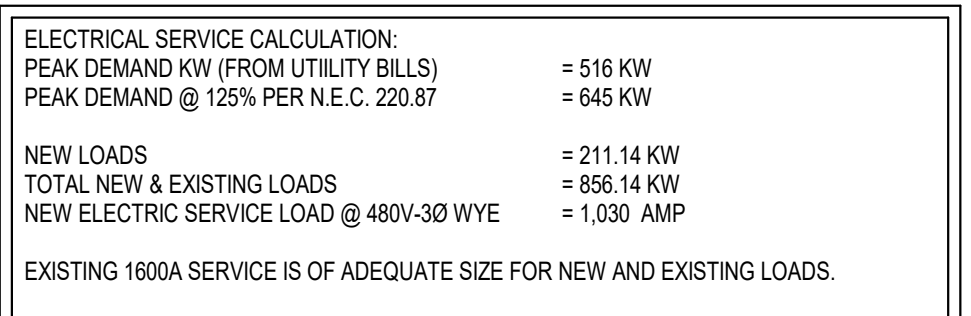


100 KING PHILIP DRIVE - West Hartford, Connecticut

DATE 11/01/2018



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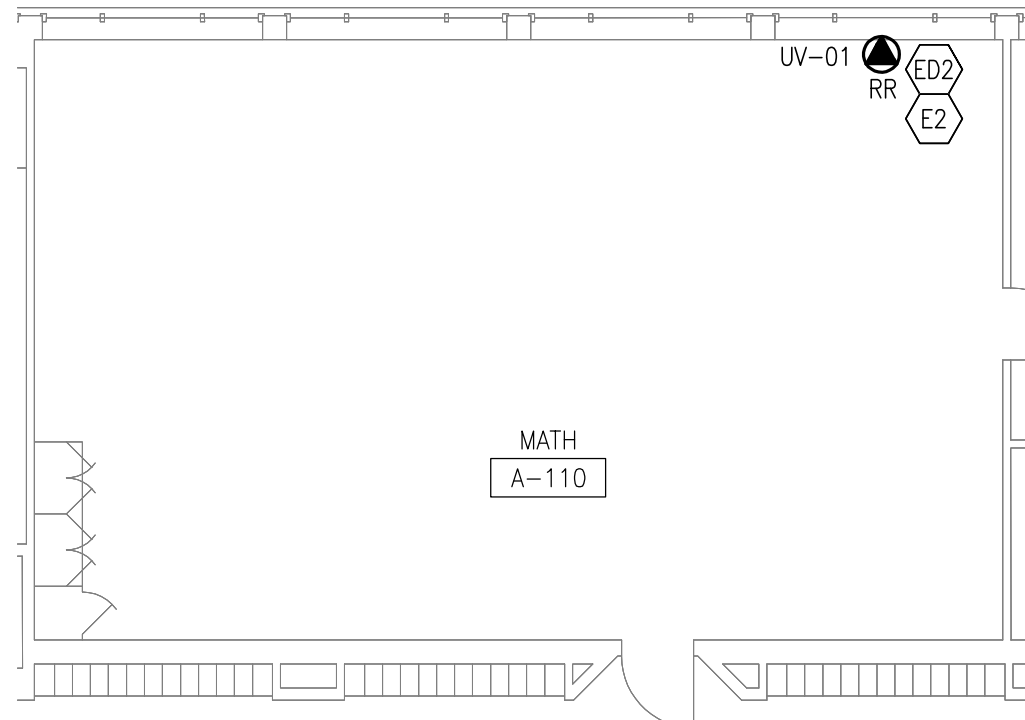
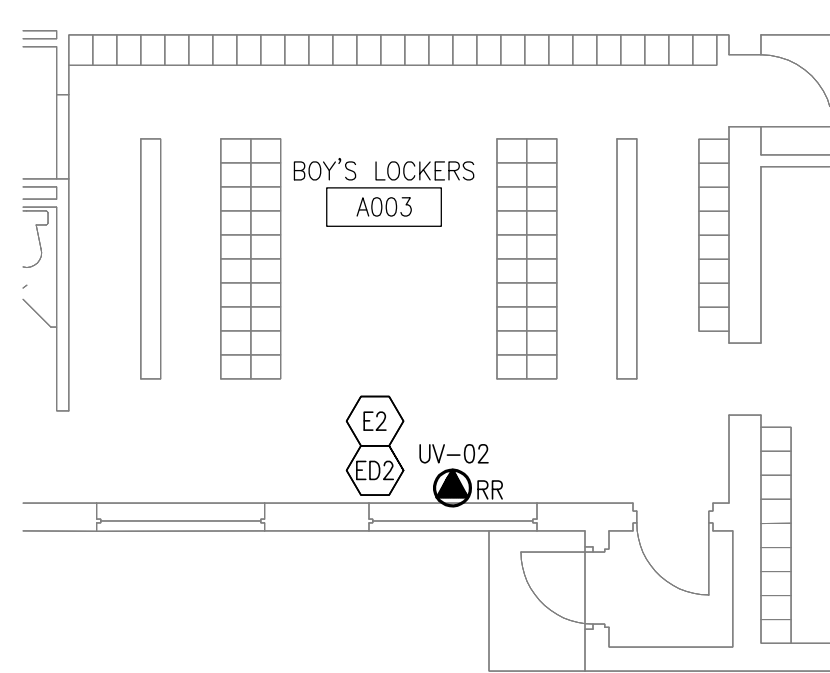
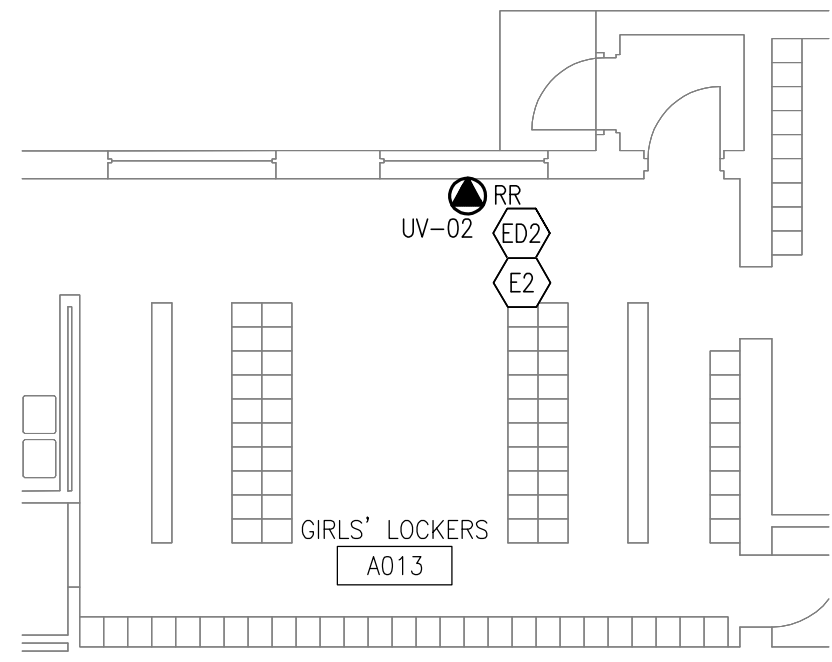
NOTES:	149 A	AMPS
[1] PROVIDE PANELBOARD WITH SILVER PLATED COPPER BUSS AND COPPER GROUND BAR. [2] PROVIDE PANELBOARD WITH DOOR-IN-DOOR TRIM. [3] PROVIDE WITH BLACK FACE, WHITE CORE ENGRAVED NAMEPLATE FIXED TO PANEL WITH TWS SCREWS OR RIVETS. [4] PROVIDE WITH METAL FRAM PLASTIC COVER CIRCUIT DIRECTORY FRAME. [5] PROVIDE WITH TYPE WRITTEN CIRCUIT DIRECTORY PREPRESENTING CIRCUITS AS ACTUALLY CONNECTED TO PANEL. [6] CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE. [7] * = GFCI C.B.		

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|
| NOTES: | 149 A | AMPS |
| [1] PROVIDE PANELBOARD WITH SILVER PLATED COPPER BUSS AND COPPER GROUND BAR.
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[3] PROVIDE WITH BLACK FACE, WHITE CORE ENGRAVED NAMEPLATE FIXED TO PANEL WITH TWS SCREWS OR RIVETS.
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[7] * = GFCI C.B. | | |

NOTES:

- [1] PROVIDE PANELBOARD WITH SILVER PLATED COPPER BUSS AND COPPER GROUND BAR.
- [2] PROVIDE PANELBOARD WITH DOOR-IN-DOOR TRIM.
- [3] PROVIDE WITH BLACK FACE, WHITE CORE ENGRAVED NAMEPLATE FIXED TO PANEL WITH TWS SCREWS OR RIVETS.
- [4] PROVIDE WITH METAL FRAM PLASTIC COVER CIRCUIT DIRECTORY FRAME.
- [5] PROVIDE WITH TYPE WRITTEN CIRCUIT DIRECTORY PREPRESENTING CIRCUITS AS ACTUALLY CONNECTED TO PANEL.
- [6] CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.
- [7] * = GFCI C/B.

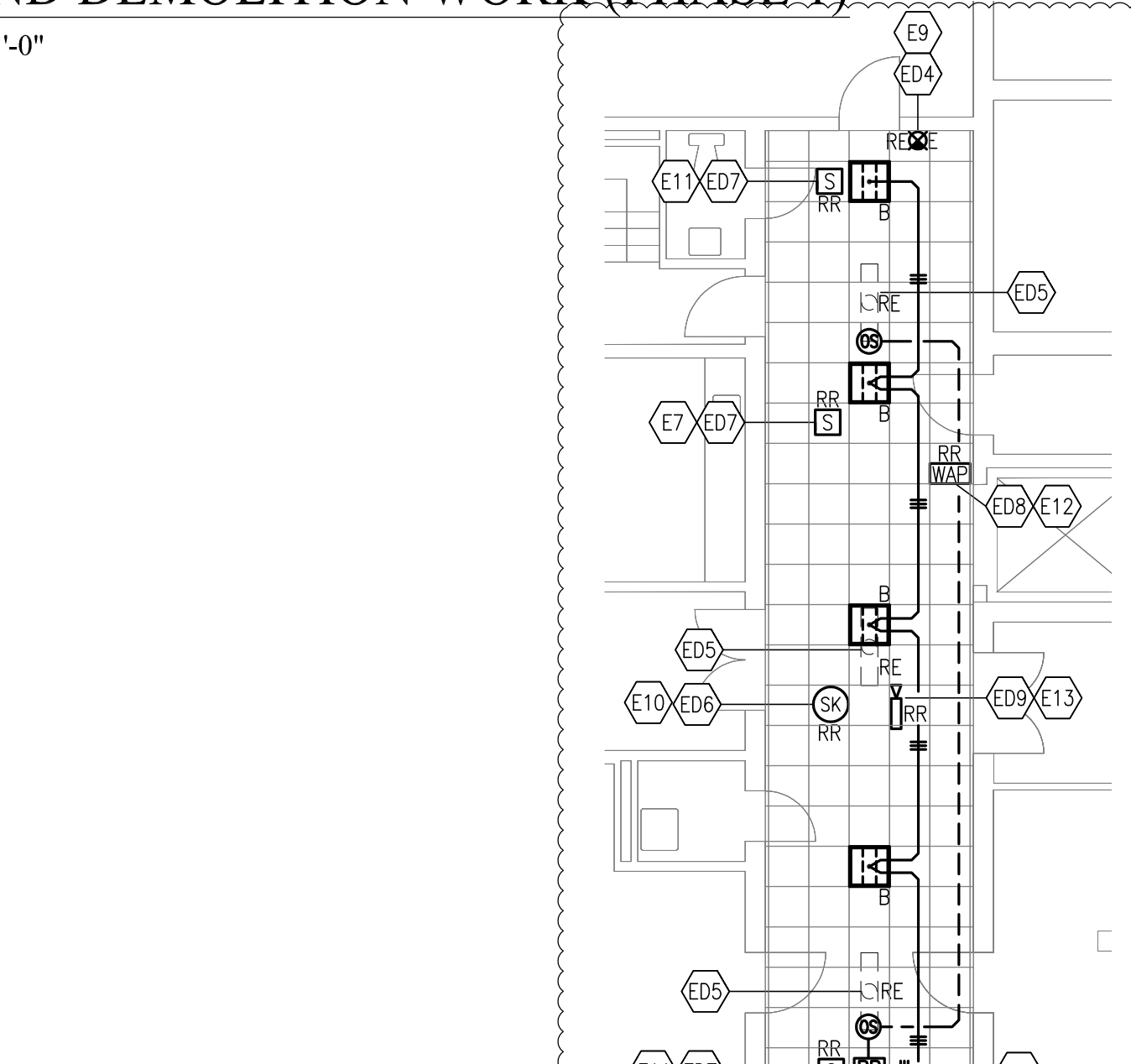
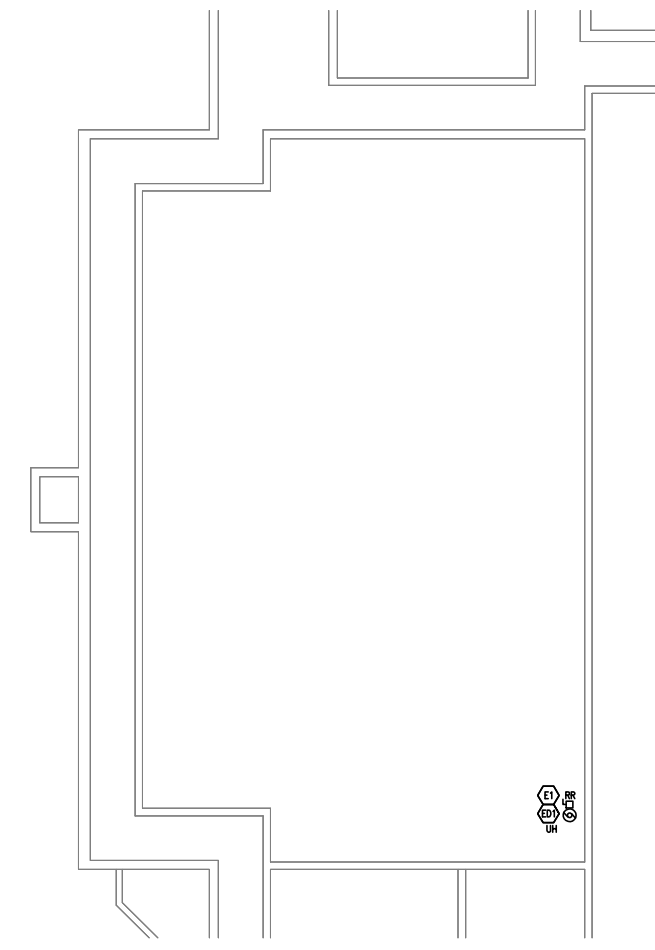
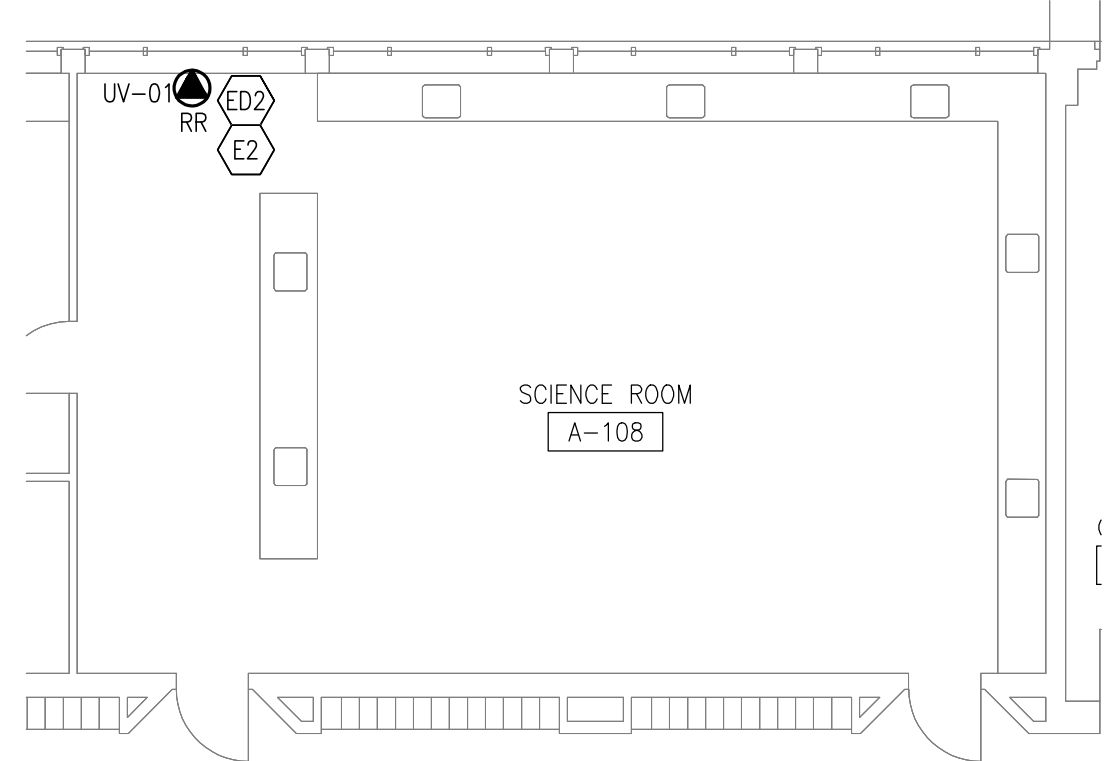
- NOTES:**
- [1] PROVIDE PANELBOARD WITH SILVER PLATED COPPER BUSS AND COPPER GROUND BAR.
 - [2] PROVIDE PANELBOARD WITH DOOR-IN-DOOR TRIM.
 - [3] PROVIDE WITH BLACK FACE, WHITE CORE ENGRAVED NAMEPLATE FIXED TO PANEL WITH TWS SCREWS OR RIVETS.
 - [4] PROVIDE WITH METAL FRAM PLASTIC COVER CIRCUIT DIRECTORY FRAME.
 - [5] PROVIDE WITH TYPE WRITTEN CIRCUIT DIRECTORY PREPRESENTING CIRCUITS AS ACTUALLY CONNECTED TO PANEL.
 - [6] CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.
 - [7] * = GFCI C/B.



1 BASEMENT PART PLAN -GIRLS LOCKER RM A013 - ELECTRICAL NEW AND DEMOLITION WORK (PHASE 1)
SCALE: 1/8"=1'-0"

2 BASEMENT PART PLAN -BOYS LOCKER RM A003 - ELECTRICAL NEW AND DEMOLITION WORK (PHASE 1)
SCALE: 1/8"=1'-0"

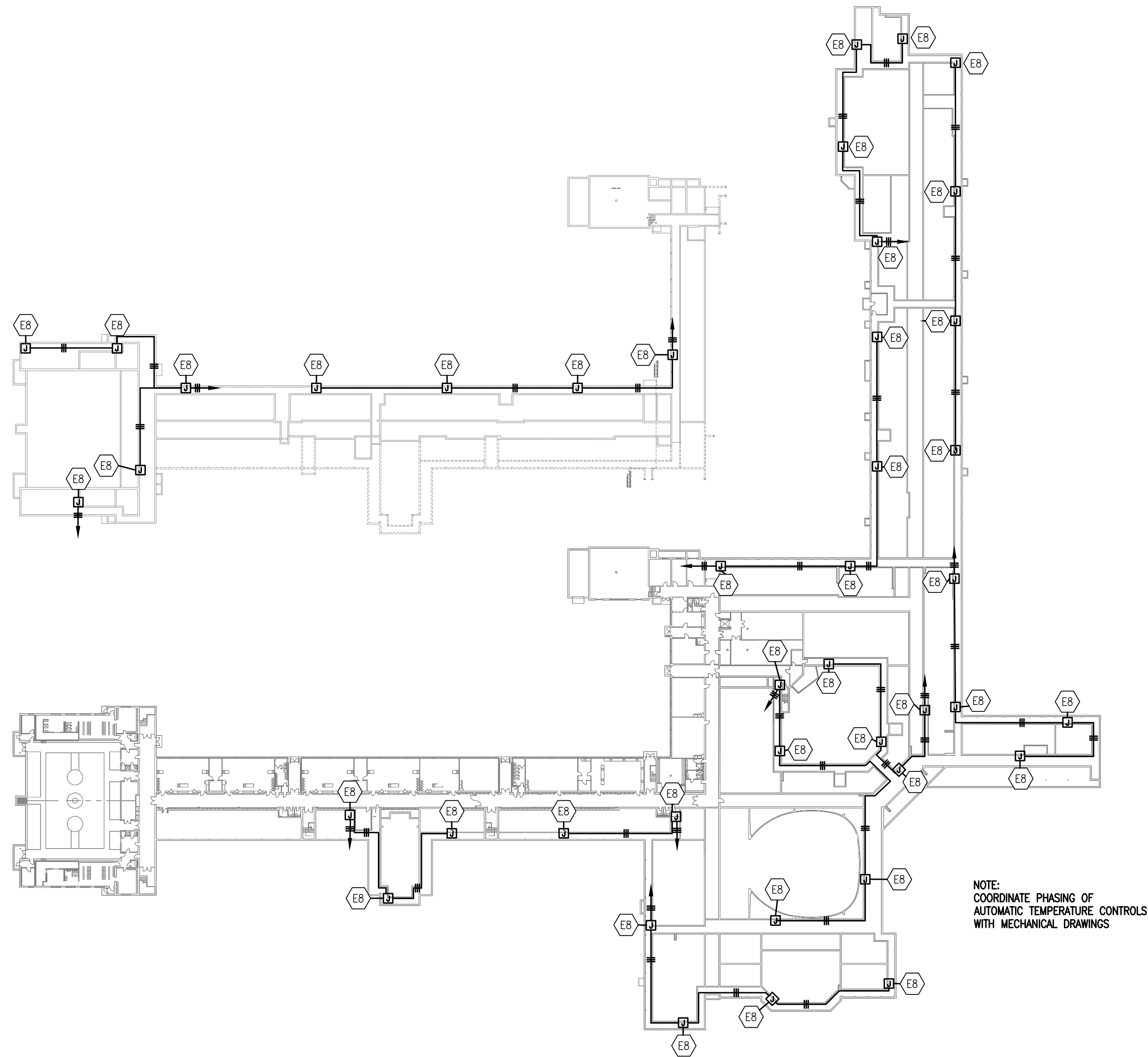
3 BASEMENT PART PLAN -MATH - A110 - ELECTRICAL NEW AND DEMOLITION WORK (PHASE 1)
SCALE: 1/8"=1'-0"



ELECTRICAL KEY NOTES (NEW WORK)	
SYMBOL	DESCRIPTION OF WORK
E1	NEW UNIT HEATER AT EXISTING LOCATION (BY M.C.) E.C. SHALL PROVIDE NEW THERMAL OVERLOAD SWITCH AND CONNECT NEW UNIT HEATER TO EXISTING BRANCH CIRCUIT, EXTEND NEW MATCHING WIRING & CONDUIT, PROVIDE ALL NECESSARY MATERIALS & LABOR NECESSARY FOR A COMPLETE INSTALLATION (TYPICAL FOR ALL UNIT VENTILATORS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
E2	NEW UNIT VENTILATOR AT EXISTING LOCATION (BY M.C.) E.C. SHALL PROVIDE NEW MOTOR RATED SWITCH AND CONNECT NEW UNIT VENTILATOR TO EXISTING BRANCH CIRCUIT, EXTEND NEW MATCHING WIRING & CONDUIT, PROVIDE ALL NECESSARY MATERIALS & LABOR NECESSARY FOR A COMPLETE INSTALLATION (TYPICAL FOR ALL UNIT VENTILATORS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
E3	NEW CABINET UNIT HEATER AT EXISTING LOCATION (BY M.C.) E.C. SHALL PROVIDE NEW THERMAL OVERLOAD SWITCH AND CONNECT NEW CABINET UNIT HEATER TO EXISTING BRANCH CIRCUIT, EXTEND NEW MATCHING WIRING & CONDUIT, PROVIDE ALL NECESSARY MATERIALS & LABOR NECESSARY FOR A COMPLETE INSTALLATION (TYPICAL FOR ALL CABINET UNIT HEATERS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
E4	NEW CIRCULATOR PUMP FOR NEW HOT WATER COIL (BY M.C.) E.C. SHALL PROVIDE NEW 20A MOTOR RATED SWITCH AND CONNECT TO NEW PUMP AND EXTEND 2#12, 1#12G IN 3/4" CONDUIT FROM NEW SWITCH TO NEAREST 120/208V PANEL (WITHIN 100') & CONNECT TO NEW 1P-20A CIRCUIT BREAKER. E.C. SHALL PROVIDE NEW CIRCUIT BREAKER IN EXISTING BLANK SPACE, NEW CIRCUIT BREAKER SHALL MATCH EXISTING PANEL MANUFACTURER AND AIC RATING (COORDINATE WITH FIELD CONDITIONS).
E5	NEW CIRCULATOR PUMP FOR NEW HOT WATER COIL (BY M.C.) REPLACING EXISTING, E.C. SHALL DISCONNECT ELECTRICAL AND MAKE SAFE FOR REMOVAL, E.C. SHALL PROVIDE NEW 20A MOTOR RATED SWITCH AND RECONNECT TO EXISTING BRANCH CIRCUIT, RE-WORK TO NEW UNIT AND CONNECT (MAINTAIN CONTINUITY) IF EXISTING CIRCUIT IS OTHER THAN 1P-20A THIS CONTRACTOR SHALL PROVIDE NEW 1P-20A ENCLOSED CIRCUIT BREAKER ADJACENT TO EXISTING ELECTRIC PANEL (VERIFY EXACT LOCATION IN FIELD) TAP EXISTING PANEL BUS WITH 2#12, 1#12G IN 3/4" CONDUIT FROM NEW SWITCH TO NEAREST 120/208V PANEL (WITHIN 100') & CONNECT TO NEW 1P-20A CIRCUIT BREAKER. E.C. SHALL PROVIDE NEW CIRCUIT BREAKER IN EXISTING BLANK SPACE, NEW CIRCUIT BREAKER SHALL MATCH EXISTING PANEL MANUFACTURER AND AIC RATING.
E6	NEW CIRCULATOR PUMP FOR NEW HOT WATER COIL (BY M.C.) E.C. SHALL PROVIDE NEW 20A MOTOR RATED SWITCH AND CONNECT TO NEW PUMP AND EXTEND 2#10, 1#10G IN 3/4" CONDUIT FROM NEW SWITCH TO NEAREST 120/208V PANEL (WITHIN 100') & CONNECT TO NEW 1P-30A CIRCUIT BREAKER. E.C. SHALL PROVIDE NEW CIRCUIT BREAKER IN EXISTING BLANK SPACE, NEW CIRCUIT BREAKER SHALL MATCH EXISTING PANEL MANUFACTURER AND AIC RATING (COORDINATE WITH FIELD CONDITIONS).
E7	NEW CIRCULATOR PUMP FOR NEW HOT WATER COIL (BY M.C.) E.C. SHALL PROVIDE NEW 20A MOTOR RATED SWITCH AND CONNECT TO NEW PUMP AND EXTEND 2#12, 1#12G IN 3/4" CONDUIT FROM NEW SWITCH TO NEW ENCLOSED CIRCUIT BREAKER & CONNECT.
E8	NEW JUNCTION BOX WITH 3/4" CONDUIT AND 1P-20A CIRCUIT FOR AUTOMATIC TEMPERATURE CONTROL CONTROLLERS (COORDINATE EXACT LOCATION AND QUANTITIES WITH MECHANICAL CONTRACTOR) E.C. SHALL EXTEND NEW 20A CIRCUIT FROM JUNCTION BOXES BACK TO NEW ELECTRICAL PANEL, BLY AND CONNECT AS REQUIRED (MAXIMUM OF 4 JUNCTION BOXES PER CIRCUIT), WIRE SIZE SHALL BE SUCH THAT MAXIMUM VOLTAGE DROP DOES NOT EXCEED 3%, VERIFY CONTROLLER LOADS WITH EQUIPMENT SUPPLIER AND INSTALLED CIRCUIT DISTANCES WITH FIELD CONDITIONS AND INCLUDE CALCULATIONS WITH ELECTRICAL SUBMITTALS FOR APPROVAL PRIOR TO BEGINNING.
E9	PROVIDE NEW SINGLE FACE EDGE LIT LED EXIT SIGN LIGHT, WITH 6" RED LETTERING 'EXIT', MIRRORRED BACKGROUND AND INTEGRAL 90 MINUTE BATTERY BACKUP BEGHELLI #0L2-SA-LR-1-M-CR-BA-AT
E10	REINSTALL EXISTING CEILING MOUNTED SPEAKER IN NEW ACT CEILING, EXTEND NEW MATCHING WIRING AS REQUIRED AND CONNECT AS REQUIRED TO MAINTAIN CONTINUITY (COMPLETE).
E11	REINSTALL EXISTING CEILING MOUNTED SMOKE DETECTOR IN NEW ACT CEILING, EXTEND NEW MATCHING WIRING AS REQUIRED AND CONNECT AS REQUIRED TO MAINTAIN CONTINUITY (COMPLETE).
E12	REINSTALL EXISTING CEILING MOUNTED WIRELESS ACCESS POINT (WAP) IN NEW ACT CEILING, EXTEND NEW MATCHING WIRING AS REQUIRED AND CONNECT AS REQUIRED TO MAINTAIN CONTINUITY (COMPLETE).
E13	REINSTALL EXISTING CEILING MOUNTED SECURITY CAMERA IN NEW ACT CEILING, EXTEND NEW MATCHING WIRING AS REQUIRED AND CONNECT AS REQUIRED TO MAINTAIN CONTINUITY (COMPLETE).
E14	PROVIDE NEW SINGLE FACE EDGE LIT LED EXIT SIGN LIGHT, WITH 6" RED LETTERING 'EXIT' & 6" HANDICAP ACCESSIBLE SYMBOL, MIRRORRED BACKGROUND AND INTEGRAL 90 MINUTE BATTERY BACKUP BEGHELLI #0L2-SA-LR-1-M-CR--SWCT-BA-AT
E15	EXTEND 2#12, 1#12G IN 3/4" TO EXISTING LIGHTING BRANCH CIRCUIT MADE AVAILABLE BY REMOVAL OF EXISTING LIGHTING AND CONNECT AS REQUIRED TO REMAIN WIRE NEW OCCUPANCY SENSORS SO THAT EXISTING SWITCHING TURNS LIGHTS OFF, OCCUPANCY SENSORS SHALL REDUCE LIGHT LEVEL BY 50% WHEN SPACE IS UNOCCUPIED

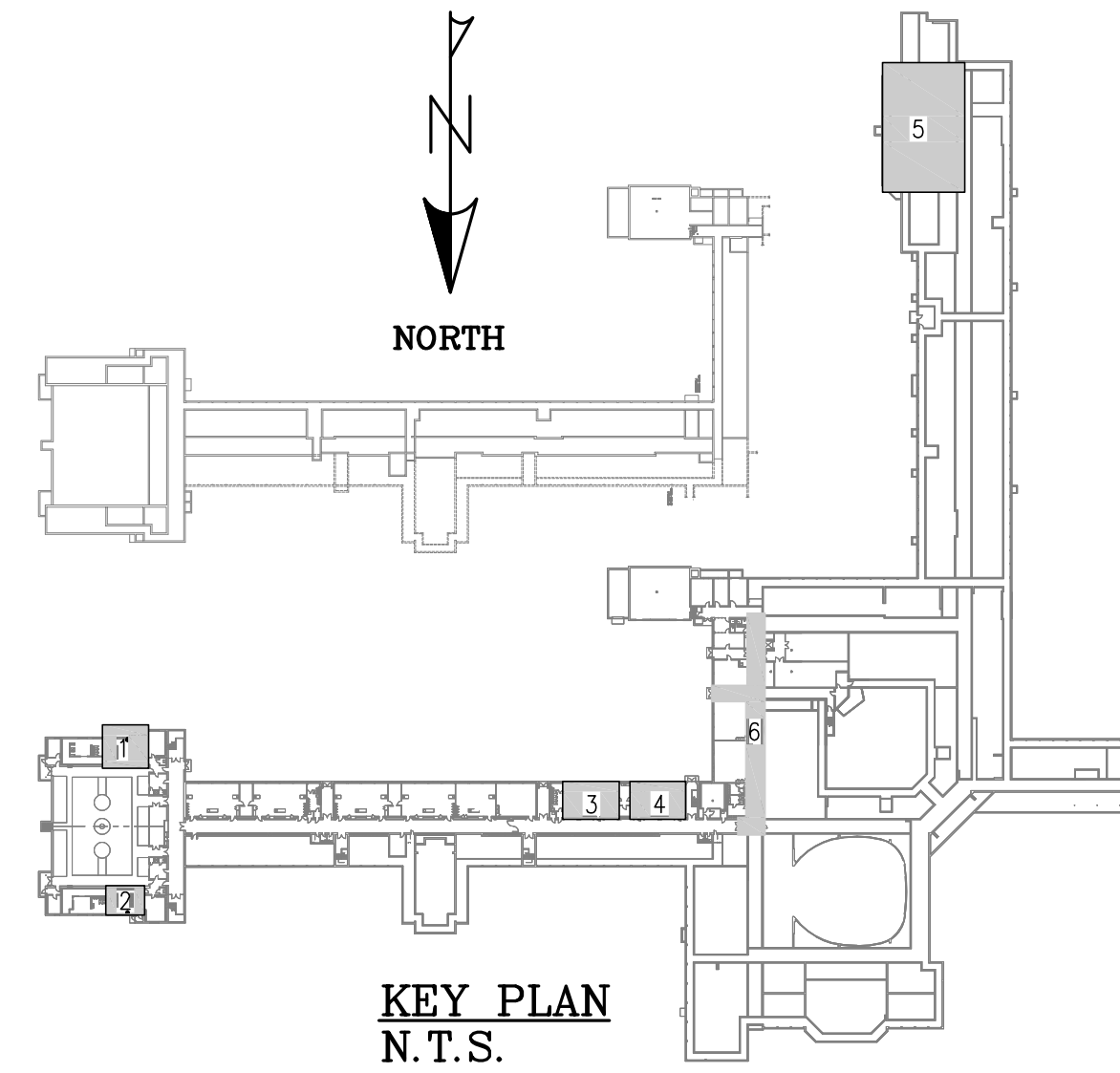
ELECTRICAL KEY NOTES (DEMOLITION)	
SYMBOL	DESCRIPTION OF WORK
ED1	EXISTING UNIT HEATER TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW (BY M.C.) E.C. SHALL DISCONNECT EXISTING ELECTRICAL AS REQUIRED FOR REMOVAL, MAKE SAFE ALL EXISTING WIRING (TYPICAL FOR ALL UNIT VENTILATORS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
ED2	EXISTING UNIT VENTILATOR TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW (BY M.C.) E.C. SHALL DISCONNECT EXISTING ELECTRICAL AS REQUIRED FOR REMOVAL, MAKE SAFE ALL EXISTING WIRING (TYPICAL FOR ALL UNIT VENTILATORS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
ED3	EXISTING CABINET UNIT HEATER TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW (BY M.C.) E.C. SHALL DISCONNECT EXISTING ELECTRICAL AS REQUIRED FOR REMOVAL, MAKE SAFE EXISTING WIRING (TYPICAL FOR ALL CABINET UNIT HEATERS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
ED4	EXISTING EXIT SIGN TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW, MAKE SAFE EXISTING WIRING.
ED5	EXISTING CEILING MOUNTED LIGHTING FIXTURE AND ALL ASSOCIATED OBSOLETE WIRING TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW, MAKE SAFE EXISTING WIRING.
ED6	EXISTING CEILING MOUNTED SPEAKER TO BE DISCONNECTED, REMOVED AND REPLACED, MAKE SAFE EXISTING WIRING.
ED7	EXISTING CEILING MOUNTED SMOKE DETECTOR TO BE DISCONNECTED, REMOVED AND REINSTALLED, MAKE SAFE EXISTING WIRING.
ED8	EXISTING WIRELESS ACCESS POINT (WAP) TO BE DISCONNECTED, REMOVED AND REINSTALLED, MAKE SAFE EXISTING WIRING.
ED9	EXISTING SECURITY CAMERA TO BE DISCONNECTED, REMOVED AND RE-INSTALLED, MAKE SAFE EXISTING WIRING.

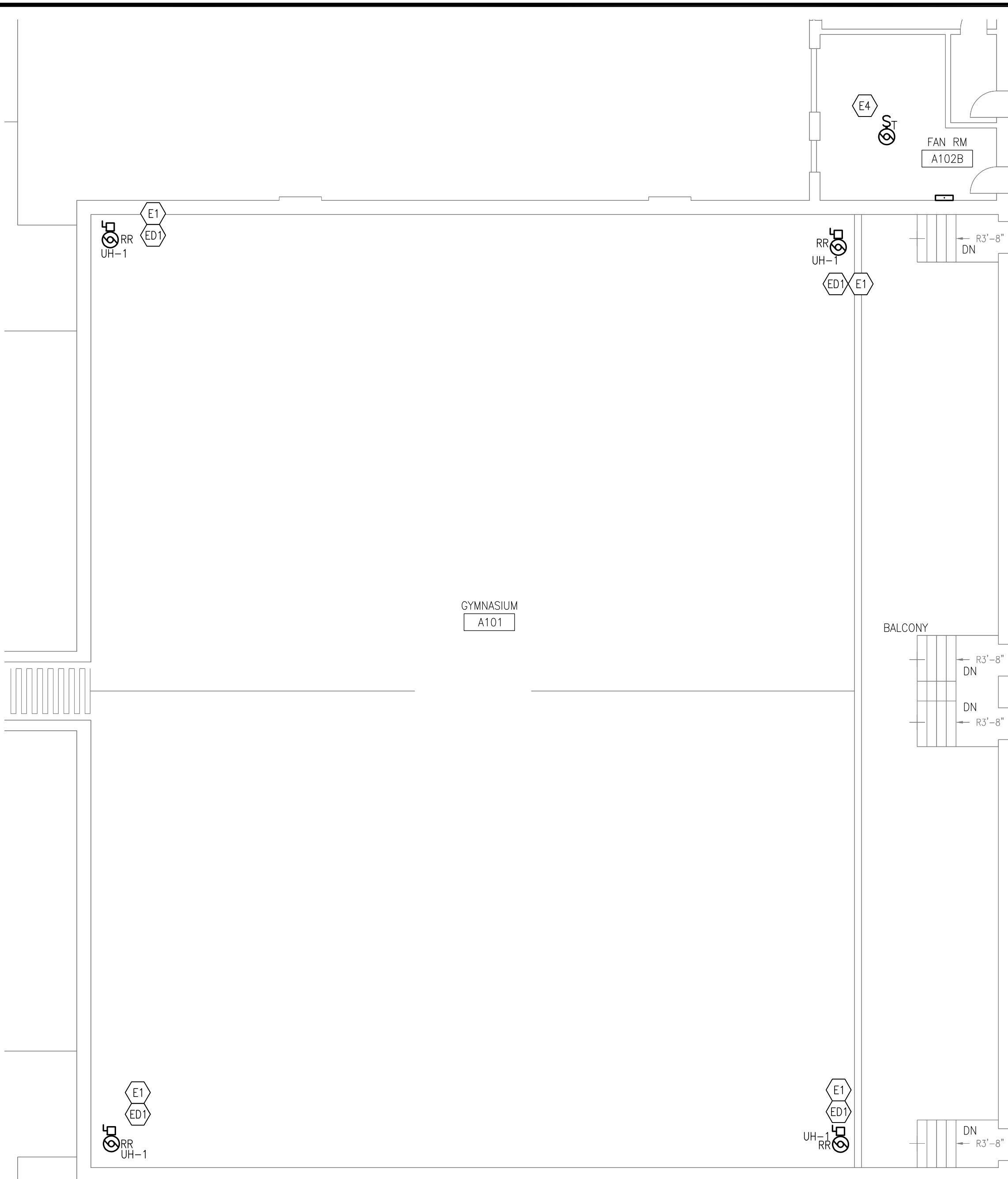
- NOTES:
- SEE SYMBOLS, SCHEDULES, NOTES & DETAILS.
 - E.C. SHALL RE-WIRE EXISTING EQUIPMENT BEING REPLACED WITH NEW, COORDINATE FINAL QUANTITY AND LOCATION OF ALL EQUIPMENT WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS.
 - PROVIDE A SEPARATE NEUTRAL WIRE FOR EACH CIRCUIT.
 - PROVIDE A SEPARATE GROUND WIRE IN EACH CONDUIT.
 - WHERE EXISTING EQUIPMENT IS SUPPLIED BY METALLIC CONDUIT, THE CONDUIT MAY BE USED AS THE EQUIPMENT GROUND PER NEW E.C. WHERE EXISTING EQUIPMENT DOES NOT CONTAIN A SEPARATE GROUND (SUCH AS BX CABLE), THE ELECTRICAL CONTRACTOR SHALL PROVIDE NEW AS PART OF THE BASE CONTRACT. E.C. SHALL REMOVE AND REPLACE EXISTING BRANCH CIRCUIT BACK TO UPSTREAM PANELBOARD (COMPLETE) PROVIDE NEW MATCHING WIRING AND CONDUIT FROM PANELBOARD TO EQUIPMENT AND CONNECT. E.C. SHALL REMOVE ALL EXISTING ASSOCIATED OBSOLETE WIRING, CUT BACK CONDUIT TO STRUCTURE, CAP AND SECURE.
 - ALL NEW BRANCH CIRCUIT WIRING SHALL BE CONCEALED, CUT AND PATCH WALLS, FLOORS AND CEILINGS WHERE NECESSARY, WHERE CONCEALING NEW BRANCH CIRCUIT WIRING IS NOT PRACTICABLE, THIS CONTRACTOR SHALL PROVIDE THE FOLLOWING:
 - IN FINISHED OCCUPIED AREAS E.C. SHALL PROVIDE WIREMOLD DS4000 STEEL RACEWAY (COLOR TO MATCH SURROUNDINGS) COMPLETE WITH ALL ACCESSORIES.
 - IN FINISHED UNOCCUPIED AREAS E.C. SHALL PROVIDE WIREMOLD V700 STEEL RACEWAY (COLOR TO MATCH SURROUNDINGS) COMPLETE WITH ALL ACCESSORIES.
 - IN UNFINISHED AREAS E.C. SHALL PROVIDE EMT CONDUIT.



5 BASEMENT PART PLAN -TUNNEL AREA - POWER FOR HVAC CONTROL PANELS
SCALE: 1/64"=1'-0"

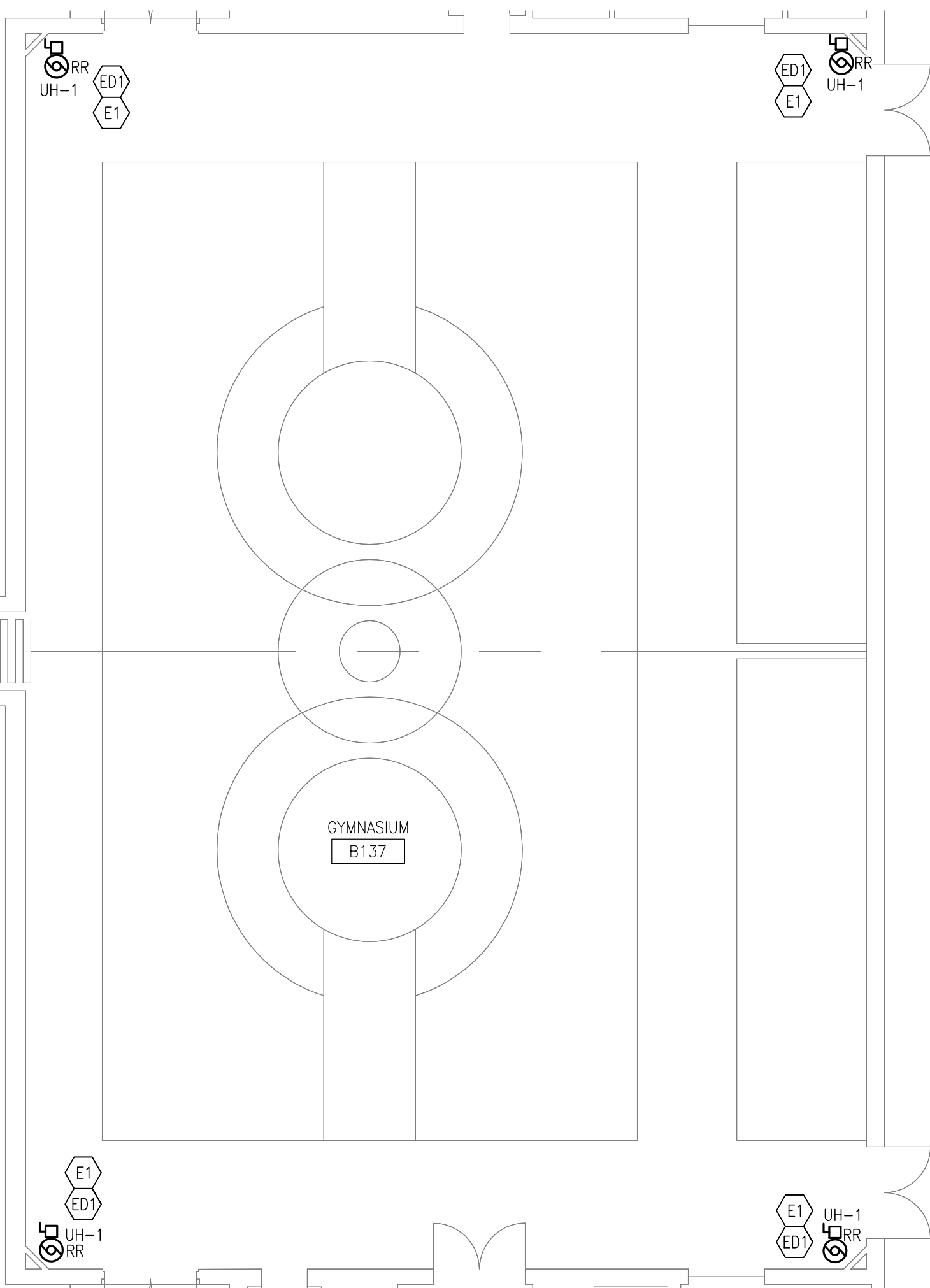
6 FIRST FLOOR PART PLAN - ELECTRICAL NEW AND DEMOLITION WORK (PHASE 1)
SCALE: 1/8"=1'-0"





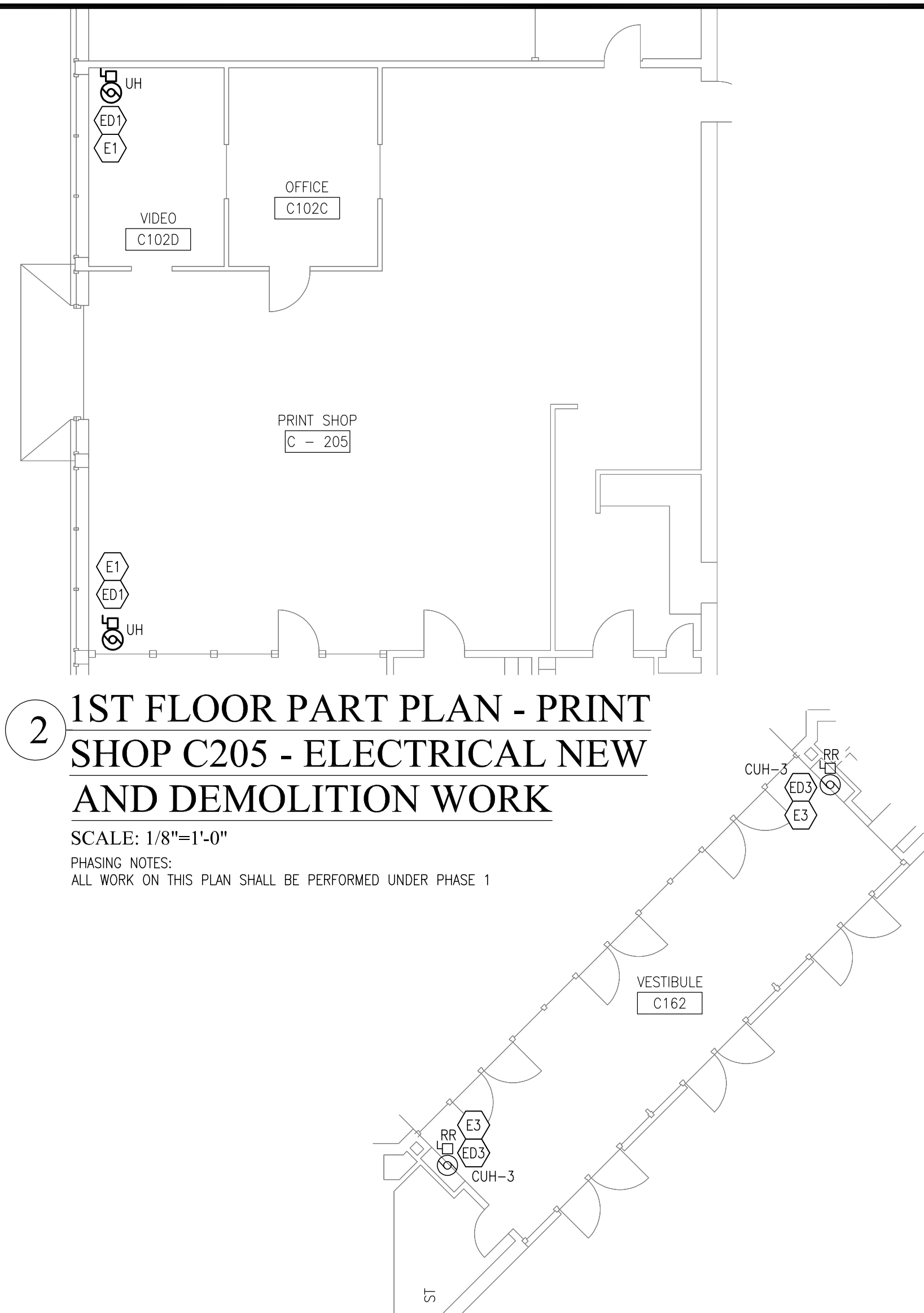
1ST FLOOR PART PLAN -GYM A101 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 1



1ST FLOOR PART PLAN - GYMNASIUM B137 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2

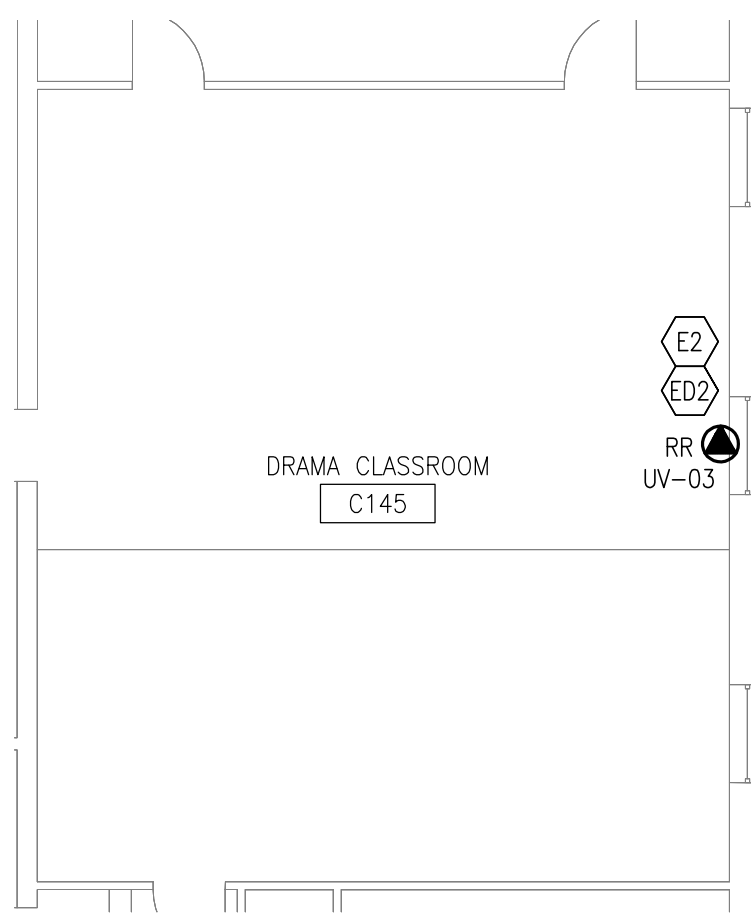


1ST FLOOR PART PLAN - PRINT SHOP C205 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 1

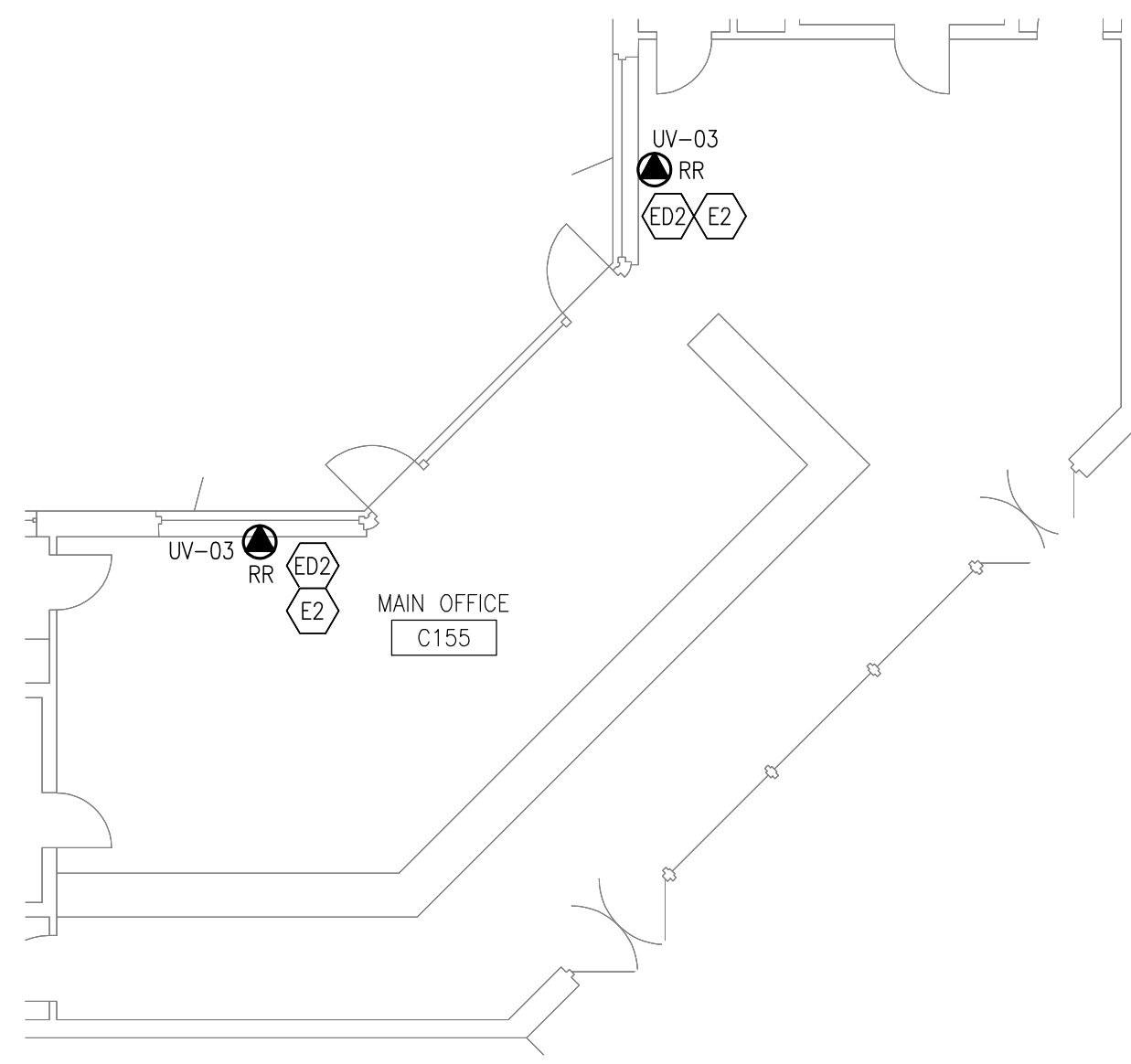
1ST FLOOR PART PLAN -VESTIBULE - C162 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2



1ST FLOOR PART PLAN -DRAMA CLASSROOM C145 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2

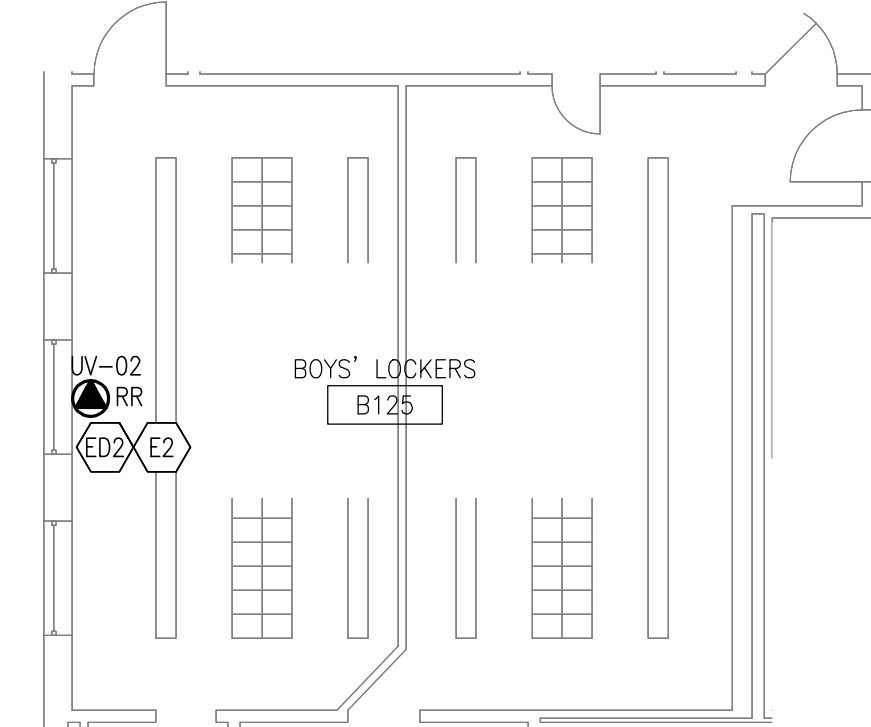


1ST FLOOR PART PLAN -MAIN OFFICE C155 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2

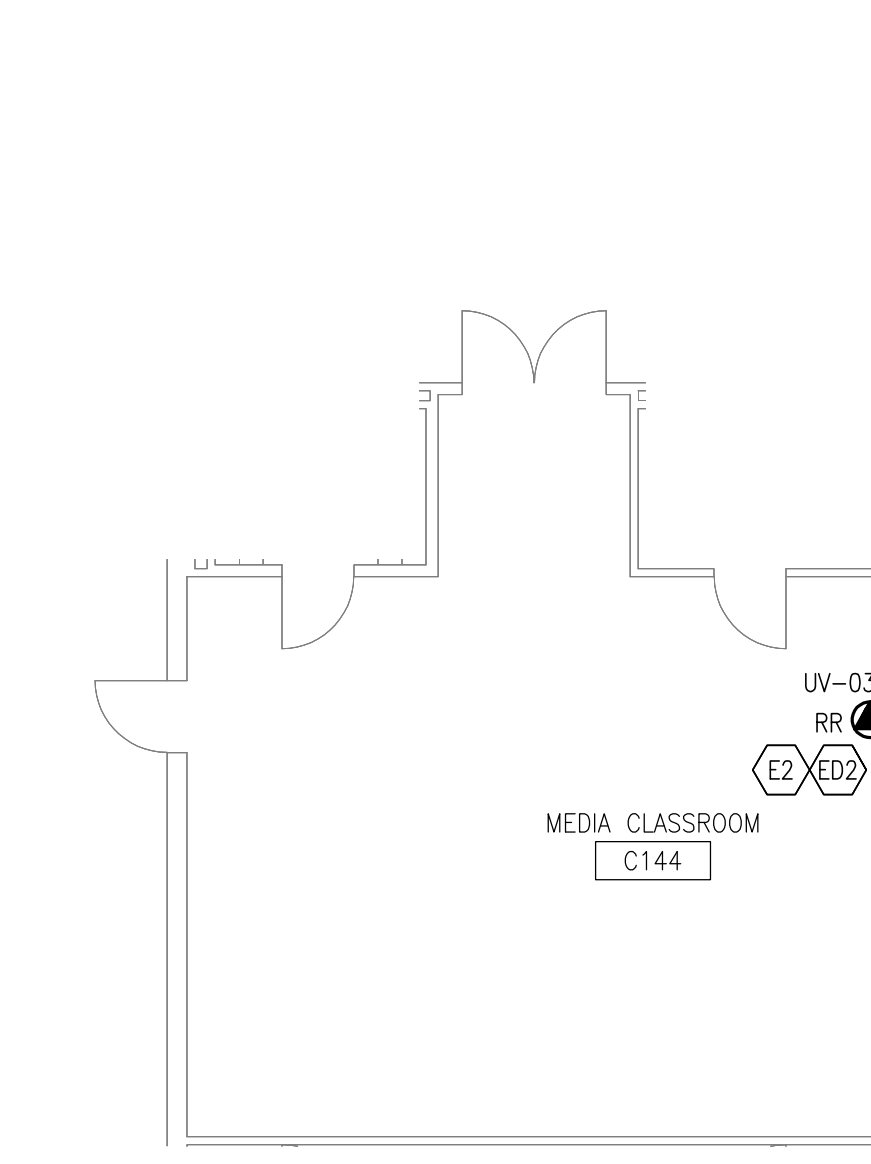
1ST FLOOR PART PLAN -VESTIBULE - C123 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2



1ST FLOOR PART PLAN - BOYS LOCKERS B125 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2

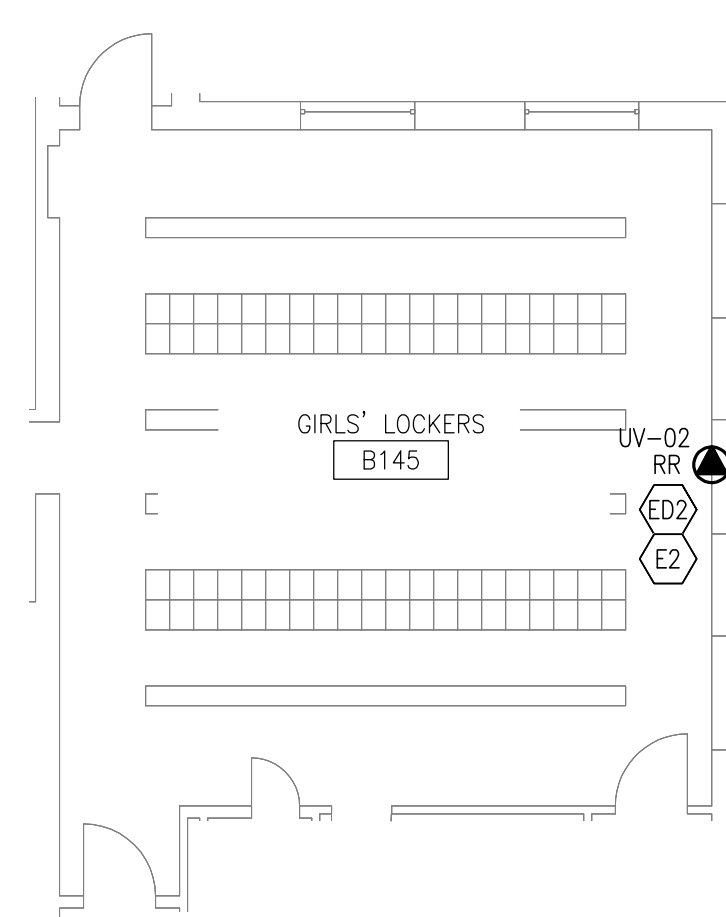


1ST FLOOR PART PLAN -MEDIA CLASSROOM C144 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2

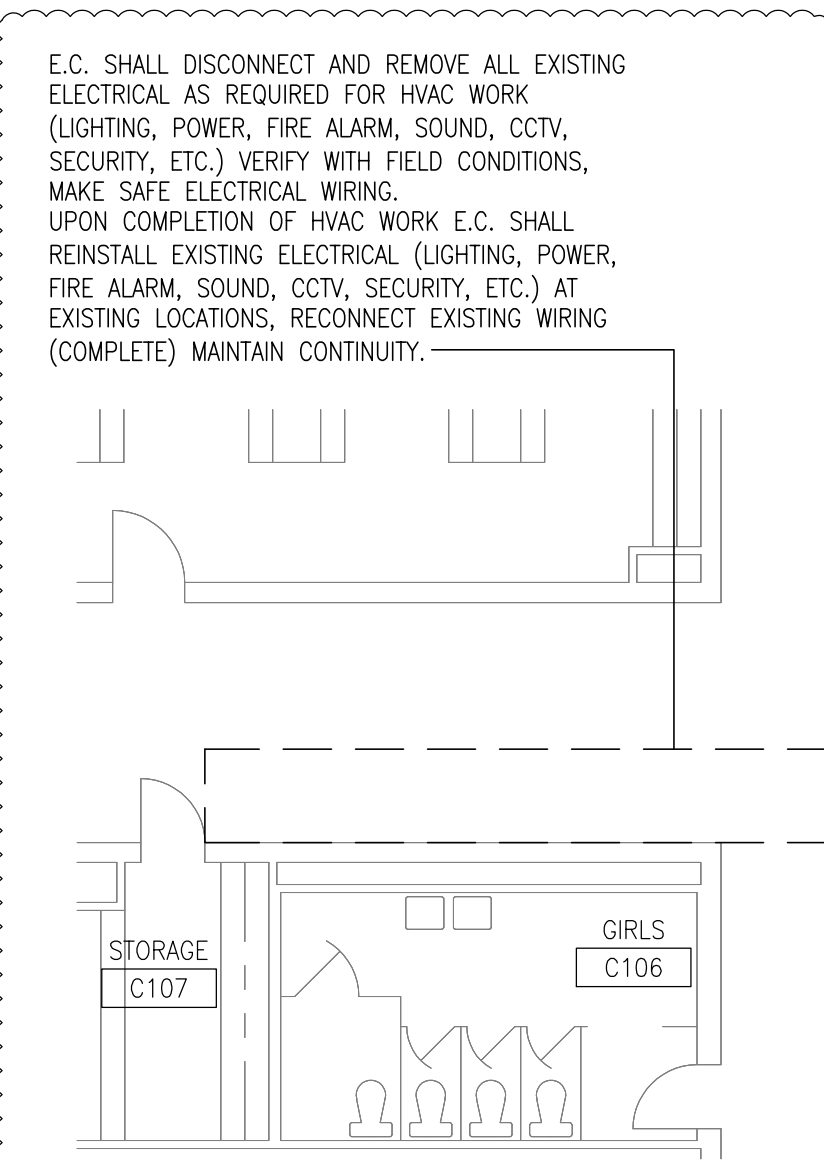
1ST FLOOR PART PLAN - GIRLS LOCKERS B145 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2



1ST FLOOR PART PLAN - GIRLS LOCKERS B145 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 2



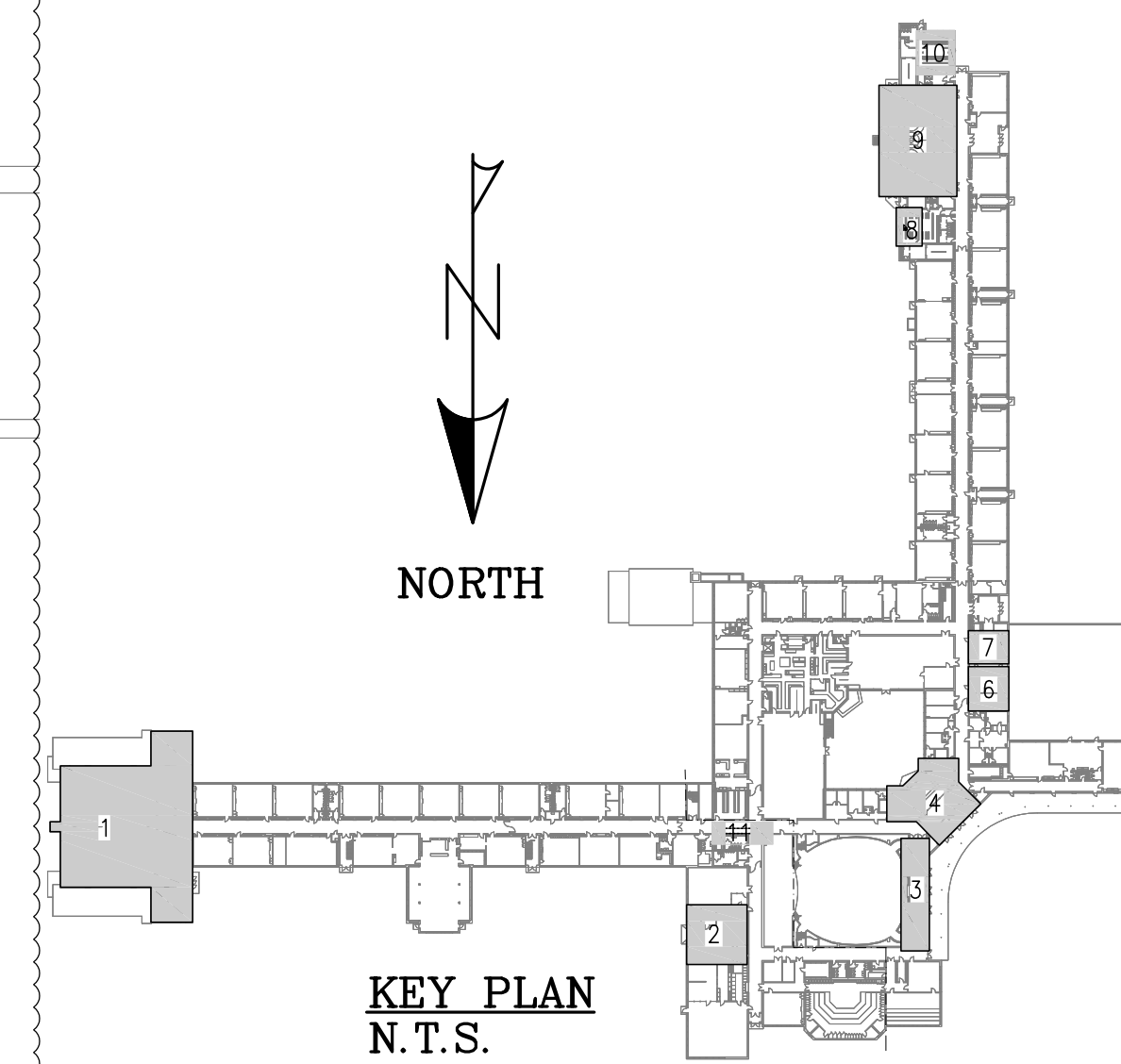
1ST FLOOR PART PLAN -CORRIDOR C124 - ELECTRICAL NEW AND DEMOLITION WORK

SCALE: 1/8"=1'-0"
PHASING NOTES:
ALL WORK ON THIS PLAN SHALL BE PERFORMED UNDER PHASE 1

ELECTRICAL KEY NOTES (NEW WORK)	
SYMBOL	DESCRIPTION OF WORK
E1	NEW UNIT HEATER AT EXISTING LOCATION (BY M.C.) E.C. SHALL PROVIDE NEW THERMAL OVERLOAD SWITCH AND CONNECT NEW UNIT HEATER TO EXISTING BRANCH CIRCUIT, EXTEND NEW MATCHING WIRING & CONDUIT, PROVIDE ALL NECESSARY MATERIALS & LABOR NECESSARY FOR A COMPLETE INSTALLATION (TYPICAL FOR ALL UNIT VENTILATORS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
E2	NEW UNIT VENTILATOR AT EXISTING LOCATION (BY M.C.) E.C. SHALL PROVIDE NEW MOTOR RATED SWITCH AND CONNECT NEW UNIT VENTILATOR TO EXISTING BRANCH CIRCUIT, EXTEND NEW MATCHING WIRING & CONDUIT, PROVIDE ALL NECESSARY MATERIALS & LABOR NECESSARY FOR A COMPLETE INSTALLATION (TYPICAL FOR ALL UNIT VENTILATORS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
E3	NEW CABINET UNIT HEATER AT EXISTING LOCATION (BY M.C.) E.C. SHALL PROVIDE NEW THERMAL OVERLOAD SWITCH AND CONNECT NEW CABINET UNIT HEATER TO EXISTING BRANCH CIRCUIT, EXTEND NEW MATCHING WIRING & CONDUIT, PROVIDE ALL NECESSARY MATERIALS & LABOR NECESSARY FOR A COMPLETE INSTALLATION (TYPICAL FOR ALL CABINET UNIT HEATERS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
E4	NEW CIRCULATOR PUMP FOR NEW HOT WATER COIL (BY M.C.) E.C. SHALL PROVIDE NEW 20A MOTOR RATED SWITCH AND CONNECT TO NEW PUMP AND EXTEND 2#12, 1#126 IN 3/4" CONDUIT FROM NEW SWITCH TO NEAREST 120/208V PANEL (WITHIN 100') & CONNECT TO NEW 1P-20A CIRCUIT BREAKER. E.C. SHALL PROVIDE NEW CIRCUIT BREAKER IN EXISTING BLANK SPACE. NEW CIRCUIT BREAKER SHALL MATCH EXISTING PANEL MANUFACTURER AND AIC RATING (COORDINATE WITH FIELD CONDITIONS).
E5	NEW CIRCULATOR PUMP FOR NEW HOT WATER COIL (BY M.C.) REPLACING EXISTING, E.C. SHALL DISCONNECT ELECTRICAL AND MAKE SAFE FOR REMOVAL, E.C. SHALL PROVIDE NEW 20A MOTOR RATED SWITCH AND RECONNECT TO EXISTING BRANCH CIRCUIT, RE-WORK TO NEW UNIT AND CONNECT (MAINTAIN CONTINUITY) IF EXISTING CIRCUIT IS OTHER THAN 1P-20A THIS CONTRACTOR SHALL PROVIDE NEW 1P-20A ENCLOSED CIRCUIT BREAKER ADJACENT TO EXISTING ELECTRIC PANEL (VERIFY EXACT LOCATION IN FIELD) TAP EXISTING PANEL BUS WITH 2#12, 1#126 IN 3/4" TAP LENGTH NOT TO EXCEED 10'. NEW CIRCUIT BREAKER SHALL MATCH EXISTING PANEL AIC RATING.
E6	NEW CIRCULATOR PUMP FOR NEW HOT WATER COIL (BY M.C.) E.C. SHALL PROVIDE NEW 20A MOTOR RATED SWITCH AND CONNECT TO NEW PUMP AND EXTEND 2#10, 1#106 IN 3/4" CONDUIT FROM NEW SWITCH TO NEAREST 120/208V PANEL (WITHIN 100') & CONNECT TO NEW 1P-30A CIRCUIT BREAKER. E.C. SHALL PROVIDE NEW CIRCUIT BREAKER IN EXISTING BLANK SPACE. NEW CIRCUIT BREAKER SHALL MATCH EXISTING PANEL MANUFACTURER AND AIC RATING (COORDINATE WITH FIELD CONDITIONS).
E7	NEW CIRCULATOR PUMP FOR NEW HOT WATER COIL (BY M.C.) E.C. SHALL PROVIDE NEW 20A MOTOR RATED SWITCH AND CONNECT TO NEW PUMP AND EXTEND 2#12, 1#126 IN 3/4" CONDUIT FROM NEW SWITCH TO NEW ENCLOSED CIRCUIT BREAKER & CONNECT.
E8	NEW JUNCTION BOX WITH 3/4" CONDUIT AND 1P-20A CIRCUIT FOR AUTOMATIC TEMPERATURE CONTROL CONTROLLERS (COORDINATE EXACT LOCATION AND QUANTITIES WITH MECHANICAL CONTRACTOR) E.C. SHALL EXTEND NEW 20A CIRCUIT FROM JUNCTION BOXES BACK TO NEW ELECTRICAL PANEL BUS AND CONNECT AS REQUIRED (MAXIMUM OF 4 JUNCTION BOXES PER CIRCUIT), WIRE SIZE SHALL BE SUCH THAT MAXIMUM VOLTAGE DROP DOES NOT EXCEED 3%, VERIFY CONTROLLER LOADS WITH EQUIPMENT SUPPLIER AND INSTALLED CONDUIT DISTANCES WITH FIELD CONDITIONS AND INCLUDE CALCULATIONS WITH ELECTRICAL SUBMITTALS FOR APPROVAL PRIOR TO ROUGHING.
E9	PROVIDE NEW SINGLE FACE EDGE LIT LED EXIT SIGN LIGHT, WITH 6" RED LETTERING "EXIT", MIRRORRED BACKGROUND AND INTEGRAL 90 MINUTE BATTERY BACKUP BEGHELLI #BOL2-SA-LR-1-M-CR-BA-AT
E10	REINSTALL EXISTING CEILING MOUNTED SPEAKER IN NEW ACT CEILING, EXTEND NEW MATCHING WIRING AS REQUIRED AND CONNECT AS REQUIRED TO MAINTAIN CONTINUITY (COMPLETE).
E11	REINSTALL EXISTING CEILING MOUNTED SMOKE DETECTOR IN NEW ACT CEILING, EXTEND NEW MATCHING WIRING AS REQUIRED AND CONNECT AS REQUIRED TO MAINTAIN CONTINUITY (COMPLETE).
E12	REINSTALL EXISTING CEILING MOUNTED WIRELESS ACCESS POINT (WAP) IN NEW ACT CEILING, EXTEND NEW MATCHING WIRING AS REQUIRED AND CONNECT AS REQUIRED TO MAINTAIN CONTINUITY (COMPLETE).
E13	REINSTALL EXISTING CEILING MOUNTED SECURITY CAMERA IN NEW ACT CEILING, EXTEND NEW MATCHING WIRING AS REQUIRED AND CONNECT AS REQUIRED TO MAINTAIN CONTINUITY (COMPLETE).
E14	PROVIDE NEW SINGLE FACE EDGE LIT LED EXIT SIGN LIGHT, WITH 6" RED LETTERING "EXIT" & 6" HANDICAP ACCESSIBLE SYMBOL, MIRRORRED BACKGROUND AND INTEGRAL 90 MINUTE BATTERY BACKUP BEGHELLI #BOL2-SA-LR-1-M-CR--SWT-BA-AT
E15	EXTEND 2#12, 1#126 IN 3/4" TO EXISTING LIGHTING BRANCH CIRCUIT MADE AVAILABLE BY REMOVAL OF EXISTING LIGHTING AND CONNECT AS REQUIRED, EXISTING SWITCHING TO REMAIN WIRE NEW OCCUPANCY SENSORS SO THAT EXISTING SWITCHING TURNS LIGHTS OFF, OCCUPANCY SENSORS SHALL REDUCE LIGHT LEVEL BY 50% WHEN SPACE IS UNOCCUPIED

ELECTRICAL KEY NOTES (DEMOLITION)	
SYMBOL	DESCRIPTION OF WORK
ED1	EXISTING UNIT HEATER TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW (BY M.C.) E.C. SHALL DISCONNECT EXISTING ELECTRICAL AS REQUIRED FOR REMOVAL, MAKE SAFE ALL EXISTING WIRING (TYPICAL FOR ALL UNIT VENTILATORS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
ED2	EXISTING UNIT VENTILATOR TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW (BY M.C.) E.C. SHALL DISCONNECT EXISTING ELECTRICAL AS REQUIRED FOR REMOVAL, MAKE SAFE ALL EXISTING WIRING (TYPICAL FOR ALL UNIT VENTILATORS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
ED3	EXISTING CABINET UNIT HEATER TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW (BY M.C.) E.C. SHALL DISCONNECT EXISTING ELECTRICAL AS REQUIRED FOR REMOVAL, MAKE SAFE EXISTING WIRING (TYPICAL FOR ALL CABINET UNIT HEATERS, COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS).
ED4	EXISTING EXIT SIGN TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW, MAKE SAFE EXISTING WIRING.
ED5	EXISTING CEILING MOUNTED LIGHTING FIXTURE AND ALL ASSOCIATED OBSOLETE WIRING TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW, MAKE SAFE EXISTING WIRING.
ED6	EXISTING CEILING MOUNTED SPEAKER TO BE DISCONNECTED, REMOVED AND REPLACED, MAKE SAFE EXISTING WIRING.
ED7	EXISTING CEILING MOUNTED SMOKE DETECTOR TO BE DISCONNECTED, REMOVED AND REINSTALLED, MAKE SAFE EXISTING WIRING.
ED8	EXISTING WIRELESS ACCESS POINT (WAP) TO BE DISCONNECTED, REMOVED AND REINSTALLED, MAKE SAFE EXISTING WIRING.
ED9	EXISTING SECURITY CAMERA TO BE DISCONNECTED, REMOVED AND RE-INSTALLED, MAKE SAFE EXISTING WIRING.

- NOTES:
- SEE SYMBOLS, SCHEDULES, NOTES & DETAILS.
 - E.C. SHALL RE-WIRE EXISTING EQUIPMENT BEING REPLACED WITH NEW, COORDINATE FINAL QUANTITY AND LOCATION OF ALL EQUIPMENT WITH MECHANICAL DRAWINGS AND FIELD CONDITIONS.
 - PROVIDE A SEPARATE NEUTRAL WIRE FOR EACH CIRCUIT.
 - PROVIDE A SEPARATE GROUND WIRE IN EACH CONDUIT.
 - WHERE EXISTING EQUIPMENT IS SUPPLIED BY METALLIC CONDUIT, THE CONDUIT MAY BE USED AS THE EQUIPMENT GROUND PER N.E.C. WHERE EXISTING EQUIPMENT BRANCH CIRCUITS DO NOT CONTAIN A SEPARATE GROUND (SUCH AS BX CABLE), THE ELECTRICAL CONTRACTOR SHALL PROVIDE NEW AS PART OF THE BASE CONTRACT. E.C. SHALL REMOVE AND REPLACE EXISTING BRANCH CIRCUIT BACK TO UPSTREAM PANELBOARD (COMPLETE) PROVIDE NEW MATCHING WIRING AND CONDUIT FROM PANELBOARD TO EQUIPMENT AND CONNECT. E.C. SHALL REMOVE ALL EXISTING ASSOCIATED OBSOLETE WIRING, CUT BACK CONDUIT TO STRUCTURE, CAP AND SECURE.
 - ALL NEW BRANCH CIRCUIT WIRING SHALL BE CONCEALED, CUT AND PATCH WALLS, FLOORS AND CEILINGS WHERE NECESSARY, WHERE CONCEALING NEW BRANCH CIRCUIT WIRING IS NOT PRACTICABLE, THIS CONTRACTOR SHALL PROVIDE THE FOLLOWING:
 - IN FINISHED OCCUPIED AREAS E.C. SHALL PROVIDE WIREMOLD D54000 STEEL RACEWAY (COLOR TO MATCH SURROUNDINGS) COMPLETE WITH ALL ACCESSORIES.
 - IN FINISHED UNOCCUPIED AREAS E.C. SHALL PROVIDE WIREMOLD V700 STEEL RACEWAY (COLOR TO MATCH SURROUNDINGS) COMPLETE WITH ALL ACCESSORIES.
 - IN UNFINISHED AREAS E.C. SHALL PROVIDE EMT CONDUIT.



REVISIONS
MARCH 23, 2020

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KING PHILIP MIDDLE SCHOOL

HOT WATER CONVERSION

100 KING PHILIP DRIVE – West Hartford, Connecticut

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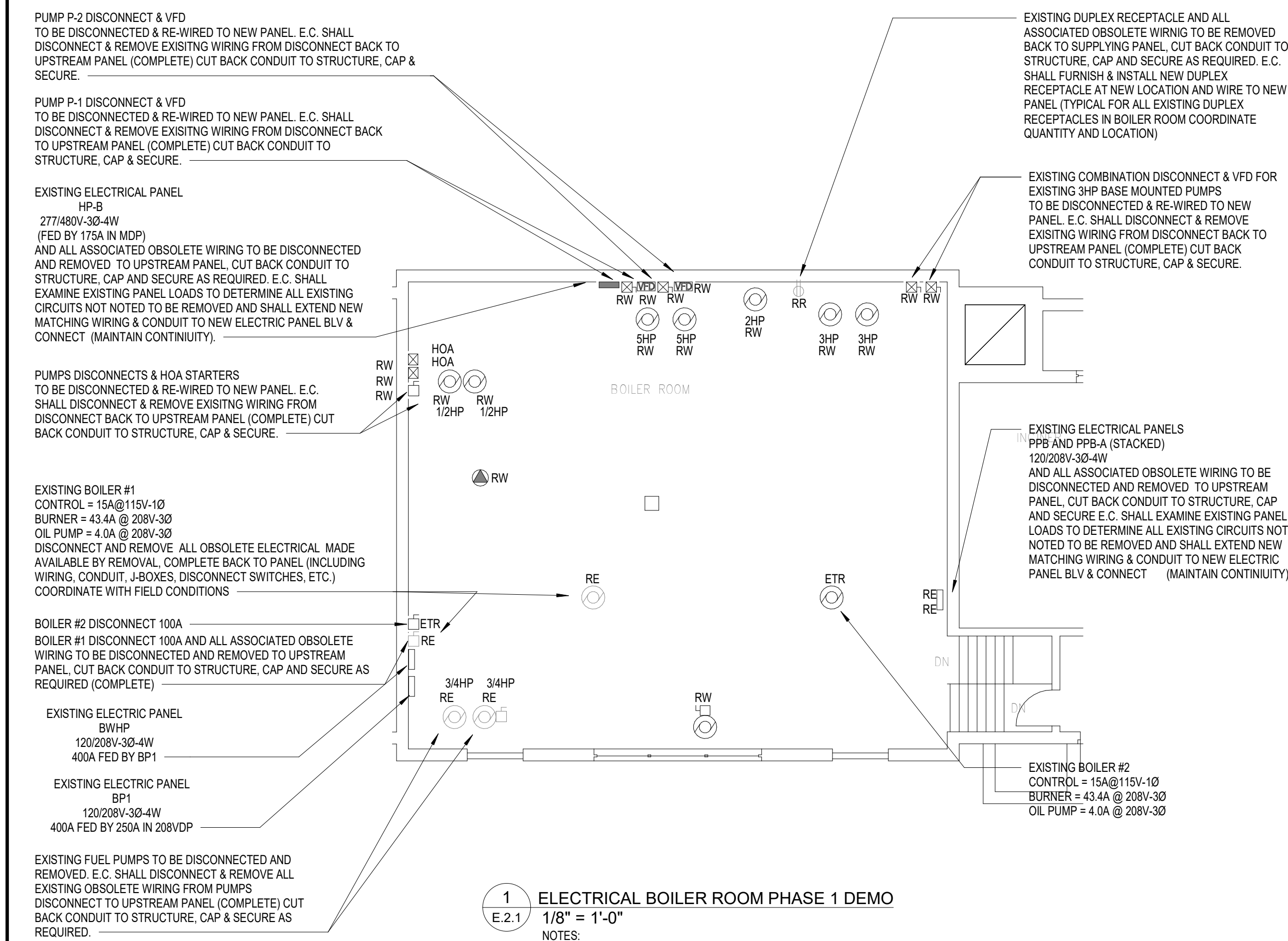
TITLE

FIRST FLOOR PART PLANS ELECTRICAL NEW AND DEMOLITION WORK

DATE 02/07/2020

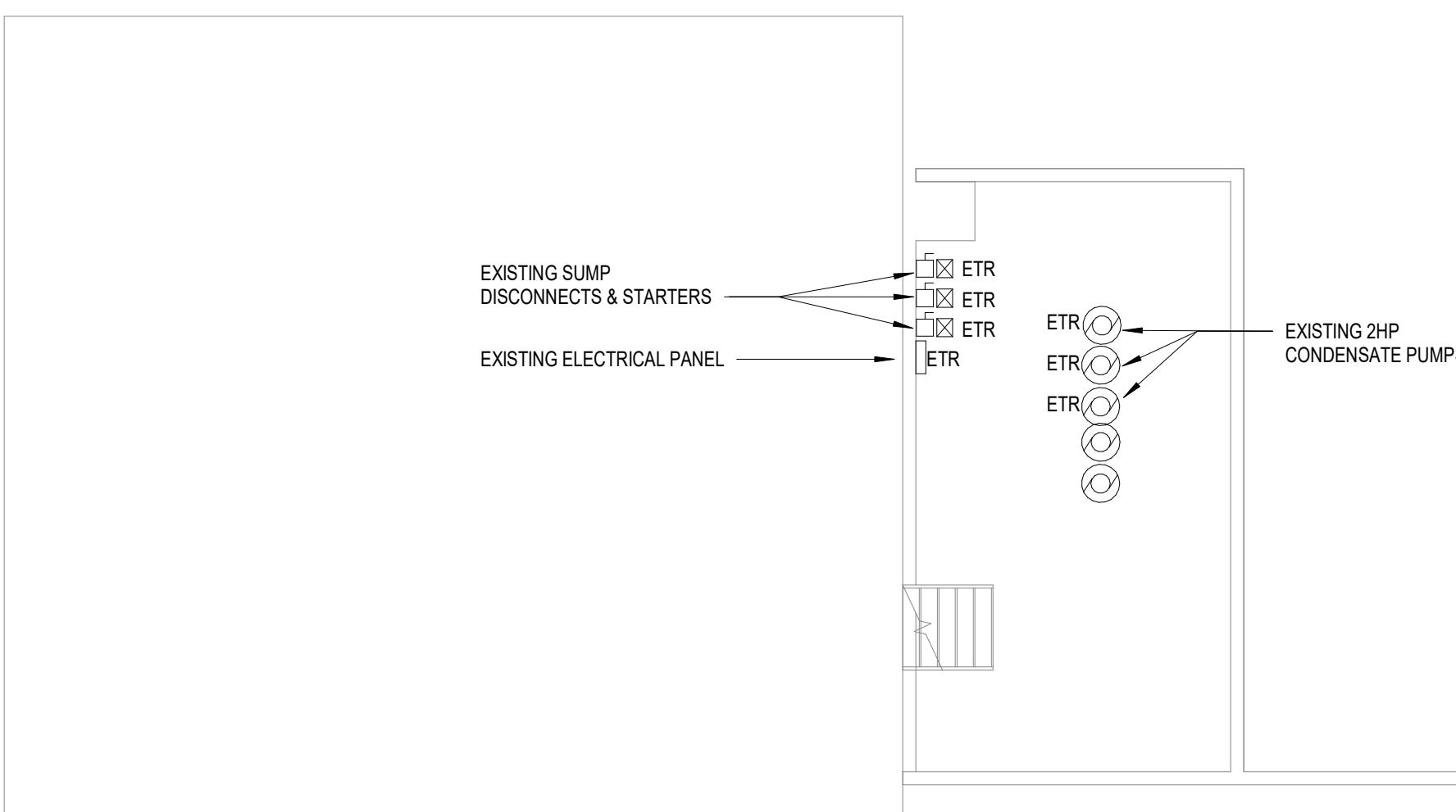
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E.1.2



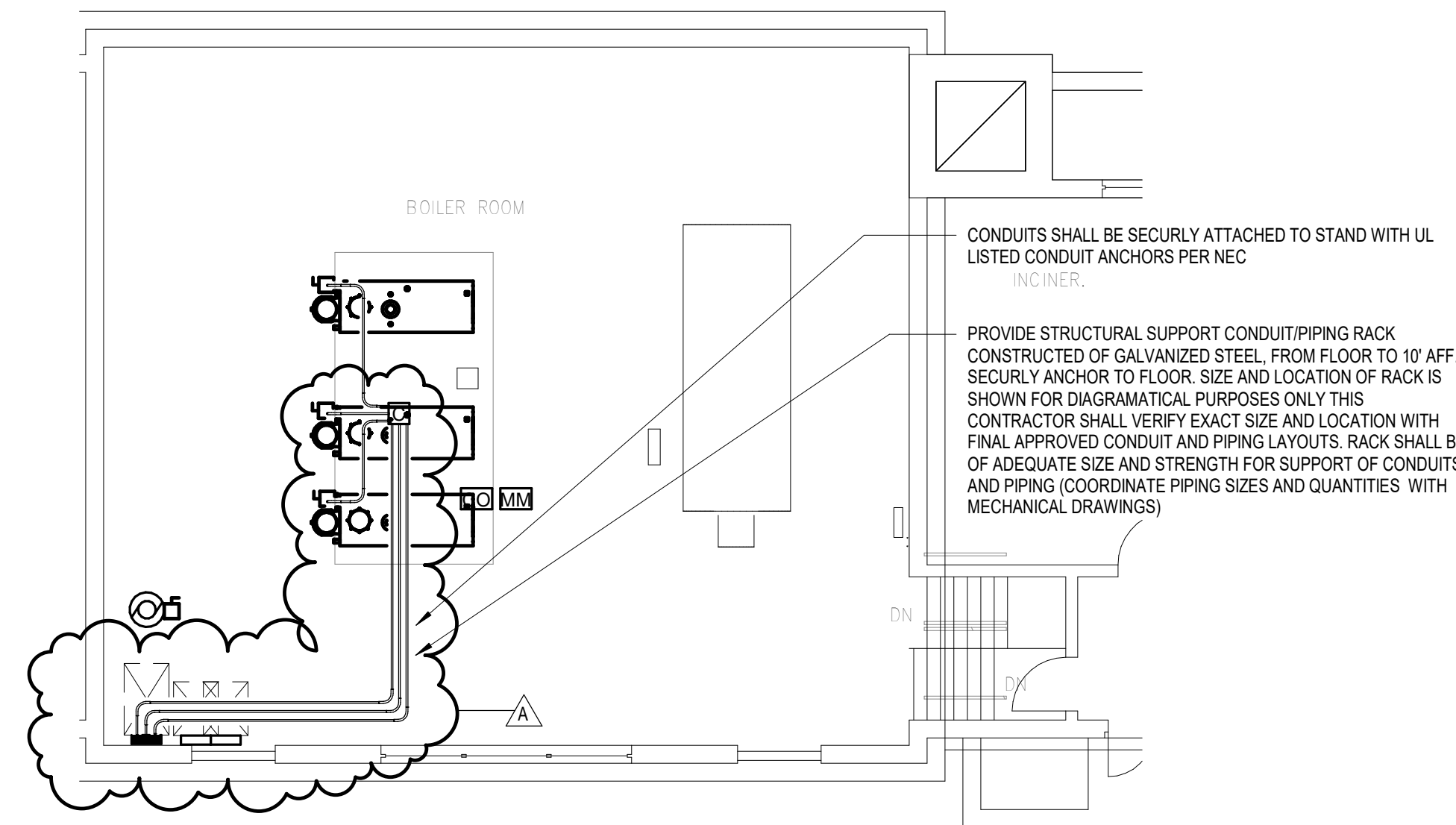
1 ELECTRICAL BOILER ROOM PHASE 1 DEMO
E.2.1 1/8" = 1'-0"

- NOTES:
- UPON REMOVAL OF ANY ELECTRICAL EQUIPMENT OR ELECTRICAL RELATED TO EQUIPMENT BEING REMOVED BY OTHER DIVISION THIS CONTRACTOR SHALL:
 - DISCONNECT ELECTRICAL POWER FROM EQUIPMENT. MAKE SAFE FOR REMOVAL.
 - REMOVE ALL ASSOCIATED OBSOLETE ELECTRICAL EQUIPMENT, SWITCHES, WIRING, ETC.
 - REMOVE ALL ASSOCIATED OBSOLETE WIRING (COMPLETE BACK TO SOURCE).
 - EXTEND NEW MATCHING WIRING AND CONDUIT AS REQUIRED TO MAINTAIN CONTINUITY OF ANY EQUIPMENT NOT LISTED FOR REMOVAL AND DISTURBED BY THE REMOVAL OF EXISTING. CONNECT TO EXISTING NEW CIRCUIT TO MAINTAIN CONTINUITY.
 - CUT BACK ALL ASSOCIATED OBSOLETE CONDUITS TO STRUCTURE, CEILING OR BELOW FLOOR. CAP WHERE CONDUITS ARE CUT BACK TO BELOW FLOOR THIS CONTRACTOR SHALL PATCH FLOOR SURFACE TO MATCH EXISTING SURROUNDINGS (COORDINATE WITH FIELD CONDITIONS).

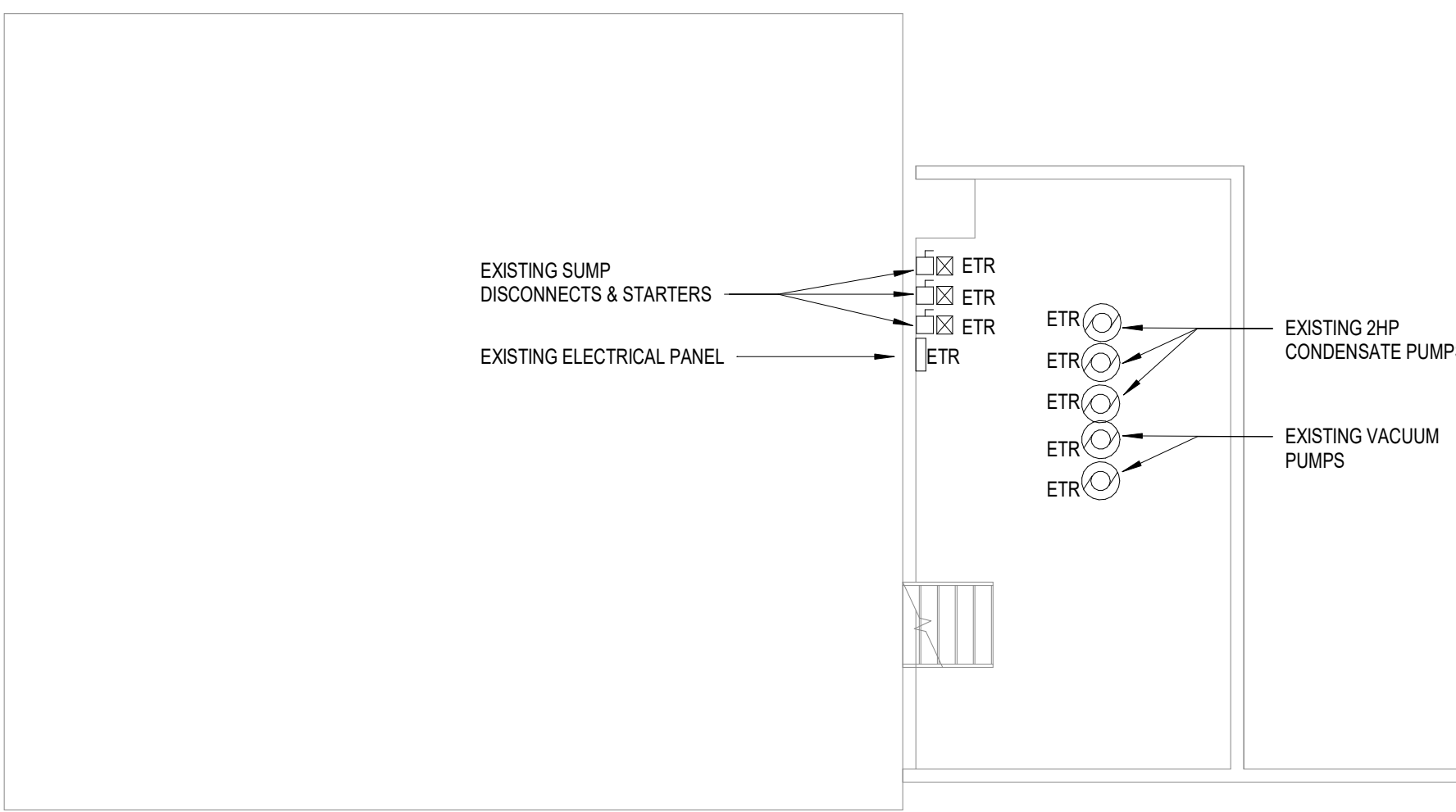


2 ELECTRICAL SUB BOILER ROOM PHASE 1 DEMO
E.2.1 1/8" = 1'-0"

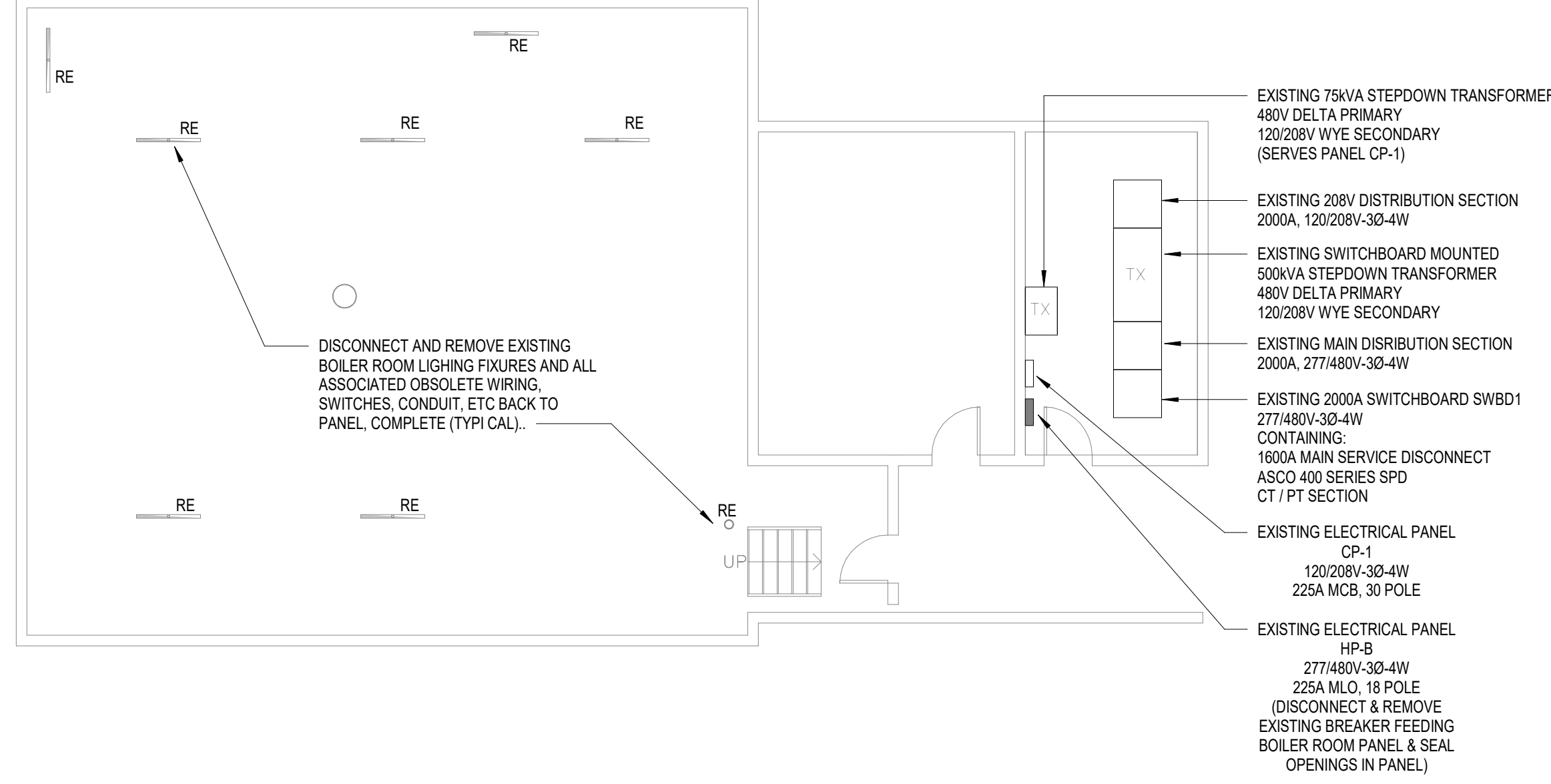
- NOTES:
- UPON REMOVAL OF ANY ELECTRICAL EQUIPMENT OR ELECTRICAL RELATED TO EQUIPMENT BEING REMOVED BY OTHER DIVISION THIS CONTRACTOR SHALL:
 - DISCONNECT ELECTRICAL POWER FROM EQUIPMENT. MAKE SAFE FOR REMOVAL.
 - REMOVE ALL ASSOCIATED OBSOLETE ELECTRICAL EQUIPMENT, SWITCHES, WIRING, ETC.
 - REMOVE ALL ASSOCIATED OBSOLETE WIRING (COMPLETE BACK TO SOURCE).
 - EXTEND NEW MATCHING WIRING AND CONDUIT AS REQUIRED TO MAINTAIN CONTINUITY OF ANY EQUIPMENT NOT LISTED FOR REMOVAL AND DISTURBED BY THE REMOVAL OF EXISTING. CONNECT TO EXISTING NEW CIRCUIT TO MAINTAIN CONTINUITY.
 - CUT BACK ALL ASSOCIATED OBSOLETE CONDUITS TO STRUCTURE, CEILING OR BELOW FLOOR. CAP WHERE CONDUITS ARE CUT BACK TO BELOW FLOOR THIS CONTRACTOR SHALL PATCH FLOOR SURFACE TO MATCH EXISTING SURROUNDINGS (COORDINATE WITH FIELD CONDITIONS).



7 ELECTRICAL BOILER ROOM PHASE 1 NEW WORK (CONDUIT & SUPORT)
E.2.1 1/8" = 1'-0"

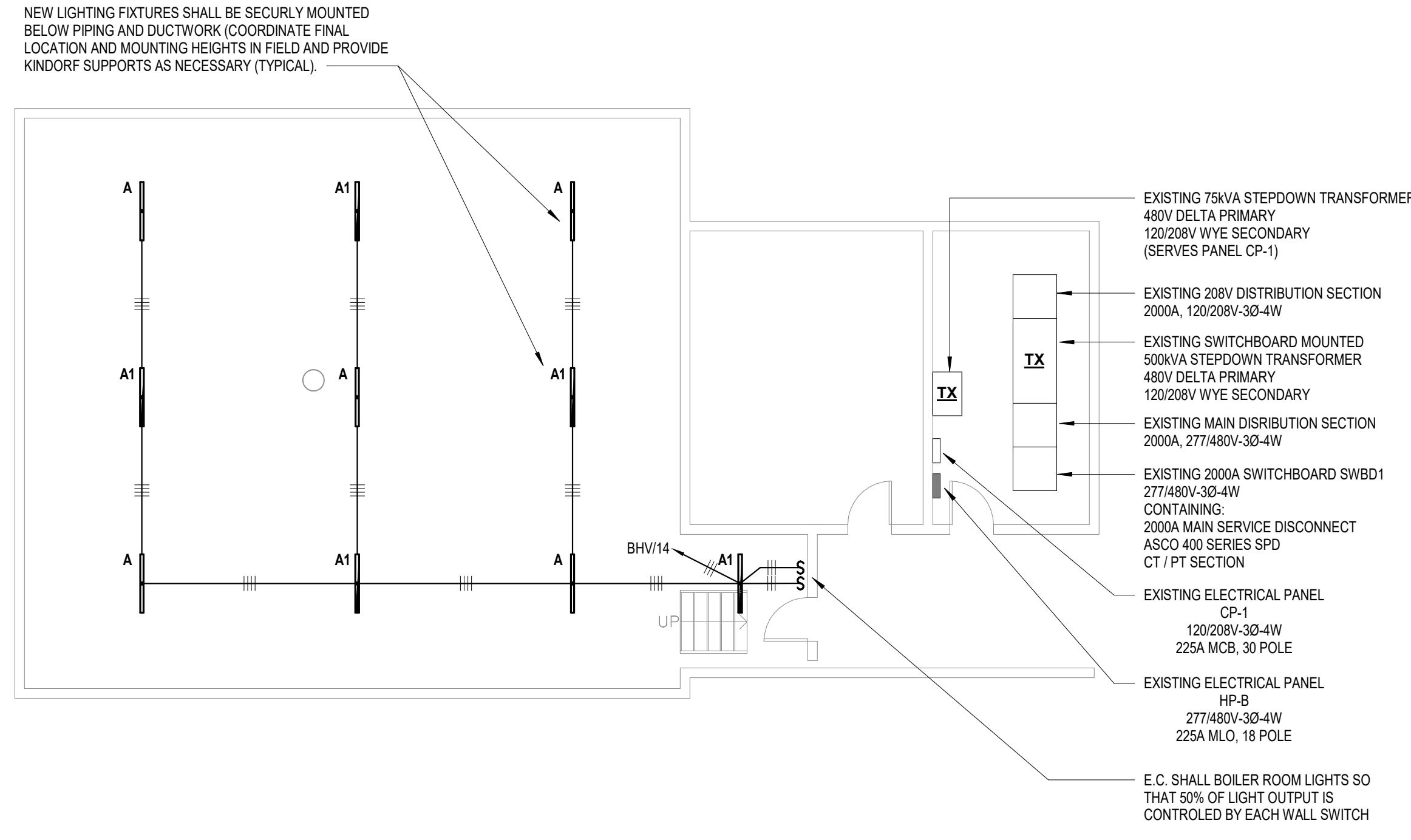


4 ELECTRICAL SUB BOILER ROOM PHASE 1 NEW WORK
E.2.1 1/8" = 1'-0"

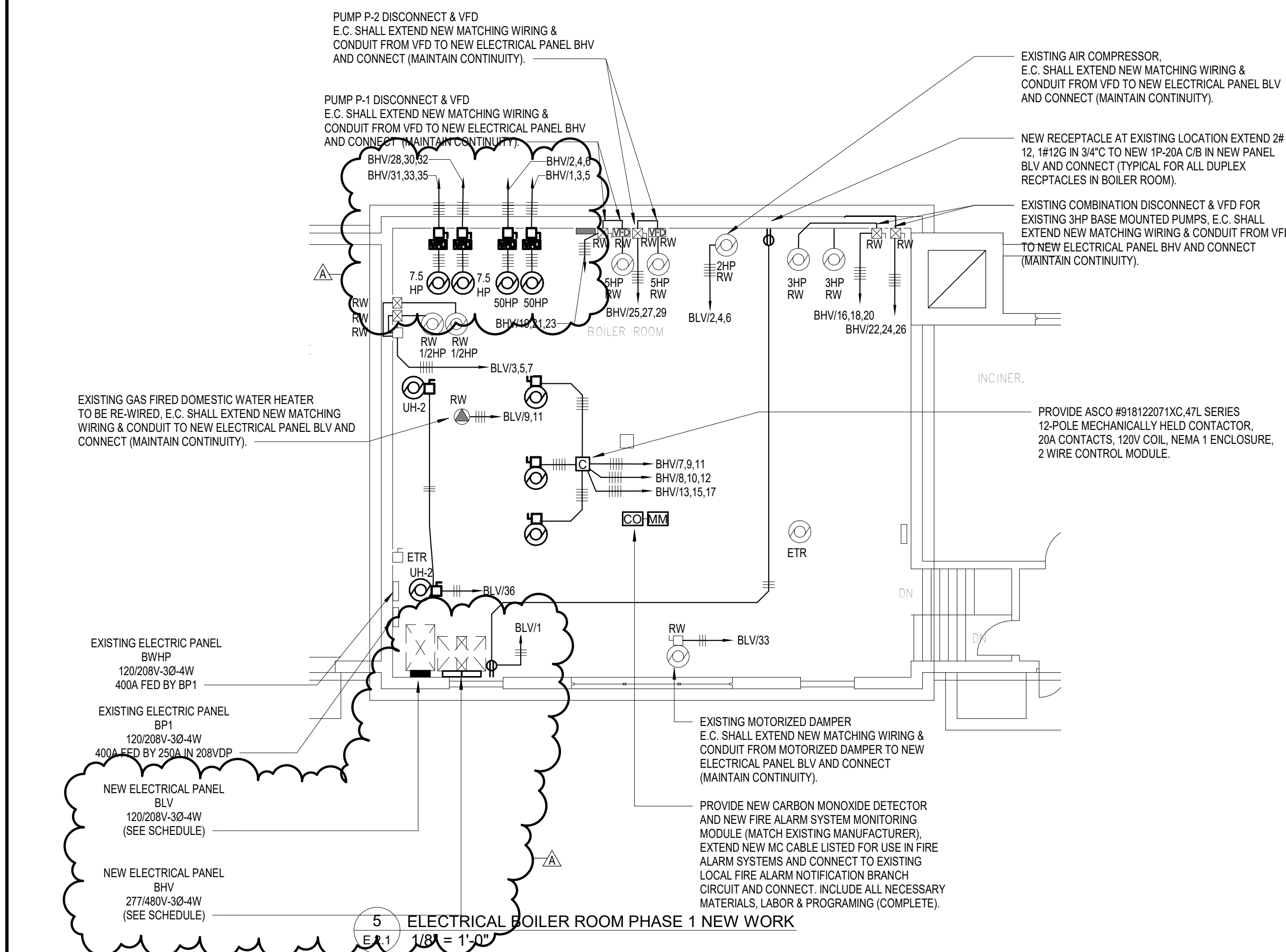


3 ELECTRICAL BOILER ROOM CEILING AND ELECTRICAL ROOM PHASE 1 DEMO
E.2.1 1/8" = 1'-0"

- NOTES:
- UPON REMOVAL OF ANY ELECTRICAL EQUIPMENT OR ELECTRICAL RELATED TO EQUIPMENT BEING REMOVED BY OTHER DIVISION THIS CONTRACTOR SHALL:
 - DISCONNECT ELECTRICAL POWER FROM EQUIPMENT. MAKE SAFE FOR REMOVAL.
 - REMOVE ALL ASSOCIATED OBSOLETE ELECTRICAL EQUIPMENT, SWITCHES, WIRING, ETC.
 - REMOVE ALL ASSOCIATED OBSOLETE WIRING (COMPLETE BACK TO SOURCE).
 - EXTEND NEW MATCHING WIRING AND CONDUIT AS REQUIRED TO MAINTAIN CONTINUITY OF ANY EQUIPMENT NOT LISTED FOR REMOVAL AND DISTURBED BY THE REMOVAL OF EXISTING. CONNECT TO EXISTING NEW CIRCUIT TO MAINTAIN CONTINUITY.
 - CUT BACK ALL ASSOCIATED OBSOLETE CONDUITS TO STRUCTURE, CEILING OR BELOW FLOOR. CAP WHERE CONDUITS ARE CUT BACK TO BELOW FLOOR THIS CONTRACTOR SHALL PATCH FLOOR SURFACE TO MATCH EXISTING SURROUNDINGS (COORDINATE WITH FIELD CONDITIONS).



6 ELECTRICAL BOILER ROOM CEILING AND ELECTRIC ROOM PHASE 1 NEW WORK
E.2.1 1/8" = 1'-0"



5 ELECTRICAL BOILER ROOM PHASE 1 NEW WORK
E.2.1 1/8" = 1'-0"

BOILER SCHEDULE														
TAG	MANUFACTURER	MODEL	INPUT CFH	OUTPUT MBH	THERMAL EFFICIENCY	EWTF	LWTF	MIN. MAX. WATER FLOW GPM	PRESSURE DROP	MIN. MAX. GAS PRESSURE	VOLT/PH/HZ	FLA	BURNER MOTOR HP	REMARKS
B-1, B-2 & B-3	AERCO	BMK 5000	5000	4350-4800	94%	165	195	75 / 700	4 PSI @ 500 GPM	4" - 10"WC	480/3/60	19	5	REFER TO NOTES

- NOTES:
1. PROVIDE CONDENSATE NEUTRALIZER FOR EACH BOILER, PIPE TO FLOOR DRAIN.
 2. MANUFACTURER SHALL EQUIP THE BOILERS WITH MANUAL RESET HIGH-LIMIT AQUASTAT, SAFETY CONTROLS THAT COMPLY WITH ASME FOR LOW PRESSURE BOILER, LOW WATER CUTOFF AND A MANUAL-RESET HIGH-LIMIT TEMPERATURE DEVICE COMPLY WITH ASME STANDARDS.
 3. HI/LOW GAS PRESSURE SWITCH.
 4. PROVIDE TEMPERATURE OUTDOOR AIR SENSOR, SENSOR SHOULD BE POSITIONED ON THE NORTH WALL OF THE BUILDING, AND NOT IN DIRECT SUNLIGHT.
 5. MANUFACTURER TO PROVIDE ON BOARD BOILER SEQUENCING TECHNOLOGY (BST).
 6. PROVIDE HEADER SENSOR, SENSOR SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
 7. BOILER MANUFACTURER TO PROVIDE AND CONTROL FIELD INSTALLED, MOTORIZED ISOLATION VALVES ON EACH BOILER
 8. BOILER MANUFACTURER SHALL PROVIDE PRESSURE RELIEF VALVE.
 9. BOILER MANUFACTURER SHALL PROVIDE GAS PRESSURE REGULATOR
 10. COMBUSTION AIR SHALL BE INSULATED GALVANIZED DIRECT DUCTED.
 11. VENT PIPING MATERIAL SHALL BE POLYPROPYLENE.

FREEZE PROTECTION CIRCULATING PUMP														
TAG	SERVES	MANUFACTURER	SERIES	MODEL	TYPE	GPM	HEAD (FT)	EFF %	IMPELLER DIA (IN)	MOTOR (HP)	BHP	RPM	VOLT/PH/Hz	REMARKS
P-HWC-1	HWC-1	BELL & GOSSETT	e-60	1.25x1.25x5.25	INLINE	18	20	42.3	5	0.5	0.175	1800	115/1/60	REFER TO NOTES
P-HWC-2	HWC-2	BELL & GOSSETT	e-60	1.25x1.25x5.25	INLINE	20	12	43.5	4	0.25	0.117	1800	115/1/60	REFER TO NOTES
P-HWC-3	HWC-3	BELL & GOSSETT	e-60	1.25x1.25x5.25	INLINE	29	15	56	4.375	0.33	0.186	1800	115/1/60	REFER TO NOTES
P-HWC-5	HWC-5	BELL & GOSSETT	e-60	1.25x1.25x5.25	INLINE	21	15	48.8	4	0.25	0.157	1800	115/1/60	REFER TO NOTES
P-HWC-6	HWC-6	BELL & GOSSETT	e-60	1.25x1.25x5.25	INLINE	28	20	57.4	5	0.5	0.235	1800	115/1/60	REFER TO NOTES
P-HWC-7	HWC-7	BELL & GOSSETT	e-60	1.5x1.5x6.25	INLINE	57	25	62.6	5.375	0.75	0.551	1800	115/1/60	REFER TO NOTES
P-HWC-8	HWC-8	BELL & GOSSETT	e-60	1.5x1.5x6.25	INLINE	57	25	62.6	5.375	0.75	0.551	1800	115/1/60	REFER TO NOTES

- NOTES:
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 2. PROVIDE WITH MOTOR RATED SWITCH AND STARTING RELAY.

VARIABLE FREQUENCY DRIVE SCHEDULE						
TAG	SERVES	MANUFACTURER	MODEL	MOTOR HP	VOLT/PH/HZ	REMARKS
VFD-P-5	P-5	ABB	ACH 580	50	480/3/60	REFER TO NOTES
VFD-P-6	P-6	ABB	ACH 580	50	480/3/60	REFER TO NOTES
VFD-P-7	P-7	ABB	ACH 580	7.5	480/3/60	REFER TO NOTES
VFD-P-8	P-8	ABB	ACH 580	7.5	480/3/60	REFER TO NOTES

- NOTES:
1. EACH VFD SHALL HAVE MANUAL BYPASS.

FINNED TUBE RADIATORS SCHEDULE												
TYPE	MANUFACTURER	MODEL	TIER #	CENTER TO CENTER (IN)	FIN THICKNESS (IN)	TUBE SIZE (IN)	FIN NUMBER PER FOOT	FIN SIZE (IN)	SO. (IN)	BTU/H/FT	AVG. WATER TEMP. °F	REMARKS
A, A1, A2 & A3	STERLING	C3/4-45	2	6	0.02	3/4"	50	4 1/4"	2256	180		REFER TO NOTES
B, B1 & B2	STERLING	C3/4-45	3	6	0.02	3/4"	50	4 1/4"	2552	180		REFER TO NOTES
C	STERLING	C3/4-45	1	—	0.02	3/4"	50	4 1/4"	1704	180		REFER TO NOTES

- NOTES:
1. FINNED TUBES SHALL BE MANUFACTURED WITH SEAMLESS COPPER TUBING MECHANICALLY EXPANDED INTO THE DIAMETER OF THE EQUALLY SPACED ALUMINUM FINS.
 2. PRIOR TO ORDER THIS CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS TO MATCH EXISTING ELEMENT DIMENSION.
 3. EXISTING ENCLOSURE AND BACK PLATE TO REMAIN. ENCLOSURE COVER SHALL BE RE-INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 4. PROVIDE NEW BRACKETS AND CRADLES TO SUPPORT FINNED TUBES. SPACING AND NUMBER OF CRADLES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 5. PROVIDE NEW JOINER STRIPS.
 6. FOR LENGTH AND OTHER HEATING INFORMATION PLEASE REFER TO THE DRAWINGS.
 7. REFER TO DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

CONNECTOR ELEMENTS SCHEDULE						
TYPE	MANUFACTURER	TYPE	CONNECTOR DEPTH	TUBES PER ELEMENT	AVG. WATER TEMP. °F	REMARKS
E & E1	STERLING	SURFACE MOUNT	4"6"/8"	2/3/4	180	REFER TO NOTES
D	STERLING	SURFACE MOUNT	4"6"/8"	2/3/4	180	REFER TO NOTES
D1	STERLING	RECESSED OR SEMI-RECESSED	4"6"/8"	2/3/4	180	REFER TO NOTES

- NOTES:
1. PRIOR TO ORDER THIS CONTRACTOR SHALL FIELD VERIFY TO MATCH EXISTING ELEMENT DIMENSION.
 2. EXISTING ENCLOSURE TO REMAIN. ENCLOSURE COVER SHALL BE RE-INSTALLED IN PROPER WAY AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 3. PROVIDE NEW BRACKETS (END POCKETS) TO SUPPORT THE HEATING ELEMENT. SUPPORT SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 4. PROVIDE WITH TWO VENT PLUGS FOR EACH ELEMENT.
 5. FOR MODEL AND OTHER HEATING INFORMATION PLEASE REFER TO DRAWINGS.
 6. REFER TO DETAILS FOR ADDITIONAL REQUIREMENTS.

RADIANT CEILING PANEL SCHEDULE								
TAG	MANUFACTURER	MODEL	PASSES	WIDTH	BTU/H PER LINEAR FOOT	AVG. WATER TEMP. °F	MIN GPM	REMARKS
RCP-01	STERLING	LRP	4	18"	363	180	2	REFER TO NOTES

- NOTES:
1. CONTRACTOR SHALL FIELD VERIFY TO COORDINATE WITH EXISTING CONDITIONS.
 2. CASING SHALL BE 20-GAUGE DIE-FORMED STEEL.
 3. REFER TO DETAILS FOR ADDITIONAL REQUIREMENTS.
 4. PROVIDE 0.115 INCH THICK FLUTED ALUMINUM FACE PANEL, TONGUE AND GROOVED PANEL EDGES WITH STEEL CHANNEL CROSS BRACES ATTACHED BY MECHANICAL FASTENER AND 1 INCH THICK FIBERGLASS PAD FACTORY APPLIED. FACTORY APPLIED POWDER COAT FINISH COLOR IS SELECTED BY THE OWNER. CONTRACTOR IS RESPONSIBLE FOR PROTECTING PANEL FINISH FROM SCRATCHES & BLEMISHES DURING CONSTRUCTION.
 5. PROVIDE 1" THICK, PLENUM RATED, THERMAL ACOUSTICAL PAD OF 0.75 Lb DENSITY U-VALUE=0.16/INCH.

UNIT HEATER SCHEDULE															
TAG	SERVE	MANUFACTURER	MODEL	ELECTRICAL		SUPPLY FAN		HOT WATER COIL							REMARKS
				VOLT/Hz/PH	MCA	CFM	MOTOR HP	EAT °F	LAT °F	MBH	EWTF	LWT °F	GPM	WPD FT-H ₂ O	
UH-1	GYMNASIUM A & B	STERLING	HS-204	115/60/1	4.5	2900	3	60	107	148	190	160	14.9	0.79	REFER TO NOTES
UH-2	BOILER ROOM	STERLING	HS-108	115/60/1	2.2	1500	1 1/2	60	103	54.4	190	160	4.7	0.14	REFER TO NOTES

- NOTES:
1. CONTRACTOR SHALL FIELD VERIFY TO COORDINATE WITH EXISTING CONDITIONS.
 2. CASING SHALL BE 20-GAUGE DIE-FORMED STEEL.
 3. MOTOR SHALL BE TOTALLY ENCLOSED FAN COOLED, WITH THERMAL OVERLOAD PROTECTION AND PERMANENTLY LUBRICATED SLEEVE BEARINGS WITH SOLID STATE SPEED CONTROLLER.
 4. MOTOR SHALL BE EXPLOSION PROOF.
 5. PROVIDE CSFM FAN GUARD.
 6. PROVIDE WITH HORIZONTAL INDIVIDUALLY ADJUSTABLE LOUVERS.
 7. PROVIDE WALL BRACKETS. INSTALL UNIT HEATER IN ACCORDANCE OF MANUFACTURER RECOMMENDATIONS.
 8. PROVIDE WITH MOTOR RATED SWITCH AND STARTING RELAY.

UNIT VENTILATOR SCHEDULE																
TAG	MANUFACTURER	MODEL	ELECTRICAL		SUPPLY FAN					HOT WATER COIL						
			VOLTAGE	MCA	CFM	MOTOR HP	MOTOR TYPE	EAT °F	LAT °F	ROWS	MBH	EWTF °F	LWT °F	GPM	WPD FT-H ₂ O	REMARKS
UV-01	DAIKIN	UAV9V13	115/60/1	6.3	1000	0.333	VARIABLE ECM	49.9	132.6	3	90	190	159.8	4.5	1.6	REFER TO NOTES
UV-02	DAIKIN	UAV9V10	115/60/1	6.3	800	0.333	VARIABLE ECM	49.9	136.5	3	75	190	152.4	4	2.85	REFER TO NOTES
UV-03	DAIKIN	UAV9V07	115/60/1	6.3	600	0.333	VARIABLE ECM	56.6	140	3	54.7	190	158.7	3.5	1.97	REFER TO NOTES

- NOTES:
1. PRIOR TO ORDER THIS CONTRACTOR SHALL FIELD VERIFY TO COORDINATE WITH EXISTING CONDITIONS.
 2. TOP BAR GRILLE DISCHARGE AIR, AND BOTTOM FRONT RETURN AIR
 3. COLOR BY THE OWNER.
 4. FAN AND MOTOR ASSEMBLY SHALL BE OF LOW SPEED DESIGN TO ASSURE MAXIMUM QUIETNESS AND EFFICIENCY.
 5. MOTOR SHALL BE ECM VARIABLE SPEED.
 6. OUTSIDE AIR LOUVER TO REMAIN, PROVIDE INSULATED DUCTWORK ADAPTER TO CONNECT TO EXISTING OUTSIDE AIR LOUVER. SEAL TIGHT AIR AND WATER.
 7. MERV-13 FILTER.
 8. MANUFACTURER SHALL PROVIDE WITH FREEZE/STAT PROTECTION.
 9. PROVIDE WITH END PANELS.
 10. MANUFACTURER TO PROVIDE VALVE KIT.
 11. PROVIDE WITH MOTOR RATED SWITCH AND STARTING RELAY.

CABINET UNIT HEATER SCHEDULE																				
TAG	MANUFACTURER	MODEL	SIZE	ELECTRICAL			SUPPLY FAN			FILTER	HOT WATER COIL									REMARKS
				VOLTAGE	MCA	MROPD	CFM	MOTOR HP	MOTOR TYPE		TYPE	EAT °F	LAT °F	ROWS	MBH	EWTF	LWT °F	GPM	WPD FT-H ₂ O	
CUH-1	DAIKIN	FHVC106	06	115/60/1	5.3	15	500	$\frac{1}{2}$	ECM	1" MERV 8	70	157	3	47.4	190	159.8	3.1	2.54	REFER TO NOTES	
CUH-2	STERLING	RW-1120	04	115/60/1	2.5	15	230	$\frac{1}{8}$	ECM	$\frac{3}{4}$ " PERM.	50	150	2	46.3	190	160	3	1.3	REFER TO NOTES	
CUH-3	STERLING	RW-1120	04	115/60/1	2.5	15	430	$\frac{1}{8}$	ECM	$\frac{3}{4}$ " PERM.	50	150	2	46.3	190	160	3	1.3	REFER TO NOTES	

- NOTES:
1. CUH-1:
 - a. 18 GAUGE CABINET ENCLOSURE, STANDARD STYLE.
 - b. 3/4" INCH CLOSED CELL CABINET INSULATION
 - c. PROVIDE WITH LEVELING LEGS.
 - d. BOTTOM FRONT RETURN AIR GRILLE
 - e. TOP DOUBLE DEFLECTION DISCHARGE AIR DIFFUSER
 - f. EXTENDED END POCKETS.
 2. CUH-2 AND CUH-3:
 - a. FRONT RETURN AND DISCHARGE AIR.
 - b. 18 GAUGE CABINET ENCLOSURE.
 - c. ADJUSTABLE REAR MOUNTING BRACKETS.
 - d. PROVIDE WALL SEAL ASSEMBLY.
 3. 3-SPEED ECM MOTOR.
 4. COLOR BY THE OWNER
 5. PROVIDE MOTOR RATED SWITCH AND STARTING RELAY
 6. PROVIDE WITH FILTER.

HOT WATER COIL SCHEDULE																	
TAG	SERVE	FPI	ROWS	FIN HEIGHT (IN)	FIN LENGTH (IN)	FACE AREA (F ²)	CFM	FACE VELOCITY (FT/MIN)	EAT °F	LAT °F	MBH	ADP (IN-H ₂ O)	EWTF °F	LWT °F	GPM	WDP (FT-H ₂ O)	REMARKS
HWC-1	LIBRARY	13	1	24	67	11.2	6000	537.3	70	111.2	270	0.22	190	159.9	17.9	9.1	REFER TO NOTES
HWC-2	BAND ROOM	10	2	27	34.5	6.5	2850	440.6	2.9	100.7	305	0.25	190	159.8	20.2	2	REFER TO NOTES
HWC-3	CAFE C-276	9	2	27	56	10.5	4000	381	2.9	102.5	436	0.18	190	159.2	28.3	4.5	REFER TO NOTES
HWC-5	KITCHEN	11	2	27	35	6.6	3000	457	2.9	104.1	332	0.39	190	158.7	21.2	2.2	REFER TO NOTES
HWC-6	CAFE C-250	9	2	27	56	10.5	4000	381	2.9	102.5	436	0.18	190	159.2	28.3	4.5	REFER TO NOTES
HWC-7	GYMNASIUM-B	10	2	33	70	16	8100	504.9	2.9	101	869	0.32	190	159.7	57.3	14.9	REFER TO NOTES
HWC-8	GYMNASIUM-A	10	2	33	70	16	8100	504.9	2.9	101.0	869	0.32	190	159.7	57.3	14.9	REFER TO NOTES

- NOTES:
1. PRIOR TO ORDER COIL, CONTRACTOR SHALL FIELD VERIFY TO MATCH EXISTING OVERALL COIL DIMENSIONS.
 2. EXISTING ENCLOSURE TO REMAIN (EXCEPT FOR HWC-1)
 3. PROVIDE ALL NECESSARY ACCESSORIES TO SECURE THE COIL INSIDE THE EXISTING ENCLOSURE.
 4. SEAL AIR BETWEEN HOT WATER COIL AND ENCLOSURE.

HOT WATER PUMP SCHEDULE														
TAG	MANUFACTURER	SERIES	MODEL	TYPE	GPM	HEAD (FT)	EFF %	IMPELLER DIA (IN)	MOTOR (HP)	BHP	RPM	VOLT/PH/Hz	WEIGHT (LBS)	REMARKS
P-5	BELL & GOSSETT	e-1510	6G-SS-326T-L	BASE MOUNTED END SUCTION	1090	100	78.8	10.75	50	33.6	1694	480/3/60	1276	REFER TO NOTES
P-6	BELL & GOSSETT	e-1510	6G-SS-326T-L	BASE MOUNTED END SUCTION	1090	100	78.8	10.75	50	33.6	1694	480/3/60	1276	REFER TO NOTES
P-7	BELL & GOSSETT	e-1510	6BD-SS-254T-L	BASE MOUNTED END SUCTION	1000	20	79.8	8.625	7.5	6.06	1090	480/3/60	725	REFER TO NOTES
P-8	BELL & GOSSETT	e-1510	6BD-SS-254T-L	BASE MOUNTED END SUCTION	1000	20	79.8	8.625	7.5	6.06	1090	480/3/60	725	REFER TO NOTES

- NOTES:
1. PROVIDE WITH ANSI/OSHA COUPLING GUARD
 2. PROVIDE WITH FABRICATED HEAVY DUTY BASE PLATE.
 3. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 4. PROVIDE WITH PREMIUM EFFICIENCY MOTOR.

REVISIONS
MARCH 23, 2020

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KING PHILIP MIDDLE SCHOOL
HOT WATER CONVERSION
100 KING PHILIP DRIVE - West Hartford, Connecticut

REVISIONS:
ADDENDUM#1

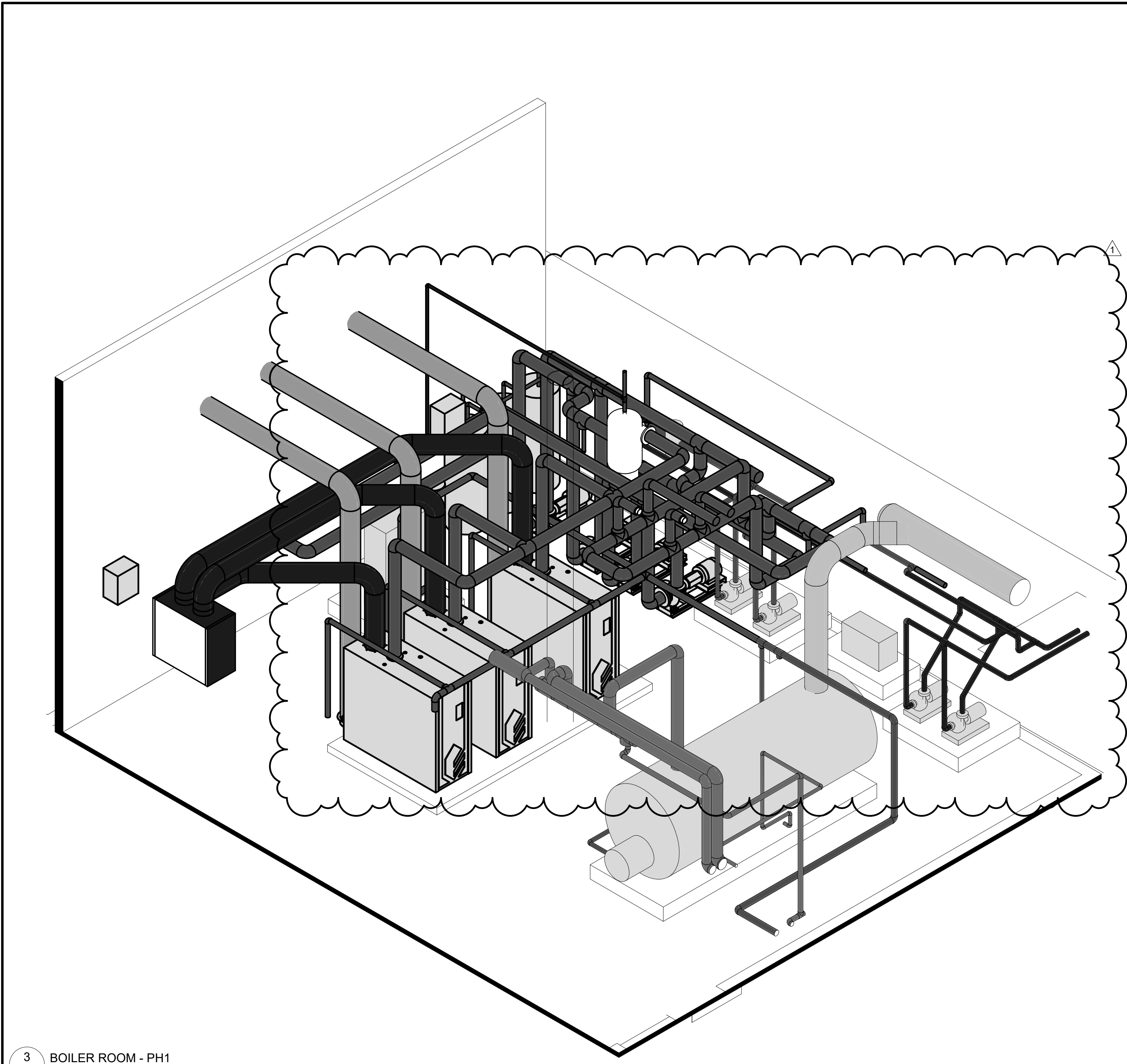
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TITLE
MECHANICAL
SCHEDULES

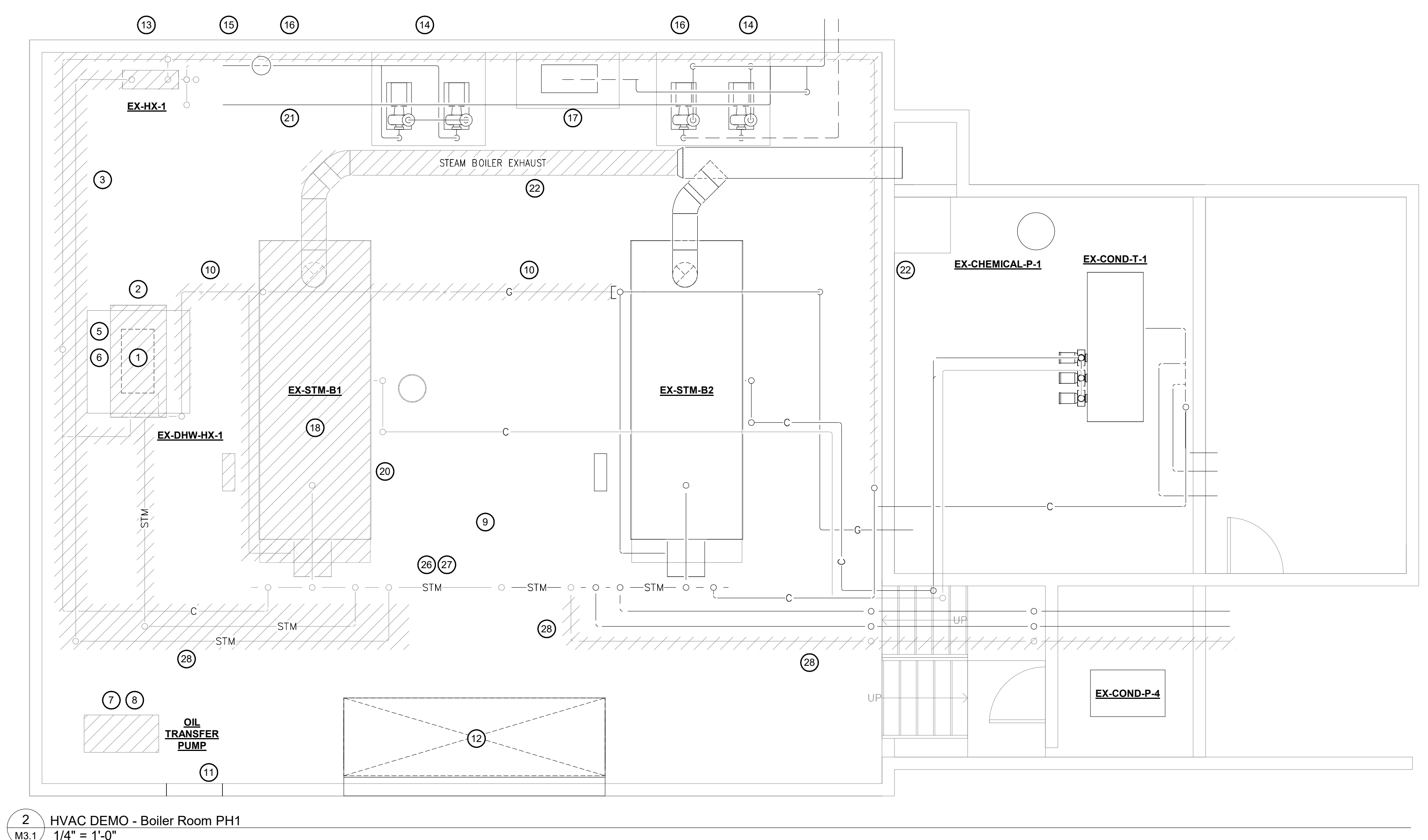
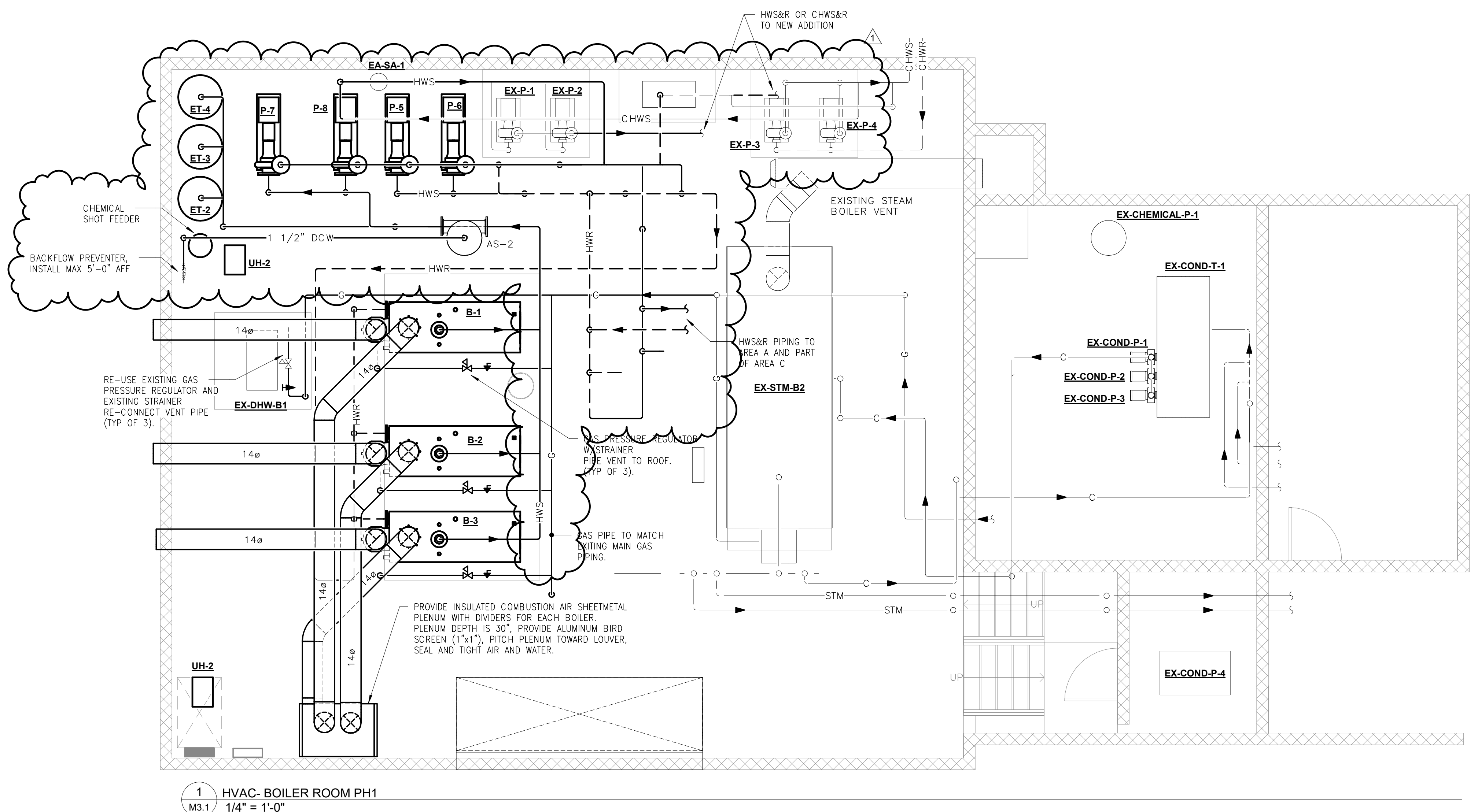
DATE 02/07/2020

DWG. NO.

M0.1



3 BOILER ROOM - PH1
M3.1



REVISIONS:
MARCH 23, 2020

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REVISIONS:
ADDENDUM #1

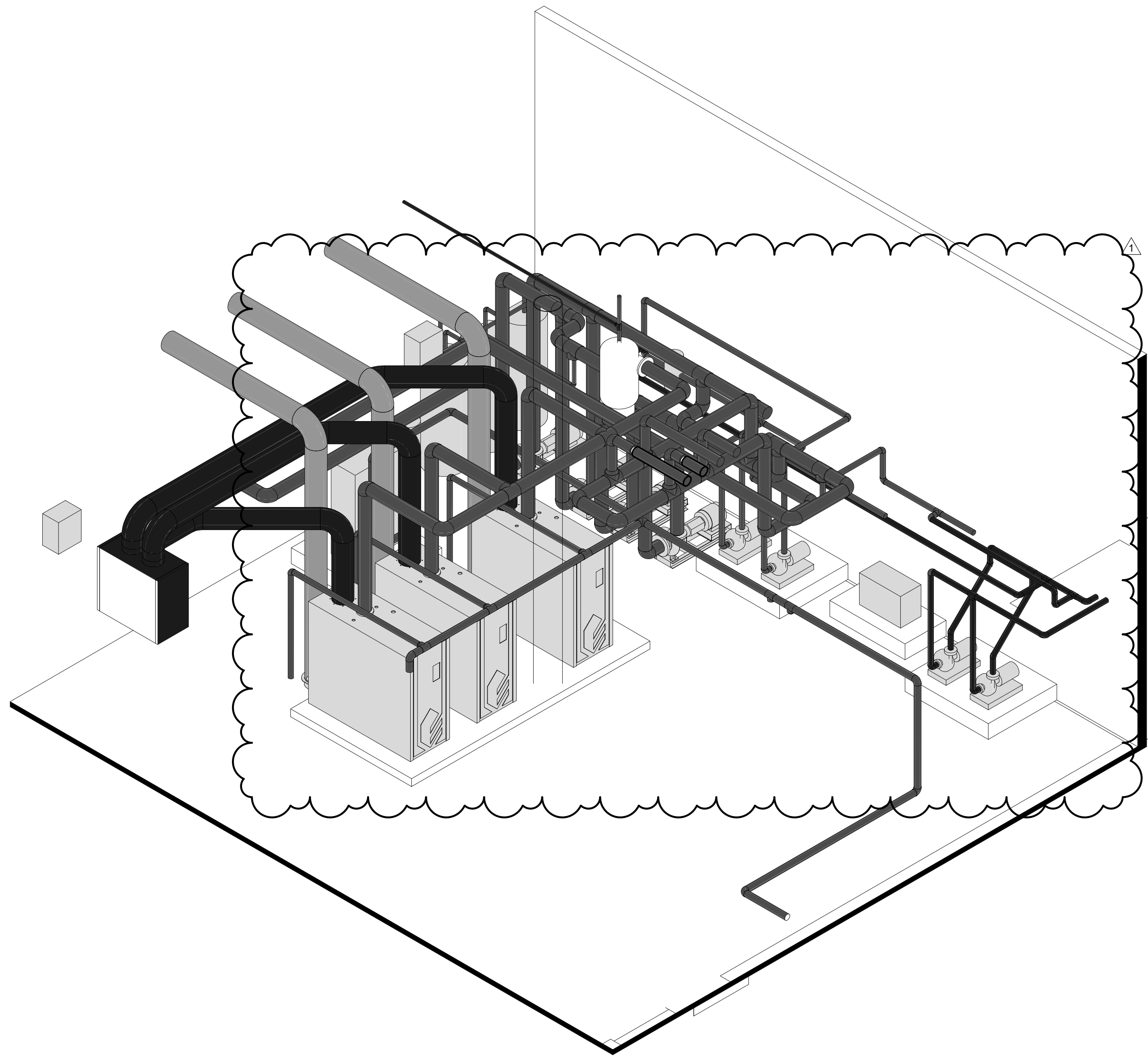
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BOILER ROOM -
DEMOLITION AND
NEW WORK PH1

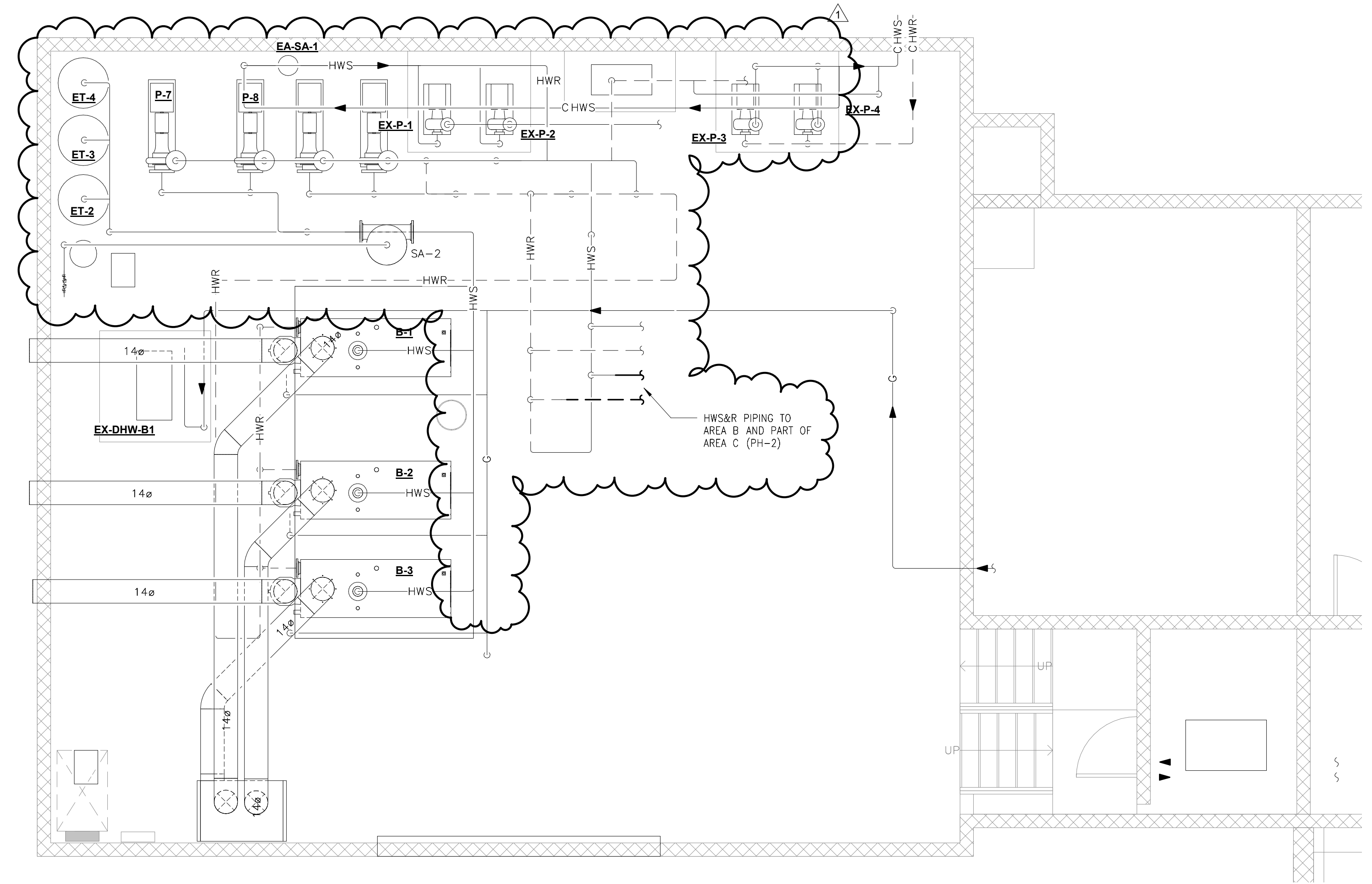
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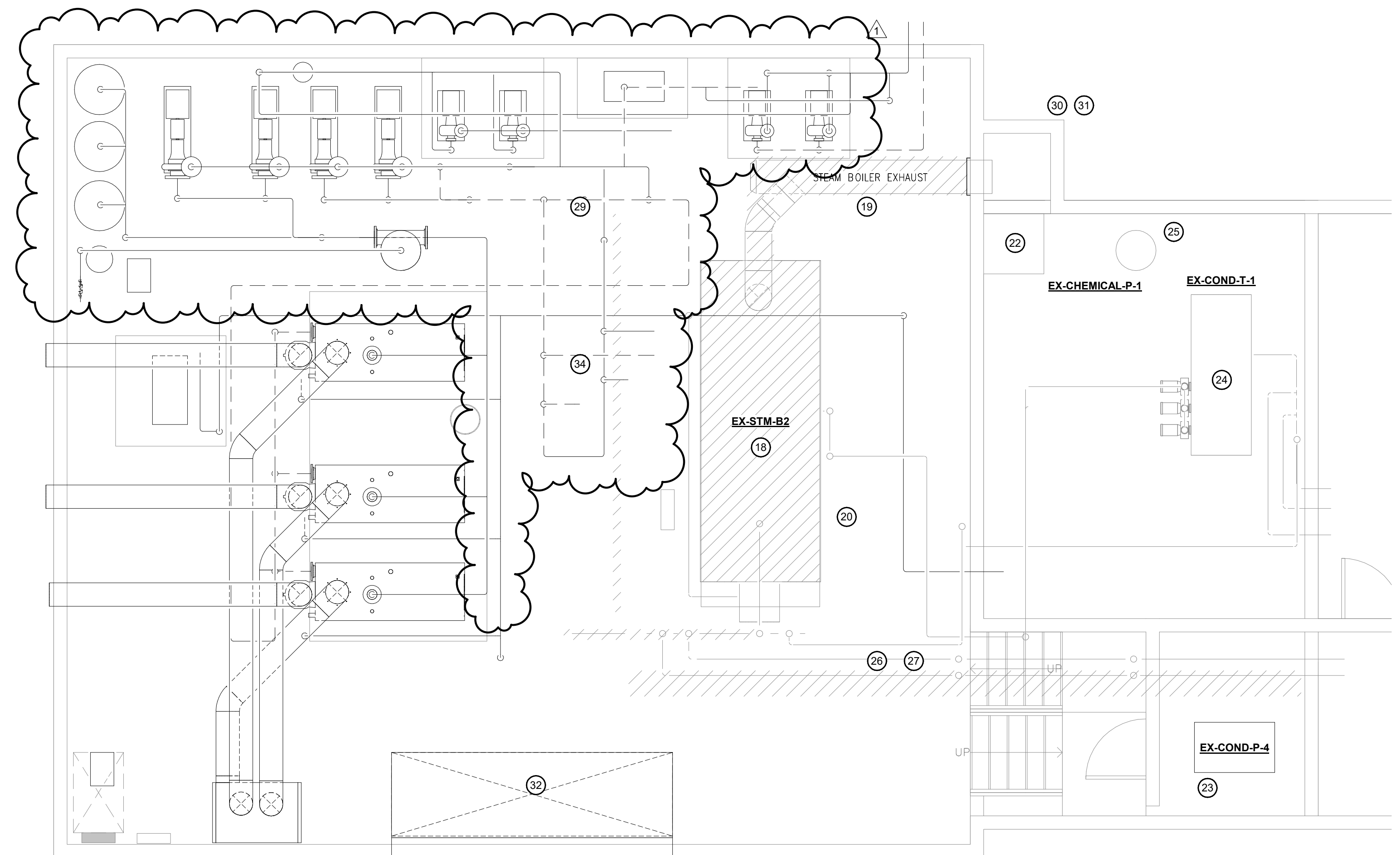
M3.1



3 BOILER ROOM - PH2
M3.2



2 HVAC- BOILER ROOM PH2
M3.2 1/4" = 1'-0"



1 HVAC DEMO - Boiler Room PH2
M3.2 1/4" = 1'-0"

REVISIONS
MARCH 23, 2020

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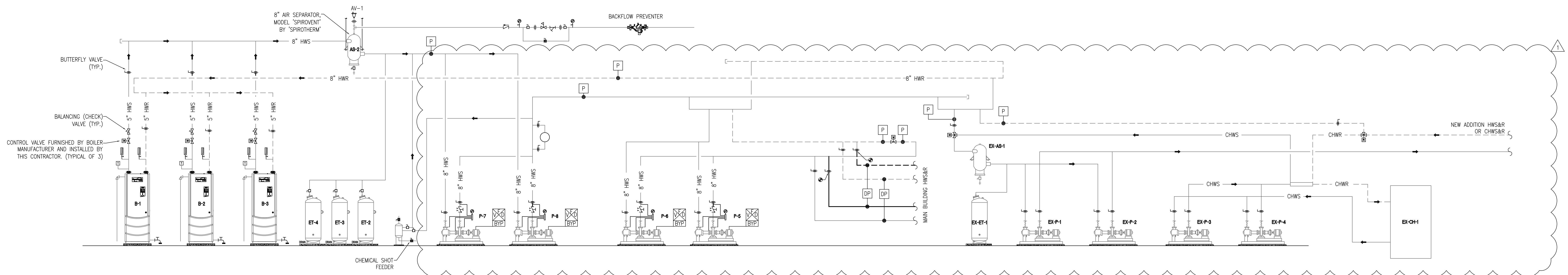
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BOILER ROOM -
DEMOLITION AND
NEW WORK PH2

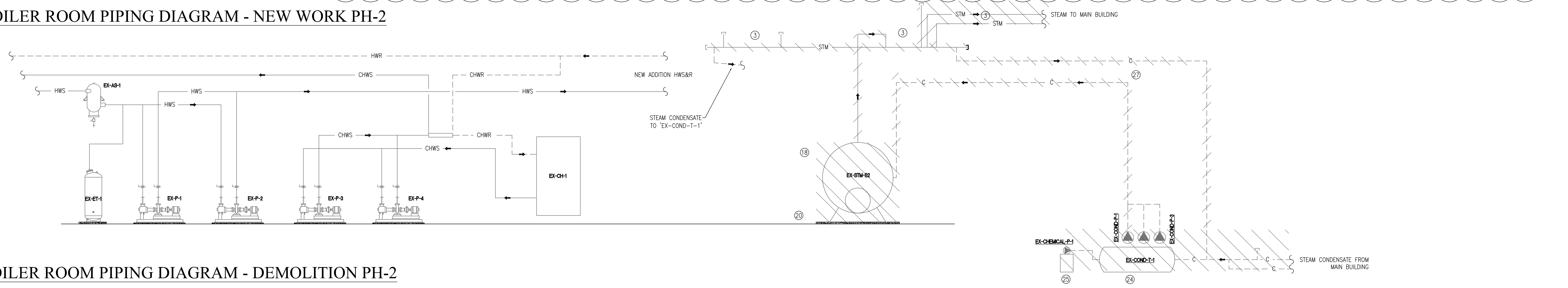
DATE 11/01/2018

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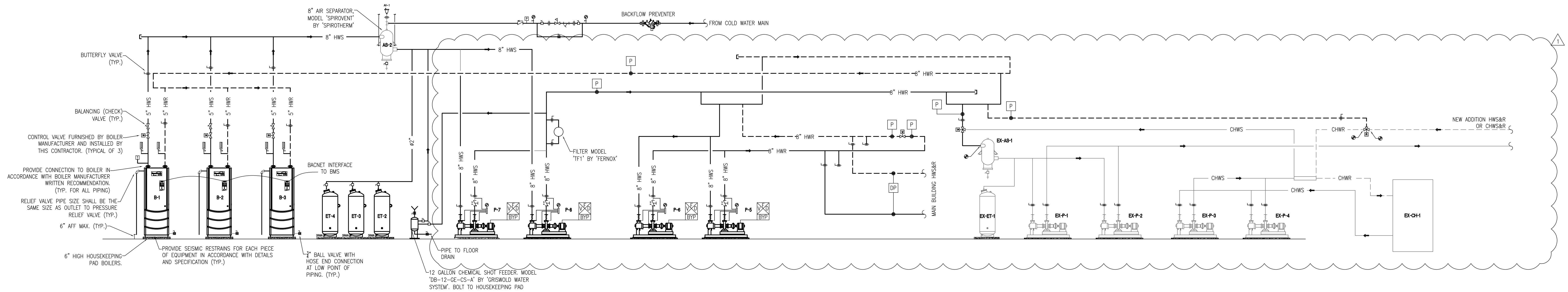
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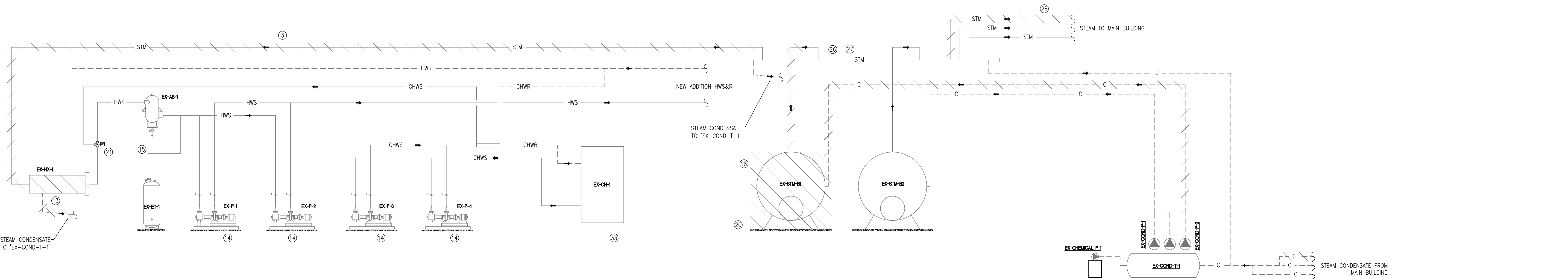
BOILER ROOM PIPING DIAGRAM - NEW WORK PH-2



BOILER ROOM PIPING DIAGRAM - DEMOLITION PH-2



BOILER ROOM PIPING DIAGRAM - NEW WORK PH-1



BOILER ROOM PIPING DIAGRAM - DEMOLITION PH-1

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TITLE
BOILER ROOM -
PIPING DIAGRAM
DEMO / NEW WORK
PH1 & PH2

DATE 02/07/2020

DWG. NO.

M4.1

