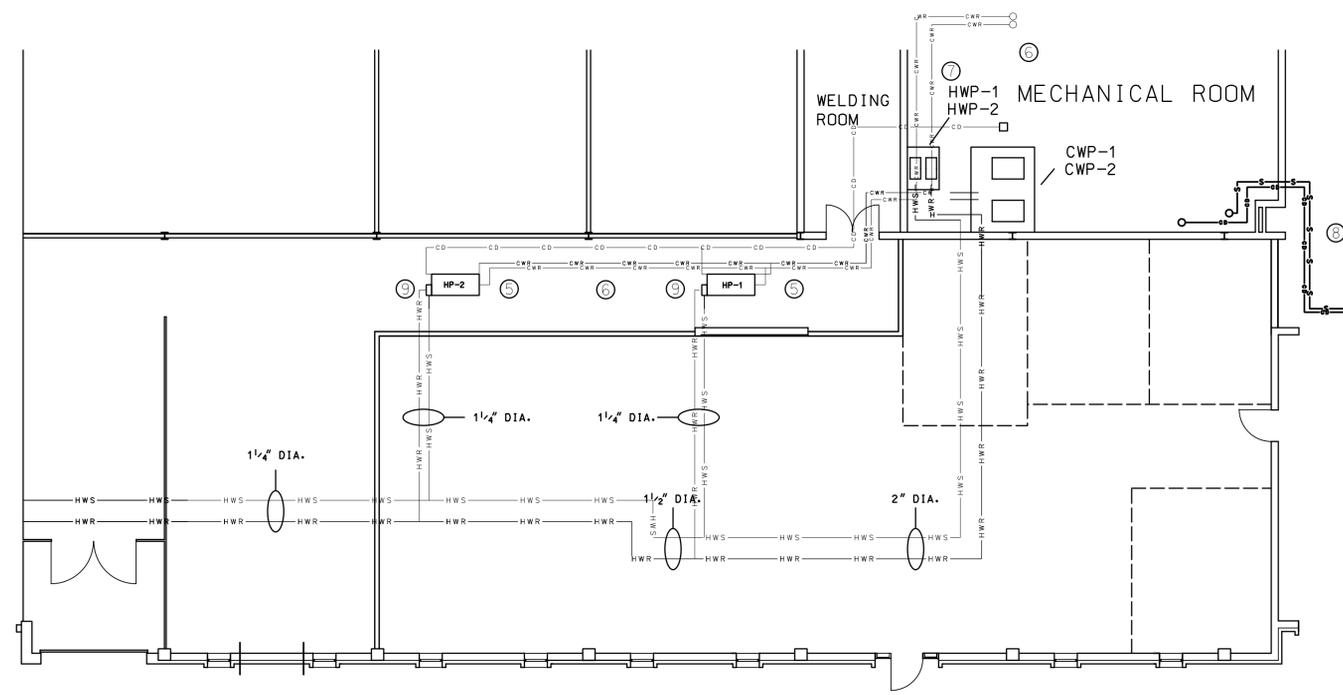
Sheet 12, Reference Number M-2, NEW MECHANICAL EQUIPMENT PLAN  
(Notes revised, zone numbers added)

Sheet 13, Reference Number M-3, MECHANICAL EQUIPMENT SCHEDULES  
(Hot Water Pump revised, Hot water coils revised, ZD-1 revised, bypass dampers added)

(End of Summary of Changes)



1 NEW OFFICE HVAC DUCT PLAN  
SCALE : 1/8" = 1' - 0'

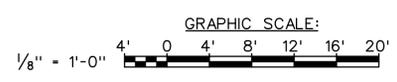


NEW OFFICE HVAC PIPING PLAN  
SCALE : 1/8" = 1' - 0'

CONSTRUCTION NOTES

1. PROVIDE NEW SUPPLY AND RETURN DUCTWORK AS SHOWN. DUCTWORK SHALL BE PRESSURE CLASS 2. INSULATE SUPPLY AIR DUCTS, RETURN AIR DUCTS AND OUTSIDE AIR INTAKE DUCTS AS SPECIFIED. CAP DUCT BRANCHES PROVIDED FOR FUTURE EXPANSION. CONNECT ZONE DAMPER BOXES TO NEW THERMOSTATS AS SHOWN.
2. PROVIDE NEW SUPPLY DIFFUSERS AND RETURN GRILLES AS SHOWN. INSTALL NEW MANUAL BALANCING DAMPERS WHERE INDICATED. USE FLEXIBLE CONNECTORS FOR DIFFUSER RUNOUTS.
3. PROVIDE NEW PENTHOUSE LOUVER ON EXISTING ROOF CURB FORMERLY USED BY EF-10. SEE ARCHITECTURAL SHEETS FOR ROOF CURB DETAIL.
4. PROVIDE NEW FIRE DAMPERS WHERE INDICATED. SEE SPECIFICATIONS FOR FIRE DAMPER REQUIREMENTS.
5. PROVIDE TWO NEW HEAT PUMPS AS SHOWN. PIPE HEAT PUMP CONDENSATE DRAIN LINES BACK TO NEAREST FLOOR DRAIN IN MECHANICAL ROOM.
6. PROVIDE NEW CONDENSING WATER PIPING AS INDICATED. CONNECT TO EXISTING 2" DIAMETER STEEL CONDENSING WATER CONNECTIONS IN MECHANICAL ROOM.
7. REPLACE TWO EXISTING HOT WATER PUMPS WITH NEW INCREASED CAPACITY PUMPS. SEE EQUIPMENT SCHEDULE FOR PUMP PERFORMANCE REQUIREMENTS.
8. CONNECT EXISTING LOW PRESSURE STEAM SUPPLY AND CONDENSATE RETURN AS SHOWN. PROVIDE PIPE SLEEVES AND FIRESTOPPING FOR NEW MECHANICAL ROOM WALL PENETRATIONS. INSULATE NEW PIPE AS SPECIFIED.
9. PROVIDE TWO NEW HOT WATER HEATING COILS AS INDICATED. CONNECT TO NEW HOT WATER HEATING SUPPLY AND RETURN LINES.
10. INSULATE HOT WATER AND CONDENSATE DRAIN PIPING AS SPECIFIED.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL LOCATION OF ALL MECHANICAL EQUIPMENT.

NOTE: SEE SHEET M-3 FOR LEGEND AND NEW CARPENTER SHOP DUST COLLECTOR DUCT LAYOUT



Rev.	Date	Description
1	17/1/04	NOTES REVISED - ZONE NUMBERS ADDED

Designed by: ARG	Date: June 2003	Rev.
Drawn by: ARG	Solicitation no. W912W-04-B-0005	
Reviewed by: JOHN WUTZER /s/	Drawing scale: F-218-45-01	
Submitted by: DAVID DESCOTTEAUX /s/	File name: Chief, General Engng Sect	

U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
CONCORD, MASSACHUSETTS

U.S. ARMY SOLDIER SYSTEMS CENTER  
NATICK, MASSACHUSETTS  
BUILDING 45 OFFICE RENOVATION

**NEW MECHANICAL EQUIPMENT PLAN**

Reference number:  
**M-2**  
Sheet 12 of 21

HOT WATER PUMPS							
TAG	ELECTRICAL					SIZE	REMARKS
	RPM	V	PH	HZ	HP		
HWP-1	1750	208/230	3	60	2	1 1/2 BC	BELL AND GOSSETT 314 TB MODEL 1531 OR APPROVED EQUAL
HWP-2	1750	208/230	3	60	2	1 1/2 BC	

HEAT PUMPS											
TAG	ESP (IN WG)	CONDENSER WATER FLOW (GPM)	AIRFLOW (CFM)	COOLING (TONS)	EER	HEATING (BTUH)	COP	ELECTRICAL			REMARKS
								V	PH	HZ	
HP-1	0.6	15	2000	5	12	76800	4.2	208/230	3	60	CARRIER MODEL 50RHCO60ECC50130 OR EQUAL
HP-2	0.6	15	2000	5	12	76800	4.2	208/230	3	60	

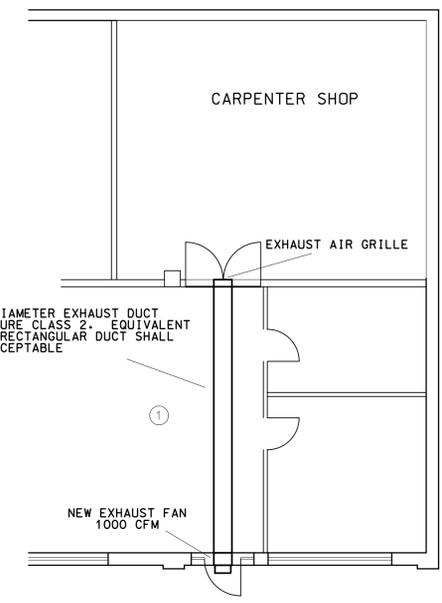
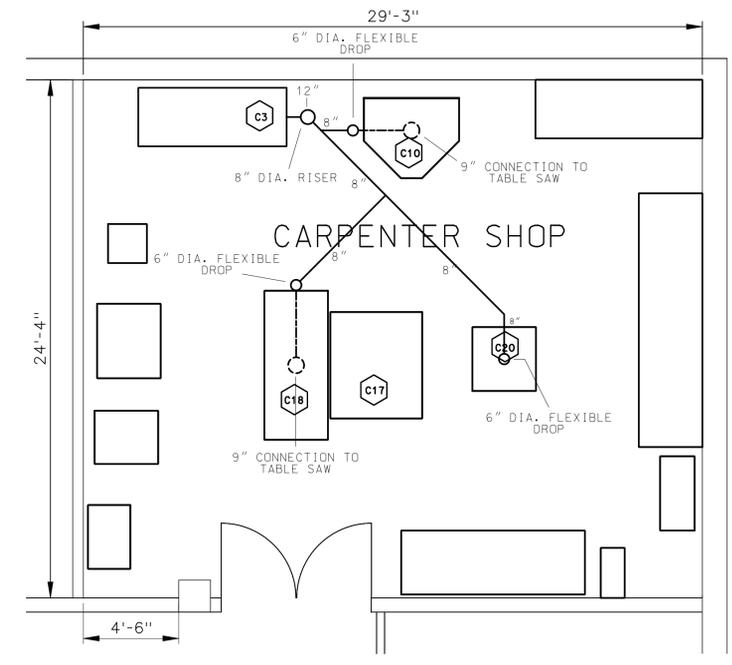
DIFFUSERS, GRILLES, LOUVERS						
TAG	SERVICE	SIZE (IN)	NECK SIZE (IN)	MAX. RADIATED NOISE (NC)	MAX dP (IN. WG)	NOTES
SD-1	SUPPLY	24"x24"	8"	12	0.015	STAMPED SQUARE, 4 WAY THROW, OBD
RG-1	RETURN	24"x24"	8"	20	0.03	PERFORATED
RG-2	RETURN	24"x24"	12"	20	0.07	PERFORATED
PL-1	OA INTAKE	24"x24"	-	-	0.05	PENTHOUSE LOUVER, 3.2 SQFT. FREE AREA, 12" HIGH, INSECT SCREEN

HOT WATER COILS											
TAG	AIRFLOW (CFM)	MAX FACE VELOCITY (FPM)	AIR (F)		AIR PD (IN WG)	MIN CAPACITY (MBH)	WATER (F)		HOT WATER FLOW (GPM)	WATER PD (FT WG)	MIN ROWS
			EAT	LAT			EWT	LWT			
HC-1	2000	500	68	110	.2	120	180	160	12	0.5	1
HC-2	2000	500	68	110	.2	120	180	160	12	0.5	1

ZONE DAMPERS						
TAG	AIRFLOW (CFM)		MAX dP	INLET SIZE (IN)	MAX. RADIATED NOISE (NC)	REMARKS
	MAX	MIN				
ZD-1	150	20	0.02	8	24	TWO POSITION OPERATION
ZD-2	1000	200	0.04	12	22	
ZD-3	1500	300	0.09	12	22	

DUST VACUUM EQUIPMENT SCHEDULE					
TAG	DESCRIPTION	MODEL NO.	CFM	FITTING	REMARKS
C-10	RADIAL ARM SAW	DEWALT 3 HP 30 AMP 230 VAC	800	9"	PROVIDE NEW 9" TO 6" REDUCER TO CONNECT TO FLEXIBLE DROP
C-18	TABLE SAW	ROCKWELL DELTA TYPE BFR	800	9"	PROVIDE NEW 9" TO 6" REDUCER TO CONNECT TO FLEXIBLE DROP
C-20	PLAINER	ROCKWELL INVICTA 22500	1100	-	-

BYPASS DAMPER			
SYSTEM	MAX AIRFLOW (CFM)	MAX PD (IN. WG)	REMARKS
HP-1, HP-2	1600	0.02	ROUND, 16" DIA. MAX



LEGEND	
SYMBOL	DESCRIPTION
	MOTORIZED DAMPER
	SUPPLY DIFFUSER
	RETURN GRILLE
	THERMOSTAT
	MANUAL BALANCING DAMPER
	SUPPLY DUCT
	RETURN DUCT
	BYPASS DUCT
	CONNECT TO EXISTING WORK
	HOT WATER SUPPLY PIPE
	HOT WATER RETURN PIPE
	CONDENSING WATER SUPPLY PIPE
	CONDENSING WATER RETURN PIPE
	CONDENSATE DRAIN PIPE
	STEAM SUPPLY PIPE

1. PROVIDE WALL MOUNTED CENTRIFUGAL EXHAUST FAN AS SHOWN. FAN SHALL BE 1000 CFM CAPACITY, 1725 RPM DIRECT DRIVE, WITH 1/4 HP MOTOR. FAN SHALL BE UL LISTED FOR ELECTRICAL COMPONENTS. FAN SHALL BE PROVIDED WITH BIRD SCREEN, BACK DRAFT DAMPER, WALL MOUNTING PLATE, AND LOCAL DISCONNECT SWITCH. FAN SHALL BE CONTROLLED BY A MANUAL ON/OFF SWITCH LOCATED ON THE WALL INSIDE THE CARPENTER'S SHOP. FAN SHALL BE GREENHECK CW-101-A OR APPROVED EQUAL.

Rev.	Date	Description
1	7/1/04	HOT WATER PUMPS REVISED, HOT WATER COILS REVISED, ZD-1 REVISED, BYPASS DAMPERS ADDED

Designed by: ARG	Date: June 2003	Rev.
Drawn by: ARG	Solicitation no. W912W-04-B-0005	
Reviewed by: JOHN WUTZER /s/	Drawing code: F-218-45-01	
Submitted by: DAVID DESCOTEAUX /s/	File name:	
Chief, General Eng. Sect.	Plot scale:	

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U.S. ARMY SOLDIER SYSTEMS CENTER  
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**MECHANICAL EQUIPMENT SCHEDULES**