

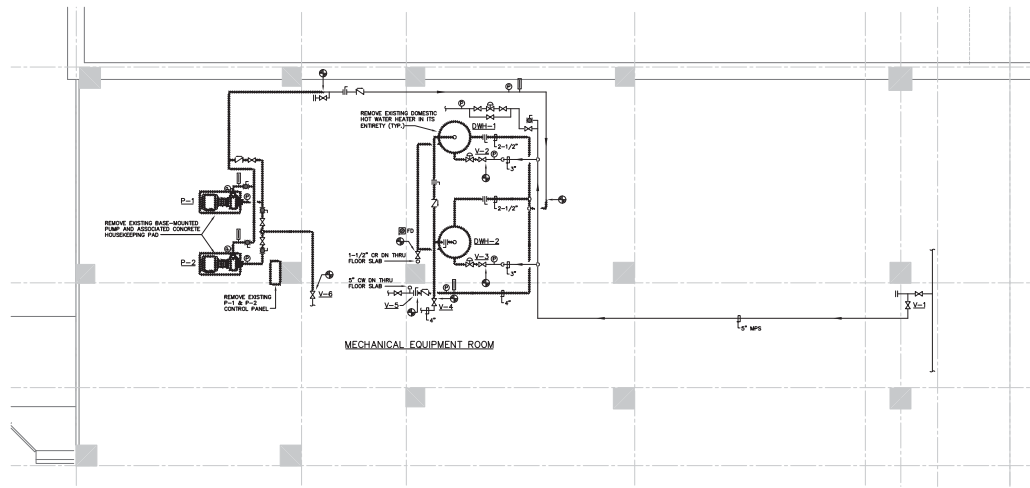


A. PUMPING CONTRACTOR SHALL MEET WITH VARIOUS CDD TO REVIEW SCOPE OF WORK AT EACH SITE LOCATION TO CONFIRM POINTS OF EXCAVATION, POINTS OF CONNECTION AND EXTENT OF PIPING INSTALLATION REMOVAL PRIOR TO COMMENCEMENT OF ANY WORK.

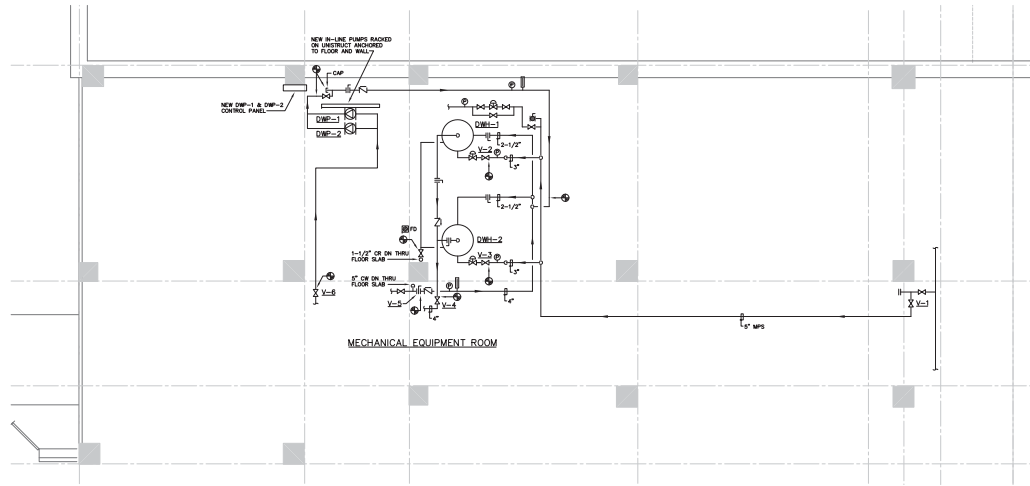
B. CONTRACTORS SHALL BE PROVIDED WITH "COMPREHENSIVE HAZARDOUS MATERIALS SURVEY REPORT - WATER HEATER REPLACEMENT PROJECT" AUTHORED BY OIL ASSOCIATED DATE 12/20, 2010. CONTRACTORS SHALL WORK WITH VARIOUS CDD & EHS TO DETERMINE APPROPRIATE ACTION.

C. NEW PIPE SIZES INDICATED ON PLANS ARE APPROXIMATED. CONTRACTOR SHALL MATCH NEW PIPING OF EQUIVALENT SIZE AND MATERIAL TO EXISTING PIPING. ALL CONNECTIONS TO EQUIPMENT SHALL BE FULL SIZE.

D. FLOOR PLAN INDICATES GENERAL ARRANGEMENT OF WORK. REFER TO "TYPICAL DOMESTIC HOT WATER ONE-LINE PIPING DIAGRAM" ON DRAWING SET FOR ACTUAL QUANTITY, TYPE AND LOCATION OF VALVES, SENSORS, ETC.



1 PLUMBING SUB-GROUND LEVEL PARTIAL DEMOLITION PLAN - AREA 'H'
P102 Scale: 1/4"=1'-0"

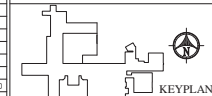


2 PLUMBING SUB-GROUND LEVEL PARTIAL NEW WORK PLAN - AREA 'H'
P102 Scale: 1/4"=1'-0"

PLUMBING GENERAL NOTES

- PLUMBING CONTRACTOR SHALL MEET WITH VINC CODE TO REVIEW SCOPE OF WORK AT EACH SITE LOCATION TO CONFIRM POINTS OF DEMOLITION, POINTS OF CONNECTION AND EXTENT OF PIPING INSULATION REMOVAL, PRIOR TO COMMENCEMENT OF ANY WORK.
- CONTRACTORS SHALL BE PROVIDED WITH "COMPREHENSIVE HAZARDOUS MATERIALS SURVEY REPORT - WATER HEATER REPLACEMENT PROJECT" AUTHORIZED BY THE ASSOCIATES WATER DEPARTMENT. CONTRACTORS SHALL WORK WITH VINC CODE & DRI TO DETERMINE APPROPRIATE ACTION.
- NEW PIPE SIZES INDICATED ON PLANS ARE APPROXIMATED. CONTRACTOR SHALL CORRECT NEW PIPING OF EQUIVALENT SIZE AND MATERIAL, TO EXISTING PIPING. ALL CONNECTIONS TO EQUIPMENT SHALL BE FULL SIZE.
- FLOOR PLAN INDICATES GENERAL ARRANGEMENT OF WORK. REFER TO TYPICAL DOMESTIC HOT WATER ONE-LINE PIPING DIAGRAM ON DRAWING 9001 FOR ACTUAL QUANTITY, TYPE AND LOCATION OF VALVES, SENSORS, ETC.

FULLY SPRINKLERED BUILDING



- GENERAL NOTES**
- WHEREVER THE TERM "REMOVE" OR "DEMOLISH" IS USED, THE INTENT OF THE TERMS SHALL BE TO REMOVE AND DISPOSE OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, FEDERAL, EPA AND DEP REGULATIONS.
 - WHEREVER THE TERM "PROVIDE" OR "NEW" IS USED, THE INTENT OF THE TERMS SHALL BE TO "PROVIDE AND INSTALL".

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Drawing Title PLUMBING SUB-GROUND LEVEL PARTIAL DEMOLITION AND NEW WORK PLANS - AREA 'H'

Approved: Project Director

Project Title INSTANTANEOUS HOT WATER IMPROVEMENT

Location
VACHS WEST HAVEN, CT

Date: 02/26/2011
Checked: SSK
Drawn: S.A.O./A.W.S.

Project Number
689-10-214
Building Number
01

Drawing Number
P102
Dwg. 6 of 12

Office of
Facilities
Management





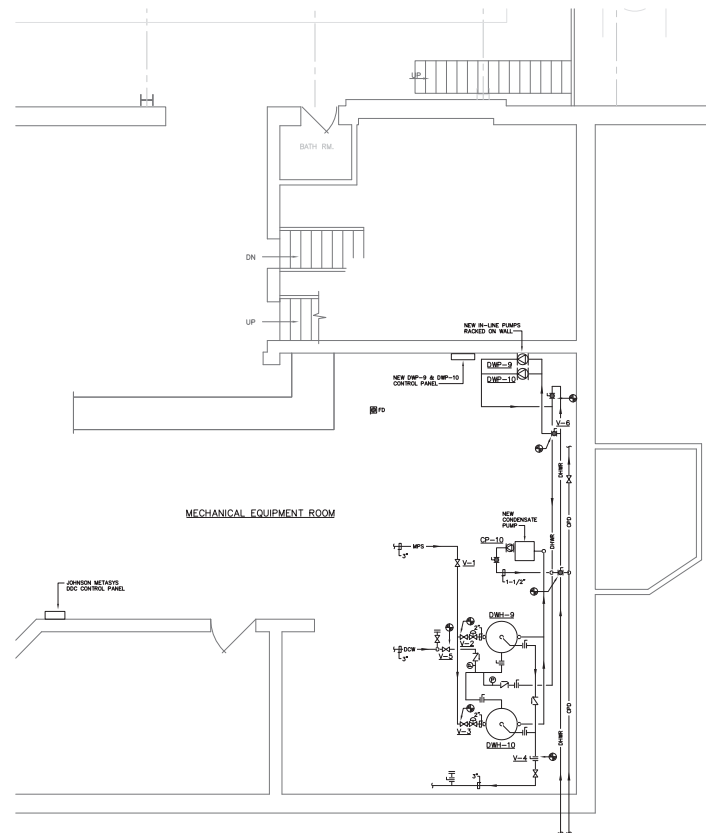
A. PLUMBING CONTRACTOR SHALL MEET WITH WAMC COWI TO REVIEW SCOPE OF WORK AT EACH SITE LOCATION TO CONFIRM POINTS OF CONNECTION, ELEVATIONS, LOCATION AND EXTENT OF PIPING INCLUDING REGIONAL, RURAL AND TOWN COMMUNITIES.

B. CONTRACTOR SHALL BE PROVIDED WITH "COMPREHENSIVE HAZARDOUS MATERIALS SURVEY REPORT" - WATER HEATER REPLACEMENT PROJECT AUTHORIZED BY AEC ASSOCIATES DATE DECEMBER 21, 2020. CONTRACTORS SHALL WORK WITH WAMC COWI & DHS TO DETERMINE APPROPRIATE ACTION.

C. NEW PIPE SIZES INDICATED ON PLANS ARE APPROXIMATED. CONTRACTOR SHALL CONNECT NEW PIPING OF EQUIVALENT SIZE AND MATERIAL TO EXISTING PIPING. ALL CONNECTIONS TO EQUIPMENT SHALL BE FULL SIZE.

D. FLOOR PLAN INDICATES GENERAL ARRANGEMENT OF WORK. REFER TO TYPICAL DOMESTIC HOT WATER ONE-LINE PIPING DIAGRAM ON DRAWING FOR QUANTITY, TYPE, SIZE AND LOCATION OF PIPING.

[illegible]



2 PLUMBING GROUND LEVEL PARTIAL NEW WORK PLAN
P104 Scale: 1/4"=1'-0"

A. PLUMBING CONTRACTOR SHALL MEET WITH VAWC COTD TO REVIEW SCOPE OF WORK AT EACH SITE LOCATION TO CONFIRM POINTS OF EXCAVATION, POINTS OF CONNECTION AND EXTENT OF PIPING INSULATION REMOVAL PRIOR TO COMMENCEMENT OF ANY WORK.

B. CONTRACTORS SHALL BE PROVIDED WITH COMPREHENSIVE HAZARDOUS MATERIALS SURVEY REPORT - WATER HEATER REPLACEMENT PROJECT* AUTHORIZED BY OEL ASSOCIATES DATED DECEMBER 21, 2010. CONTRACTORS SHALL WORK WITH VAWC COTD & EHS TO DEVELOP A HYGIENE ACTION PLAN.

C. NEW PIPE SIZES INDICATED ON PLANS ARE APPROXIMATED. CONTRACTOR SHALL COMEET NEW PIPING OF EQUIVALENT SIZE AND MATERIAL, TO EXISTING PIPES. ALL CONNECTIONS TO EQUIPMENT SHALL BE FULL SIZE.

D. PLANS INDICATE GENERAL ARRANGEMENT OF WORK. REFER TO "TYPICAL DOMESTIC HOT WATER ONE-LINE PIPING DIAGRAM" ON DRAWING #P201 FOR ADDITIONAL, QUANTITY, TYPE AND LOCATION OF VALVES, SENSORS, ETC.

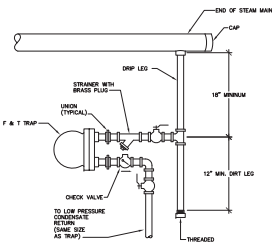
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File Name: P-BLOG-16-BOL-HOUS.dwg Layout: P104 February 25, 2011 - 2:31 PM User: SJK
one eighth inch = one foot one quarter inch = one foot three eighths

PUMP SCHEDULE																		
UNIT NO.	LOCATION	SERVING	MANUFACTURER	MODEL & SIZE	TYPE	GPM	HEAD FT.	FLUID	RPM	HPM EFF. %	IMP. EFF. %	BHP	TRIPLE DUTY VALVE	CONTROL	ELEC. DATA MOT HP VOLTS	PH	REMARKS	
DMP-1	BLOF #1, SUB-GROUND LEVEL, AREA-H	DMP-1 - 8 - 2	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-2	BLOF #1, SUB-GROUND LEVEL, AREA-H	DMP-1 - 8 - 2	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-3	BLOF #1, SUB-GROUND LEVEL, AREA-G	DMP-3 - 8 - 4	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-4	BLOF #1, SUB-GROUND LEVEL, AREA-G	DMP-3 - 8 - 4	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-5	BLOF #2, BASMENT LEVEL, AREA-O	DMP-5 - 8 - 6	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-6	BLOF #2, BASMENT LEVEL, AREA-O	DMP-5 - 8 - 6	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-7	BLOF #2, BASMENT LEVEL, AREA-O	DMP-7 - 8 - 8	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-8	BLOF #2, BASMENT LEVEL, AREA-O	DMP-7 - 8 - 8	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-9	BLOF #2, PH #2 HOUSE	DMP-9 - 10 - 10	BELL & GOSSETT	1-1/2X1-1/2 SERIES 50	N-LINE MOUNTED PUMP	50	42	WATER	1740	52.23	63.5	1.04	—	ELECTRONIC	2	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-10	BLOF #2, PH #2 HOUSE	DMP-9 - 10 - 10	BELL & GOSSETT	1-1/2X1-1/2 SERIES 50	N-LINE MOUNTED PUMP	50	42	WATER	1740	52.23	63.5	1.04	—	ELECTRONIC	2	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-11	BLOF #2, BASMENT LEVEL, AREA-O	DMP-7 - 8 - 8	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	35	40	WATER	1740	44.86	62.6	4.8	—	ELECTRONIC	1	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-12	BLOF #2, BASMENT LEVEL, AREA-O	DMP-7 - 8 - 8	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	8	12	WATER	1740	23.4	3.5	11	—	ELECTRONIC	1/2	208	3	PROVIDE PRESSURE EFFICIENT MOTOR
DMP-13	BLOF #2, BASMENT LEVEL, AREA-O	DMP-7 - 8 - 8	BELL & GOSSETT	1-1/2X1-1/2 SERIES 30	N-LINE MOUNTED PUMP	10	20	WATER	1740	31.76	4.5	16	—	ELECTRONIC	1/2	208	3	PROVIDE PRESSURE EFFICIENT MOTOR

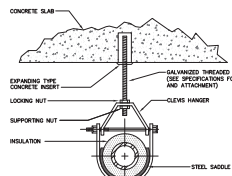
DOMESTIC WATER HEATER SCHEDULE						
UNIT	LOCATION	BASIS OF DESIGN MANUFACTURER & MODEL	CAPACITY	SUPPLY STEAM PRESSURE	STEAM TRIP LBS/HR	REMARKS
DH-1	BLDG #1, SUB-GRUPO LEVEL, AREA-A	AGERO MODEL: 8-1/2/12/50/8C	100 UOW/HP/100	75 PSIG	8768	ELECTRONIC CONTROL VALUE
DH-2	BLDG #1, SUB-GRUPO LEVEL, AREA-A	AGERO MODEL: 8-1/2/12/50/8C	100 UOW/HP/100	75 PSIG	8768	ELECTRONIC CONTROL VALUE
DH-3	BLDG #1, SUB-GRUPO LEVEL, AREA-A	AGERO MODEL: 8-1/2/12/50/8C	100 UOW/HP/100	75 PSIG	8768	ELECTRONIC CONTROL VALUE
DH-4	BLDG #1, SUB-GRUPO LEVEL, AREA-A	AGERO MODEL: 8-1/2/12/50/8C	80 UOW/HP/80	75 PSIG	4967	ELECTRONIC CONTROL VALUE
DH-5	BLDG #2, BASEMENT LEVEL, AREA-0	AGERO MODEL: 8-1/2/12/50/8C	80 UOW/HP/80	75 PSIG	4967	ELECTRONIC CONTROL VALUE
DH-6	BLDG #2, BASEMENT LEVEL, AREA-0	AGERO MODEL: 8-1/2/12/50/8C	80 UOW/HP/80	75 PSIG	4967	ELECTRONIC CONTROL VALUE
DH-7	BLDG #2, BASEMENT LEVEL, AREA-0	AGERO MODEL: 8-1/2/12/50/8C	120 UOW/HP/120	55 PSIG	6438	ELECTRONIC CONTROL VALUE
DH-8	BLDG #2, BASEMENT LEVEL, AREA-0	AGERO MODEL: 8-1/2/12/50/8C	120 UOW/HP/120	55 PSIG	6438	ELECTRONIC CONTROL VALUE
DH-9	BLDG #3, FORT HOUSE	AGERO MODEL: 8-1/2/12/50/8C	54 UOW/HP/54	30 PSIG	3753	ELECTRONIC CONTROL VALUE
DH-10	BLDG #3, FORT HOUSE	AGERO MODEL: 8-1/2/12/50/8C	54 UOW/HP/54	30 PSIG	3753	ELECTRONIC CONTROL VALUE

CONDENSATE RECEIVER/PUMP SCHEDULE															
UNIT NO.	LOCATION	SERVING	MANUFACTURER	MODEL	CAPACITY SF./T. E.D.R.	DISCHARGE PSIG	PUMP CAP. GAL.	PUMP CAP. GPM	DISCHARGE SIZE	RECEIVER SIZE	ELEC. DATA			REMARKS	
											MOTOR HP	VOLTS	PH		
CP-1	BLDG #18 POWER HOUSE	DHW-H & DWH-H	STERLO	DUPLEX 4128-G	8000	20	8	12	1-1/2"	12.5"x10.5"x10.5"	80	273	120	1	

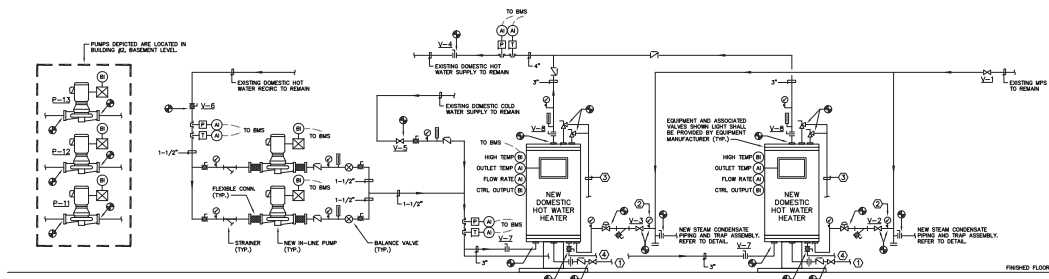
NOTE: STARTERS FURNISHED AND INSTALLED BY DIV. 15. DISCONNECT SWITCH BY DIV. 16.



END OF MAIN STEAM DRIFF
LOW PRESSURE STEAM
(O-15 PSIG)



PIPE HANGER DETAIL
NOT TO SCALE



TYPICAL DOMESTIC HOT WATER ONE-LINE PIPING & CONTROL DIAGRAM
NOT TO SCALE

- ① EXTEND 1" STEAM CONDENSATE PIPING (GRAVITY-FED) WITH ISOLATION VALVE TO STEAM CONDENSATE MAIN. REFER TO FLOOR PLANS FOR ACTUAL LOCATIONS.
- ② PROVIDE NEW PRESSURE GAUGE WITH ISOLATION VALVE ON EXISTING PIPE WELL.
- ③ EXTEND 2" RELIEF VALVE DRAIN PIPING FULL SIZE TO NEAREST FLOOR DRAIN. PITCH IN DIRECTION OF FLOW. QUANTITY OF RELIEF VENTS VARIES BASED ON NEW WATER HEATER CAPACITY. DO NOT CONNECT TO WATER HEATER DRAIN PIPING.
- ④ EXTEND 2" WATER HEATER DRAIN PIPING FULL SIZE TO NEAREST FLOOR DRAIN. PITCH IN DIRECTION OF FLOW. DO NOT CONNECT TO RELIEF VALVE DRAIN PIPING.

THESE PHASING NOTES ARE ONLY TO BE USED AS A GUIDE TO ILLUSTRATE INTENT OF PROJECT SCOPE OF WORK. DEMOLITION AND INSTALLING CONTRACTORS SHALL SUBMIT PROPOSED WATER HEATER REPLACEMENT ACTION PLAN TO VAMC AND ENGINEER FOR REVIEW AND APPROVAL. ACTION PLAN SHALL DESCRIBE IN DETAIL DATE, DURATION, AND SCOPE OF WORK ASSOCIATED WITH EACH OF THE SHUTDOWNS. CONTRACTORS SHALL NOT COMMENCE DEMOLITION WORK UNTIL NOTICE TO PROCEED IS RECEIVED AND ALL NECESSARY EQUIPMENT AND MATERIALS ARE ON SITE TO MINIMIZE QUANTITY AND DURATION OF SHUTDOWNS.

PRIOR TO ANY WORK PERFORMED, BALANCING CONTRACTOR SHALL PROVIDE ULTRASONIC WATER FLOW MEASUREMENTS, AND TEMPORARY PRESSURE AND TEMPERATURE GAUGES TO EACH PUMP TO VERIFY FLOW, PRESSURE, AND TEMPERATURE. OPERATING CHARACTERISTICS. CONTRACTOR SHALL NOT USE OR RELY ON ANY EXISTING GAUGES FOR THIS PURPOSE. SUBMIT DOCUMENTED VALUES (IN SPREAD SHEET FORMAT) TO VAMC AND ENGINEER FOR REVIEW AND RECORD PURPOSES. DURING SYSTEM REBALANCING, CONTRACTOR SHALL BALANCE PUMPS AND SYSTEM TO MEET CURRENT FLOW AND TEMPERATURE CHARACTERISTICS.

1. REPLACE WATER HEATER STEAM ISOLATION VALVES "Y-2" & "Y-3" DURING WEDNESDAY SHUTDOWN WITH MAIN STEAM ISOLATION VALVE "Y-1".
2. ISOLATE DOMESTIC HOT WATER ISOLATION VALVE "W-8" AND HOT WATER ISOLATION VALVE "W-7" TO ISOLATE EITHER OF THE TWO DOMESTIC HOT WATER HEATERS.
3. REPLACE PRIMARY DOMESTIC HOT WATER HEATER AND ALL ASSOCIATED PIPING AND VALVES. THE NEW HEATER SHALL BE INSTALLED IN ACCORDANCE WITH OPERATION "PRIMARY" WATER HEATER SHALL BE DETERMINED BY EITHER PRESENT OPERATING CONDITION OR EASE OF INSTALLATION. ANY EXISTING PIPING SHALL BE REINSTALLED IN ACCORDANCE WITH THE SAME.
4. UPON VERIFICATION THAT INSTALLATION IS COMPLETE THROUGHOUT SYSTEM, BRING NEW PRIMARY DOMESTIC HOT WATER HEATER ON-LINE AND RE-START THE SYSTEM. REPEAT WATER HEATER REPLACEMENT PROCEDURE.
5. DEPENDING ON EXISTING CONDITIONS, DURATION OF SHUTDOWN, AND THE TYPE OF WATER HEATER, IT MAY BE NECESSARY TO INCORPORATE PUMP REPLACEMENT IN A SIMILAR MANNER AS THE WATER HEATER REPLACEMENT. IF THE EXISTING PUMP IS FOUND TO BE DEFECTIVE, PUMPS SHALL BE INSTALLED AS COMPLETE AS POSSIBLE INCLUDING VALVES AND PIPING. THE PUMP SHALL BE INSTALLED IN ACCORDANCE WITH THE SAME. PRIOR TO REMOVAL OF EXISTING PUMPS, WORKS INDICATED ON PLANS TO CONNECT TO EXISTING CURRENTLY IN USE BREAKERS, PRE-WIRE NEW BREAKERS TO EXISTING BREAKERS SHALL OCCUR AT TIME OF SHUTDOWN AND RE-START OF THE SYSTEM.

KEYPLAN

1. WHEREVER THE TERM "REMOVE" OR "DEMOLISH" IS USED, THE INTENT OF THE TERMS SHALL BE TO "REMOVE AND DISPOSE OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, FEDERAL, EPA AND DEP REGULATIONS".

2. WHEREVER THE TERM "PROVIDE" OR "NEW" IS USED, THE INTENT OF THE TERMS SHALL BE TO "PROVIDE AND INSTALL".

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VZHS PROJECT# 2010163.00

INDUSTRIAL HYGIENIST:
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T: 603. 801.4310

Approved: Project Director

Location	VACHS WEST HAVEN, CT
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Date	Checked	Drawn
02/25/2011	SSK	SAO/AV

P201
 Div. 8 of 12

**Office of
Facilities
Management**