KEYNOTES:

INTERLOCK.

INCREASE 😝

CAP 🕙

HWR

XM P-4

COMBUSTION

TO 5" AT

| ELBOW DN

XM 10"Ø DN-

(CAPPED)

XM 6"HCHWS/R-

RELIEF VALVE

TO 6" AFF

BAROMETRIC-

RELIEF DAMPER

GAS **FIRED**

WATER

HEATER

−XM 1 1/2"

-XM 4"HCHWS

XM 6"HCHWR

96"x16" COMBUSTION AIR INTAKE-DN. TERMINATES 12" AFF.

XM ACD (LOW)

XM 32"Ø FLUE UP-

XM 12"Ø FLUE UP-

XM SHOT FEEDER -

- CONNECT BOILER TO EXISTING FLUE MAIN. PROVIDE ANY NECESSARY TRANSITIONS TO MAKE CONNECTION TO BOILER FLUE OUTLET. INSTALL VENTING PER BOILER MANUFACTURERS INSTALLATION INSTRUCTIONS. PATCH EXISTING FLUE INSULATION TO MATCH EXISTING.
- RE-INSULATE PUMP CASING ACCORDING TO INSULATION SCHEDULE ON SHEET H-0.0.
- BOILER IS TO BE PURCHASED AS A KNOCK-DOWN UNIT AND ASSEMBLED IN
- 4 PROVIDE NEW BUTTERFLY TYPE ISOLATION VALVE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- INSTALL NEW DAMPER ACTUATOR ON EXISTING COMBUSTION AIR DAMPER SHAFT. PROVIDE WIRING AS REQUIRED FOR BOILER COMBUSTION AIR

-XM HW STORAGE

XM PRESSURE RELIEF VALVE

-XM B-1

-XM 3"HCHWR

XM BAROMETRIC -

RELIEF DAMPER

- XM 48"x36" UPPER COMBUSTION AIR

INTAKE (TYP-2)

XM ACD

XM ACD (LOW)

XM OIL TRANSFER PUIMP SKID

XM HW & CHW DDC -

GENERAL NOTES:

XM 3"HCHWS

VFD

XM 4"HCWS-

VFD

- XM 6"HCWS

XM P-2A

FROM LEFT: P-6 STARTER -P-4 STARTER

P-3 STARTER

CONTRACTOR TO COORDINATE WORK SCHEDULE WITH OWNER; ACCEPTABLE HOURS OF **WORK ARE AS FOLLOWS:**

- NOISY WORK I.E. CUTTING, DRILLING, HAMMERING, ETC. TO BE PERFORMED MONDAY THROUGH FRIDAY AFTER 3PM OR ON WEEKENDS.

- ALL OTHER WORK CAN BE PERFORMED MONDAY THROUGH FRIDAY 7AM-3PM.

- COORDINATE ALL SYSTEM SHUTDOWNS WITH OWNER. EXISTING HEATING AND CHILLED WATER SYSTEM ARE TO REMAIN IN OPERATION DURING CONSTRUCTION WHILE BUILDING

CONTRACTOR TO COORDINATE RIGGING PATH WITH OWNER TO PREVENT DAMAGE TO EXISTING FLOORING, FINISHES, AND STRUCTURE. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO BUILDING.

XM P-1A

XM PANEL -

BOARDS

XM P-1B

CONTROL SYSTEM DESCRIPTION:

BUILDING HVAC SYSTEMS ARE CONTROLLED BY EXISTING BUILDING AUTOMATION SYSTEM BY AUTOMATED LOGIC.

PROVIDE STANDALONE BOILER CONTROLLER TO OPERATE BOILER WITH CAPABILITY TO OPERATE BOILER, PUMPS, AND COMBUSTION AIR DAMPERS SIMILAR TO EXISTING SYSTEM. CONTROLLER TO BE COMPATIBLE WITH ALL EXISTING CONTROL COMPONENTS. PROVIDE ALL NECESSARY CONTROLS HARDWARE AND SOFTWARE FOR

A FULLY FUNCTIONAL SYSTEM WITH FEATURES INCLUDING BUT NOT LIMITED TO:

-BOILER MODULATION SEQUENCING CONTROL -OUTDOOR AIR LOCKOUT

-MINIMUM BOILER RETURN TEMP CONTROL -UNOCCUPIED/NIGHTTME SETBACK

-DISPLAY SCREEN WITH OPERATOR INPUT -INTERLOCK WITH EXISTING COMBUSTION AIR DAMPER. PROVIDE WITH END SWITCH FOR VERIFICATION OF DAMPER POSITION

-BACNET INTERFACE -REMOTE START/STOP

XM ALARM PRINTER

-XM DDC PANELS

ATC CONTRACTOR TO MEET WITH BOILER CONTROLS MANUFACTURER TO COORDINATE THE REQUIRED CONTROL SIGNALS, STATUS SIGNALS (FOR THE GRAPHICS), AND ALARMS FOR THE BOILER SYSTEM.

This CADD Document is an instrument of professional service, and shall not be used, in whole or in part, for any project other than for which it was created without the expressed, written consent of the RDK Engineers. Any unauthorized use, reuse, modification or alteration, including automated conversion of this document shall be at the user's sole risk without liability or legal exposure to the RDK Engineers. DATE CHK DESCRIPTION -XM RS/RL UP XM CHW HX PROJECT

HVAC MECHANICAL ROOM NEW WORK PLAN



CONSTRUCTION DOCUMENTS 9-03-2020 1/2" = 1' - 0"

380 Russell Street Hadley, MA 01035

T.413-387-4640

F.413-387-0197

W. www.nv5.com

DATE-08/27/2020

LONGMEADOW WOLFSWAMP **ELEMENTARY SCHOOL** BOILER REPLACEMENT

DRAWING

JFL

CHECKED BY

SCALE-1/2" = 1'-0"

HVAC

MECHANICAL ROOM **NEW WORK PLAN**