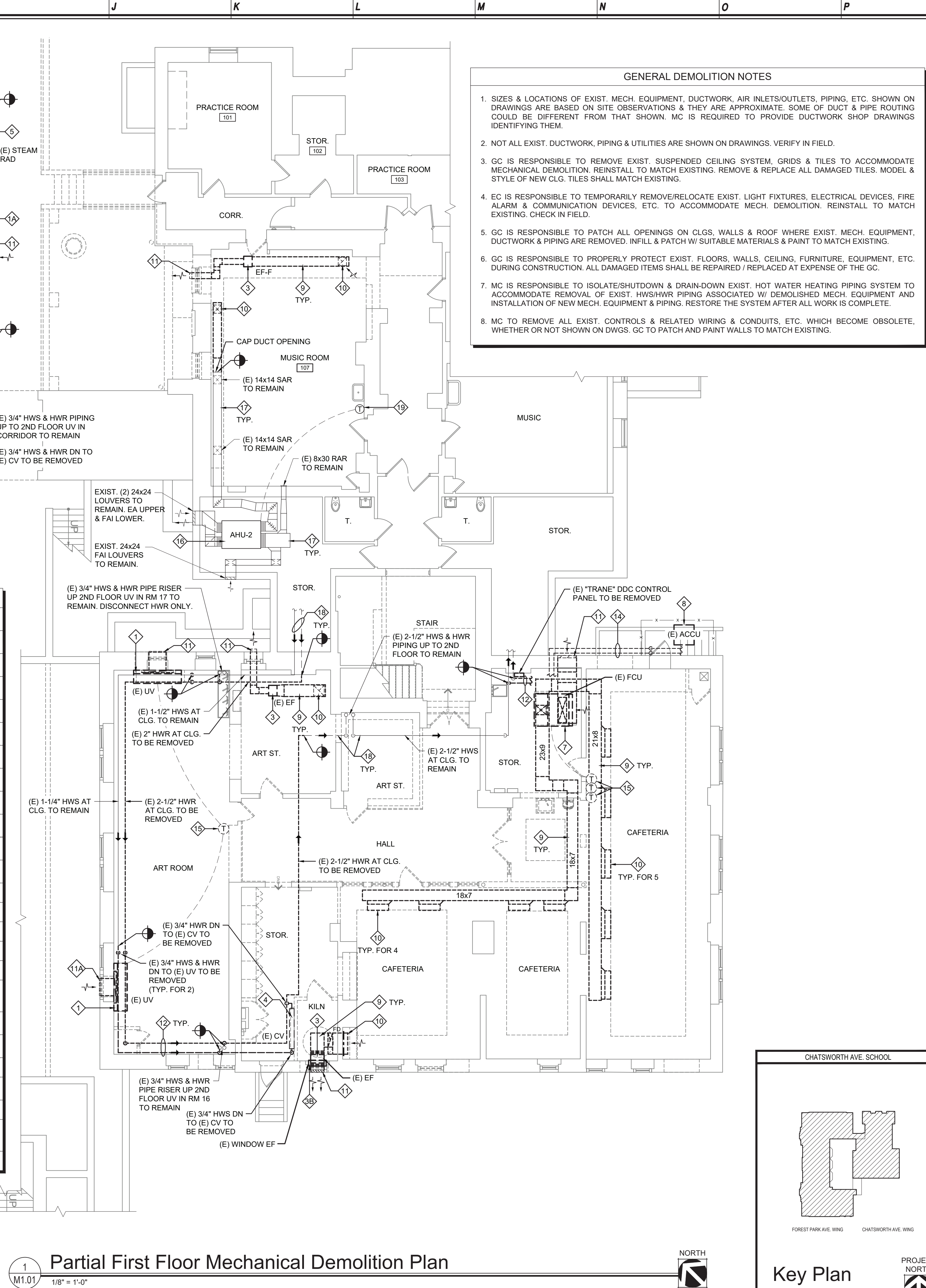
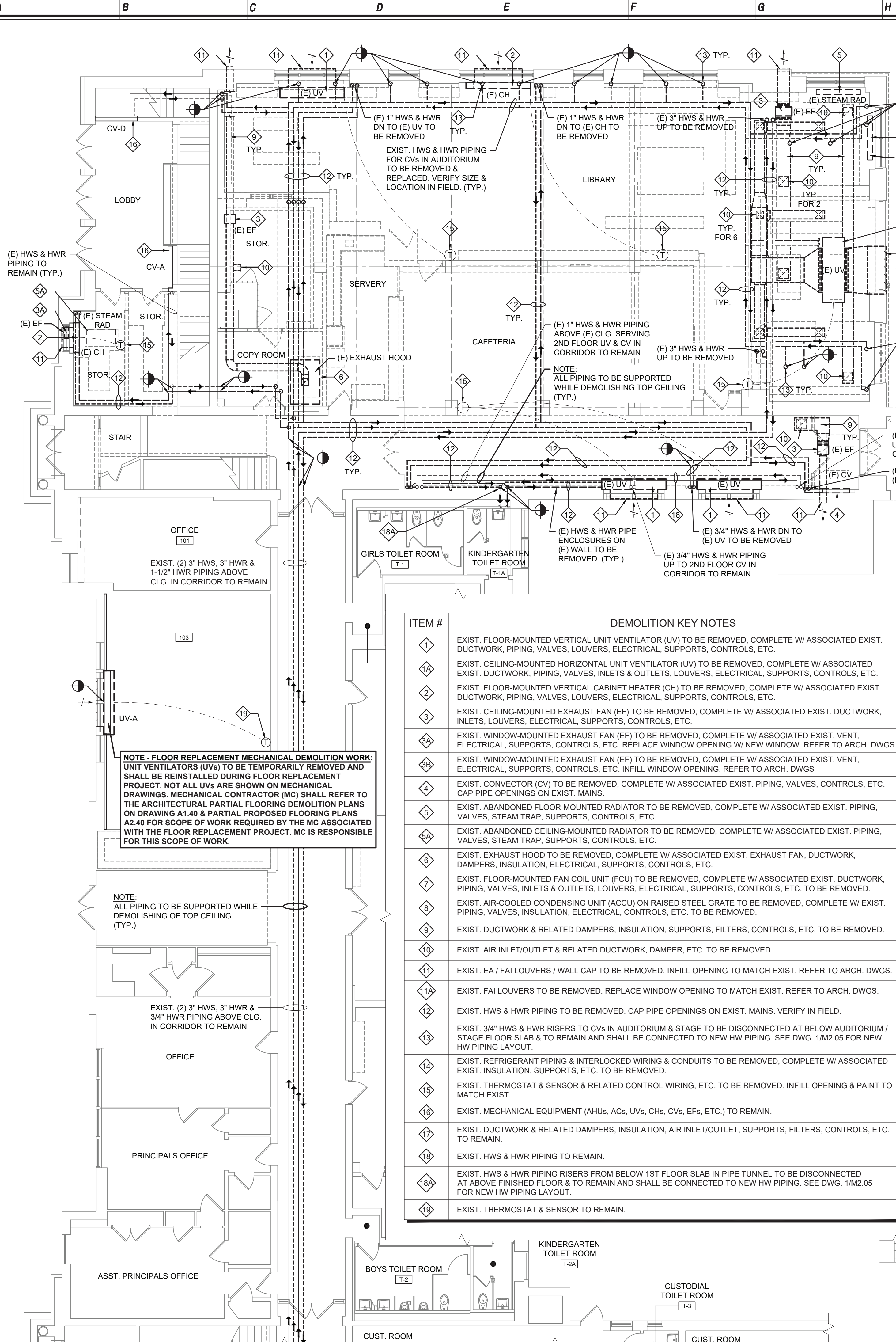


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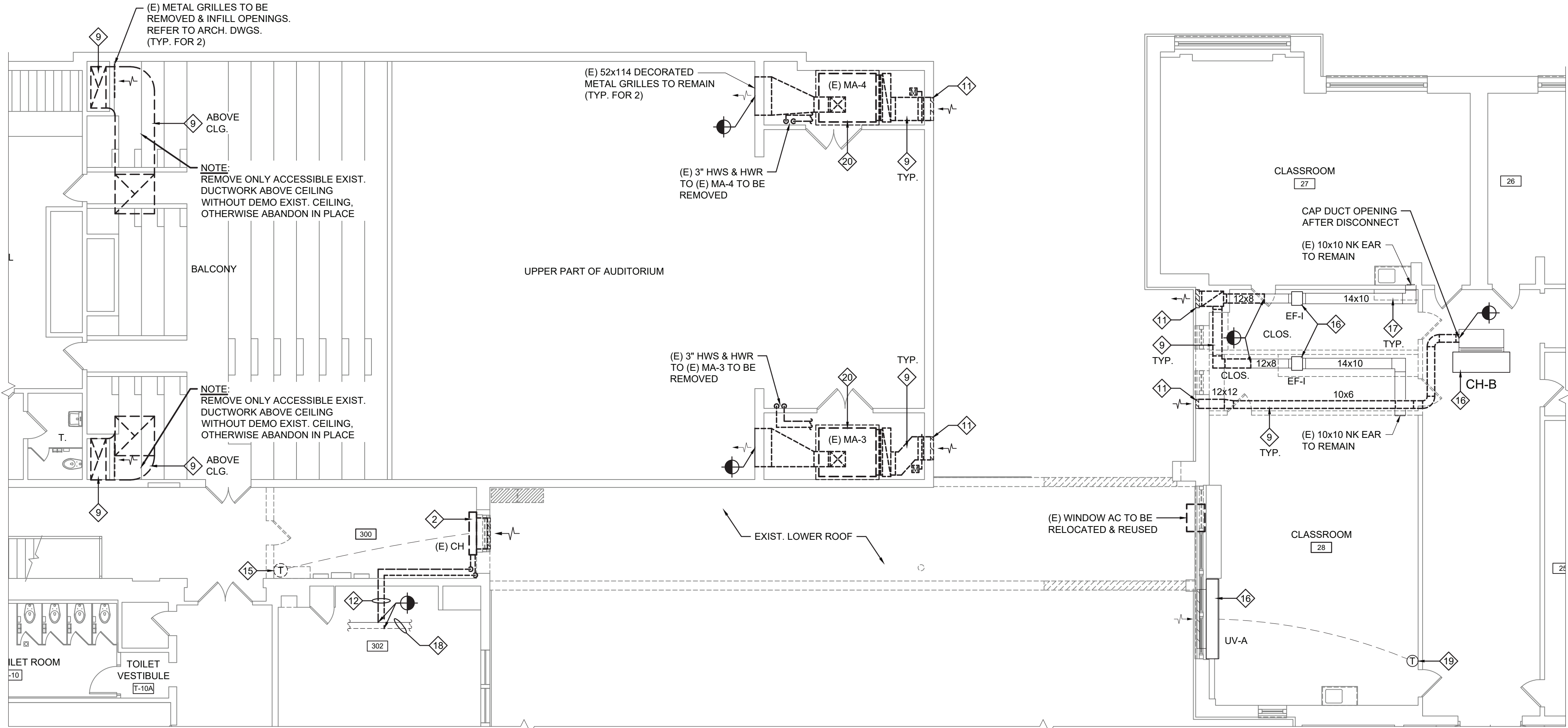
Date	1/10/20
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MICHAEL J. McGOVERN, R.A.	
Title	REGISTERED ARCHITECT
License No.	022257-1
Revisions:	
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232 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350	
MECHANICAL NOTES	
2019 BOND REFERENDUM	
CHATSWORTH AVENUE ELEMENTARY SCHOOL	
MAMARONECK UNION FREE SCHOOL DISTRICT	
CHATSWORTH AVENUE, LARCHMONT, NY 10538	
JOB No. 4, 1092.72.03	
File No. 10927203M201	
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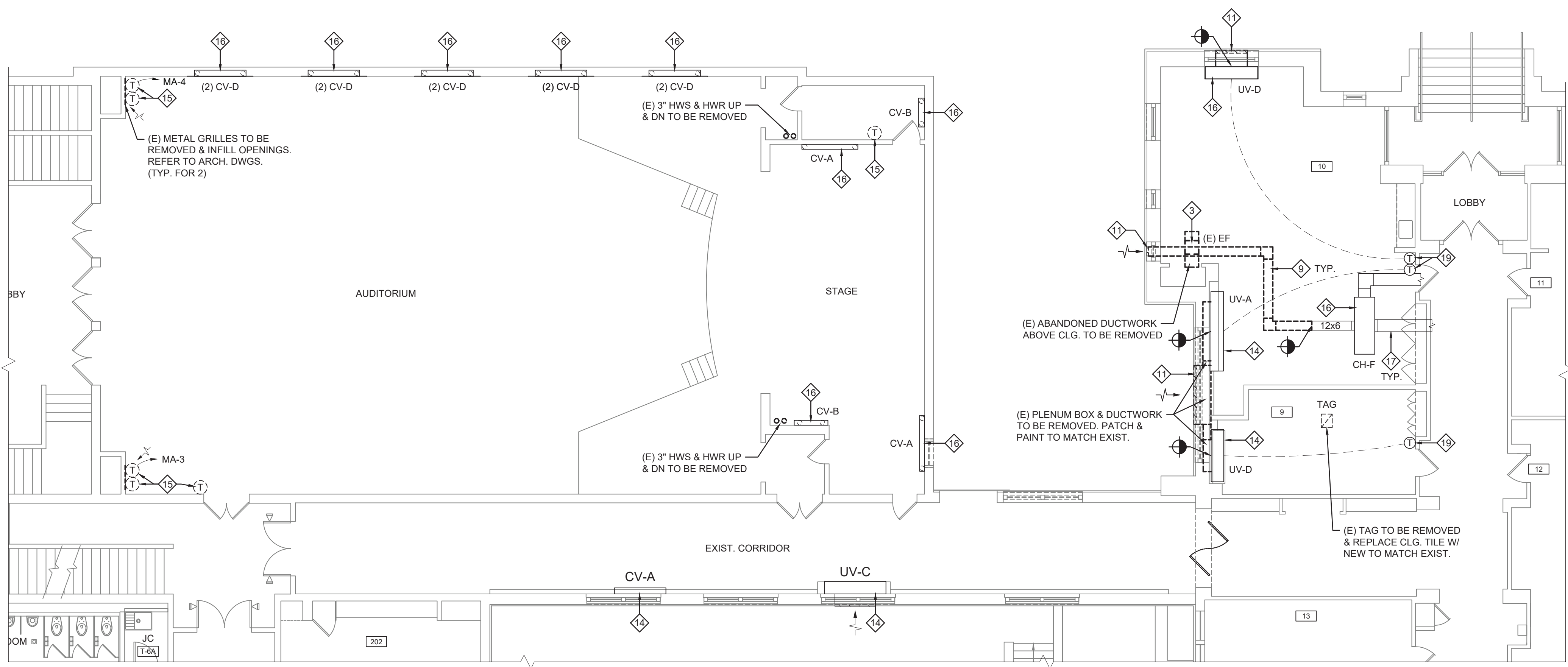


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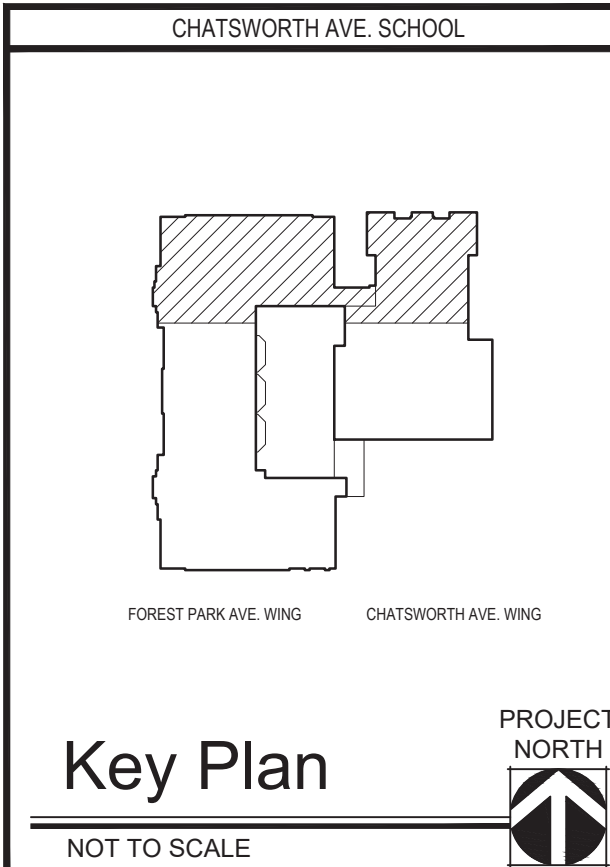
2 Partial Third Floor Mechanical Demolition Plan
M1.02 1/8" = 1'-0"



1 Partial Second Floor Mechanical Demolition Plan
M1.02 1/8" = 1'-0"

ITEM #	DEMOLITION KEY NOTES
2	EXIST. FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
3	EXIST. CEILING-MOUNTED EXHAUST FAN (EF) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, INLETS, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
9	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, SUPPORTS, FILTERS, CONTROLS, ETC. TO BE REMOVED.
11	EXIST. EA / FAI LOUVERS / WALL CAP TO BE REMOVED. INFILL OPENING TO MATCH EXIST. REFER TO ARCH. DWGS.
12	EXIST. HWS & HWR PIPING TO BE REMOVED. CAP PIPE OPENINGS ON EXIST. MAINS. VERIFY IN FIELD.
15	EXIST. THERMOSTAT & SENSOR & RELATED CONTROL WIRING, ETC. TO BE REMOVED. INFILL OPENING & PAINT TO MATCH EXIST.
16	EXIST. MECHANICAL EQUIPMENT (AHUs, ACs, UVs, CHs, CVs, EFs, ETC.) TO REMAIN.
17	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, AIR INLET/OUTLET, SUPPORTS, FILTERS, CONTROLS, ETC. TO REMAIN.
18	EXIST. HWS & HWR PIPING TO REMAIN.
18A	EXIST. HWS & HWR PIPING RISER UP ABOVE 1ST FLOOR CLG., IN PIPE ENCLOSURE AND PIPING RISER DN BELOW 1ST FLOOR SLAB TO REMAIN.
19	EXIST. THERMOSTAT & SENSOR TO REMAIN.
20	EXIST. FLOOR-MOUNTED MAKEUP AIR (MA) UNIT TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, LOUVERS, CONCRETE PAD, ELECTRICAL, SUPPORTS, CONTROLS, ETC.

- GENERAL DEMOLITION NOTES
- SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, AIR INLETS/OUTLETS, PIPING, ETC. SHOWN ON DRAWINGS ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. SOME OF DUCT & PIPE ROUTING COULD BE DIFFERENT FROM THAT SHOWN. MC IS REQUIRED TO PROVIDE DUCTWORK SHOP DRAWINGS IDENTIFYING THEM.
 - NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD.
 - GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING SYSTEM, GRIDS & TILES TO ACCOMMODATE MECHANICAL DEMOLITION. REINSTALL TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES. MODEL & STYLE OF NEW CLG. TILES SHALL MATCH EXISTING.
 - EC IS RESPONSIBLE TO TEMPORARILY REMOVE/RELOCATE EXIST. LIGHT FIXTURES, ELECTRICAL DEVICES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE MECH. DEMOLITION. REINSTALL TO MATCH EXISTING. CHECK IN FIELD.
 - GC IS RESPONSIBLE TO PATCH ALL OPENINGS ON CLGS, WALLS & ROOF WHERE EXIST. MECH. EQUIPMENT, DUCTWORK & PIPING ARE REMOVED. INFILL & PATCH W/ SUITABLE MATERIALS & PAINT TO MATCH EXISTING.
 - GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED / REPLACED AT EXPENSE OF THE GC.
 - MC IS RESPONSIBLE TO ISOLATE/SHUTDOWN & DRAIN-DOWN EXIST. HOT WATER HEATING PIPING SYSTEM TO ACCOMMODATE REMOVAL OF EXIST. HWS/HWR PIPING ASSOCIATED W/ DEMOLISHED MECH. EQUIPMENT AND INSTALLATION OF NEW MECH. EQUIPMENT & PIPING. RESTORE THE SYSTEM AFTER ALL WORK IS COMPLETE.
 - MC TO REMOVE ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DWGS. GC TO PATCH AND PAINT WALLS TO MATCH EXISTING.



Date 1/10/20
Checked MAM
Drawn IM
MICHAEL J. MCGOVERN, R.A.
REGISTERED ARCHITECT
License No. 022257-1

Revisions:
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11/23/20

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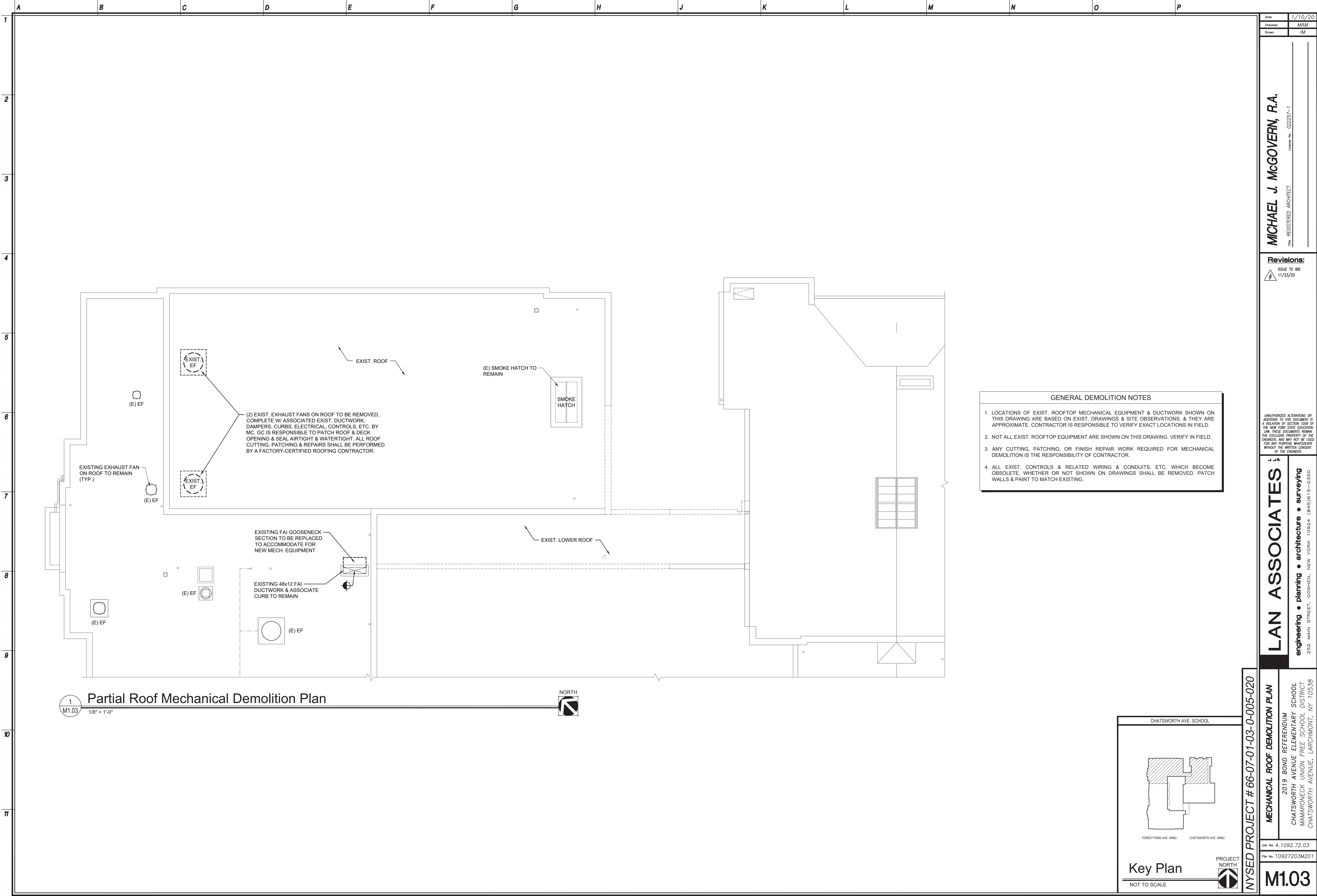
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NYSED PROJECT # 66-07-01-03-0-005-020

MECHANICAL DEMOLITION PLANS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203M201

M1.02



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NYSed PROJECT # 66-07-01-03-0-005-020

MECHANICAL ROOF DEMOLITION PLAN

2019 BOND REFERENDUM

CHATSWORTH AVENUE ELEMENTARY SCHOOL

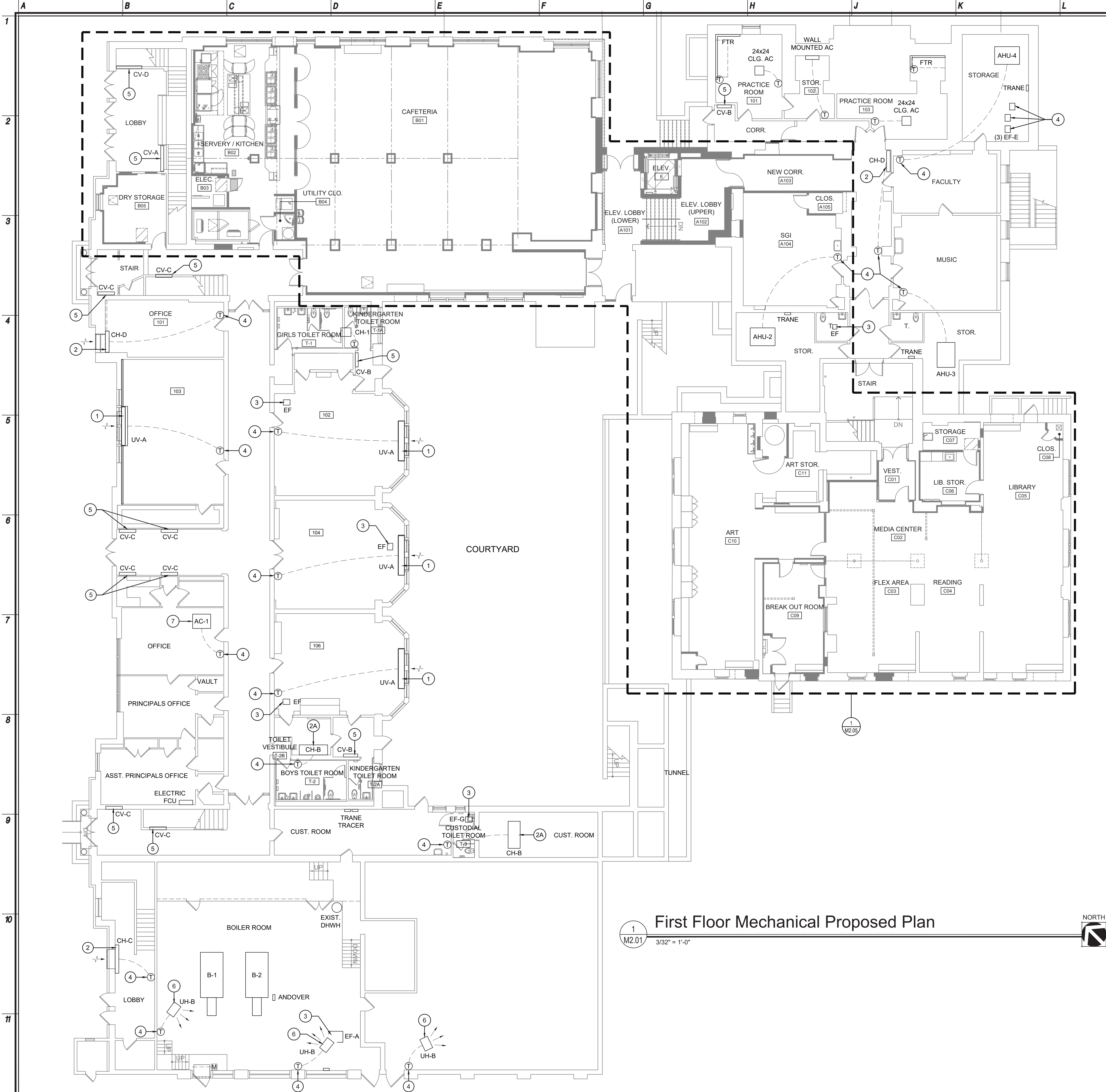
MAMARONECK UNION FREE SCHOOL DISTRICT

CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4,1092.72.03

File No. 10927203M201

M1.03



ITEM #	CONSTRUCTION KEY NOTES
1	EXISTING FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2	EXISTING FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2A	EXISTING CEILING-MOUNTED HORIZONTAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
3	EXISTING CEILING-MOUNTED EXHAUST FAN (EF) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS & TIE INTO EXISTING BMS. INTERLOCK WITH RESPECTIVE UNIT(S) FOR OPERATION.
4	REPLACE EXISTING THERMOSTAT WITH NEW "ANDOVER" DDC THERMOSTAT. TIE NEW THERMOSTAT TO RESPECTIVE UNIT(S) FOR OPERATION. TIE INTO EXISTING BMS.
5	EXISTING CONVECTOR (CV) TO REMAIN. REPLACE EXISTING CONTROL VALVE WITH NEW "ANDOVER" DDC CONTROL VALVE & TIE INTO EXISTING BMS. PROVIDE NEW "ANDOVER" DDC CONTROL VALVE TO EXISTING CV WITHOUT CONTROL VALVE & TIE INTO EXISTING BMS.
6	EXISTING CEILING-MOUNTED UNIT HEATER (UH) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS & TIE INTO EXISTING BMS.
7	EXISTING CEILING-MOUNTED MECHANICAL EQUIPMENT ABOVE CEILING TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.

- GENERAL INSTALLATION NOTES
- LOCATIONS OF EXISTING MECHANICAL EQUIPMENT, ETC. SHOWN ON DRAWINGS ARE BASED ON EXISTING DRAWINGS AND SITE OBSERVATIONS AND THEY ARE APPROXIMATE. NOT ALL EXISTING EQUIPMENT, ETC. ARE SHOWN ON DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
 - GENERAL CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILING TILES, LIGHTING, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW CONTROLS AND WIRING ABOVE CEILING REINSTALL TO MATCH EXISTING. ALL DAMAGED ITEMS SHALL BE REMOVED AND REPLACED.
 - TO ACCESS EXISTING CONTROL VALVE AND ACTUATORS INSIDE OF EXISTING UNIT VENTILATORS, CONTRACTOR IS REQUIRED TO REMOVE EXISTING PIPING, VALVES, COMPONENTS, ETC. AND REINSTALL THEM AFTER NEW WORK IS COMPLETE.
 - MECHANICAL CONTRACTOR IS RESPONSIBLE TO DRAIN-DOWN EXISTING HEATING HOT WATER SYSTEM TO ACCOMMODATE REPLACEMENT OF EXISTING CONTROL VALVES, ETC. RESTORE THE SYSTEMS AFTER ALL WORK IS COMPLETE.
 - PROVIDE NEW INSULATION ON ALL DISTURBED PIPING/INSULATION AND NEW PIPING/VALVES.
 - ALL EXISTING ABANDONED PNEUMATIC THERMOSTATS (NOT ALL SHOWN) AND AIR TUBING THAT ARE ACCESSIBLE (ABOVE CEILING, EXPOSED IN SPACES, NEAR EXISTING MECHANICAL EQUIPMENT, TO/FROM EXISTING PNEUMATIC CONTROL PANELS, ETC.) SHALL BE REMOVED IN ENTIRETY. EXISTING PNEUMATIC AIR TUBING THAT ARE NOT ACCESSIBLE (IN WALLS/CHASES, ABOVE HARD CEILING, ETC.) SHALL BE ABANDONED IN PLACE. GENERAL CONTRACTOR TO PATCH AND PAINT OPENINGS TO MATCH EXISTING WHERE THERMOSTATS AND ACCESSIBLE AIR TUBING ARE REMOVED. CHECK IN FIELD.
 - IF NEW DDC THERMOSTATS DO NOT COVER EXISTING WALL OPENINGS. PROVIDE S.S. PLATE TO COVER EACH OPENING. CHECK IN FIELD.
 - ALL NEW CONTROL VALVES, DAMPER ACTUATORS, THERMOSTATS, SPACE SENSORS, ETC. CALLED OUT ON CONSTRUCTION KEY NOTES SHALL BE DDC TYPE. ALL NEW CONTROL VALVES SHALL BE MODULATING TYPE. REFER TO DDC DIAGRAMS ON DWG. M6.04 AND SPEC. FOR DETAILED DDC WORK REQUIREMENTS.
 - PROVIDE LOCKABLE TAMPER-PROOF ENCLOSURES FOR ALL NEW DDC THERMOSTATS IN AREAS ACCESSSED BY STUDENTS (CLASSROOMS, CORRIDORS, LOBBIES, STUDENT TOILETS, AUDITORIUM, CAFETERIA, GYM, MEDIA CENTER, ETC.). VERIFY IN FIELD AND CONFIRM LOCATIONS WITH OWNER.
 - ALL NEW WIRING SHALL BE RUN CONCEALED ABOVE EXISTING SUSPENDED CEILING. ALL NEW EXPOSED WIRING SHALL BE RUN CONCEALED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
 - ALL LOW VOLTAGE CABLES SHALL BE PLENUM RATED.
 - ROOM NAMES/NUMBERS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY AND THEY MAY VARY IN FIELD.

MICHAEL J. MCGOVERN, R.A.

Revisions:
11/23/20

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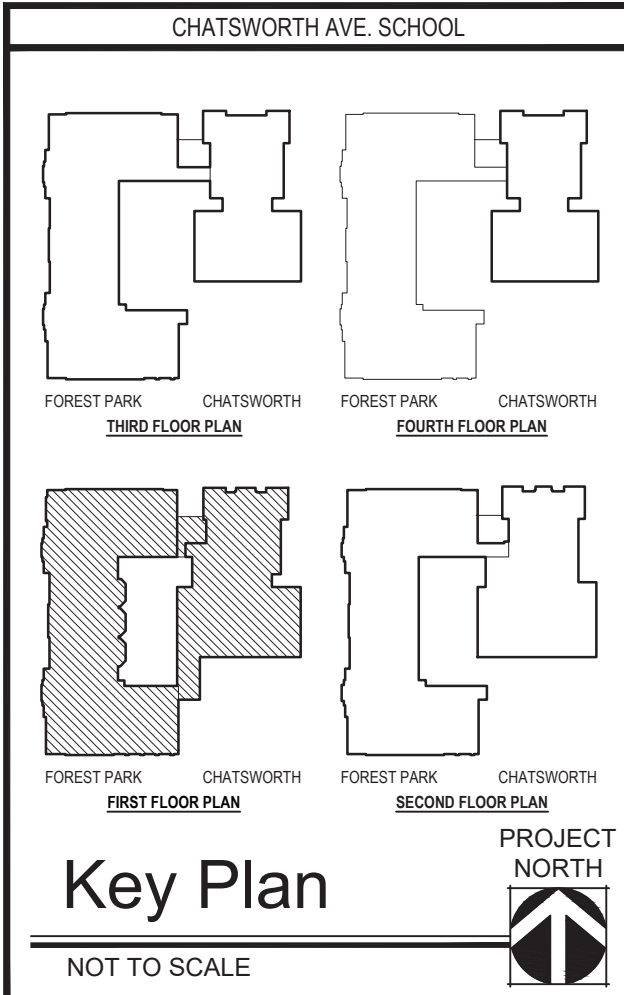
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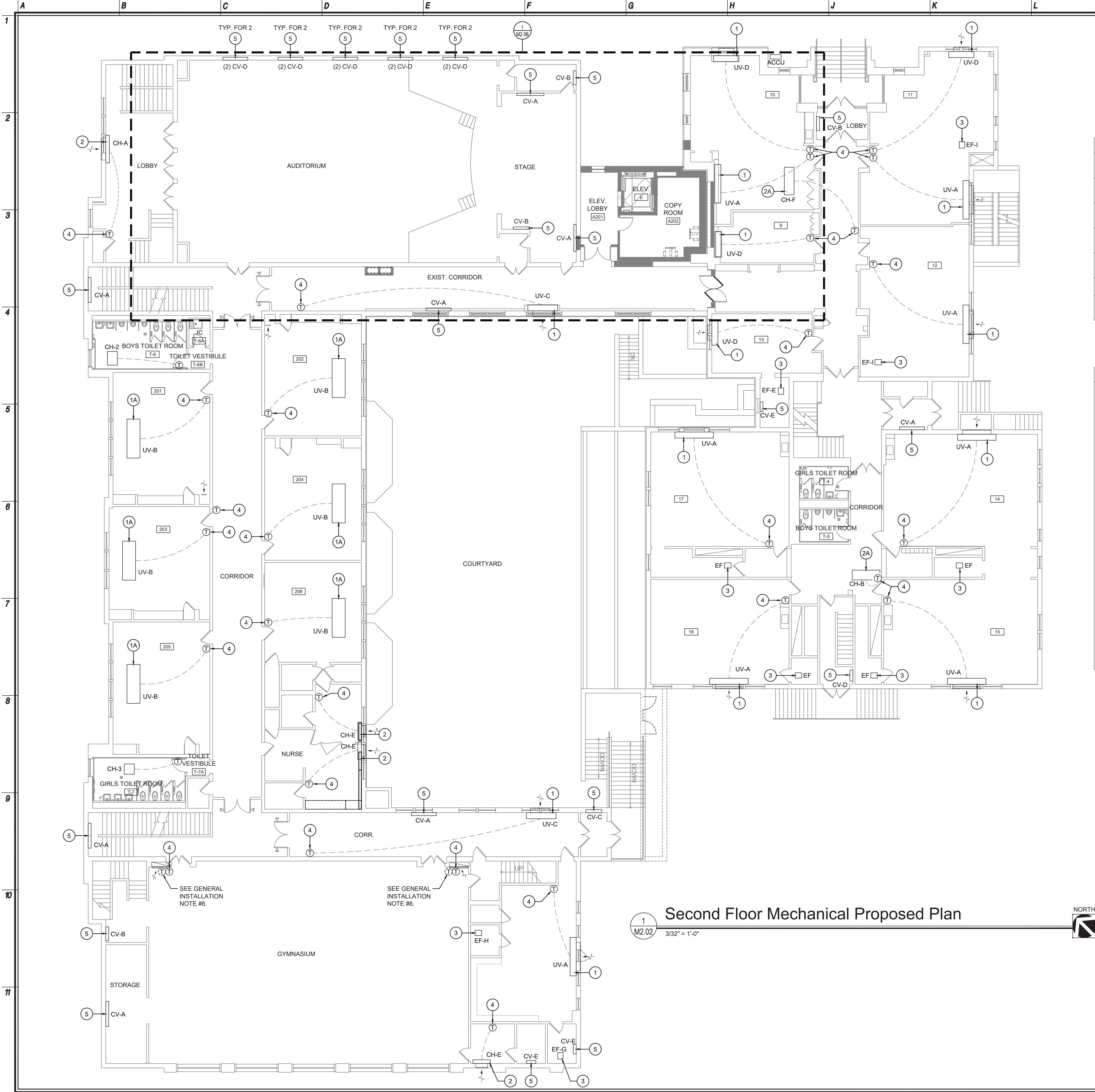
FIRST FLOOR MECHANICAL PLAN

2019 BOND REFERENDUM
CHATSORTH AVE. ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSORTH AVE., LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203M201

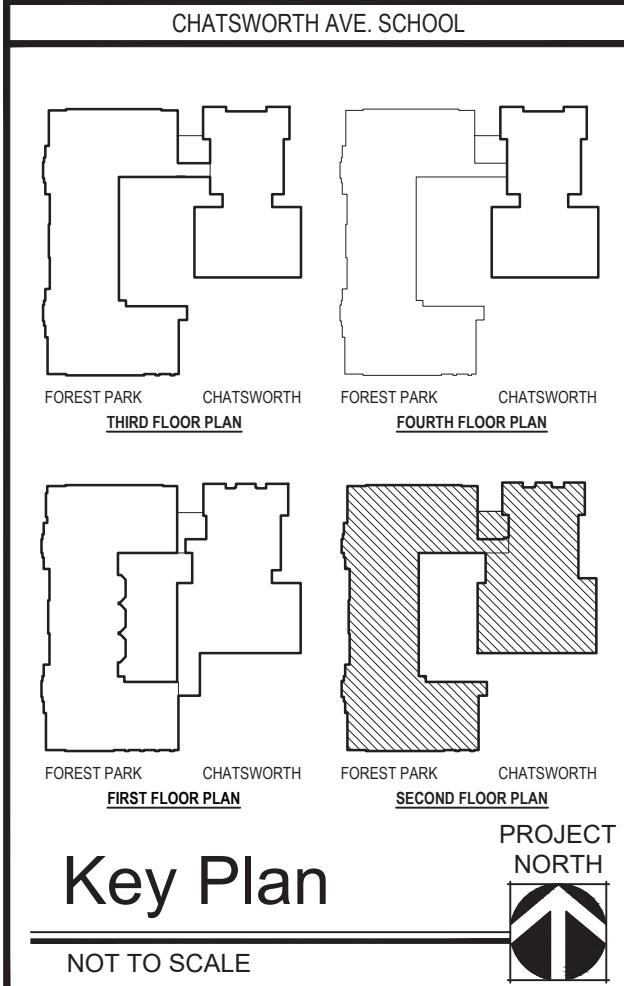
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ITEM #	CONSTRUCTION KEY NOTES
1	EXISTING FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
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2	EXISTING FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2A	EXISTING CEILING-MOUNTED HORIZONTAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
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- GENERAL INSTALLATION NOTES**
- LOCATIONS OF EXISTING MECHANICAL EQUIPMENT, ETC. SHOWN ON DRAWINGS ARE BASED ON EXISTING DRAWINGS AND SITE OBSERVATIONS AND THEY ARE APPROXIMATE. NOT ALL EXISTING EQUIPMENT, ETC. ARE SHOWN ON DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
 - GENERAL CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILING TILES, LIGHTING, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW CONTROLS AND WIRING ABOVE CEILING REINSTALL TO MATCH EXISTING. ALL DAMAGED ITEMS SHALL BE REMOVED AND REPLACED.
 - TO ACCESS EXISTING CONTROL VALVE AND ACTUATORS INSIDE OF EXISTING UNIT VENTILATORS, CONTRACTOR IS REQUIRED TO REMOVE EXISTING PIPING, VALVES, COMPONENTS, ETC. AND REINSTALL THEM AFTER NEW WORK IS COMPLETE.
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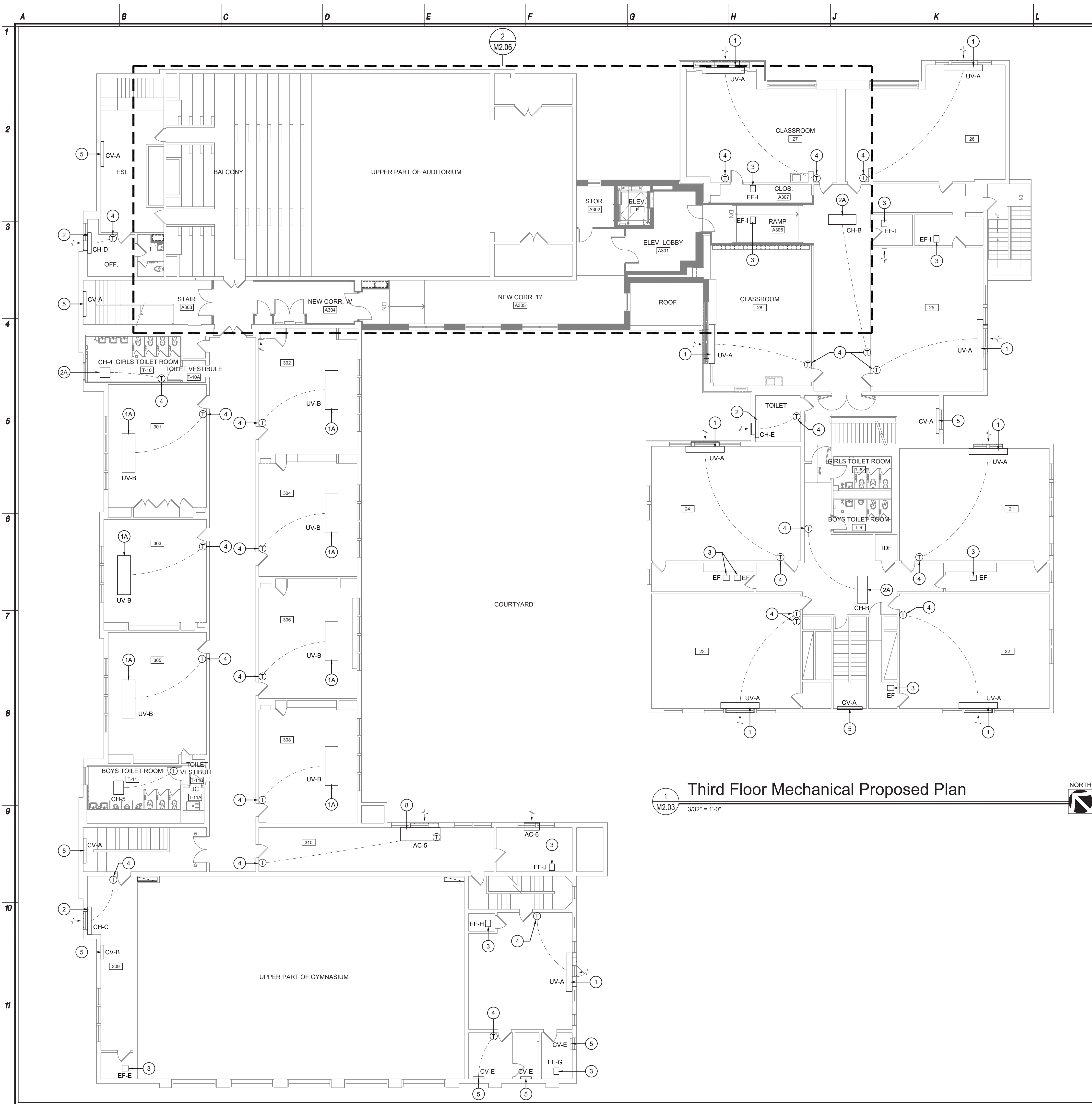
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NYSED PROJECT # 66-07-01-03-0-005-020
SECOND FLOOR MECHANICAL PLAN
2019 BOND REFERENDUM
2019 BOND REFERENDUM
CHATSORTH AVE. ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSORTH AVE., LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203M201

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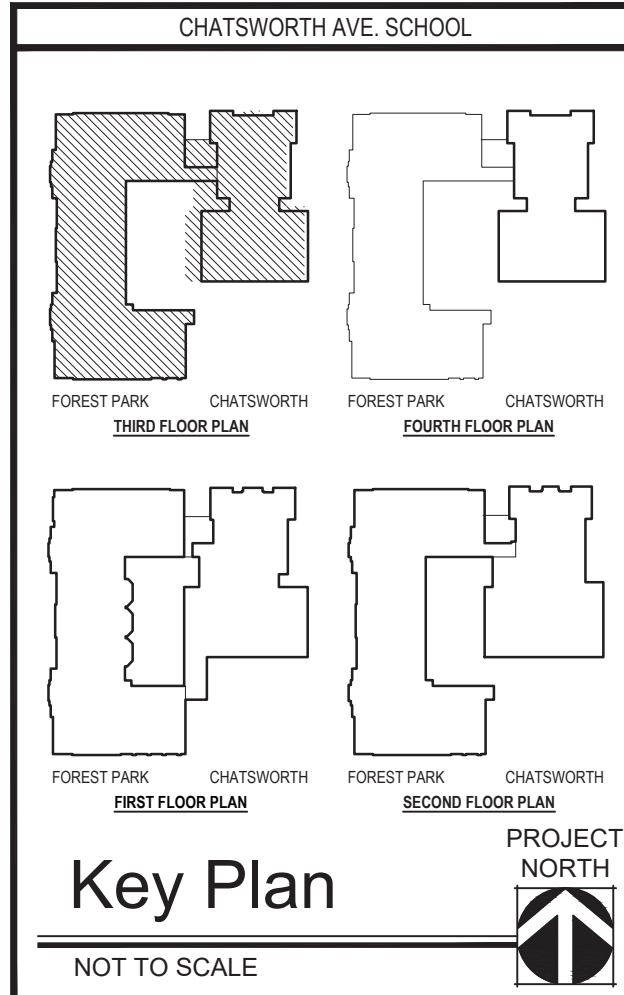
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M2.03
3/32" = 1'-0"

Third Floor Mechanical Proposed Plan

NORTH

ITEM #	CONSTRUCTION KEY NOTES
1	EXISTING FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
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8	EXISTING FLOOR-MOUNTED SELF-CONTAINED HVAC MECHANICAL EQUIPMENT TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.

- GENERAL INSTALLATION NOTES
- LOCATIONS OF EXISTING MECHANICAL EQUIPMENT, ETC. SHOWN ON DRAWINGS ARE BASED ON EXISTING DRAWINGS AND SITE OBSERVATIONS AND THEY ARE APPROXIMATE. NOT ALL EXISTING EQUIPMENT, ETC. ARE SHOWN ON DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
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 - ALL EXISTING ABANDONED PNEUMATIC THERMOSTATS (NOT ALL SHOWN) AND AIR TUBING THAT ARE ACCESSIBLE (ABOVE CEILING, EXPOSED IN SPACES, NEAR EXISTING MECHANICAL EQUIPMENT, TO/FROM EXISTING PNEUMATIC CONTROL PANELS, ETC.) SHALL BE REMOVED IN ENTIRETY. EXISTING PNEUMATIC AIR TUBING THAT ARE NOT ACCESSIBLE (IN WALLS/CHASES, ABOVE HARD CEILING, ETC.) SHALL BE ABANDONED IN PLACE. GENERAL CONTRACTOR TO PATCH AND PAINT OPENINGS TO MATCH EXISTING WHERE THERMOSTATS AND ACCESSIBLE AIR TUBING ARE REMOVED. CHECK IN FIELD.
 - IF NEW DDC THERMOSTATS DO NOT COVER EXISTING WALL OPENINGS. PROVIDE S.S. PLATE TO COVER EACH OPENING. CHECK IN FIELD.
 - ALL NEW CONTROL VALVES, DAMPER ACTUATORS, THERMOSTATS, SPACE SENSORS, ETC. CALLED OUT ON CONSTRUCTION KEY NOTES SHALL BE DDC TYPE. ALL NEW CONTROL VALVES SHALL BE MODULATING TYPE. REFER TO DDC DIAGRAMS ON DWG. M6.04 AND SPEC. FOR DETAILED DDC WORK REQUIREMENTS.
 - PROVIDE LOCKABLE TAMPER-PROOF ENCLOSURES FOR ALL NEW DDC THERMOSTATS IN AREAS ACCESSIBLE BY STUDENTS (CLASSROOMS, CORRIDORS, LOBBIES, STUDENT TOILETS, AUDITORIUM, CAFETERIA, GYM, MEDIA CENTER, ETC.). VERIFY IN FIELD AND CONFIRM LOCATIONS WITH OWNER.
 - ALL NEW WIRING SHALL BE RUN CONCEALED ABOVE EXISTING SUSPENDED CEILING. ALL NEW EXPOSED WIRING SHALL BE RUN CONCEALED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
 - ALL LOW VOLTAGE CABLES SHALL BE PLENUM RATED.
 - ROOM NAMES/NUMBERS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY AND THEY MAY VARY IN FIELD.



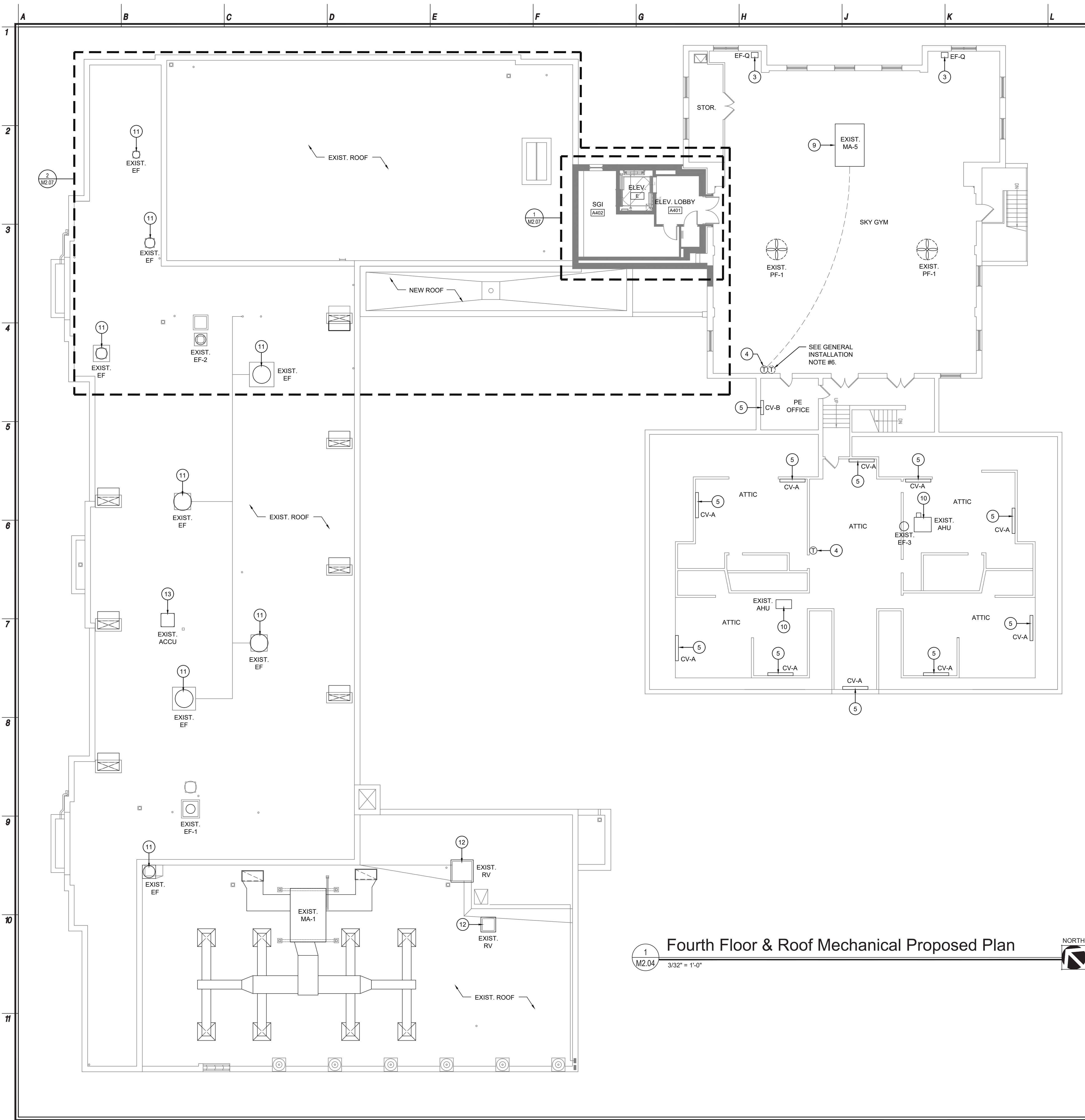
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022257-1
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License No.

Revisions:
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NYSED PROJECT # 66-07-01-03-0-005-020
THIRD FLOOR MECHANICAL PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538
Job No. 4,1092.72.03
File No. 10927203M201
M2.03



ITEM #	CONSTRUCTION KEY NOTES
1	EXISTING FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
1A	EXISTING CEILING-MOUNTED HORIZONTAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2	EXISTING FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2A	EXISTING CEILING-MOUNTED HORIZONTAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
3	EXISTING CEILING-MOUNTED EXHAUST FAN (EF) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS & TIE INTO EXISTING BMS. INTERLOCK WITH RESPECTIVE UNIT(S) FOR OPERATION.
4	REPLACE EXISTING THERMOSTAT WITH NEW "ANDOVER" DDC THERMOSTAT. TIE NEW THERMOSTAT TO RESPECTIVE UNIT(S) FOR OPERATION. TIE INTO EXISTING BMS.
5	EXISTING CONVECTOR (CV) TO REMAIN. REPLACE EXISTING CONTROL VALVE WITH NEW "ANDOVER" DDC CONTROL VALVE & TIE INTO EXISTING BMS. PROVIDE NEW "ANDOVER" DDC CONTROL VALVE TO EXISTING CV WITHOUT CONTROL VALVE & TIE INTO EXISTING BMS.
9	EXISTING CEILING-MOUNTED MECHANICAL EQUIPMENT TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
10	EXISTING FLOOR-MOUNTED MECHANICAL EQUIPMENT IN ATTIC TO REMAIN. PROVIDE NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
11	EXISTING EXHAUST FAN (EF) ON ROOF TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
12	EXISTING ROOF INTAKE/RELIEF VENT (RV) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
13	EXISTING AIR-COOLED CONDENSING UNIT (ACCU) TO REMAIN. PROVIDE NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.

- GENERAL INSTALLATION NOTES**
- LOCATIONS OF EXISTING MECHANICAL EQUIPMENT, ETC. SHOWN ON DRAWINGS ARE BASED ON EXISTING DRAWINGS AND SITE OBSERVATIONS AND THEY ARE APPROXIMATE. NOT ALL EXISTING EQUIPMENT, ETC. ARE SHOWN ON DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
 - GENERAL CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILING TILES, LIGHTING, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW CONTROLS AND WIRING ABOVE CEILING REINSTALL TO MATCH EXISTING. ALL DAMAGED ITEMS SHALL BE REMOVED AND REPLACED.
 - TO ACCESS EXISTING CONTROL VALVE AND ACTUATORS INSIDE OF EXISTING UNIT VENTILATORS, CONTRACTOR IS REQUIRED TO REMOVE EXISTING PIPING, VALVES, COMPONENTS, ETC. AND REINSTALL THEM AFTER NEW WORK IS COMPLETE.
 - MECHANICAL CONTRACTOR IS RESPONSIBLE TO DRAIN-DOWN EXISTING HEATING HOT WATER SYSTEM TO ACCOMMODATE REPLACEMENT OF EXISTING CONTROL VALVES, ETC. RESTORE THE SYSTEMS AFTER ALL WORK IS COMPLETE.
 - PROVIDE NEW INSULATION ON ALL DISTURBED PIPING/INSULATION AND NEW PIPING/VALVES.
 - ALL EXISTING ABANDONED PNEUMATIC THERMOSTATS (NOT ALL SHOWN) AND AIR TUBING THAT ARE ACCESSIBLE (ABOVE CEILING, EXPOSED IN SPACES, NEAR EXISTING MECHANICAL EQUIPMENT, TO/FROM EXISTING PNEUMATIC CONTROL PANELS, ETC.) SHALL BE REMOVED IN ENTIRETY. EXISTING PNEUMATIC AIR TUBING THAT ARE NOT ACCESSIBLE (IN WALLS/CHASES, ABOVE HARD CEILING, ETC.) SHALL BE ABANDONED IN PLACE. GENERAL CONTRACTOR TO PATCH AND PAINT OPENINGS TO MATCH EXISTING WHERE THERMOSTATS AND ACCESSIBLE AIR TUBING ARE REMOVED. CHECK IN FIELD.
 - IF NEW DDC THERMOSTATS DO NOT COVER EXISTING WALL OPENINGS. PROVIDE S.S. PLATE TO COVER EACH OPENING. CHECK IN FIELD.
 - ALL NEW CONTROL VALVES, DAMPER ACTUATORS, THERMOSTATS, SPACE SENSORS, ETC. CALLED OUT ON CONSTRUCTION KEY NOTES SHALL BE DDC TYPE. ALL NEW CONTROL VALVES SHALL BE MODULATING TYPE. REFER TO DDC DIAGRAMS ON DWG. M6.04 AND SPEC. FOR DETAILED DDC WORK REQUIREMENTS.
 - PROVIDE LOCKABLE TAMPER-PROOF ENCLOSURES FOR ALL NEW DDC THERMOSTATS IN AREAS ACCESSED BY STUDENTS (CLASSROOMS, CORRIDORS, LOBBIES, STUDENT TOILETS, AUDITORIUM, CAFETERIA, GYM, MEDIA CENTER, ETC.). VERIFY IN FIELD AND CONFIRM LOCATIONS WITH OWNER.
 - ALL NEW WIRING SHALL BE RUN CONCEALED ABOVE EXISTING SUSPENDED CEILING. ALL NEW EXPOSED WIRING SHALL BE RUN CONCEALED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
 - ALL LOW VOLTAGE CABLES SHALL BE PLENUM RATED.
 - ROOM NAMES/NUMBERS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY AND THEY MAY VARY IN FIELD.

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Revisions:
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11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

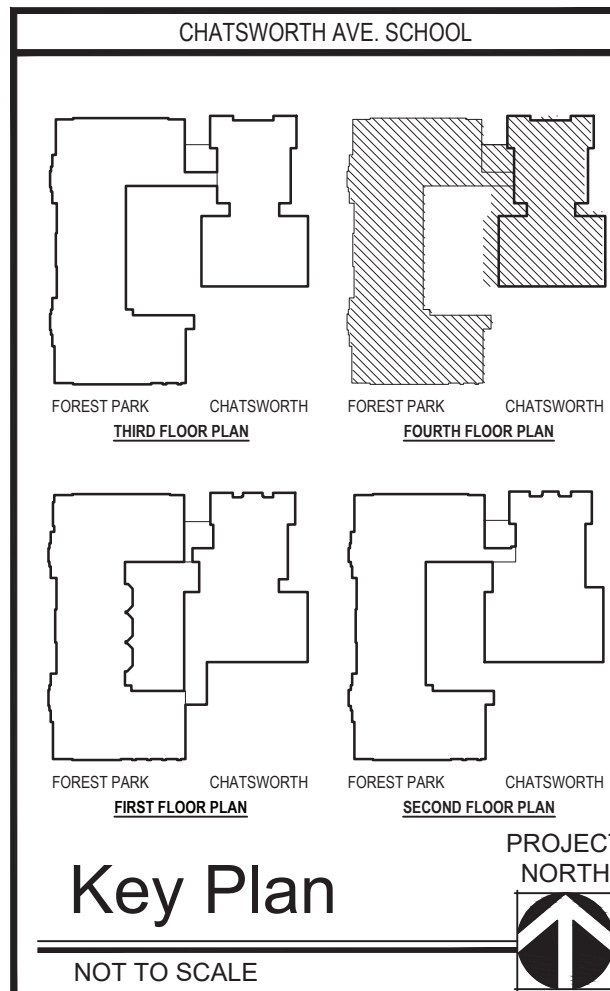
FOURTH FLOOR & ROOF MECH. PLAN

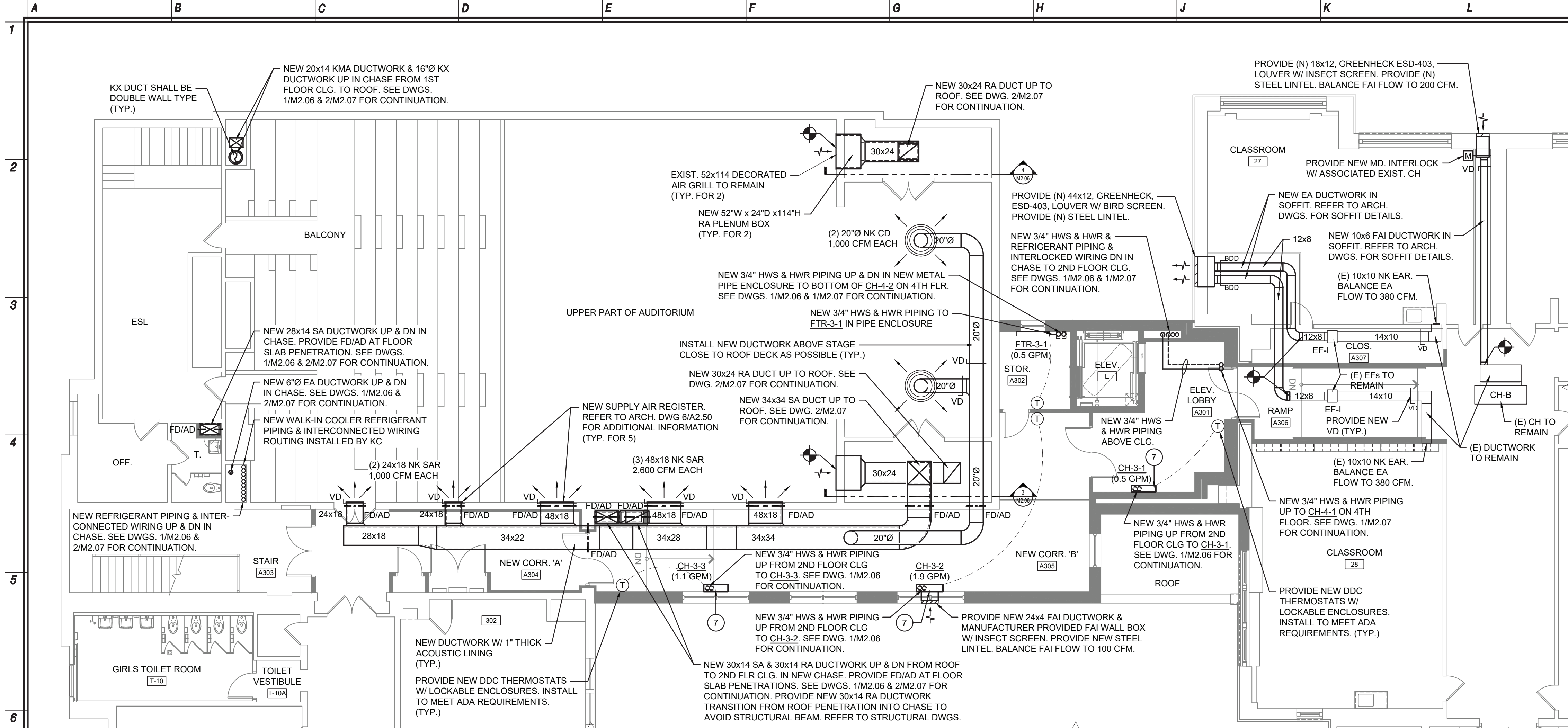
2019 BOND REFERENDUM

CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

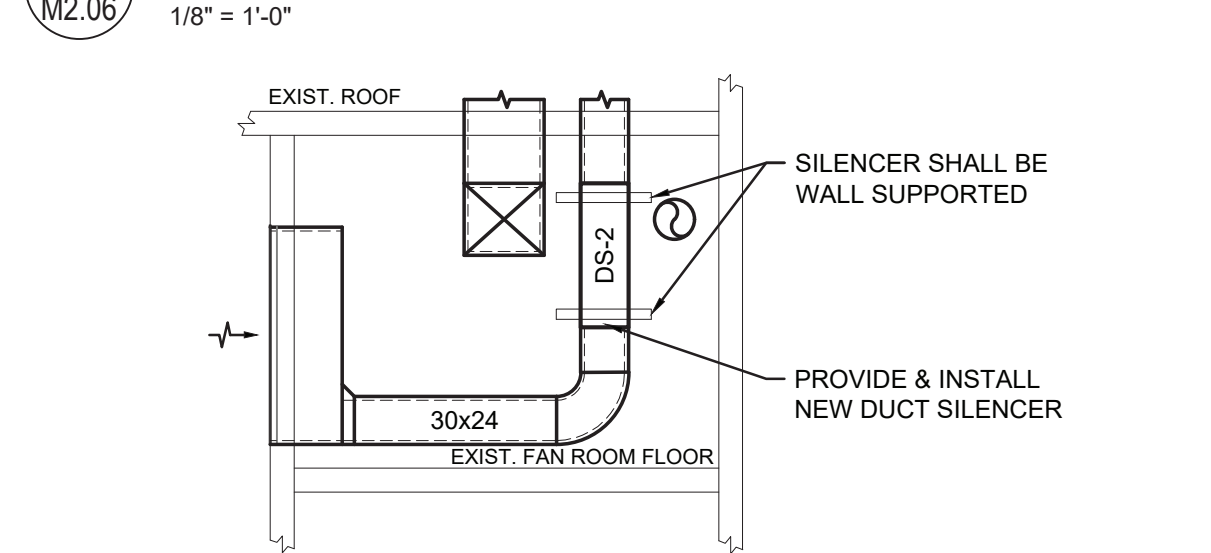
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File No. 10927203M201

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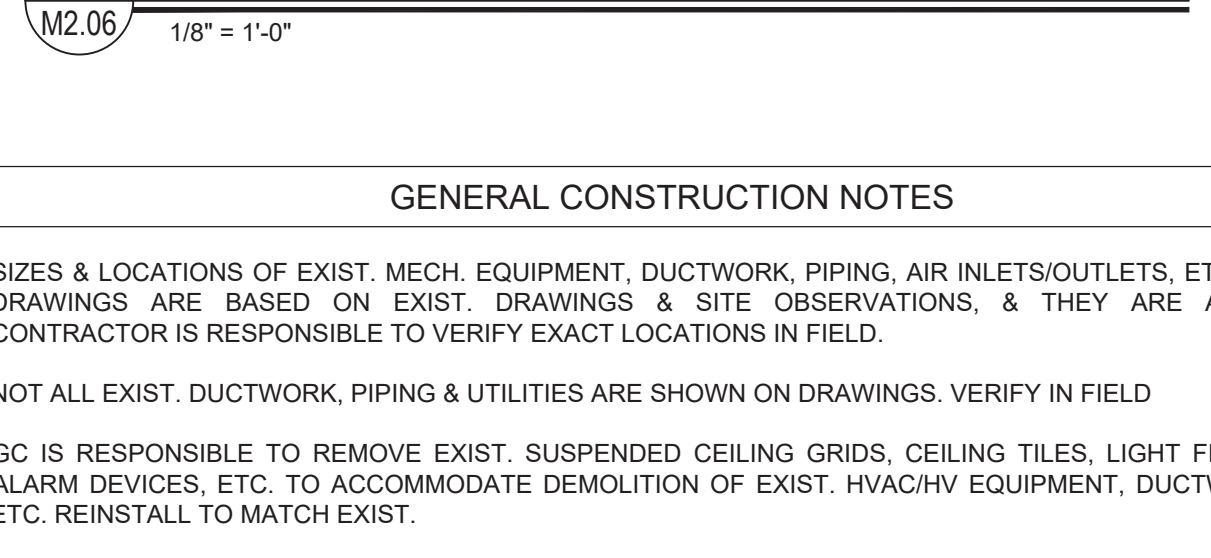




SECTION AT NORTH FAN ROOM

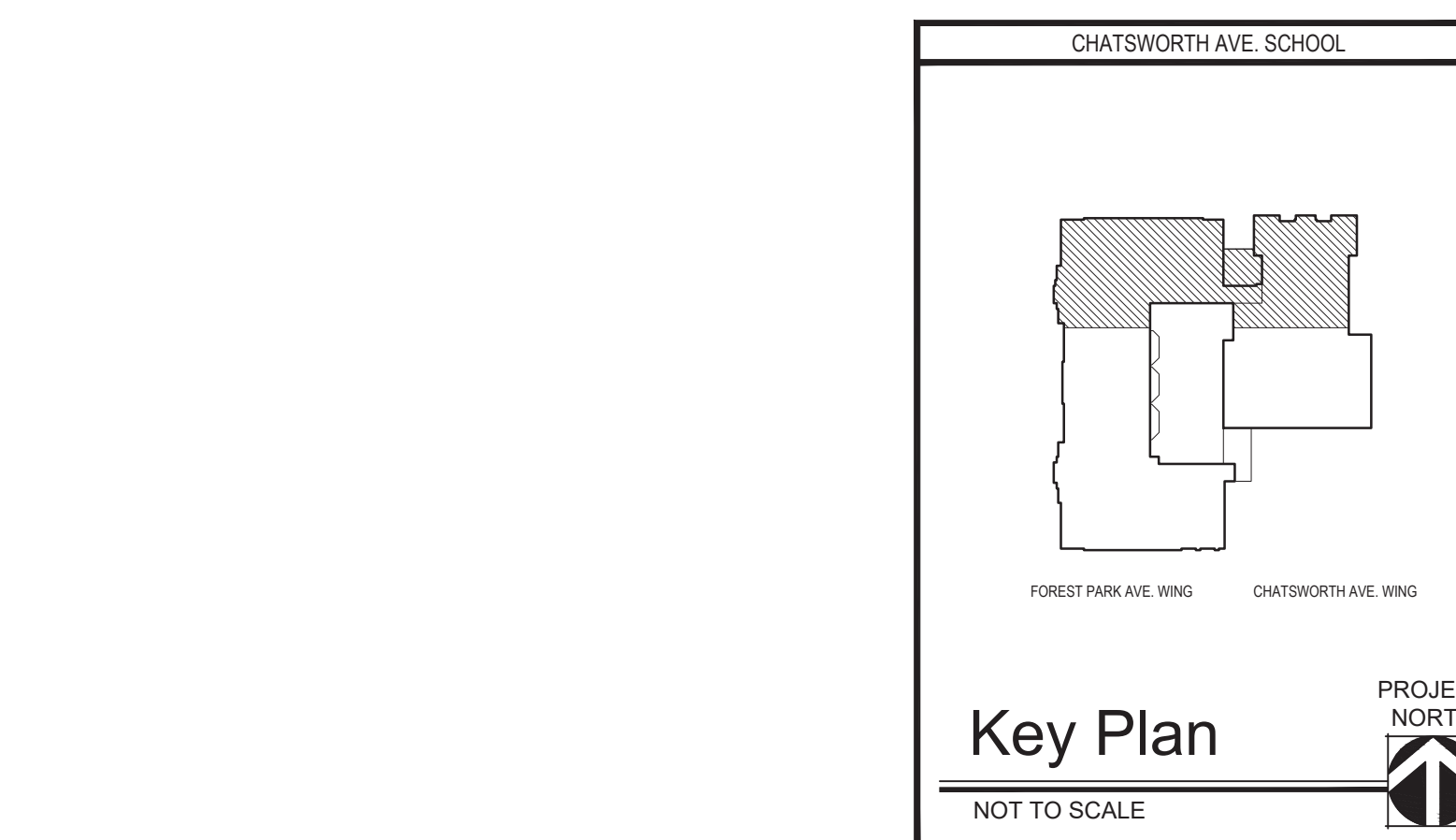
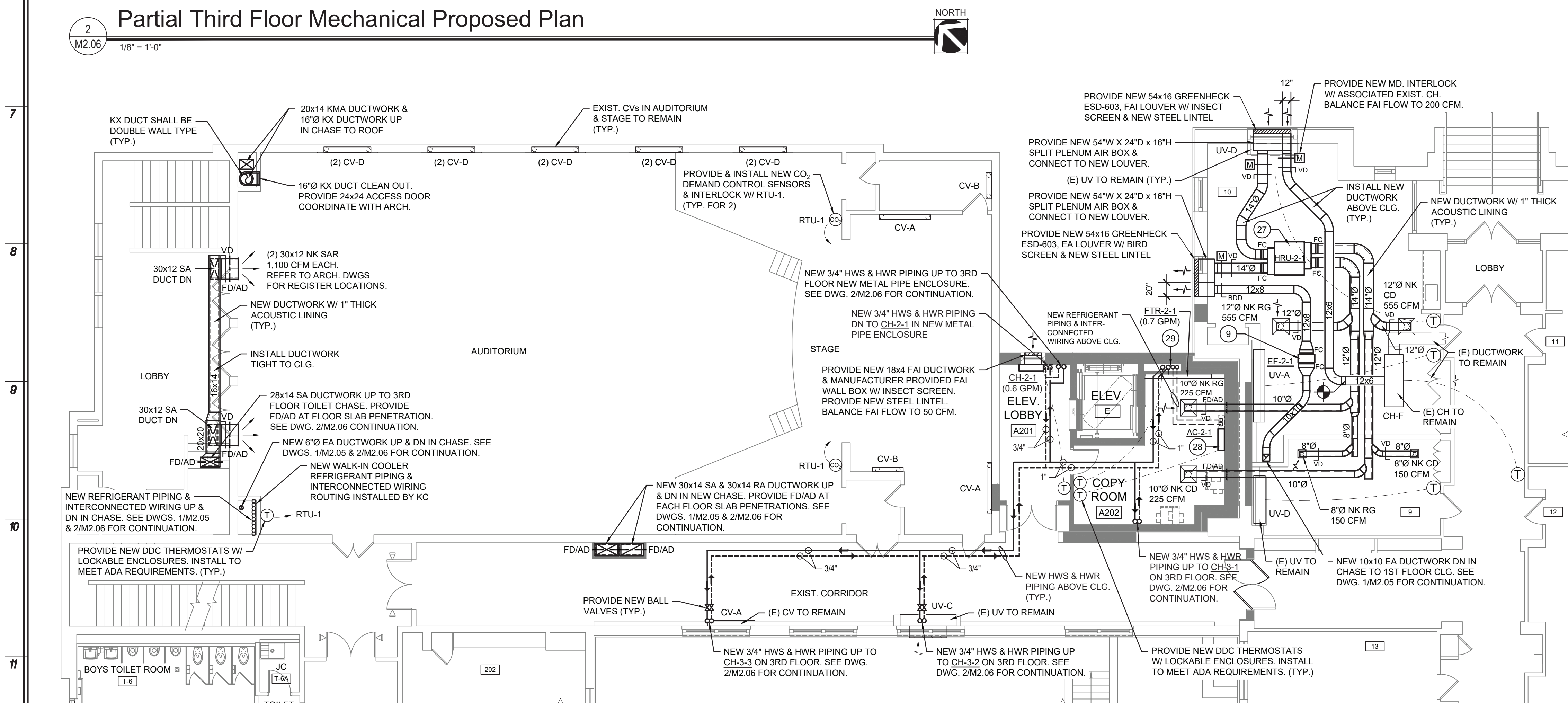


SECTION AT SOUTH FAN ROOM



- GENERAL CONSTRUCTION NOTES**
- SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, PIPING, AIR INLETS/OUTLETS, ETC. SHOWN ON DRAWINGS ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
 - NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD
 - GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING GRIDS, CEILING TILES, LIGHT FIXTURES, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE DEMOLITION OF EXIST. HVAC/HV EQUIPMENT, DUCTWORK, PIPING, ETC. REINSTALL TO MATCH EXIST.
 - GC IS RESPONSIBLE TO SAWCUT & CORE DRILL EXIST. WALLS / FLOORS / CLG. FOR NEW DUCTWORK / PIPING / CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS.
 - ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE GC.
 - MC IS RESPONSIBLE TO ISOLATE / SHUT-DOWN & DRAIN-DOWN EXIST. HEATING PIPING SYSTEMS TO ACCOMMODATE MECHANICAL DEMOLITION & NEW INSTALLATION. RESTORE THE SYSTEMS AFTER ALL WORK IS COMPLETE.
 - ALL NEW DDC WIRING SHALL BE INSTALLED CONCEALED ABOUT EXIST. / NEW SUSPENDED CLG. WHEREVER NEW THERMOSTAT ARE INSTALLED ON NEW WALLS, ALL NEW DDC WIRING FROM MECH. EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED CONCEALED IN WALLS. WHEREVER NEW THERMOSTATS ARE INSTALLED ON EXIST. MASONRY WALL, ALL NEW DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
 - GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE GC.
 - ALL EXIST. DUCTWORK & AIR INLETS/OUTLETS THAT ARE SHOWN TO REMAIN & BE REUSED SHALL BE VACUUM-CLEANED THOROUGHLY TO BE FREE OF DUST & DEBRIS. PROVIDE PHOTO DOCUMENTATION BEFORE & AFTER CLEANING.

ITEM #	CONSTRUCTION KEY NOTES
7	PROVIDE & INSTALL NEW FLOOR-MOUNTED VERTICAL TYPE CABINET HEATER (CH) OF SIZE & CAPACITIES SCHEDULED. COMPLETE W/ HW PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES. PROVIDE CH-3-2 W/ NEW FAI DUCTWORK & LOUVER.
9	PROVIDE & INSTALL NEW EXHAUST FAN (EF) OF SIZE & CAPACITIES SCHEDULED ABOVE CEILING. COMPLETE W/ DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
27	PROVIDE & INSTALL NEW HEAT RECOVER UNIT (HRU) OF SIZE & CAPACITIES SCHEDULED ABOVE CEILING. COMPLETE W/ ALL DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
28	PROVIDE & INSTALL NEW VRF WALL-MOUNTED TYPE DUCTLESS SPLIT AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED. COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
29	NEW 1\" HWS & HWR PIPING UP FROM 1ST FLOOR CLG. TO 2ND FLR CLG. IN CHASE & NEW 3/4\" HWS & HWR & REFRIGERANT PIPING & INTERCONNECTED WIRING UP TO 3RD FLR CHASE. SEE DWGS. 1/M2.05 & 2/M2.06 FOR CONTINUATION. NEW 3/4\" HWS & HWR PIPING FROM NEW 1\" HWS & HWR PIPE RISERS TO FTR-2-1.



Date: 1/10/20
Checked: MAM
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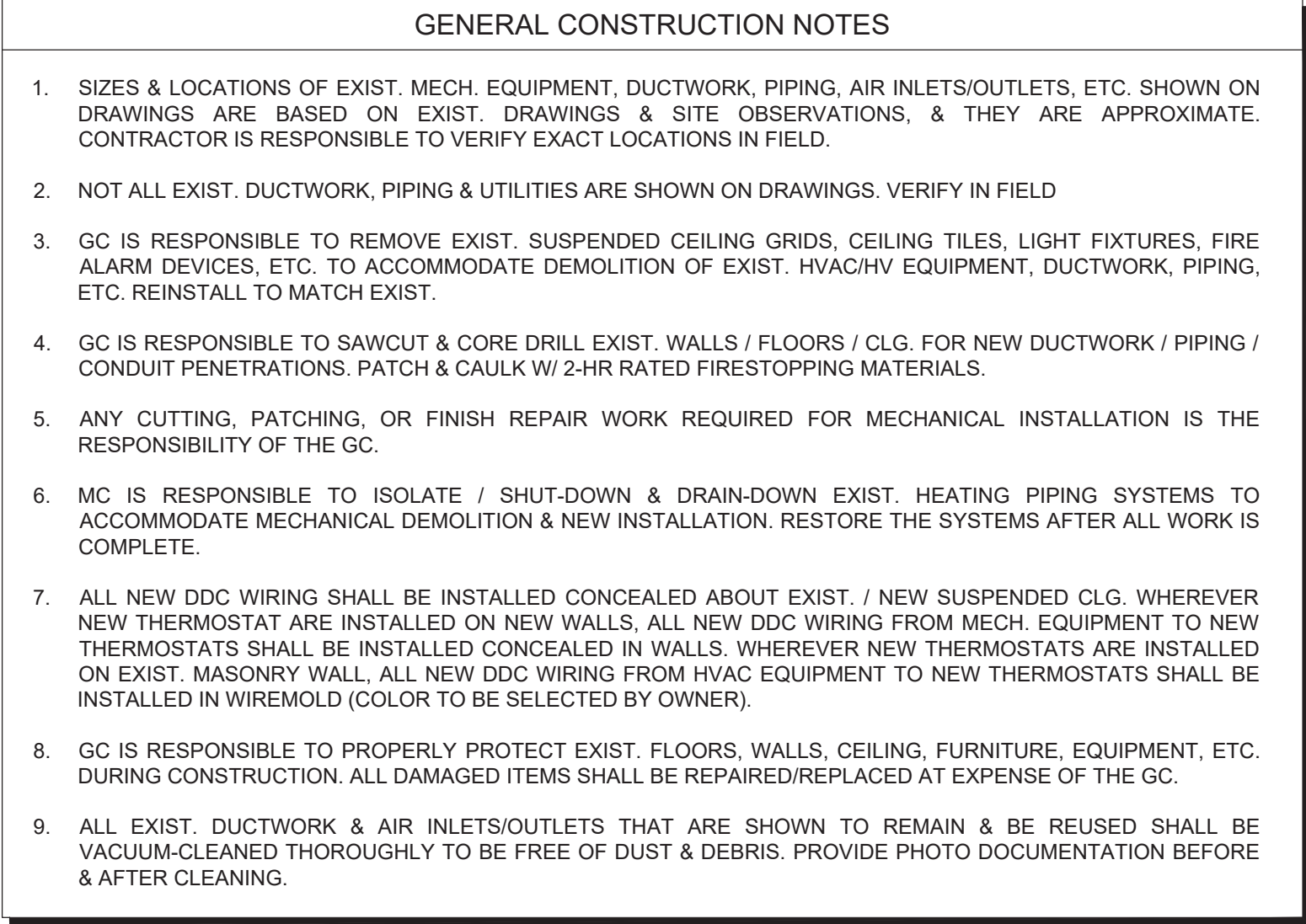
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ISSUE TO BD 11/23/20

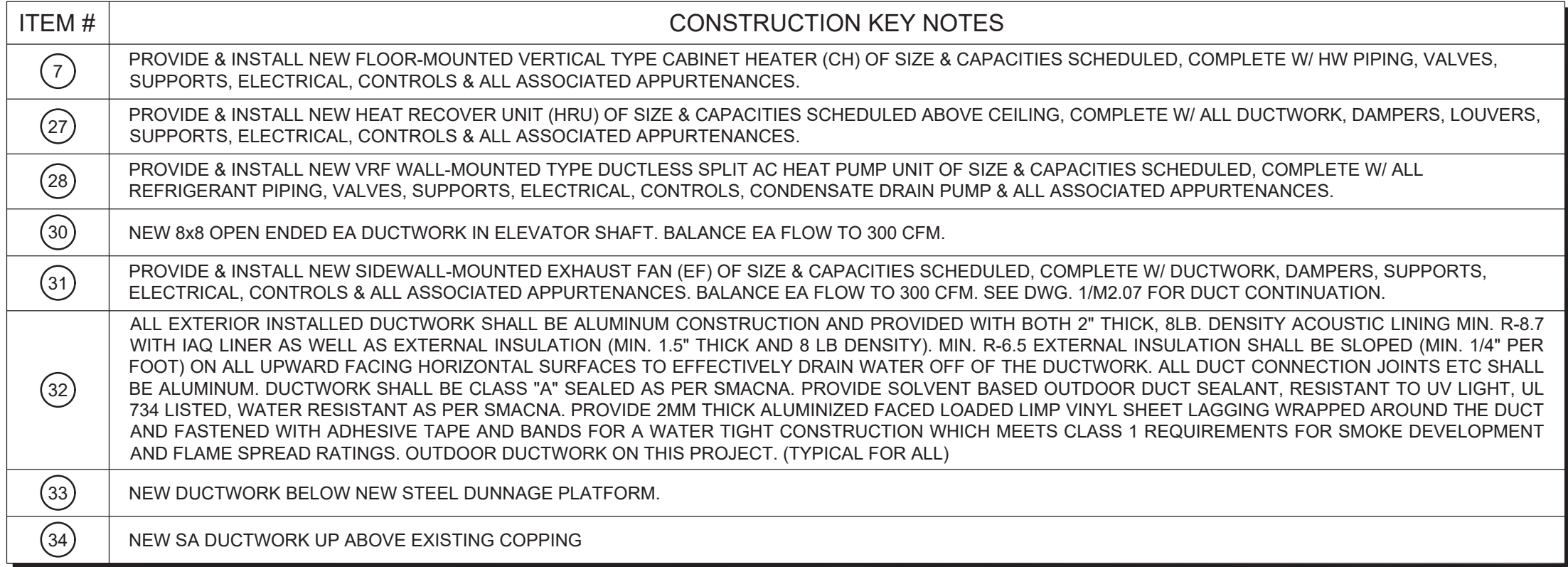
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MECHANICAL PROPOSED PLANS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

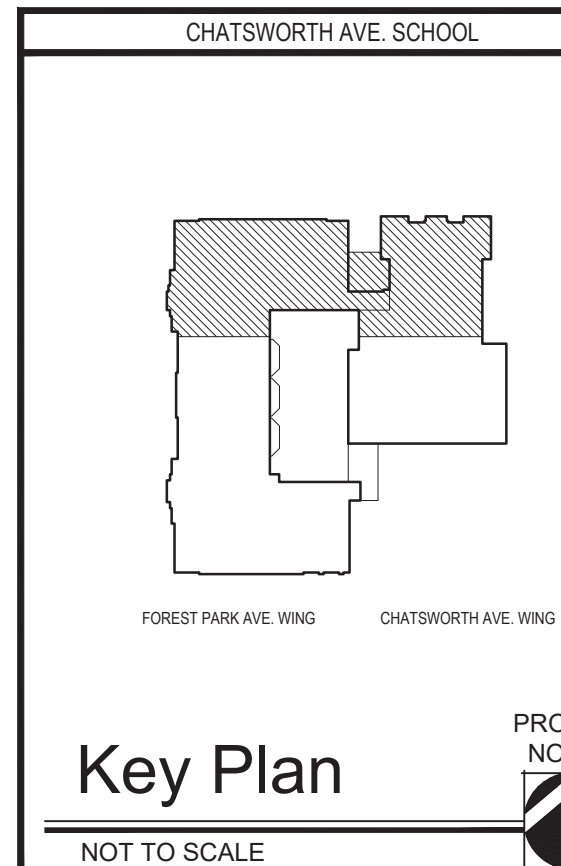
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File No. 10927203M201
M2.06



NORTH



NORTH



PACKAGED ROOFTOP GAS FIRED HV/HVAC W/ HEAT RECOVERY WHEEL UNIT SCHEDULE

TAG NO.	AREAS SERVED	MANUFACTURER	MODEL NO.	SUPPLY (CFM)	MIN. O.A. (CFM)	MAX. O.A. (CFM)	SUPPLY FAN DATA				EXHAUST FAN DATA				DX COOLING						GAS HEATING				ENERGY RECOVERY WHEEL						COMPRESSOR		CONDENSER		APPROX. UNIT DIMENSIONS (L x W x H) (IN)	APPROX. UNIT WT. (LBS)	ELECTRICAL DATA		EFFICIENCY		REFRIGERANT TYPE	REMARKS												
							EXT. SP (IN)	QTY	BHP	MHP	VFD	EXT. SP (IN)	QTY	BHP	MHP	VFD	COOLING (TMBH)	COOLING (SMBH)	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	INPUT (MBH)	OUTPUT (MBH)	EAT (°F)	LAT (°F)	COOLING			HEATING							MIN. GAS PRESSURE	NO.	RLA	NO.			HP (AMPS)	V/PH/Hz	UNIT		EER	IEER						
																											EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	EADB (°F)	LADB (°F)	LAWB (°F)	MCA											MOP									
RTU-1	EXIST. AUDITORIUM & STAGE	AAON	RN-050-8-0-EA09-DB	14,000	1,200	6,000	2.75	2.0	7.4	10.0	YES	2.0	0.75	3.0	5.0	YES	575.9	534.8	78.0	65.1	50.6	50.4	810.0	648.0	60.1	103.0	95.0	75.0	78.0	65.0	0.0	47.0	44.4	6"-10.5" WC.	4	48.1 EA.	6	3/4 EA.	203 x 100 x 102	7,500	208/3/60	321	350	11.0	12.7	R-410A	SEE NOTES.							
RTU-2 (DOAS)	CAFETERIA B01	DAIKIN	DPS007A	3,100	3,100	3,100	1.50	1.0	2.0	4.0	NO	1.5	1	2.0	4.0	NO	95.8	76.7	80.0	67.0	57.4	57.3	320.0	256.0	14.0	109.1	95.0	75.0	75.0	62.0	0.0	70.0	50.0	7"-14" WC.	2	11.9/8.6	2	(4 EA.)	111 x 96.5 x 56.8	2,600	208/3/60	42.7	50	12.1	--	R-410A	SEE NOTES							
NOTES: 1. ALL UNITS SHALL BE PROVIDED W/ MODULATING GAS HEAT CONTROL. 2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE. 3. ALL UNITS SHALL BE PROVIDED W/ SINGLE POINT POWER CONNECTION. 4. PROVIDE CONDENSER FAN COIL GUARDS, NON-FUSED DISCONNECT SWITCH, & GFI CONVENIENCE OUTLET FOR EACH UNIT. 5. ALL UNITS SHALL BE PROVIDE W/ SPRING VIBRATION ISOLATION RAILS.																																	6. PROVIDE PROGRAMMABLE THERMOSTATS W/ LCD SCREEN & DDC CONTROLS FOR ALL UNITS. CONNECT UNIT TO A NEW BMS WITH WEB-BASED ACCESS. 7. RTU-1 & 2 SHALL BE PROVIDED W/ DUAL ENTHALPY 100% MODULATING POWER EXHAUST ECONOMIZER FANS, CONTROLS & DAMPERS . 8. RTU-1 & 2 SHALL BE PROVIDED W/ 2" MERV 13 FILTERS & (2) SETS OF SPARE FILTERS OF ALL TYPES. 9. PROVIDE SPARE SET OF INSTALLED ENERGY RECOVERY WHEEL MEDIA FOR EACH UNIT. 10. PROVIDE W/ S.S. FLUE VENT EXTENSIONS FOR EACH UNIT.											11. ELECTRICAL SUBCONTRACTOR TO PROVIDE A DUCT SMOKE DETECTOR IN MAIN RETURN AND SUPPLY AIR DUCT FOR RTU. INTERLOCK RTU WITH FIRE ALARM SYSTEM. RTU SHALL BE SHUT DOWN UPON ACTIVATION OF FIRE ALARM SYSTEM. 12. PROVIDE TWO-YEARS PART & LABOR WARRANTY FROM THE MANUFACTURER. 13. RTU-1 SHALL HAVE A POWER EXHAUST FAN. MODULATE BOTH SUPPLY AND RETURN AIRFLOW PROPORTIONATELY TO MAINTAIN CONSTANT DIFFERENCE BETWEEN S.A. & R.A. 14. UNIT TO BE TIED INTO (N) ANDOVER BUILDING MANAGEMENT SYSTEM (BMS).										

UNIT VENTILATOR WITH HOT WATER HEATING / DX COOLING SCHEDULE

TAG NO.	AREA SERVED	SUPPLY CFM	OUTSIDE AIR (CFM)	DX COOLING					HOT WATER HEATING							ELECTRICAL DATA			MODEL & MANUFACTURER	DIMENSIONS (W x D x H) (IN.)	REFRIGERANT	REMARKS		
				TOTAL (MBH)	SENS. (MBH)	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	INPUT (MBH)	EAT (°F)	LAT (°F)	EWTF (°F)	LWTF (°F)	FLOW RATE (GPM)	WPD (FT)	V/PH/Hz	MCA					MOP	
UV-1-1	CAFETERIA B01	1,500	450	53.7	40.3	80.0	67.0	54.3	54.3	50.0	70	110	180	160	5.0	6.4	208/1/60	3.9	15	UAUV9S15	DAIKIN	98 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
UV-1-2	CAFETERIA B01	1,500	450	53.7	40.3	80.0	67.0	54.3	54.3	31.0	70	110	180	160	3.1	6.4	208/1/60	3.9	15	UAUV9S15	DAIKIN	98 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
UV-1-3 THRU 5	MEDIA CENTER C02 / LIBRARY C05	1,500	325	53.7	40.3	79.3	66.2	54.3	54.3	31.0	70	110	180	160	3.1	6.4	208/1/60	3.9	15	UAUV9S15	DAIKIN	98 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
UV-1-6	BREAK OUT ROOM C09	500	180	14.1	10.5	82.2	68.7	56.0	56.0	23.0	70	110	180	160	2.3	5.2	208/1/60	3.9	15	UAUV9S10	DAIKIN	74 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
UV-1-7 & 8	ART ROOM C10	1,000	370	33.1	24.8	82.4	68.7	56.0	56.0	23.0	70	110	180	160	2.3	5.2	208/1/60	3.9	15	UAUV9S10	DAIKIN	74 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
NOTES: 1. PROVIDE WITH HOT WATER HEATING COIL, 4-5/8" FALSEBACK (DAIKIN ARRANGEMENT AK WITH INSULATED OA PLENUM), 3-WAY MODULATING CONTROL VALVE PACKAGE & REMOTE THERMOSTAT W/ LOCKABLE COVER, ASHRAE CYCLE II CONTROLS, COLOR TO BE SELECTED BY OWNER. PROVIDE DRAFTSTOP WINDOW DOWNDRAFT PROTECTIONS FROM UV TO WALL ON BOTH SIDES OF UV. 2. INTERLOCK WITH SPLIT AIR COOLED CONDENSING UNIT. 3. INTERLOCK UV-1-1 & UV-1-2 WITH EF-1-1. 4. CONTRACTOR TO BALANCE OUTSIDE AIR FLOW & SUPPLY AIR FLOW TO QUANTITIES INDICATED ABOVE. PROVIDE BALANCING REPORT FOR REVIEW. 5. CONTRACTOR TO REPLACE FILTERS AFTER COMPLETION OF PROJECT AND PRIOR TO OCCUPANCY. IN ADDITION, CONTRACTOR TO PROVIDE AN ADDITIONAL SET OF FILTERS FOR ALL UNITS. 6. ALL THERMOSTATS SHALL BE INSTALLED IN A TAMPER PROOF ENCLOSURE. 7. INTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT AND WIRE ALL EXTERNAL COMPONENTS. UNIT SHALL BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS. 8. UV-1-6, 1-7, & 1-8 SHALL BE PROVIDED WITH 48"x10" FACTORY FAI LOUVERS. UV-1-1 THRU UV-1-5 WILL BE INSTALLED WITH 60"x12" GREENHECK ESD-403 LOUVERS.																								

OUTDOOR AIR COOLED CONDENSING UNIT SCHEDULE

TAG NO.	LOCATION	AREA SERVED	UNIT SERVED	COOLING (TMBH)	HEATING (TMBH)	AMBIENT TEMP (°F)	ELECTRICAL DATA V/PH/Hz	MCA	MOP	IEER	EER	MODEL & MANUFACTURER	DIMENSIONS (W x H x D) (IN)	APPROX. WEIGHT (LBS)	REMARKS
ACC-G-1	GRADE	MEDIA CENTER C02 / LIBRARY C05	UV-1-3 THRU 5	144	-	95	208/3/60	55.1	60	24.8	11.5	RXYQ144TATAJU DAIKIN	48.9 x 66.7 x 30.2	700	2-STAGE CONDENSING UNIT, PROVIDE "PATE" EQUIPMENT SUPPORTS, DISCONNECT SWITCH, GFI CONVENIENCE OUTLET.
ACC-G-2	GRADE	ART ROOM C10	UV-1-6 THRU 8	90	-	95	208/3/60	27.6	35	25.9	12.7	RXYQ72TATJU DAIKIN	36.7 x 66.7 x 30.2	450	2-STAGE CONDENSING UNIT, PROVIDE "PATE" EQUIPMENT SUPPORTS, DISCONNECT SWITCH, GFI CONVENIENCE OUTLET.
ACC-R-1	ROOF	CAFETERIA B01	AC-1-1 THRU 3	108.8	102.0	95	208/3/60	36.3	45	25.4	12.4	RXYQ120TATJU DAIKIN	48.9 x 66.7 x 30.2	530	SEE NOTE(S) BELOW
ACC-R-2	ROOF	CAFETERIA B01	UV-1-1 & UV-1-2	95.6	92.5	95	208/3/60	36.3	45	27.3	14.3	RXYQ96TATJU DAIKIN	48.9 x 66.7 x 30.2	530	SEE NOTE(S) BELOW
ACC-R-3	ROOF	ELEC. B03	AC-1-4	31.4	-	95	208/1/60	17	20	17.5	10	FTX30NVJU DAIKIN	34.2 x 28.9 x 12.6	40	SEE NOTE(S) BELOW
ACC-R-4	ROOF	COPY ROOM A202 & SGI A402	AC-2-1 & AC-4-1	36	39.8	95	208/1/60	16.5	25	18	12	RXTQ36TAVJ9 DAIKIN	37.0 x 39.0 x 12.6	175	SEE NOTE(S) BELOW
NOTES: PROVIDE WITH LOW AMBIENT CONTROL TO 0°F, INTERLOCK WITH RESPECTIVE AC UNITS. ELECTRICAL SUBCONTRACTOR SHALL FURNISH & INSTALL NEMA 3R DISCONNECT SWITCH & GFI CONVENIENCE OUTLET FOR EACH UNIT. REFER TO ELECTRICAL DRAWINGS. PROVIDE VIBRATION ISOLATION PADS FOR ACC-G-1 AND SECURE UNIT TO STEEL GRADING.															

VENTILATION INDEX

UNIT SERVED	ROOM NAME & NUMBER	OCCUPANCY CLASSIFICATION	FLOOR AREA (SQ. FT.)	REQ'D O.A. PER SQ. FT.	REQ'D O.A. FOR SPACE	OCCUPANCY DENSITY PER 1,000 FT²	OCCUPANCY BASED ON DENSITY	VENTILATION OCCUPANCY	REQ'D O.A. PER PERSON	REQ'D O.A. FOR OCCUPANCY	TOTAL REQ'D O.A. (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS	ZONE MIN. O.A. REQ'D (CFM)	ACTUAL O.A. (CFM)	EXHAUST AIR E.A. (CFM)	REMARKS
FIRST FLOOR																
	ELEV. LOBBY (LOWER) A101	CORRIDORS	256	0.06	15	-	-	-	-	-	15	1.0	15	-		SEE NOTE #1.
	ELEV. LOBBY (UPPER) A102	CORRIDORS	183	0.06	11	-	-	-	-	-	11	1.0	11	-		SEE NOTE #1.
EXIST. CH	NEW CORR. A103 & EXIST. CORRIDOR	CORRIDORS	505	0.06	30	-	-	-	-	-	30	1.0	30	200		SEE NOTE #2.
RTU-2	CAFETERIA B01	CAFETERIA, FAST FOOD	3,508	0.18	631	100	351	351	7.5	2,633	2,464	0.8	3,080	3,100		SEE NOTE #3.
UV-1-1 & UV-1-2											800	0.9	889	900		
MAU-1	SERVERY / KITCHEN B02	KITCHENS (COOKING)	778	0.7	545	-	-	-	-	-	545	1.0	545	-	600	SEE NOTE #4.
	DRY STORAGE B05	STORAGE ROOMS	206	0.12	33	-	-	-	-	-	33	1.0	33	-		SEE NOTE #5.
UV-1-3 THRU 5	MEDIA CENTER C02, FLEX AREA C03, READING C04 & LIBRARY C05	MEDIA CENTER	2,271	0.12	273	25	57	57	10	570	843	0.9	936	975		
UV-1-6	BREAK OUT ROOM C09	CLASSROOMS (AGE 9 PLUS)	324	0.12	39	35	11	11	10	110	149	0.9	165	180		
UV-1-7 & UV-1-8	ART C10	ART CLASSROOM	1,052	0.18	189	20	21	21	10	210	399	0.9	444	740	740	
UV-1-7 & UV-1-8	ART STOR. C11	STORAGE ROOMS	272	0.12	33	-	-	-	-	-	33	1.0	33	35		SEE NOTE #5.
SECOND FLOOR																
RTU-1	EXIST. AUDITORIUM & STAGE	AUDITORIUMS	5,589	0.06	335	150	839	839	5	4,195	4,530	0.8	5,663	6,000		
HRU-2-1	EXIST. ROOM 9	CLASSROOMS (AGE 9 PLUS)	240	0.12	29	35	8	8	10	80	109	0.8	136	150		
HRU-2-1	EXIST. ROOM 10	CLASSROOMS (AGE 9 PLUS)	829	0.12	99	35	29	29	10	290	389	0.8	487	555		
CH-2-1	ELEV. LOBBY A201	CORRIDORS	139	0.06	8	-	-	-	-	-	8	0.9	9	50		
HRU-2-1	COPY ROOM A202	COPY, PRINTING ROOMS	247	0.06	14	4	1	1	5	5	19	0.8	25	225	225	SEE NOTE #6.
THIRD FLOOR																
CH-3-2	ELEV. LOBBY A301	CORRIDORS	231	0.06	14	-	-	-	-	-	14	1.0	14	25		SEE NOTE #7.
	STOR. A302	STORAGE ROOMS	79	0.12	9	-	-	-	-	-	9	1.0	9	-		SEE NOTE #5.
CH-3-2	NEW CORR. 'A' A304	CORRIDORS	307	0.06	18	-	-	-	-	-	18	1.0	18	25		SEE NOTE #7.
CH-3-2	NEW CORR. 'B' A305	CORRIDORS	718	0.06	43	-	-	-	-	-	43	1.0	43	50		
FOURTH FLOOR																
HRU-4-1	ELEV. LOBBY A401	CORRIDORS	109	0.06	7	-	-	-	-	-	7	0.8	9	50		
HRU-4-1	SGI A402	CLASSROOMS (AGE 9 PLUS)	283	0.12	34	35	10	10	10	100	134	0.8	167	175		
NOTES:																
1. BASED ON 2015 IMC CHAPTER 4, SECTIONS 402.1 & 402.2, NATURAL VENTILATION SHALL BE THROUGH DOORS TO THE OUTDOORS.																
2. ACTUAL OUTDOOR AIR FROM EXISTING FLOOR-MOUNTED CABINET HEATER (CH) IN EXISTING CORRIDOR.																
3. TOTAL REQUIRED OUTDOOR AIR OF 3,264 CFM FOR THE CAFETERIA IS SERVED BY 2,464 OA CFM FROM RTU-2 (3,100 OA CFM ACCOUNTING FOR ZONE AIR DISTRIBUTION EFFECTIVENESS OF 0.8) AND 800 OA CFM FROM UV-1-1 & UV-1-2 (400 OA CFM EACH WITH 400% ACCOUNTING FOR ZONE AIR DISTRIBUTION EFFECTIVENESS OF 0.9).																
4. MAKEUP AIR FOR EXHAUST FROM CAFETERIA THROUGH TRANSFER GRILLE. SPACE TO BE NEGATIVELY-PRESSURIZED.																
5. BASED ON 2015 IMC CHAPTER 2, SECTION 202, DEFINITION OF "OCCUPIABLE SPACE" & CHAPTER 4, SECTION 401.2, STORAGE ROOMS ARE EXCLUDED FROM OCCUPIABLE SPACE AND DO NOT REQUIRE VENTILATION AIR.																
6. 100% RETURN AIR THROUGH HRU-2-1 IS EXHAUST AIR.																
7. VENTILATION AIR THROUGH OPERABLE DOORS FROM ADJACENT NEW CORRI. 'A' A304 WITH NEW CH WITH MIN. 100 O.A. CFM.																

EXHAUST FAN SCHEDULE

(GREENHECK AS STANDARD)

TAG NO.	AREA SERVED	CFM	SP. (IN)	BHP	MHP	RPM	ELECTRICAL DATA V/PH/Hz	DIMENSIONS (L x W x H) (IN)	APPROX. WT. (LBS)	MODEL & MANUFACTURER	SONES	REMARKS
EF-1-1	SERVERY / KITCHEN B02	600/1,500	0.5	0.30	3/4	1,349	120/1/60	21 x 21 x 21	59	SQ-130-VG GREENHECK	9.2	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER 84-277VAC TO 24 VDC, VARI-GREEN TWO-SPEED CONTROL & BACK DRAFT DAMPER. UNIT TO BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS). FOR CONTROLS REFER TO SEQUENCE OF OPERATIONS 230993 SECTION 1.13.
EF-1-2	UTILITY CLO. B04	75	0.5	0.03	⁴⁹ WATTS	900	120/1/60	14 x 12 x 11	23	CSP-A200 GREENHECK	2.2	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-1-3	MEDIA CENTER C02 & LIBRARY C05	975	0.25	0.29	1/3	1,120	120/1/60	14 x 24 x 15	49	CSP-A1050-VG GREENHECK	1.3	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-1-4	ART 06	1000	0.125	0.1	0.25	1250	120/1/60	25"Ø x 30	44	CUE-101-VG GREENHECK	8.0	WALL MOUNTED VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-1-5	KILN ROOM / ART STORAGE C11	500	0.5	0.11	1/6	1,586	120/1/60	16 x 15 x 15	47	SQ-095-VG GREENHECK	8.3	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-2-1	SGI A104	450	0.5	0.12	1/3	1,284	120/1/60	24 x 12 x 12	39	CSP-A700-VG GREENHECK	1.3	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-R-1	ROOF SIDEWALL	300	0.25	0.04	0.07	1,644	120/1/60	20"Ø x 15	22	CUE-070-VG GREENHECK	5.6	WALL MOUNTED, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER 84-277VAC TO 24 VDC & BACK DRAFT DAMPER, PROVIDE THERMOSTAT IN ELEVATOR SHAFT AND SET FOR 80°F ADJUSTABLE. FAN TO BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS).

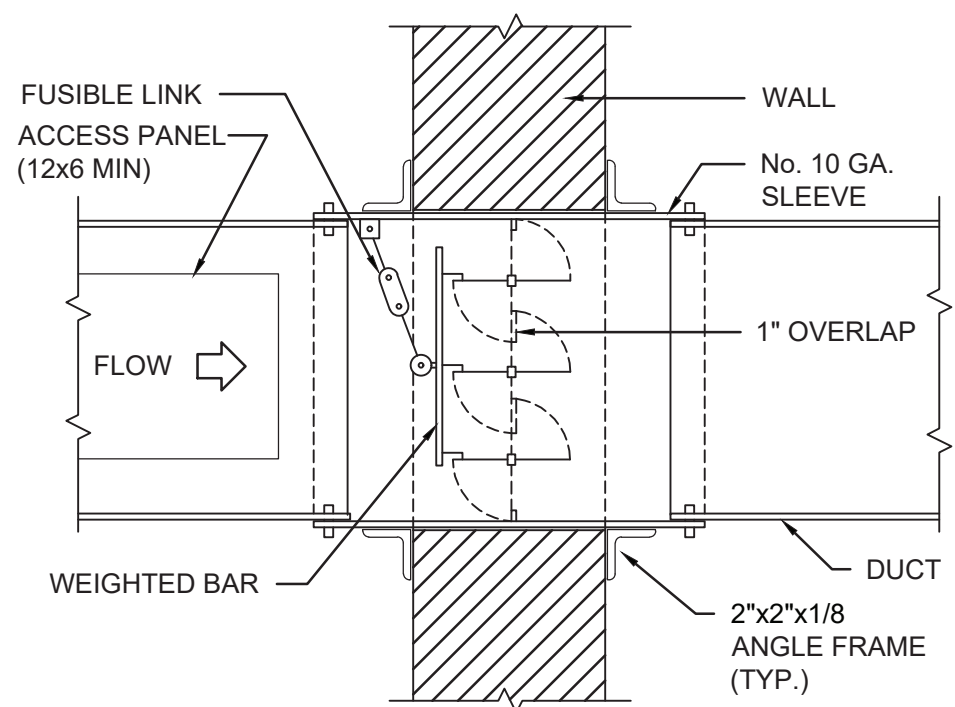
HOT WATER FINNED TUBE RADIATION SCHEDULE

(STERLING AS STANDARD)

TAG NO.	LOCATION	TUBE SIZE	FIN PER FT.	ACTIVE ELEMENT LENGTH	BTU/ HR-FT	HOT WATER HEATING				MODEL & MANUFACTURER	REMARKS
						MBH	EWT (°F)	LWT (°F)	GPM		
FTR-1-1	CAFETERIA B01	3/4"	50	(3) 7'-0"	1,200	8.4 EA.	180	160	0.8 EA.	JVB-T24 STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES BELOW.
FTR-2-1	COPY ROOM A202	3/4"	50	6'-0"	1,200	7.2	180	160	0.7	JVB-T24 STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES BELOW.
FTR-3-1	STOR. A302	3/4"	50	4'-0"	1,200	4.8	180	160	0.5	JVB-T24 STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES BELOW.

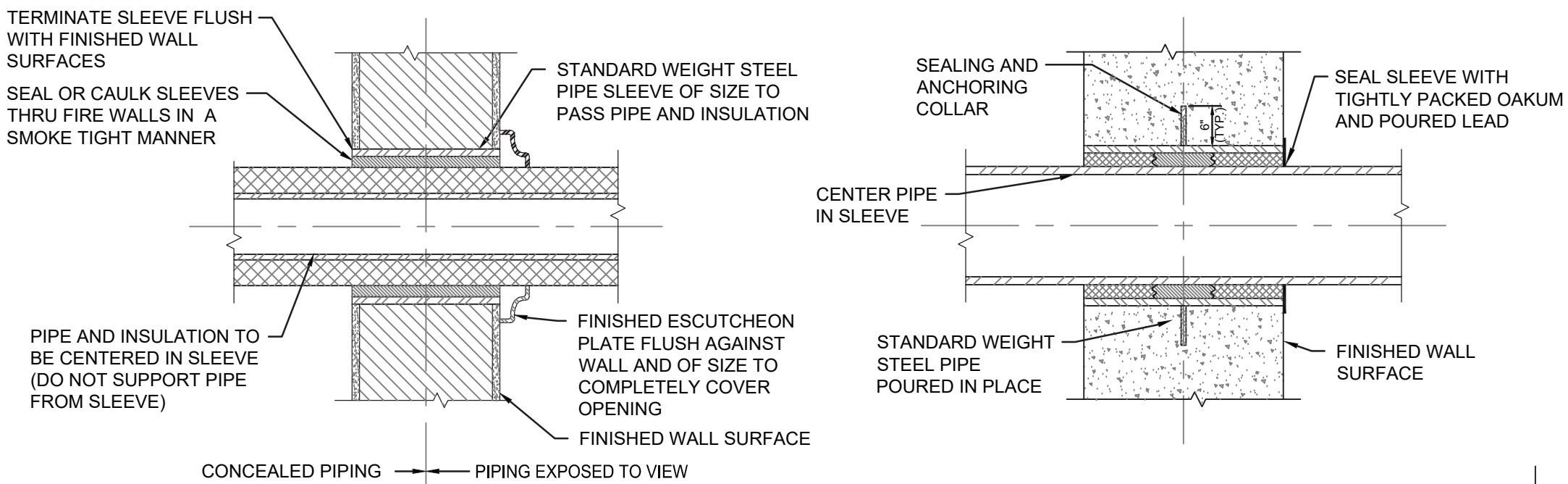
NOTES:

- ALL FTRs SHALL BE 24" H x 5-5/16" D. THE LENGTH INDICATED IN ABOVE SCHEDULE IS ACTIVE FINNED TUBE LENGTH. THE OVERALL LENGTH OF COVERS (ENCLOSURES) SHALL BE WALL TO WALL OR AS INDICATED ON FLOOR PLANS.
- PROVIDE W/ MIN. 14 GAUGE GALVANIZED STEEL FRONT COVER, 18 GA. FULL HEIGHT BACK PANEL, AIR VENT, CORNER PIECES, SPLICE PLATES, END CAPS, VALVE ENCLOSURE COVER & WALL TO WALL COVER, WATER BRACKETS & TAMPER RESISTANT DAMPERS.
- DDC CONTRACTOR SHALL PROVIDE CONTROL VALVES & FIELD-WIRE INTERLOCKS WITH RESPECTIVE AC UNIT. CONNECT TO NEW ANDOVER BMS.
- PROVIDE DANFOSS CONTROL VALVE W/ UNIT MOUNTED DIAL-CONTROL FOR EACH FTR FOR FTR-3-1 AND 2-1.
- UNIT COLOR SHALL BE SELECTED BY OWNER & PROVIDE A COLOR CHART.



FIRE DAMPER IN WALL

NOT TO SCALE

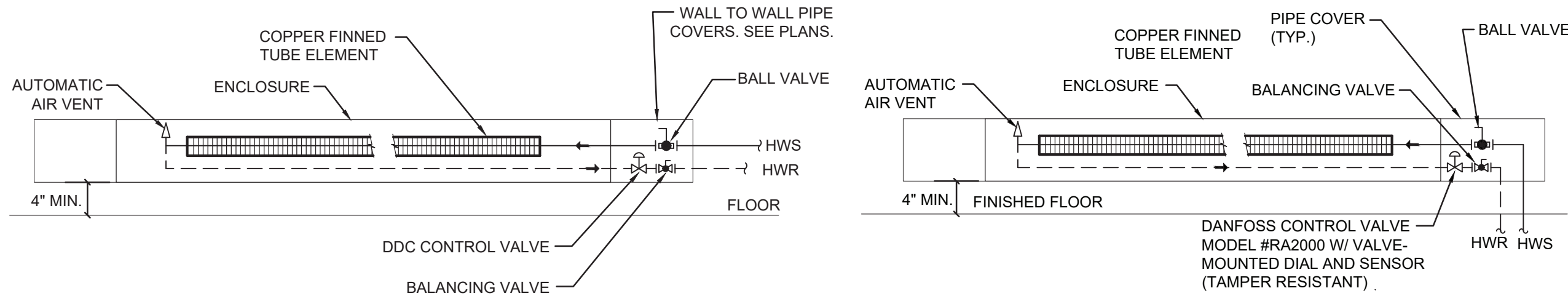


INTERIOR WALLS

EXTERIOR WALLS

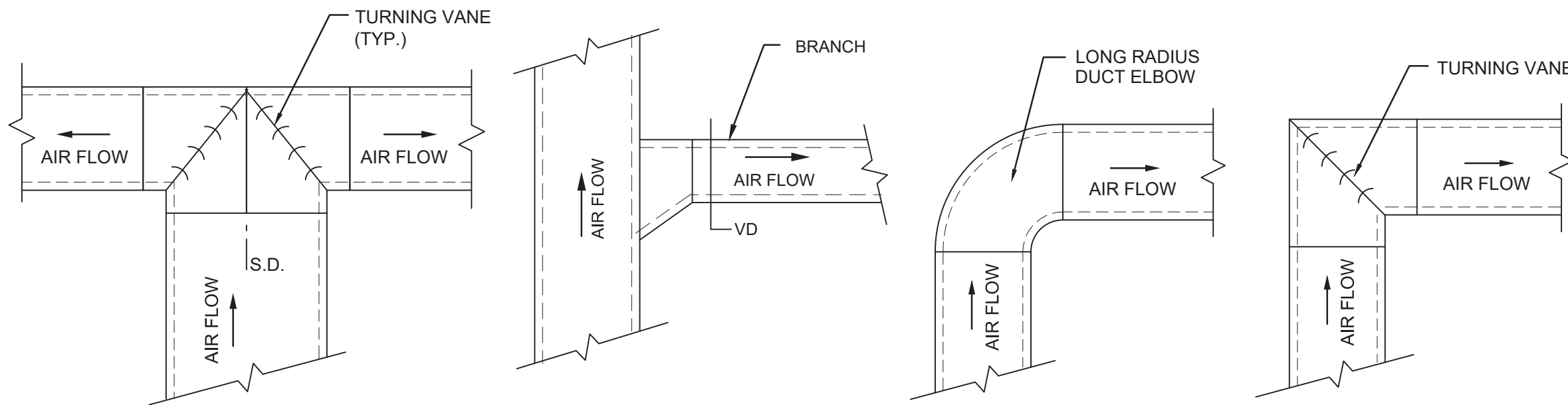
PIPE SLEEVES THRU WALL DETAILS

NOT TO SCALE



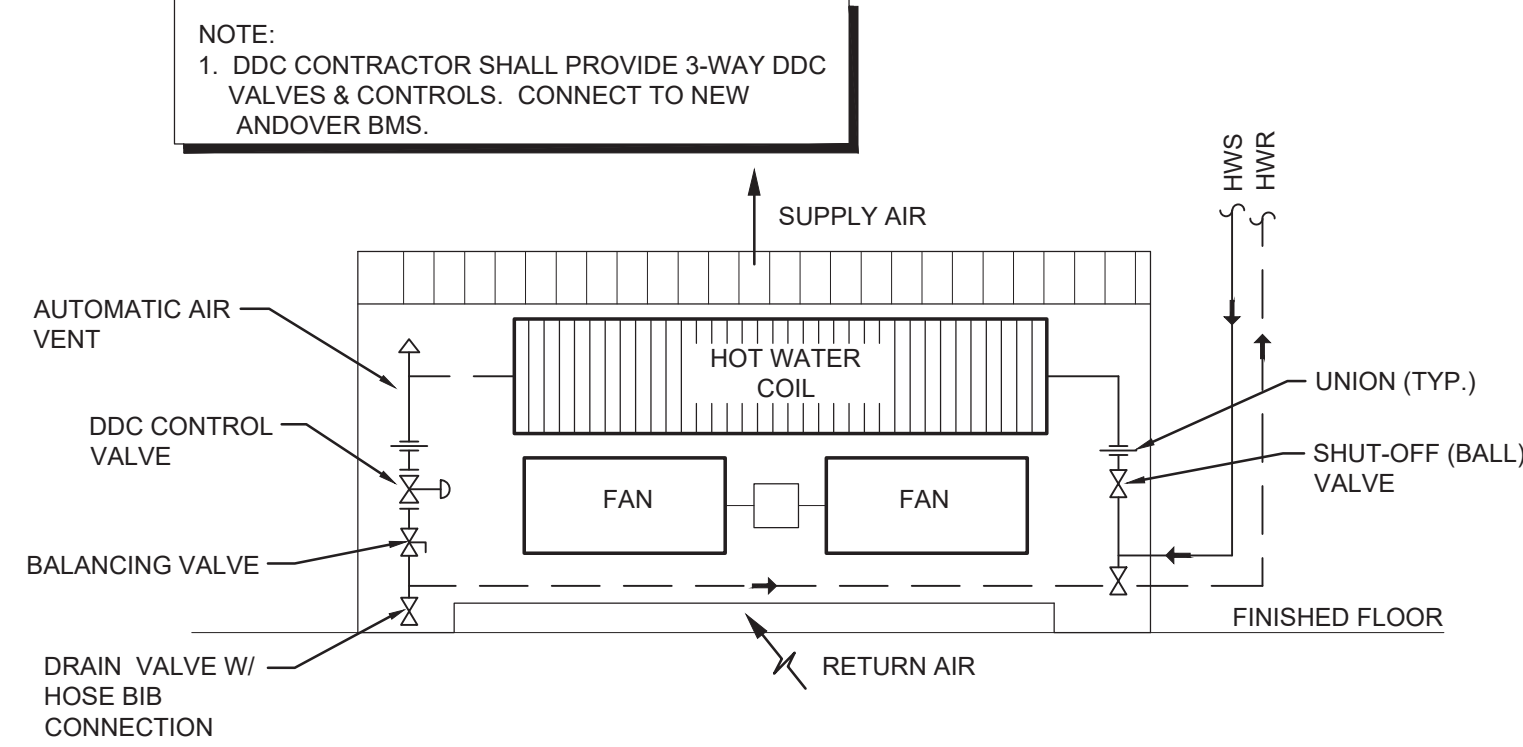
HOT WATER FTR PIPING W/ TWO TYPES OF CONTROL VALVES DETAIL

NOT TO SCALE



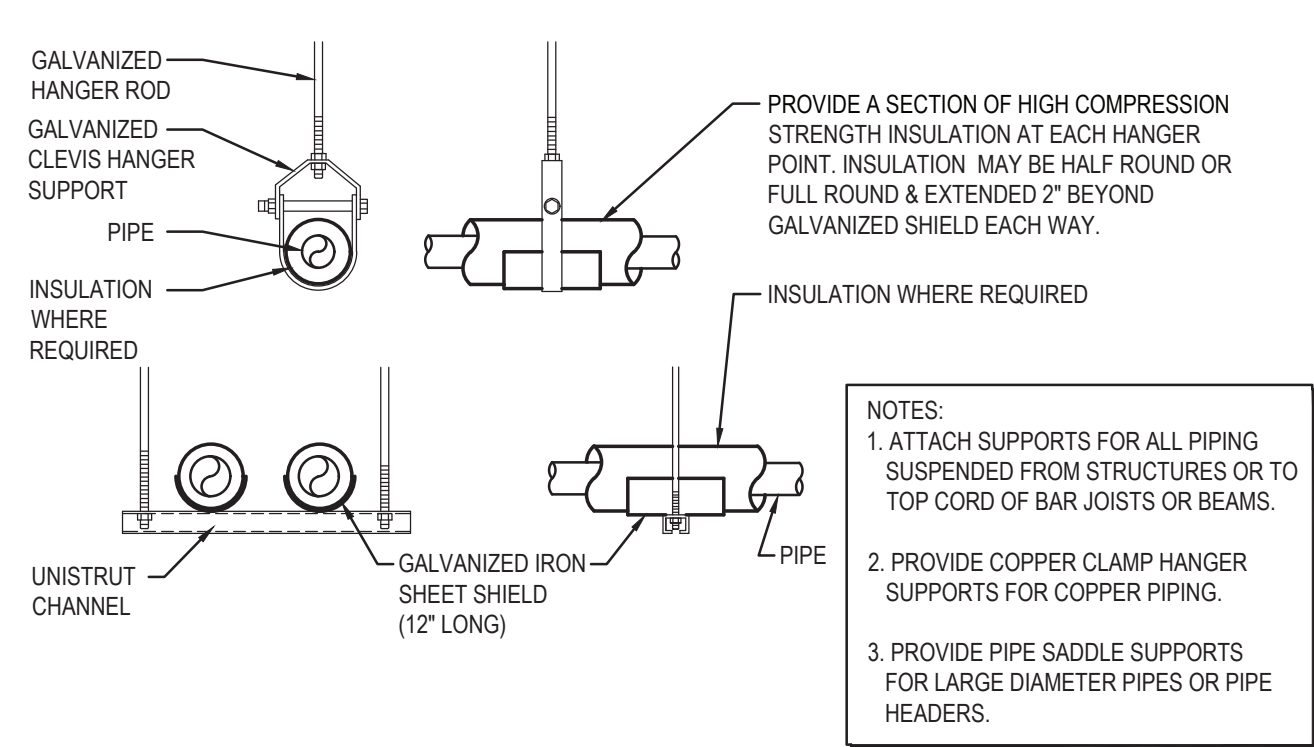
DUCT TAKE-OFF & TURN DETAIL

NOT TO SCALE



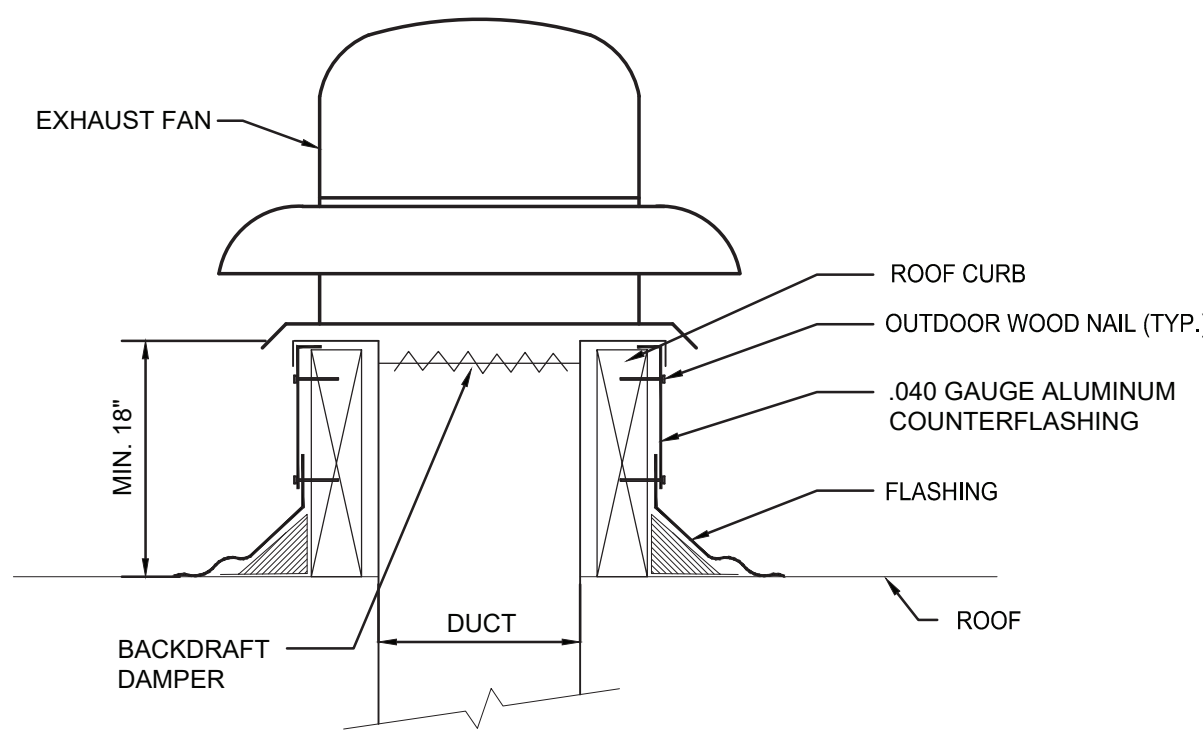
HOT WATER CABINET HEATER PIPING DETAIL

NOT TO SCALE



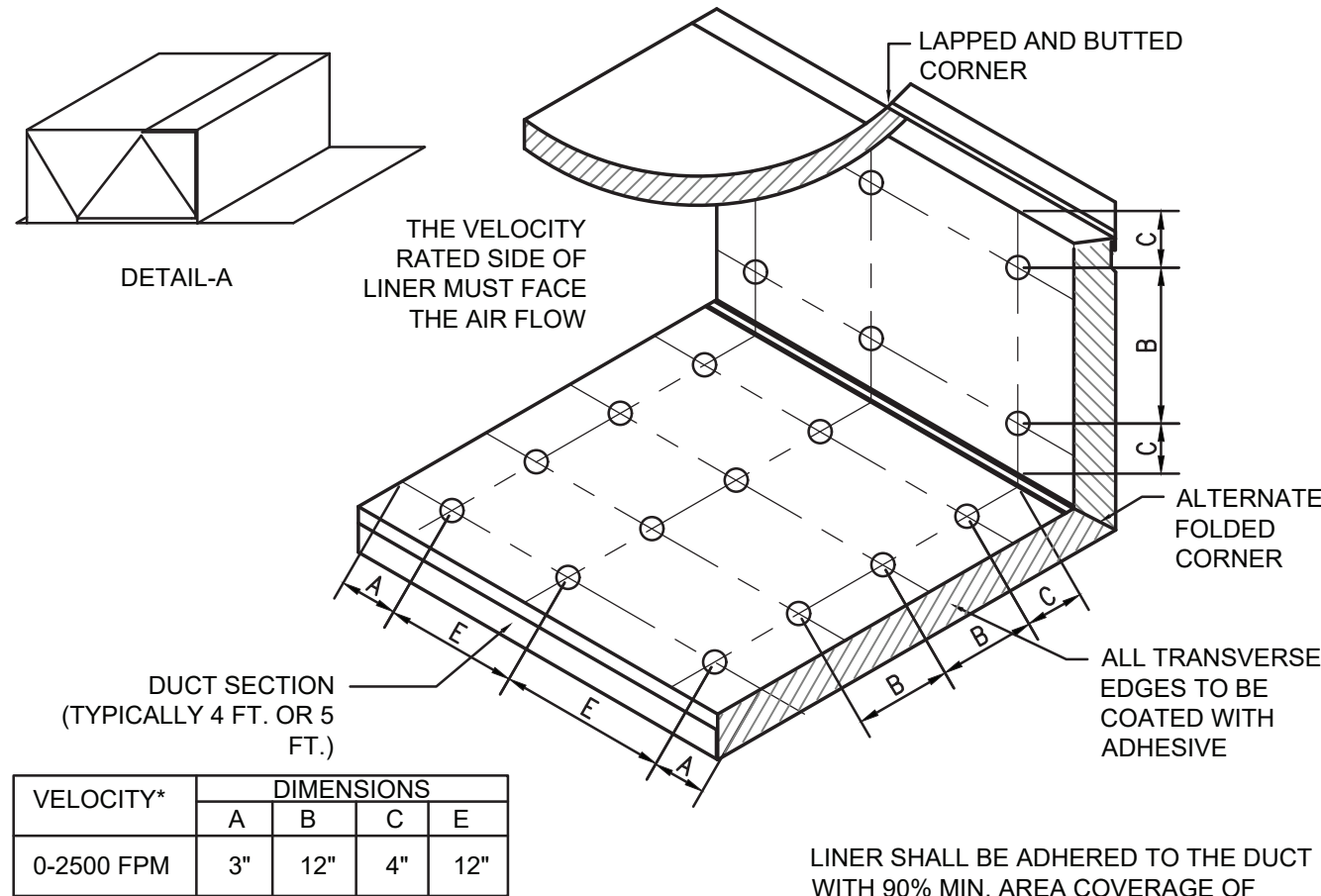
PIPE SUPPORT HANGERS

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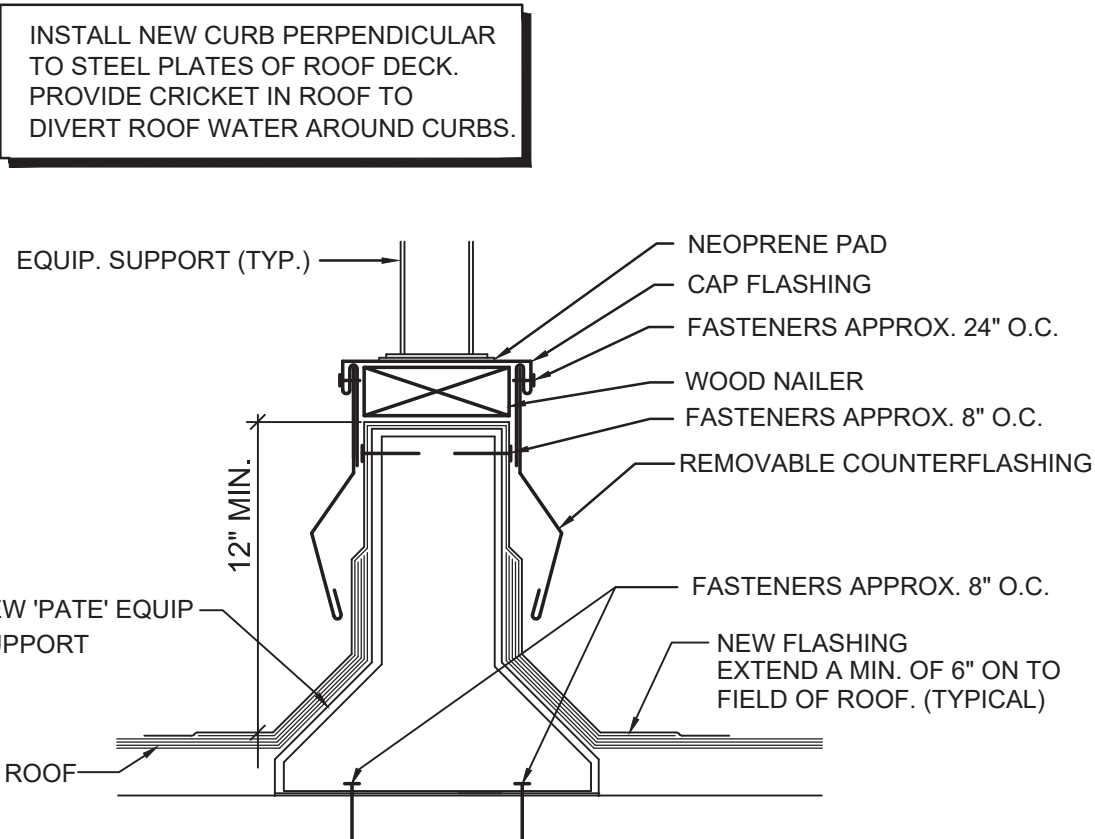
ROOF EXHAUST FAN DETAIL

NOT TO SCALE



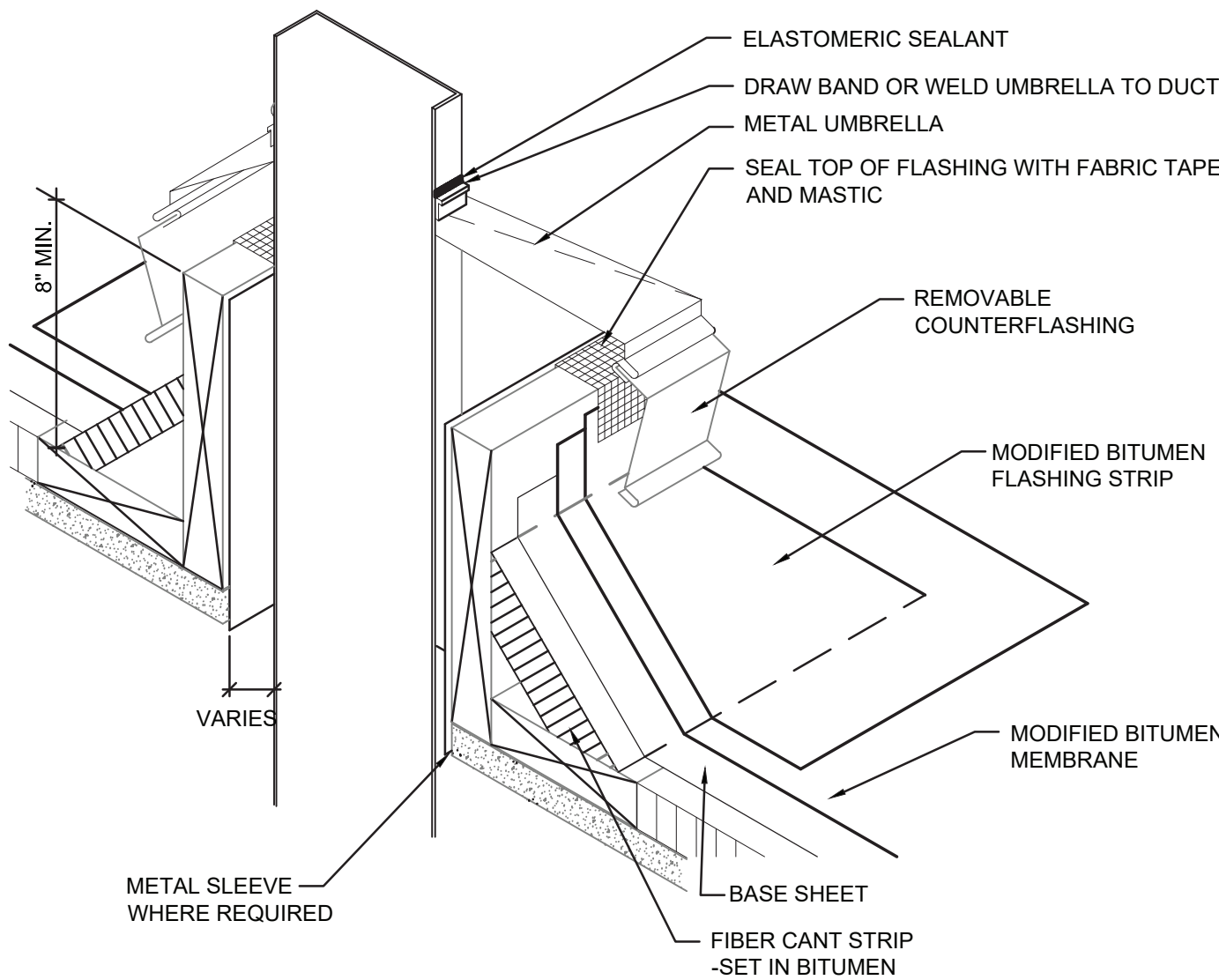
DUCT LINER INSULATION DETAIL

NOT TO SCALE



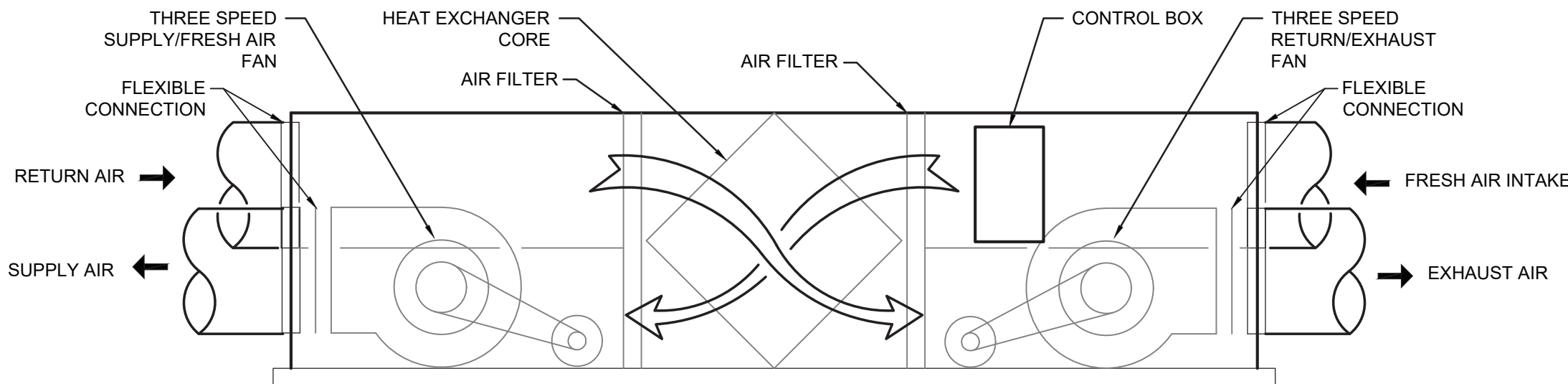
EQUIPMENT SUPPORT DETAIL

NOT TO SCALE



DUCT PENETRATION ROOF CURB DETAIL

NOT TO SCALE



LOW PROFILE HEAT RECOVERY UNIT DETAIL

NOT TO SCALE

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A B C D E F G H J K L M N O P

EXHAUST FAN INFORMATION - Job#4110057

FAN UNIT NO.	TAG	FAN UNIT MODEL #	MIN/MAX CFM/LF	MIN CFM	MAX CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SONES
1	KEF-1	USB18DD-RM	150/200	1988	2600	1.750	1285	1.500	1.2170	3	208	6.6	1333 FPM	395	18.5

MAU FAN INFORMATION - Job#4110057

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	MAX CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	MCA	MOCP	WEIGHT (LBS.)	SONES
2	MAU-1	A2-IBT-200-20D	20MF-2-MOD	A2-IBT-200	1540	2150	0.750	1153	2.000	0.9400	3	208	8.3	10.4A	15A	1025	9.6

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
2	MAU-1	200000	160000	69 deg F	7 in. w.c. - 14 in. w.c.	Natural	80

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	KEF-1	1 - Utility Set Grease Cup
		1 - B118 - 24" Discharge Extension.
		1 - B1 - Discharge Orientation Vertical Upper Left - CW Inlet Side.
		1 - B118 - Inlet Connection Standard 20" Flanged Grease Duct.
2	MAU-1	1 - Utility Set - Spring Vibration Isolators - B118 / Equivalent Sized Utility Set - Indoor/Outdoor use.
		1 - Motorized Backdraft Damper for A2-I Housing
		1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, 0 to 10" wc, 1 Furnace
		1 - Freezestat
		1 - Standard Electrical Connection (main and control panel) for Standing Power - Single Module. If a Non-DCV Prewire is used on the IBT Heater, the #28, #47, "NS", "MA", or "E2" Option Prewire must be selected. Do not provide supply starter in prewire.
		1 - IBT Size 1 & 2 Side Discharge
		1 - Separate 120V Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only

CURB ASSEMBLIES

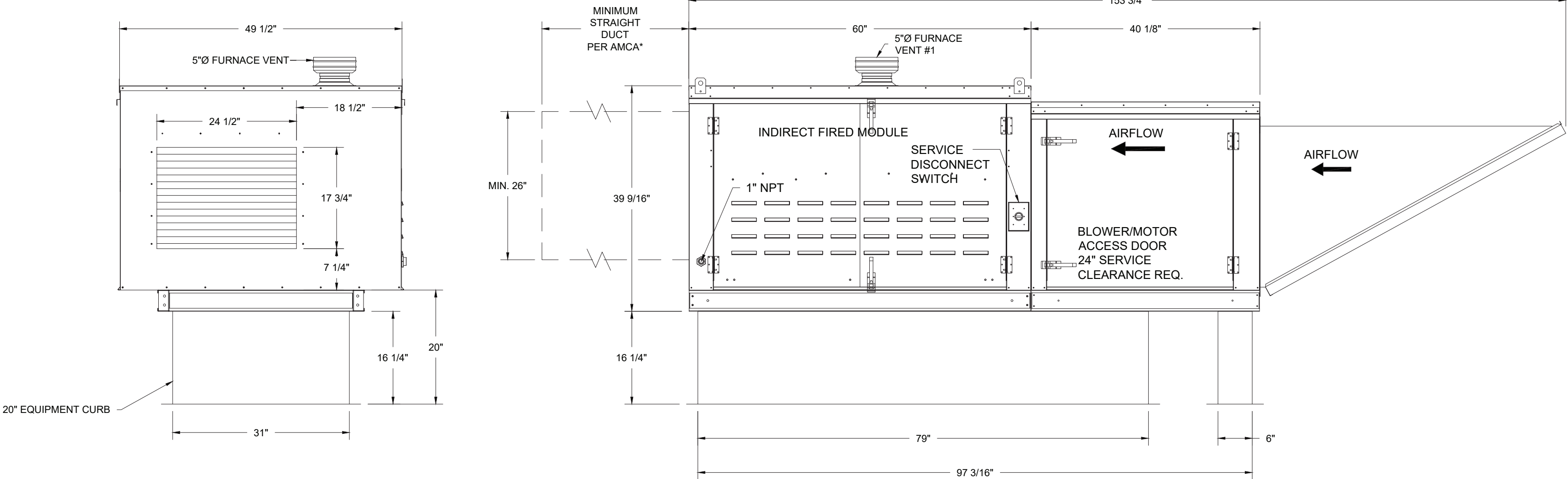
NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF-1	25 LBS	Rail	4.000"W x 48.000"L x 10.000"H Comes as a set of 2.
2	# 2	MAU-1	107 LBS	Curb	31.000"W x 79.000"L x 20.000"H Insulated
	# 2			Rail	6.000"W x 31.000"L x 20.000"H

FAN #2 A2-IBT-200-20D - MAKEUP AIR UNIT WITH HEATER (MAU-1)
1. INDIRECT BENT TUBE GAS FIRED HEATER WITH 20" DIRECT DRIVE FAN, 1 FURNACE, ELECTRONIC FULL MODULATION, CONSTANT 80% EFFICIENCY, AND 6:1 MAX TURNDOWN FOR NG, (5:1 MAX TURNDOWN FOR LP). STAINLESS STEEL BURNER AND HEAT EXCHANGER.
2. INTAKE HOOD WITH EZ FILTERS
3. SIDE DISCHARGE - AIR FLOW RIGHT -> LEFT
4. MOTORIZED BACK DRAFT DAMPER 22.75" X 24" FOR SIZE 2 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, LF120S ACTUATOR INCLUDED
5. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
6. GAS PRESSURE GAUGE, 0 TO +10 INCHES WC, 2.5" DIAMETER, 1/8" THREAD SIZE, REAR THREAD
7. FREEZESTAT FACTORY SET AT 35°F AND 10 MINUTES
8. SEPARATE 120V ELECTRICAL CONNECTION FOR ALL IBT HEATERS WITH 1 MODULE FOR STANDING POWER. 120V MUST BE RUN BY ELECTRICIAN FROM BUILDING PANEL TO MAU SWITCH.
9. USED WITH SIZE 1 AND SIZE 2 SIDE DISCHARGE IBT MODULES.
10. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MAU SWITCH.
11. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER SECTION)
IBT - US Patent 877119 B2

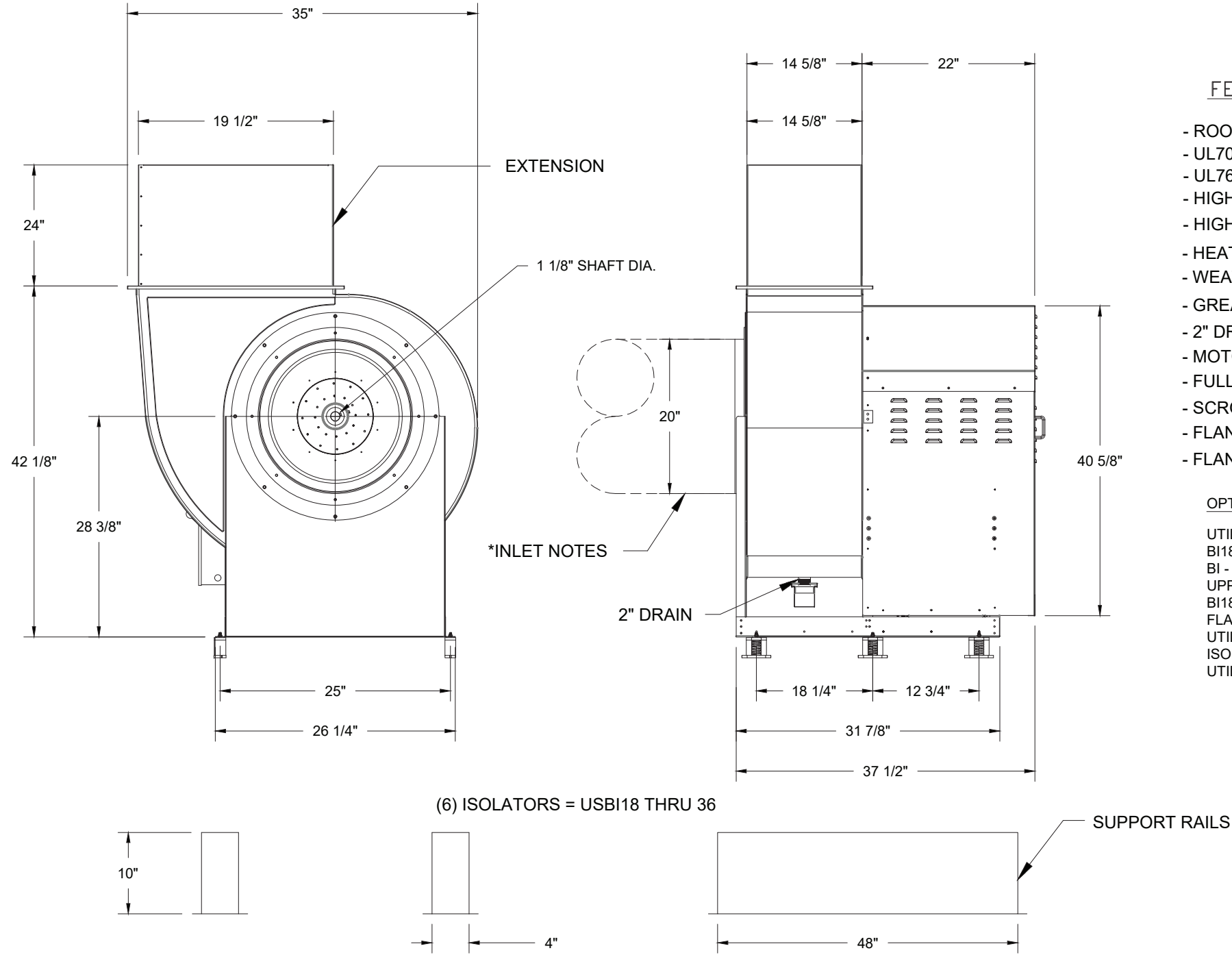
*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS, A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT.
SUGGESTED STRAIGHT DUCT SIZE IS 26" x 26"

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 5°F. TEMP. RISE = 69°F.
BTUs CALCULATED OFF STANDARD AIR DENSITY
OUTPUT BTUs AT ALTITUDE OF 0.0 ft. = 160218
INPUT BTUs AT ALTITUDE OF 0.0 ft. = 200272



FAN #1 USB18DD-RM - EXHAUST FAN (KEF-1)



FEATURES:

- ROOF MOUNTED FANS
- UL705
- UL762 AND ULC-S645 (RESTAURANT MODEL)
- HIGH HEAT OPERATION DIRECT DRIVE 350°F (176°C)
- HIGH HEAT OPERATION BELT DRIVE 350°F (176°C)
- HEAT SLINGER
- WEATHERPROOF DISCONNECT
- GREASE CLASSIFICATION TESTING
- 2" DRAIN
- MOTOR WEATHER COVER
- FULLY SEALED SCROLL HOUSING
- SCROLL ACCESS DOOR
- FLANGE 1 1/4" - 11 THRU 20.
- FLANGE 2" - 24 THRU 36.

OPTIONS

UTILITY SET GREASE CUP.
B118 - 24" DISCHARGE EXTENSION.
B1 - DISCHARGE ORIENTATION VERTICAL UPPER LEFT - CW INLET SIDE.
B118 - INLET CONNECTION STANDARD 20" FLANGED GREASE DUCT.
UTILITY SET - SPRING VIBRATION ISOLATORS - B118 / EQUIVALENT SIZED UTILITY SET - INDOOR/OUTDOOR USE.

NORMAL TEMPERATURE TEST DIRECT DRIVE EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 350°F (176°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

* INLET NOTES:
LENGTH OF THE STRAIGHT DUCT ON THE INLET TO BE 3 TIMES THE EQUIVALENT DUCT DIAMETER BEFORE CONNECTING TO ANY FITTINGS SUCH AS ELBOWS TO AVOID SYSTEM EFFECT.

Revisions:
ISSUE TO BO
11/23/20

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NYSed PROJECT # 66-07-01-03-0-005-020

KITCHEN HOOD EXHAUST FAN & MAKEUP AIR UNIT SCHEDULES & DETAILS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203M601

M6.03

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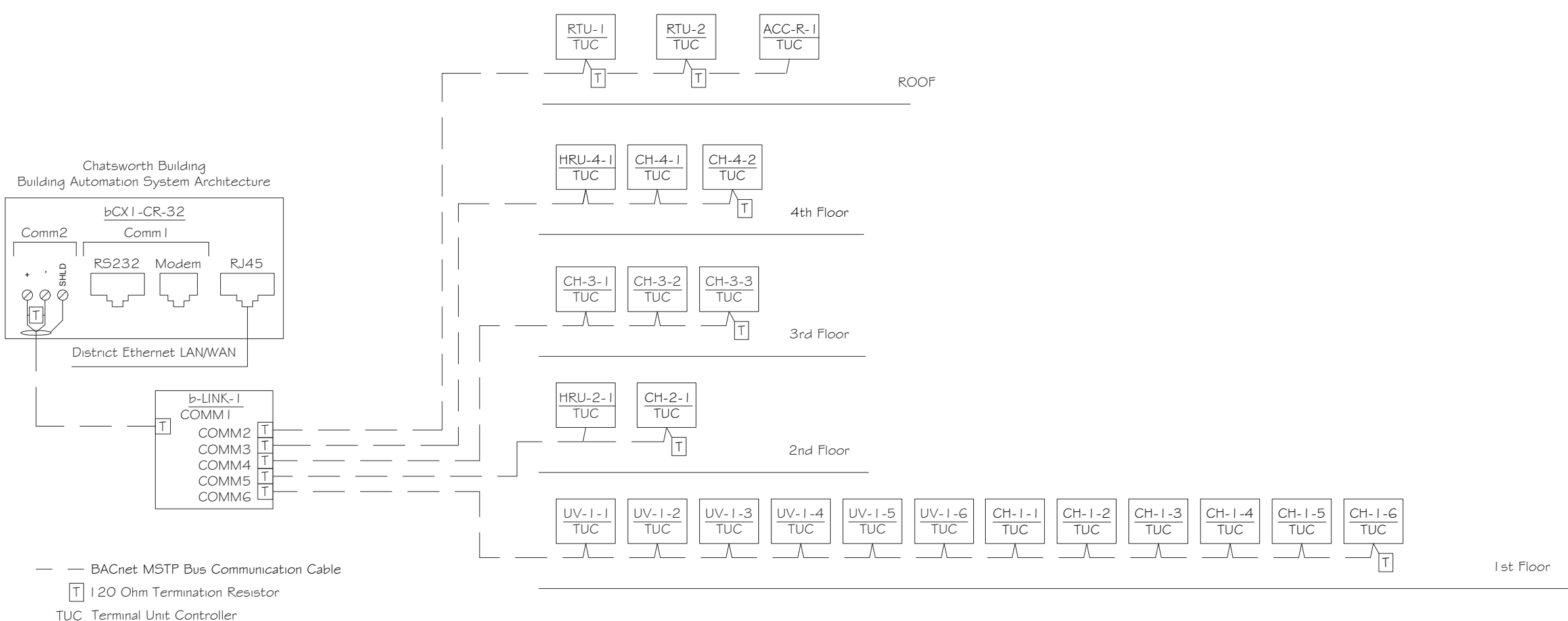
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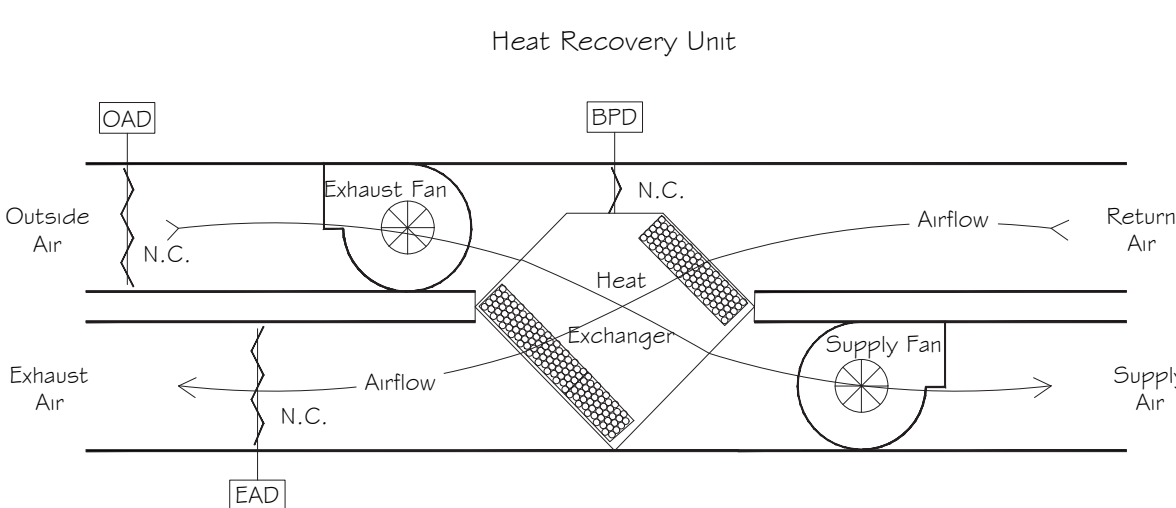
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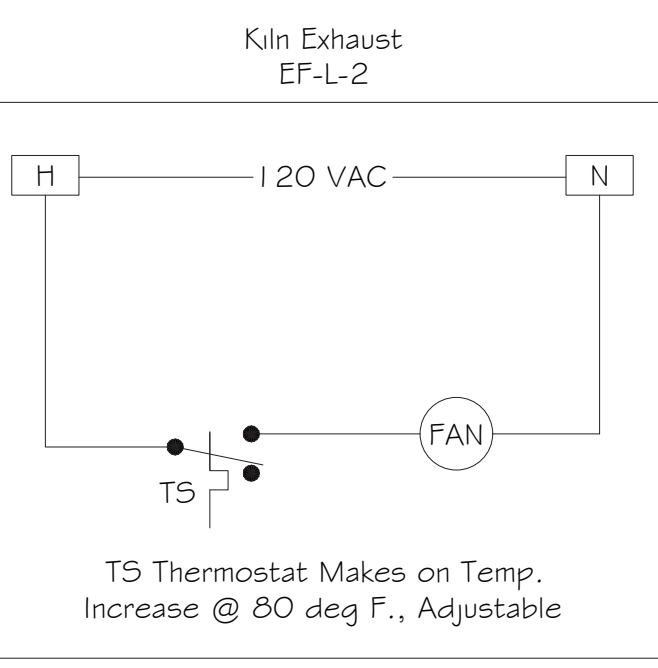
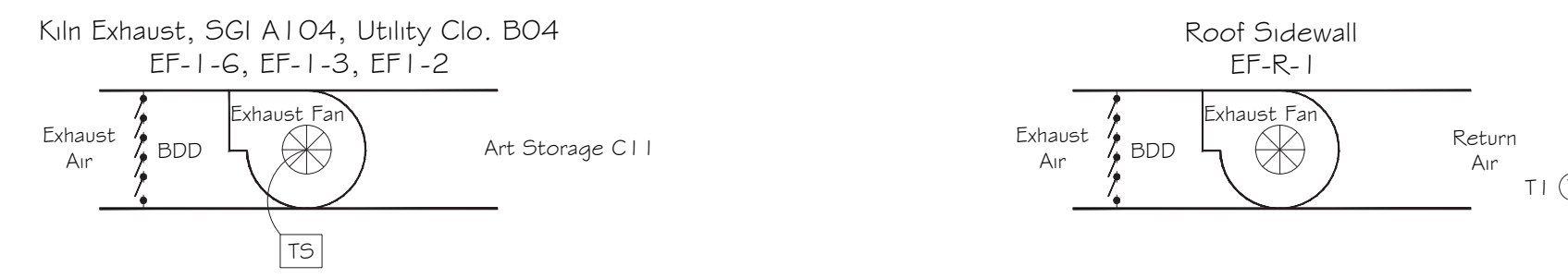
1 BAS SYSTEM ARCHITECTURE - CHATSWORTH BUILDING



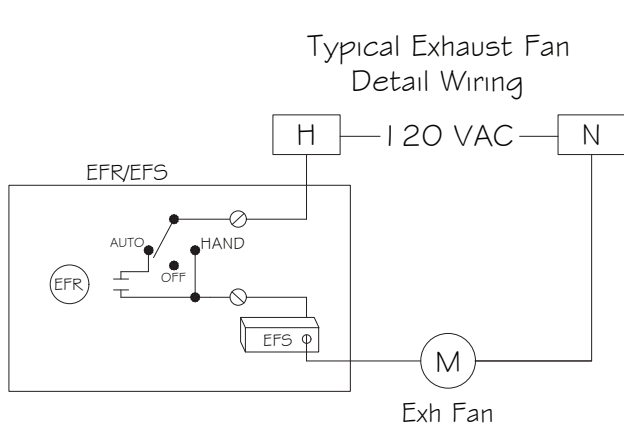
Sym	Point Description	Point Type
BPD	HX Bypass damper	AO
EAD	Exhaust air damper	DO
EAT	Exhaust air temperature sensor	AI
OAD	Outside air damper	DO
OAT	Outside air temperature sensor	AI
RAT	Return air temperature sensor	AI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
T1	Space temperature sensor	AI

Typical for HRU-2-1 and HRU-4-1

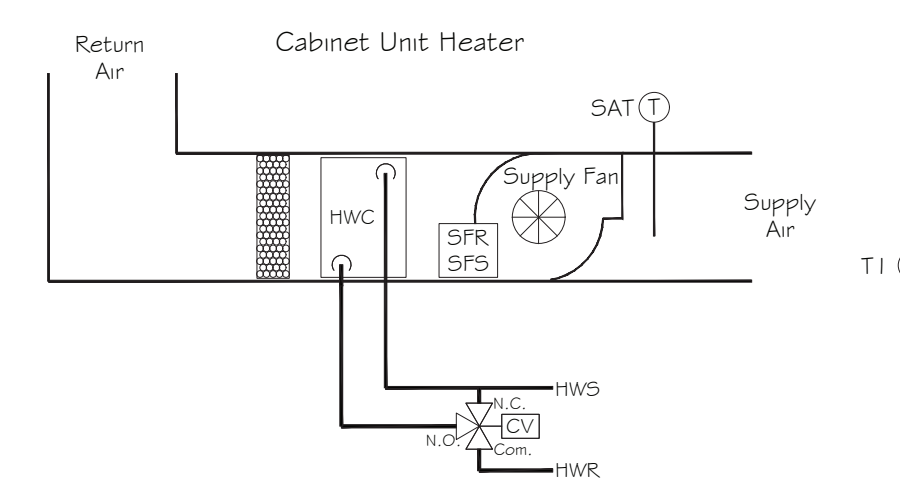
3 HRU FLOW DIAGRAM



7 EXHAUST FAN FLOW DIAGRAMS

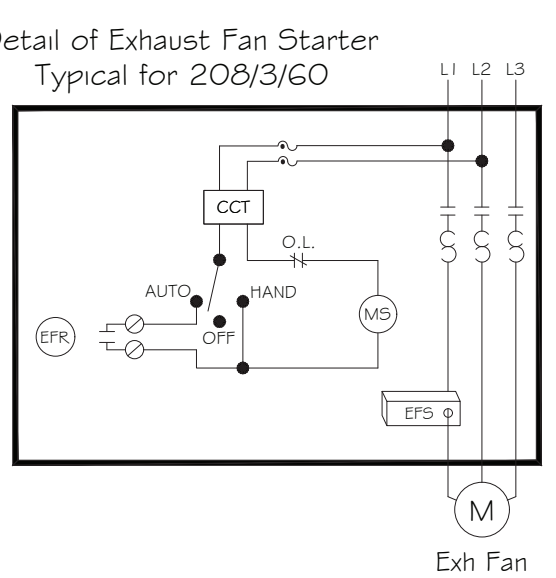
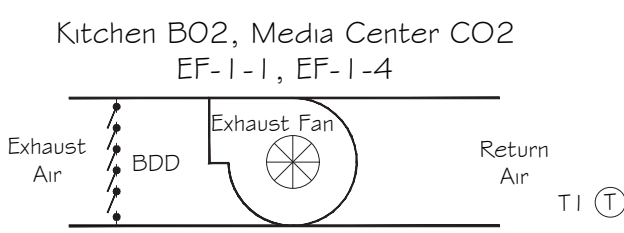


Sym	Point Description	Point Type
EF	Exhaust fan start/stop control relay	DO
EF	Exhaust fan run status current sensor	DI
T1	Space temperature sensor	AI



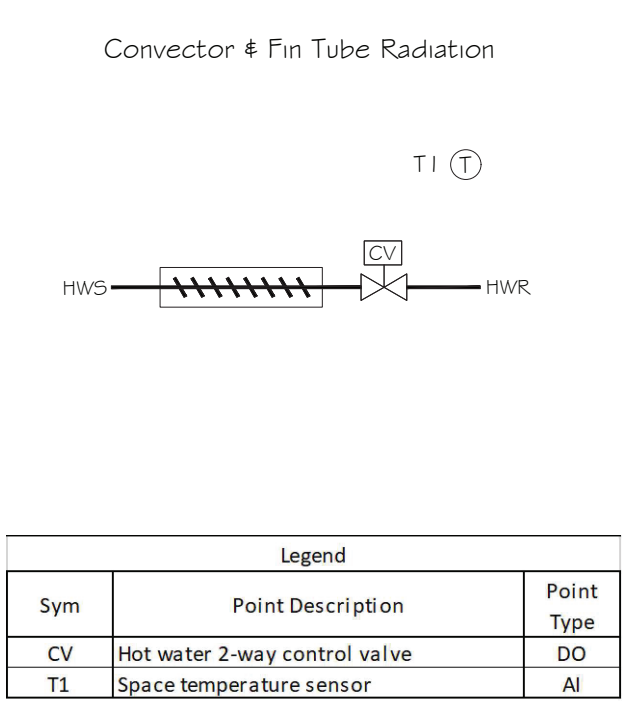
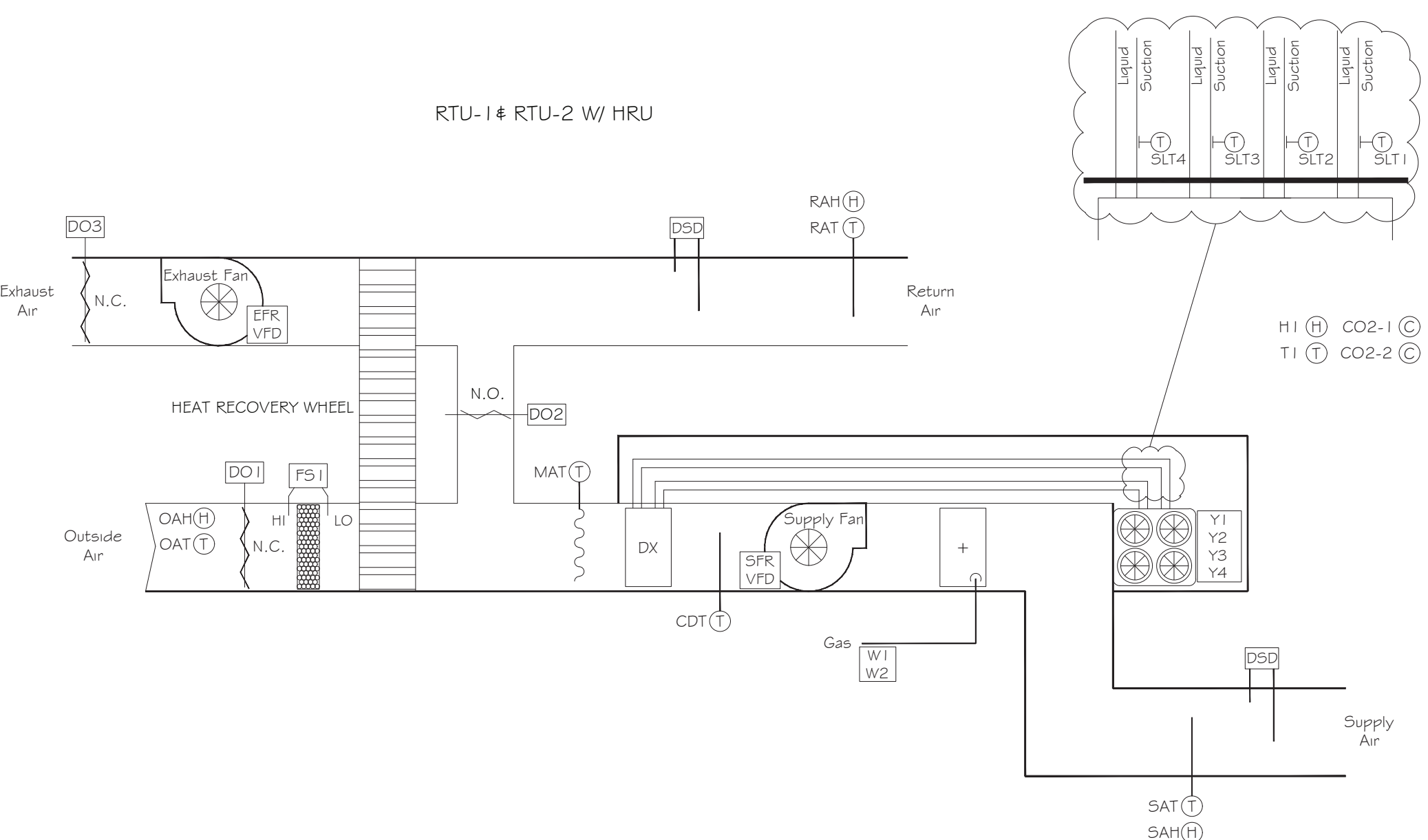
Sym	Point Description	Point Type
CV	Hot water 3-way control valve	AO
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
T1	Space temperature sensor	AI

4 CUH FLOW DIAGRAM



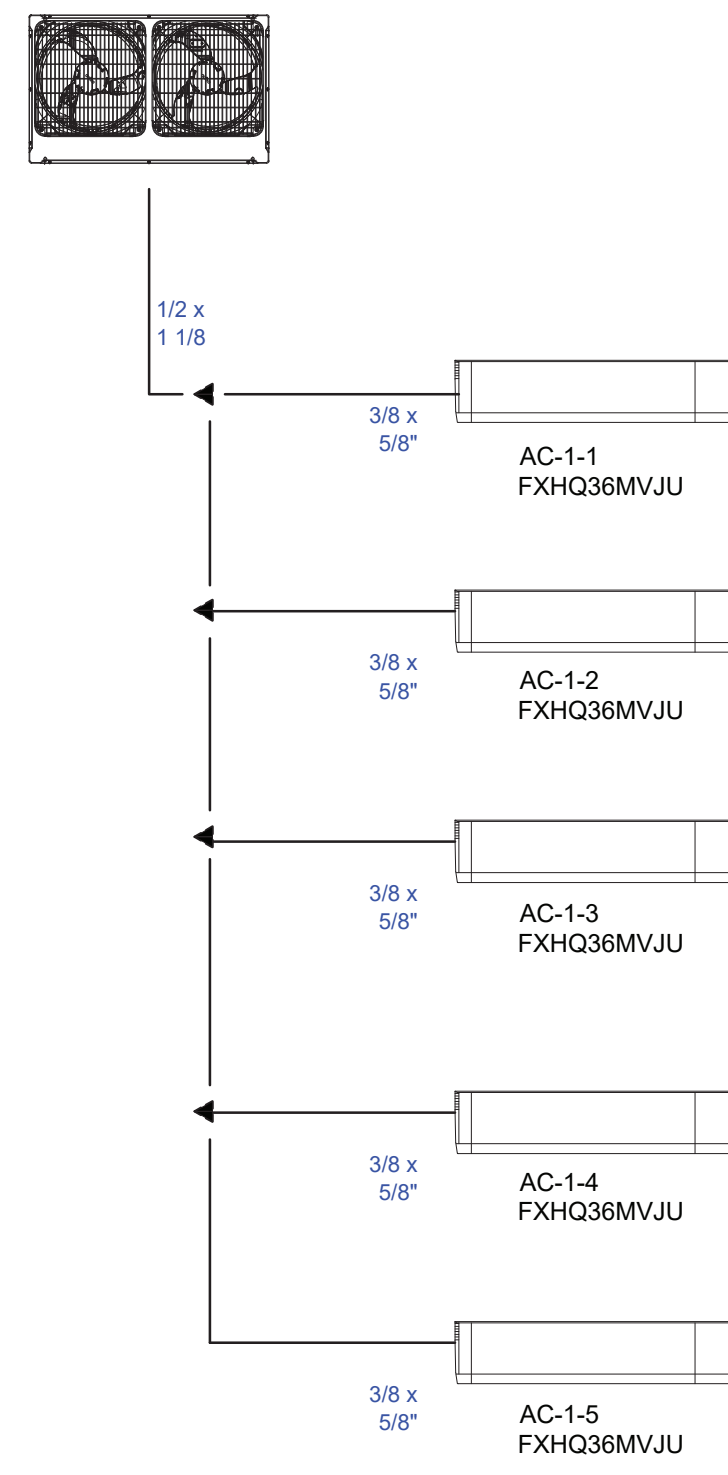
Sym	Point Description	Point Type
EF	Exhaust fan start/stop control relay	DO
EF	Exhaust fan run status current sensor	DI
T1	Space temperature sensor	AI

2 ROOFTOP UNIT FLOW DIAGRAM



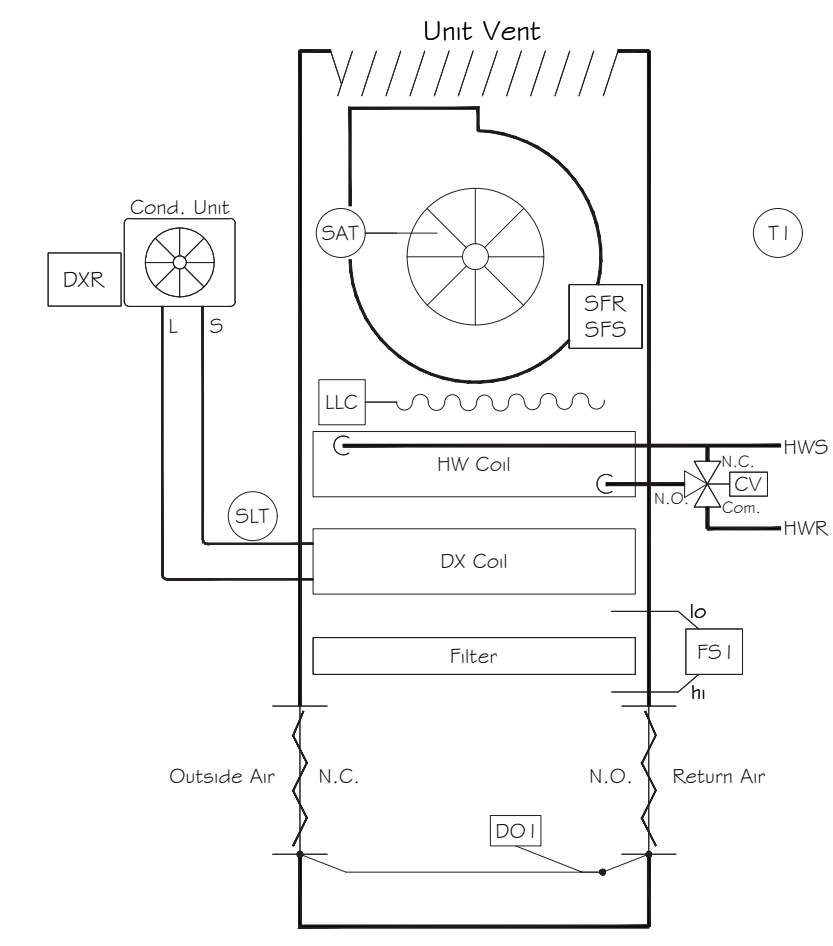
5 FTR FLOW DIAGRAM

ACC-R-1 RXYQ192TATJU (RXYQ120TATJU+RXYQ72TATJU)



8 VRF SYSTEM PIPING SCHEMATIC DIAGRAM

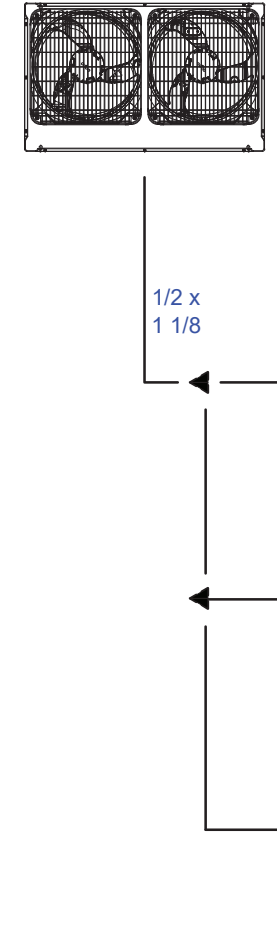
Sym	Point Description	Point Type
CDT	DX Coil discharge air temp sensor	AI
CO2-1	Room CO2 transmitter 1	AI
CO2-2	Room CO2 transmitter 2	AI
DO1	Outside air damper actuator	AO
DO2	Return air damper actuator	AO
DO3	Exhaust air damper actuator	AO
DSDR	Duct smoke detector return	DI
DSDS	Duct smoke detector supply	DI
EFR	Power exh. fan start/stop control relay	DO
EFS	Power exh. fan run status	DI
FS1	Filter DP switch	DI
H1	Space humidity transmitter	AI
MAT	Mixed air temperature sensor	AI
OAH	Outside air humidity transmitter	AI
OAT	Outside air temperature sensor	AI
RAH	Return air humidity transmitter	AI
RAT	Return air temperature sensor	AI
SAH	Supply air humidity transmitter	AI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
SLT1	DX CLG suction line temp sensor stage 1	AI
SLT2	DX CLG suction line temp sensor stage 2	AI
SLT3	DX CLG suction line temp sensor stage 3	AI
SLT4	DX CLG suction line temp sensor stage 4	AI
T1	Space temperature sensor	AI
W1	Gas fired heating coil stage 1	DO
W2	Gas fired heating coil stage 2	DO
Y2	DX cooling control relay stage 1	DO
Y3	DX cooling control relay stage 2	DO
Y4	DX cooling control relay stage 3	DO



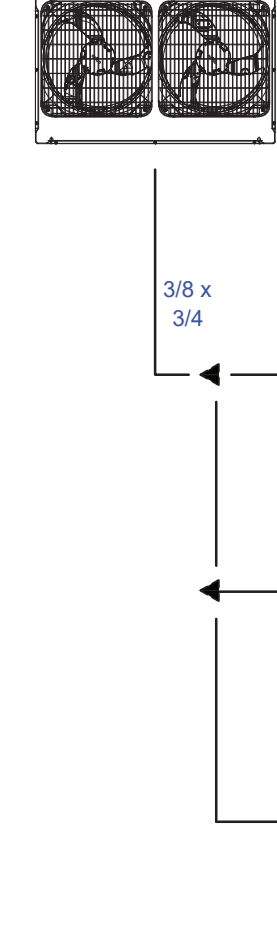
Sym	Point Description	Point Type
CV	Hot water 3-way control valve	AO
DO1	Outside/Return air damper cntrl signal	AO
DXR	DX cooling start/stop control relay	DO
FS1	Filter DP switch	DI
LLC	Low limit thermostat	DI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
SLT	Suction line temperature sensor	AI
T1	Space temperature sensor	AI

6 UV FLOW DIAGRAM

ACC-G-1 RXYQ144TATJU



ACC-G-1 RXYQ072TATJU



Date 1/10/20
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NYSED PROJECT # 66-07-01-03-0-005-020
DDC CONTROL & PIPING DIAGRAMS
2019 BOND REFUNDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538
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