ADDENDUM
NO. 3

July 31, 2020

Additions & Renovations to Lawrence North High School
7802 Hague Road
Indianapolis, IN 46256

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and Drawings dated July 6, 2020, by Schmidt Associates. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 3-1 through ADD 3-3 and attached Schmidt Associates Addendum No. 3, dated July 30, 2020 consisting of 53 pages, Specification Section 26 43 13 and Drawing Sheets: MP1H1, MDP1H1, M706, E-609 and ES102.

BID

The Bid on Tuesday August 4, 2020 at 2:00 PM will be a Virtual ZOOM Bid Opening.
Bids may be dropped off in the Lobby of the Administration Building.
The bids will be taken to the Board Room, opened and read live over ZOOM.

Join Zoom Meeting
https://zoom.us/j/91017051504?pwd=bFhwYkZ3QlhSbXdjZmRtdGZVUVhhQT09

VIRTUAL ONLINE BUILDING TOUR

A Virtual Online Building Tour is available For Reference Only at:

Website address: https://lnhs.iv.navvis.com/
Username: bidders
Password: schmidtppi2020

A. SPECIFICATION SECTION 01 12 00 MULTIPLE CONTRACT SUMMARY

B. BID CATEGORY NO. 2 - GENERAL TRADES

1. Add the following Clarifications:

15. **MEP Contractors** are responsible for cutting and patching their own trenches (Example - Note#5 on the Demolition drawings).

I. BID CATEGORY NO. 11 – HARD TILE

1. Add the following Clarification:

1. **BC#11 Contractor** is responsible for Note #23 on the IN series drawings.

N. BID CATEGORY NO. 15 – FIRE PROTECTION

1. Add the following Clarifications:

5. **BC#15 Contractor** is responsible for relocating/repiping the fire protection piping out of the Phase 1 Demolition Area. Fire Protection in occupied areas must be maintained.

O. BID CATEGORY NO. 16 - PLUMBING

1. Add the following Clarifications:

5. **MEP Contractors** are responsible for cutting and patching their own trenches (Example - Note#5 on the Demolition drawings).

P. BID CATEGORY NO. 17 - MECHANICAL

1. Add the following Clarifications:

7. **MEP Contractors** are responsible for cutting and patching their own trenches (Example - Note#5 on the Demolition drawings).

R. BID CATEGORY NO. 19 - ELECTRICAL

1. Add the following Specification Sections

Section 26 43 13 – Surge Protection for Low-Voltage Electrical Power Circuits

1. Add the following Clarifications:

6. **MEP Contractors** are responsible for cutting and patching their own trenches (Example - Note#5 on the Demolition drawings).

B. SPECIFICATION SECTION 01 21 00 ALLOWANCES

1. Article 3.01 Product Allowance:

Delete: A. BC#2 – General Trades: Hardware Allowance for Best Cores $70,000
See Specification Section 08 71 00 Door Hardware – 1.3 Allowances.

ADDENDUM NO. 3
JULY 30, 2020

PREPARED BY SCHMIDT ASSOCIATES FOR:
LAWRENCE NORTH HIGH SCHOOL RENOVATION
LAWRENCE TOWNSHIP, M.S.D. OF

This Addendum consists of 53 Addendum pages and 9 attachment pages totaling 62 pages.

Acknowledge receipt of this Addendum by inserting its number on the Bid Form. Failure to do so may subject the Bid to disqualification. This Addendum is part of the Contract Documents.

Bidder is encouraged to verify with reprographer of record all Addenda issued (do not rely exclusively on third party plan room services).

PART 1 - CHANGES TO PRIOR ADDENDA (NOT APPLICABLE)

PART 2 - CHANGES TO THE PROJECT MANUAL

Modifications described herein shall be incorporated in the Project Manual. All other Work shall remain unchanged.

2.1 DIVISION 08 – OPENINGS

A. **Section 081416 "FLUSH WOOD DOORS"**

1. DELETE Subparagraph 2.6 C. 2. in its entirety.

2.2 DIVISION 09 – FINISHES

A. **Section 095113 "ACOUSTICAL PANEL CEILINGS"**

1. ADD Subparagraph 2.9 A. 4. as follows:

   "4. Ceiling Diffuser, G&S Acoustics."

B. **Section 098413.99 "ACOUSTICAL SURFACE TREATMENT"**

1. ADD Subparagraph 2.3 D. vii. d. as follows:

   "d. RAD Panel, G&S Acoustics."

C. **Section 096566 "RESILIENT ATHLETIC FLOORING"**

1. MODIFY Subparagraph 2.1 B. 1. as follows:

   "1. Mondo; Sportflex M."

2. MODIFY Paragraph 2.1 E. as follows:

"E. Traffic-Surface Texture: ATS Emboss."

2.3 DIVISION 11 – EQUIPMENT

A. **Section 115123 "LIBRARY STACK SYSTEMS"**

1. ADD Subparagraph 2.1 A. 1. j. as follows:

"j. Russwood Library Furniture"

B. **Section 116843.43 "SCOREBOARDS/MESSAGE BOARDS"**

1. DELETE Section 116843.43 in its entirety.

2.4 DIVISION 12 – FURNISHINGS

A. **Section 126100 "FIXED AUDIENCE SEATING"**

1. MODIFY Section 2.2 as follows:

"2.2 EXISTING FIXED AUDIENCE SEATING"

"A.1 Manufacturers: Subject to compliance with requirements, provide products by the following:

a. Irwin Seating Company, Citation"

"C. 1. Backs:
a. Padding: Replace w/ new.
b. Rear Panel: Molded plastic replace w/ new.
c. Top Corners: Match Existing.
2. Seats: Two part and as follows:
a. Padding: Replace w/ new.
b. Seat Underside: Molded-Plastic Shell existing to remain.

"H. Armrests: Plastic Laminate on Medium-density fiberboard, with rounded edges, concealed mounting."

"K. Existing Chairs Total Quantity: 274"

B. **Section 123200 "MANUFACTURED WOOD CASEWORK"**

1. INSERT Subparagraph 1.2 A. 5. as follows:

"7. Mail Sorter Units"

2. INSERT Subparagraph 2.1 A. 2. as follows:

"2. Mail Sorter Units: a. Hamilton Sorter"

3. INSERT Section 2.7 as follows:

"2.7 MAIL SORTER UNITS

1. Manufacturer: Hamilton Sorter.
2. Model# S6-30PE06
3. Sort shelves read just along full depth rigid PVC plastic channel guides that allow for easy shelf adjustment.
4. Adjustable Plastic Shelving: constructed of 1/8 inch thick .90 gauge polyethylene with memory retention. Shelves are adjustable on 1 inch increments that provide full depth support. Shelves are supported front and rear with aluminum index track and clear index cover and are rated for capacity loads up to 35 lbs.
5. Provide additional adjustable shelves for more number of sort modules, reference interior elevations for exact amount."

C. **Section 122413 "ROLLER WINDOW SHADES"**

1. INSERT Subparagraph 2.1 A. 7. as follows:

   "7. Spring Window Fashions (SWF)"

2. INSERT Subparagraph 2.1 A. 8. as follows:

   "8. Legrand, Solarfective"

D. **Section 126600 "TELESCOPING STANDS"**

1. ADD Article 3.5 as follows:

   "3.5 TELESCOPING STANDS SCHEDULE

   A. Type: Reverse-Fold, Freestanding Telescoping Stands.
   B. Location: (reference Plan Note No. 32, AF1H2).
   C. Bank Length: 108'-6".
   D. Aisle Widths: 4 @ 4'-6" / 7'-6" Stepped.
   E. Number of Tiers: 22.
   F. Row Spacing(s): 24"
   G. Row Rise: 10 inches, nominal.
   H. Open Dimension: 44'-5", nominal.
   I. Closed Dimension: 8'-1", nominal.
   J. Overall Unit Height: 21'-9", nominal.
   K. Net Capacity: 1,238.
   L. Accessories:

      1. Full Bleed Graphic Vinyl End Closure Curtains."

2.5 DIVISION 21 - FIRE SUPPRESSION DIVISION

A. **Section 211313 "WET-SPRINKLER SYSTEMS"**

1. MODIFY Text within 3.11/A2 SPRINKLER SCHEDULE as follows:

   "Rooms with suspended ceilings: Recessed sprinklers."

B. **Section 211313 "WET-SPRINKLER SYSTEMS"**

1. DELETE Text 3.11/B1 SPRINKLER SCHEDULE in its entirety

2.6 DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING(HVAC)

A. **Section 233113 "METAL DUCTS"**

1. ADD Eastern Sheet Metal as an acceptable manufacture to bid.

B. **Section 233433 "AIR DUCT ACCESSORIES"**

1. ADD Powered Aire as an acceptable manufacture to bid air curtains.

C. **Section 235100 "BREECHINGS, CHIMNEYS AND STACKS"**

1. ADD VanPacker as an acceptable manufacture to bid.

D. **Section 238219 "FAN COIL UNITS"**

1. ADD MagicAire as an acceptable manufacture to bid.

2.7 DIVISION 26 – ELECTRICAL

A. **Sections 262213, 262413, 262416, 262816 and 262913.**

1. ADD ABB/GE as an acceptable manufacture to bid.

B. **Section 264313 "SURGE PROTECTION FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS"**

1. ADD new specification section per the attached.

PART 3 - CHANGES TO THE DRAWINGS

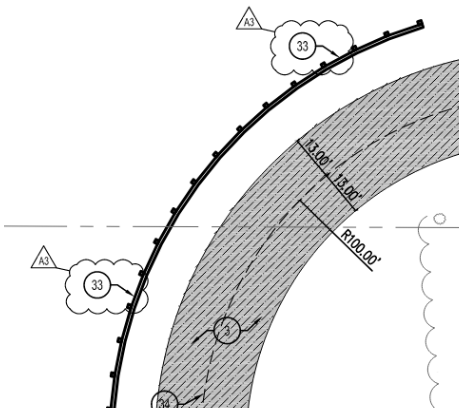
Modifications described herein shall be incorporated in the Drawings. All other Work shall remain unchanged.

3.1 C-SERIES DRAWINGS

A. **Drawing Number CL106**

1. MODIFY Drawing CL106 as shown below:

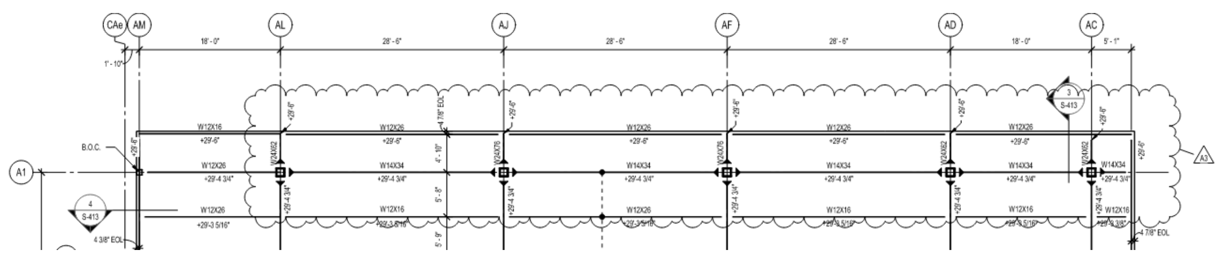
Revise keynote indicating steel backed timber guardrail from number “34” to number “33,” as shown below. There are 5 instances of this revision on this sheet.



3.2 S-SERIES DRAWINGS

A. **Drawing Number SF1AL**

1. In 1/SF1AL, modify the arrangement of beam-to-column connections on column line A1, as shown below:



3.3 A-SERIES DRAWINGS

A. **Drawing Number AD1G1**

1. DELETE Note 3 as follows:

“Delete Demolition Plan Note 3 within the Fieldhouse L116.”

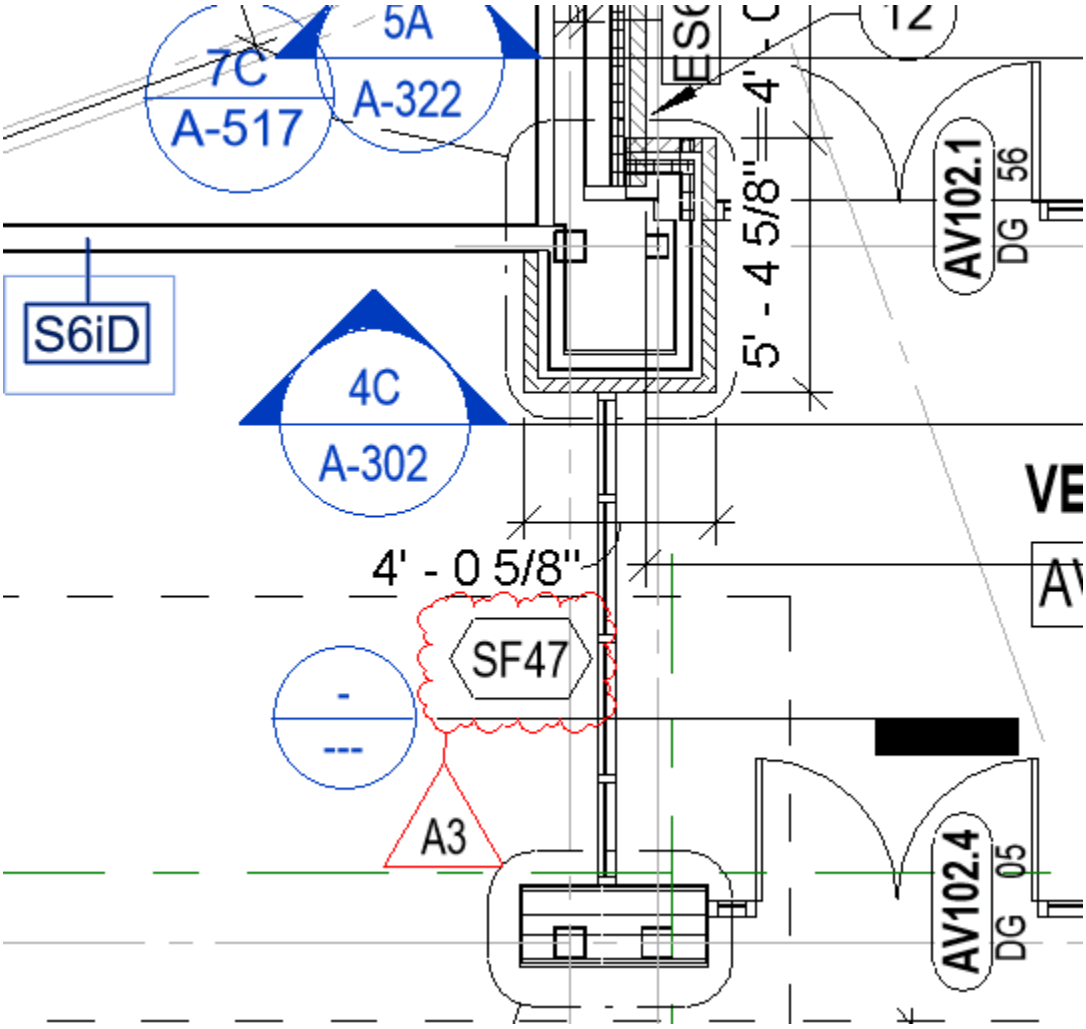
B. **Architectural Floor Plans**

1. DELETE Note 20 in its entirety and replace with the following:

“20. 096566 – RESILIENT ATHLETIC FLOORING SYSTEM, OVERLAY APPLICATION. REFERENCE I-SERIES DWGS FOR COURT STRIPING LOCATION AND COLORS.”

C. **Drawing Number AF1C1**

1. MODIFY Drawing 2A as shown below:



D. **Architectural Reflected Ceiling Plans**

1. DELETE Note 25 in its entirety and replace with the following:

   "25. 095113 – 2'x2' APC-7, ACOUSTICAL DIFFUSER PANELS."

E. **Drawing Number A-600**

1. MODIFY DOOR & FRAME Schedule as follows:

   "Change Door BC100J.1, Door Material from "WD" to "HM"."

2. MODIFY DOOR & FRAME Schedule as follows:

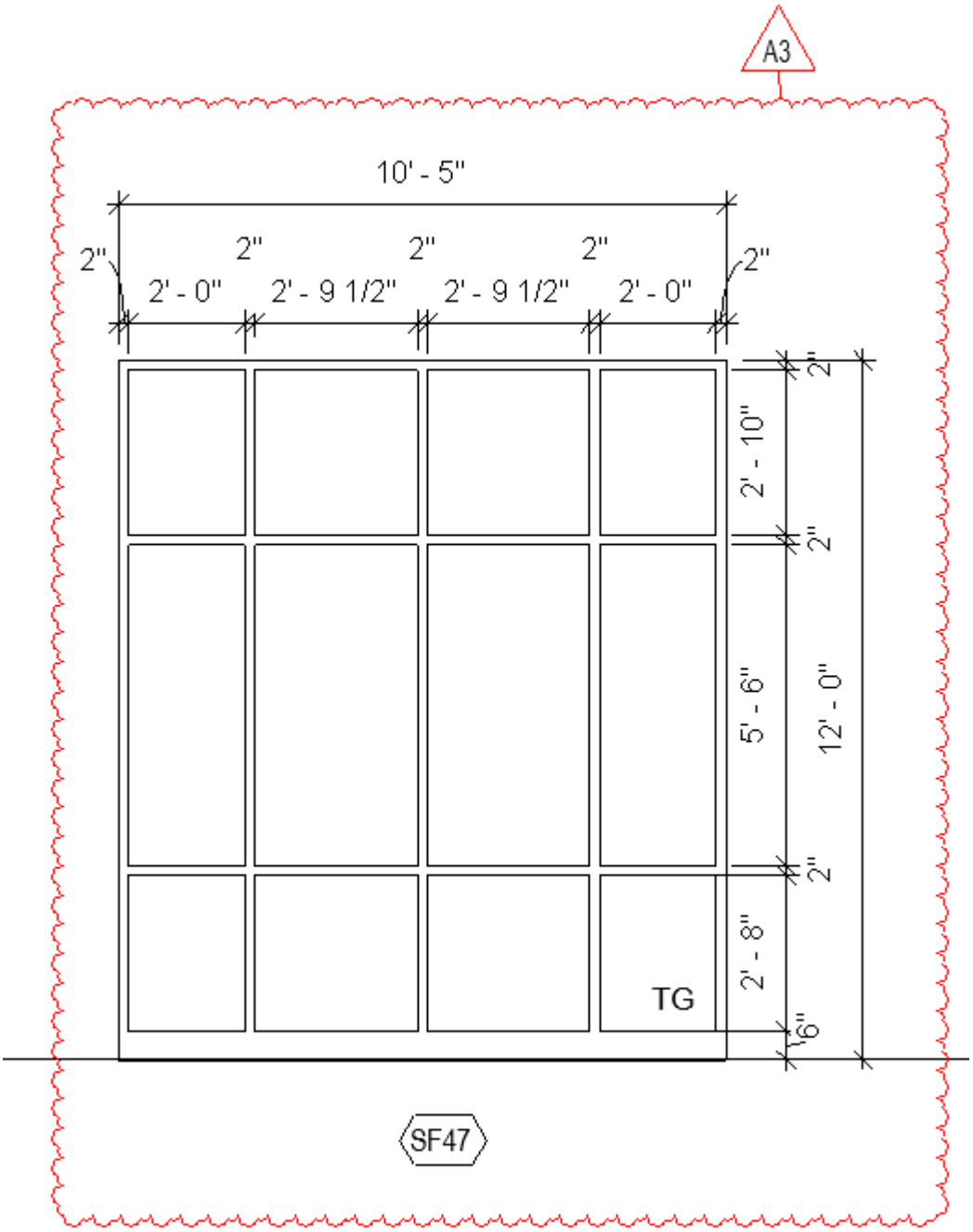
   "Change Door BC101A.1, Door Material from "WD" to "HM"."

3. MODIFY DOOR & FRAME Schedule – EXISTING as follows:

   "Change Door L114A.1, HDWR SET from "--" to "72"."

F. **Drawing Number A-604**

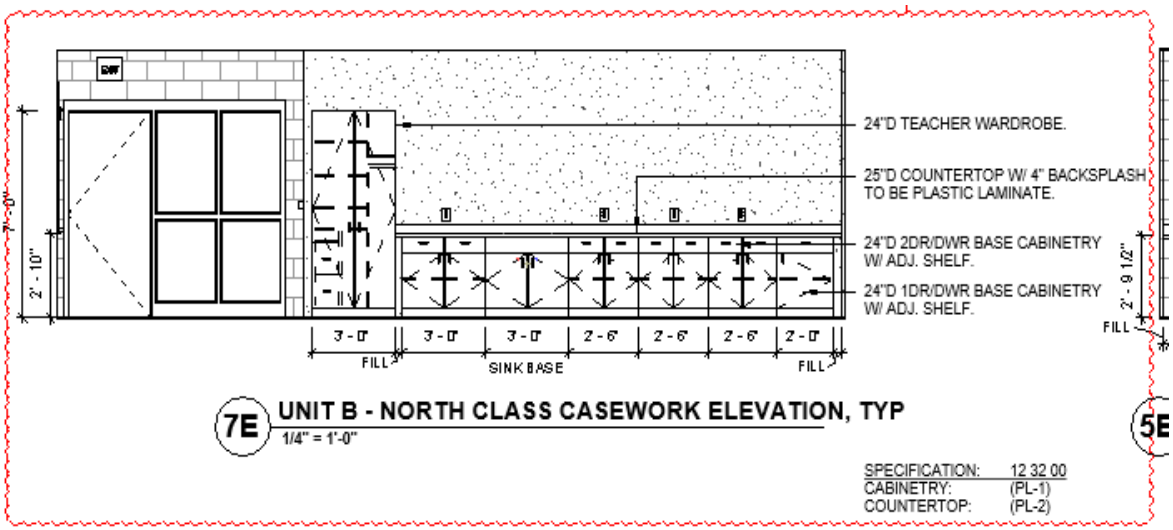
1. MODIFY Elevation SF47 as shown below:



3.4 I-SERIES DRAWINGS

A. **Drawing Number I-201**

1. INSERT Elevation 7E as shown below:



B. **Drawing Number IN1B1**

1. MODIFY Note 7 as follows:

   "SCIENCE LAB B117 –

   MODIFY PLAN NOTE #7 TO READ #40 12 35 53 - PROVIDE GOGGLE SANITIZATION CABINET."

C. **Drawing Number IN1B2**

1. MODIFY Elevation I-201/2E as follows:

   "CLASS B224, MODIFY ELEVATION MARKER TO I-201/7E"

2. MODIFY Note 7 as follows:

   "SCIENCE LAB B217, B215, B221 –

   MODIFY PLAN NOTE #7 TO READ #40 12 35 53 - PROVIDE GOGGLE SANITIZATION CABINET."

D. **Drawing Number IN1B3**

1. MODIFY Elevation I-201/2E as follows:

   "CLASS 3224, MODIFY ELEVATION MARKER TO I-201/7E"

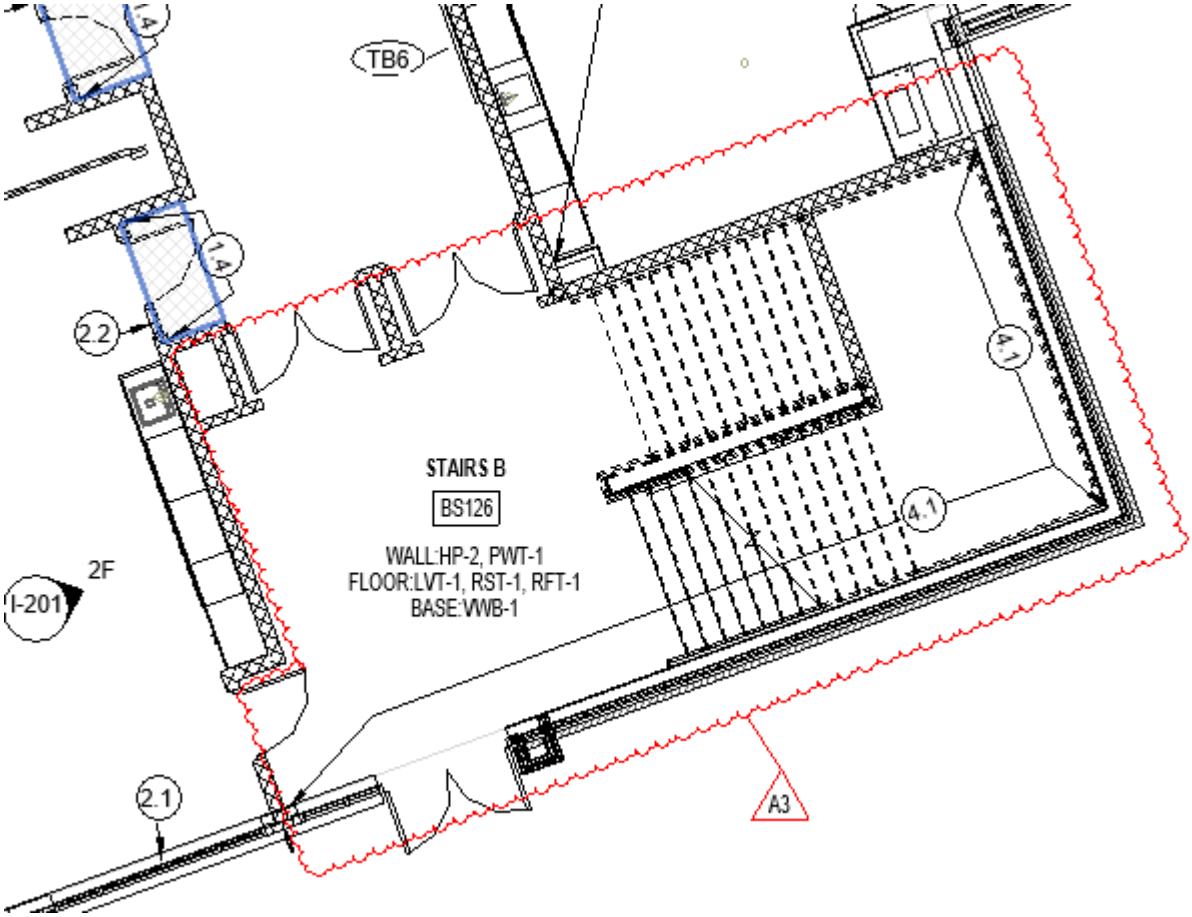
E. **IN SERIES SHEETS**

1. MODIFY Note 2.2 as follows:

   "12 24 13 - PROVIDE MANUAL ROLLER WINDOW SHADE (RWS-2) TO BE INSTALLED. VERIFY DIMENSIONS IN FIELD."

F. **Drawing Numbers IN1B1, IN1B2, IN1B3**

1. MODIFY Plan Note leader 4.1 as shown below:

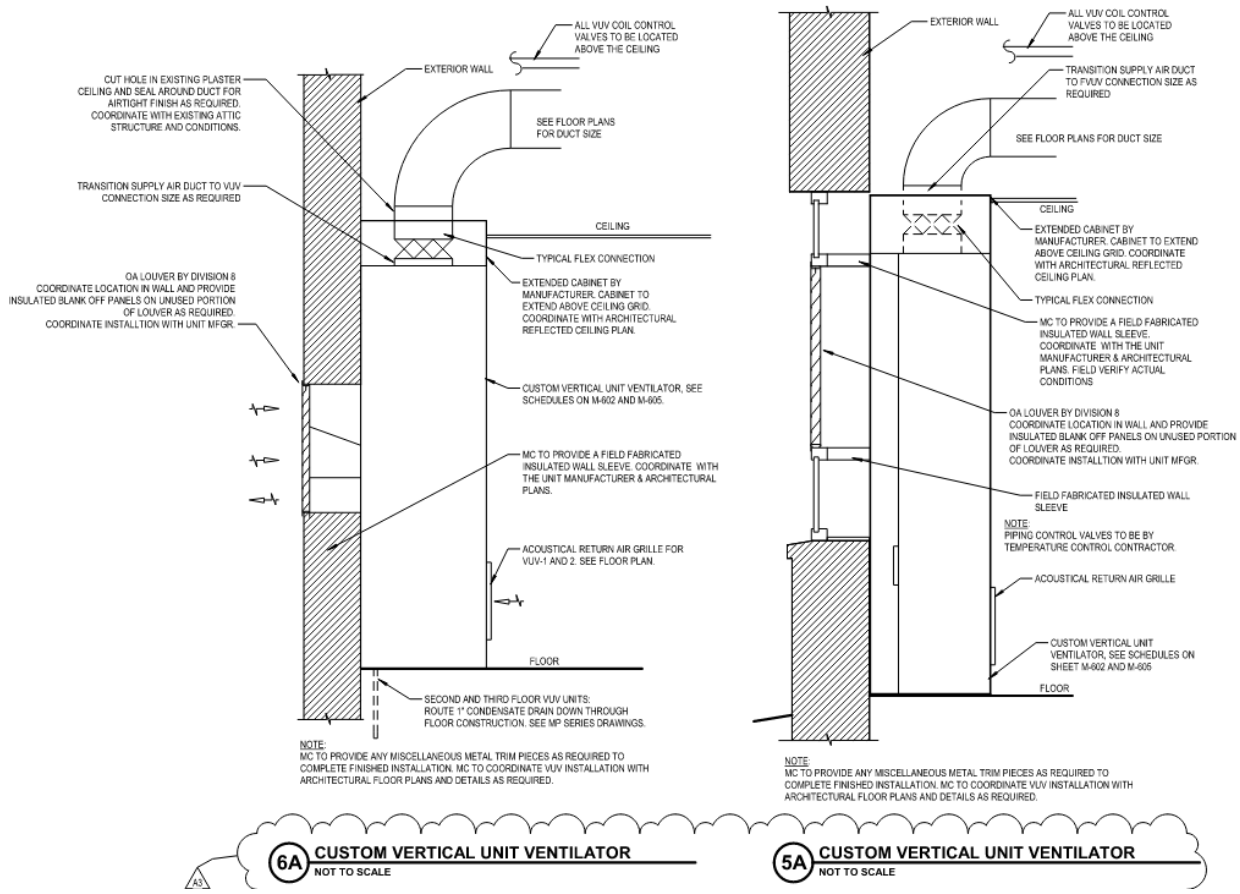


3.5 M-SERIES DRAWINGS

A. Drawing Number M-505

1. MODIFY Details 5A and 6A as follows:

   Miscellaneous clarifications to details and removed references to existing architectural features as shown below:



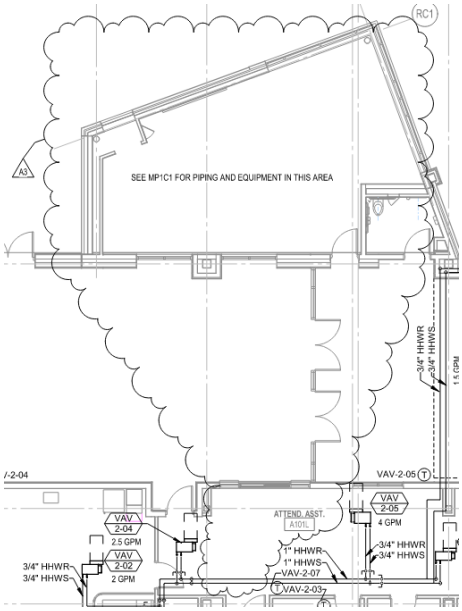
B. Drawing Number M-602

1. Pump Schedule: Add the following to Pump Schedule Notes:

   "Provide 3 speeds for AHU HHW recirc pumps."

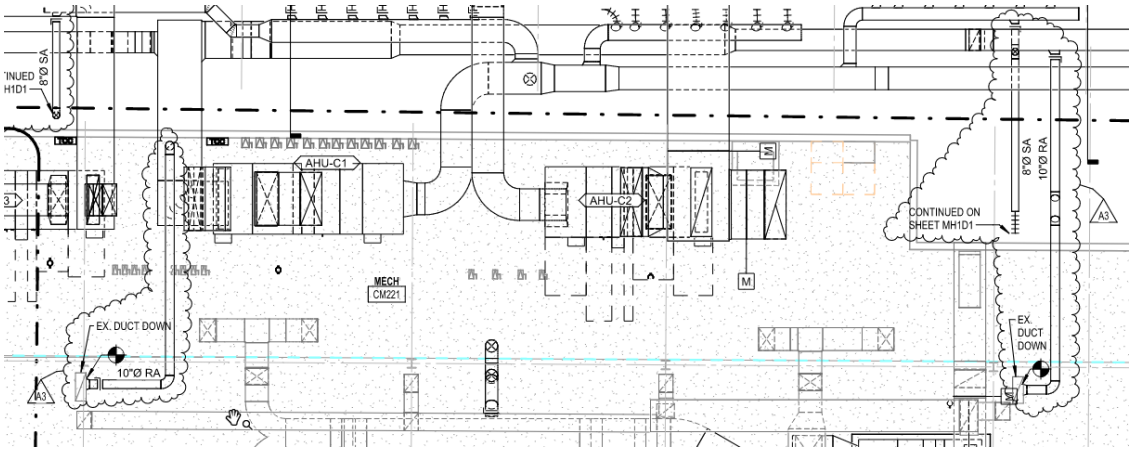
C. **Drawing Number MP1A1**

1. MODIFY Drawing as shown below: Delete redundant scope which is covered in MP1C1 sheets



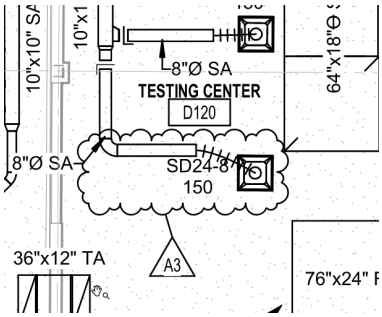
D. **Drawing Number MH1D2**

MODIFY Drawing as shown below: Added ductwork to AHU-C1 system to serve corridor areas below. Also clarified view reference on this sheet.



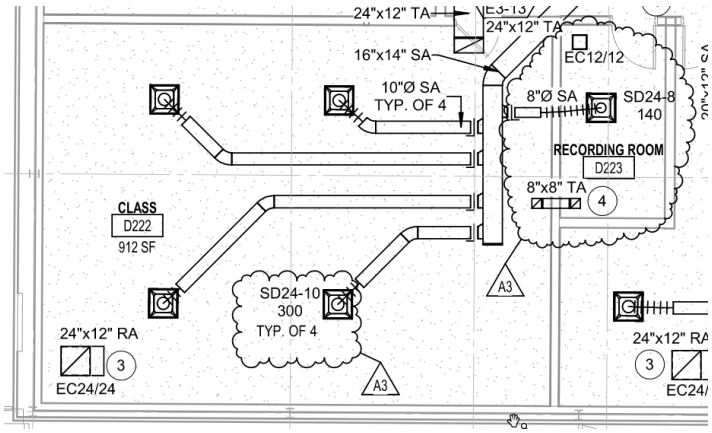
E. **Drawing Number MH1E1**

MODIFY Drawing as shown below: Modified duct routing.



F. **Drawing Number MH1E2**

MODIFY Drawing as shown below: Adjusted ductwork and air balancing.

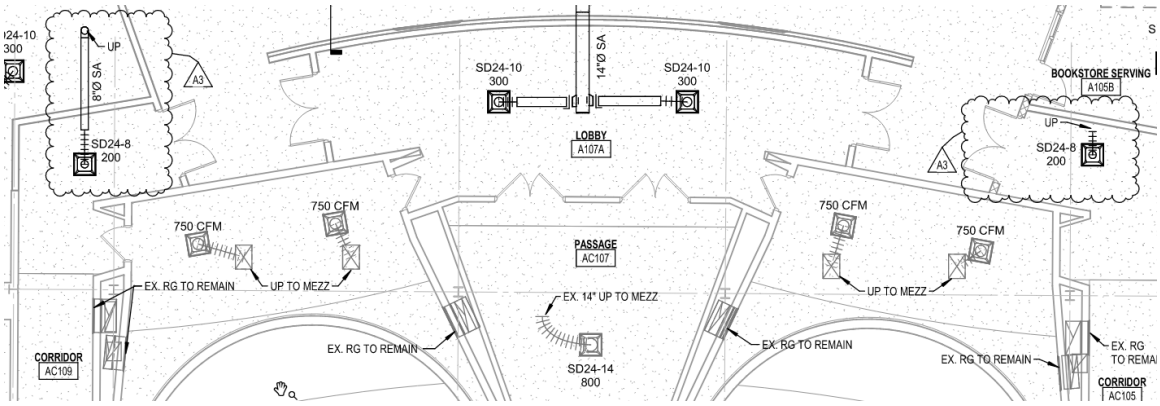


G. **Drawing Number M-601**

MODIFY Drawing as follows: AHU Schedule: AHU-C3 length to be 14’-4”. AHU-D3 length to be 16’-7”. AHU-E4 height to be 5’-5”.

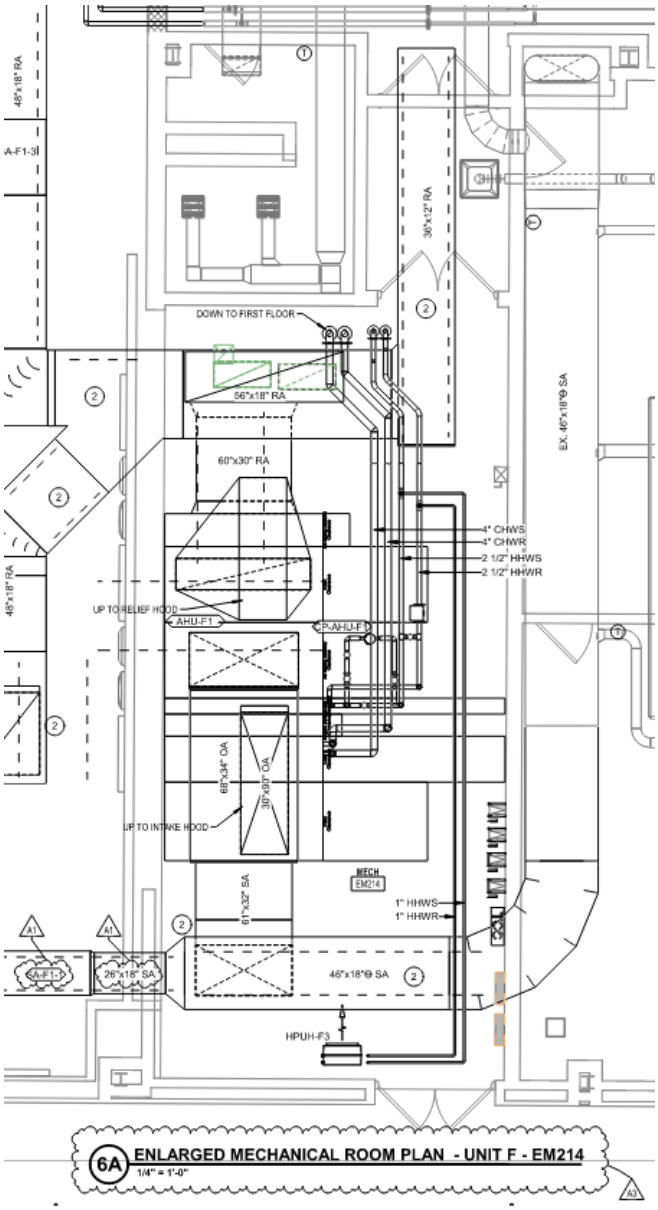
H. **Drawing Number MH1D1**

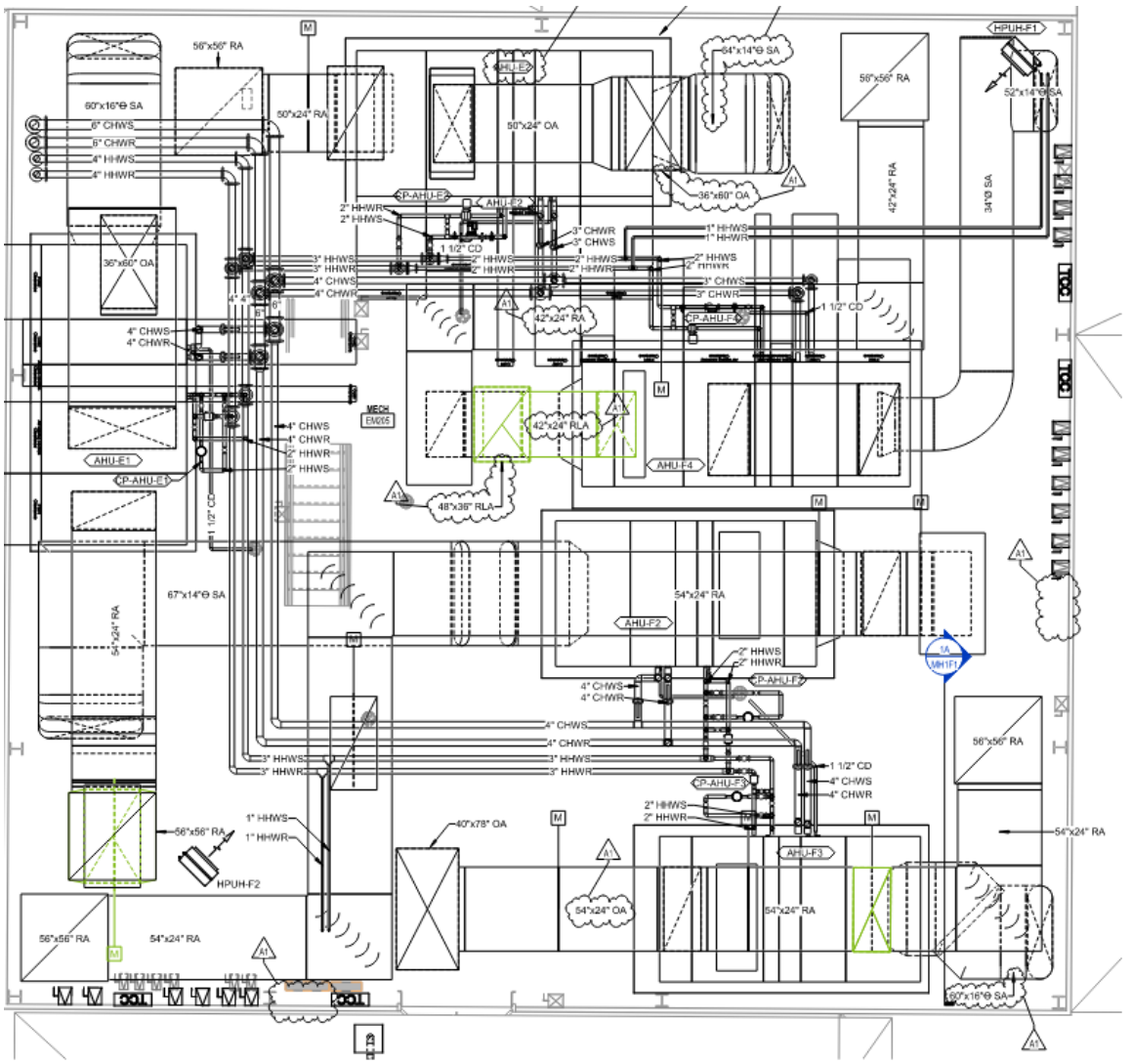
1. MODIFY Drawing as shown below: Continuation from MH1D2 modifications. Added diffusers in these spaces.



I. **Drawing Number M-402**

1. MODIFY Drawing as follows: Miscellaneous dimensions and clarifications to duct and pipe sizes on views 6A and 2A as shown below:

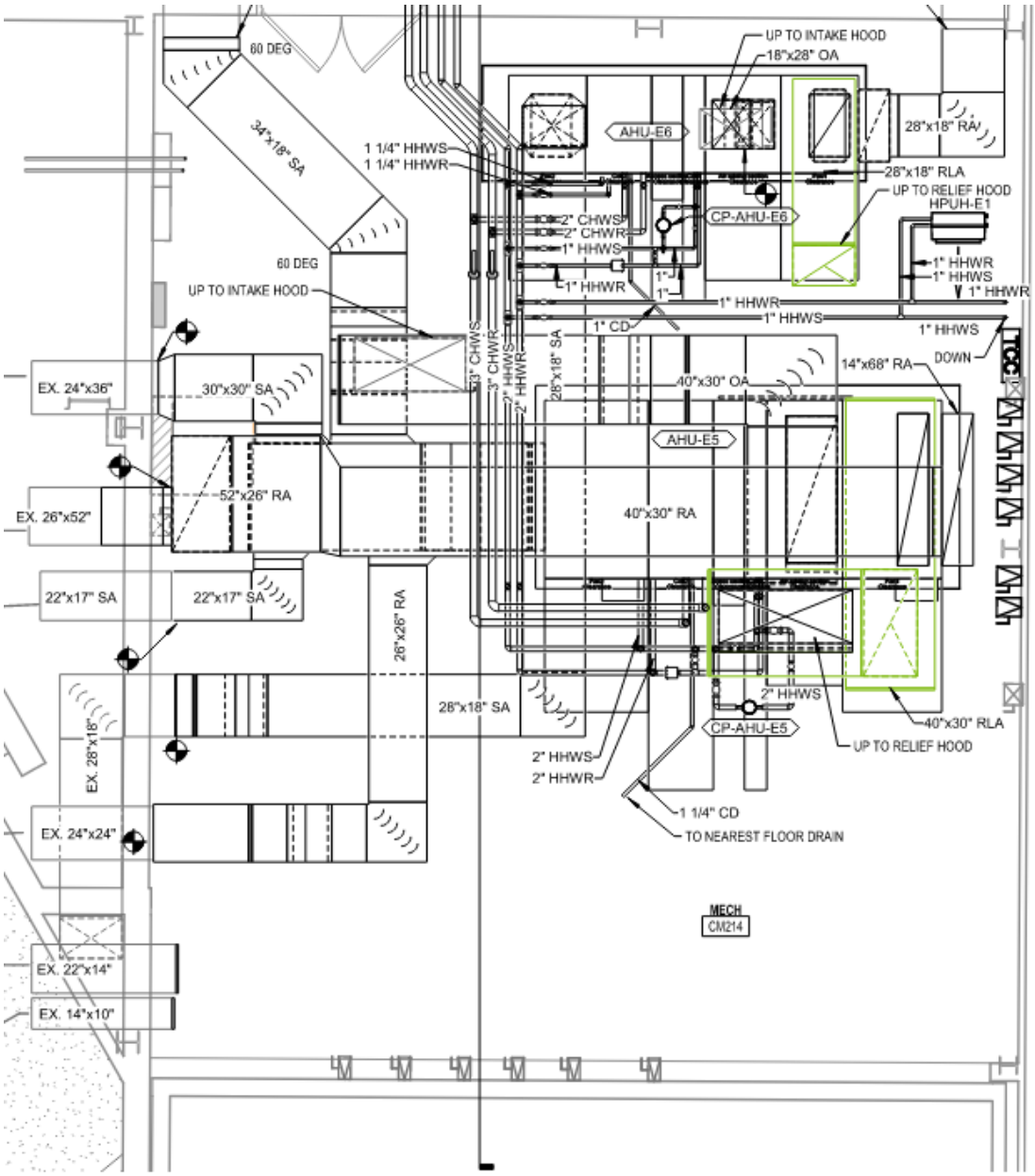




2A ENLARGED MECHANICAL ROOM PLAN - UNIT F - EM205
1/4" = 1'-0"

J. **Drawing Number M-405**

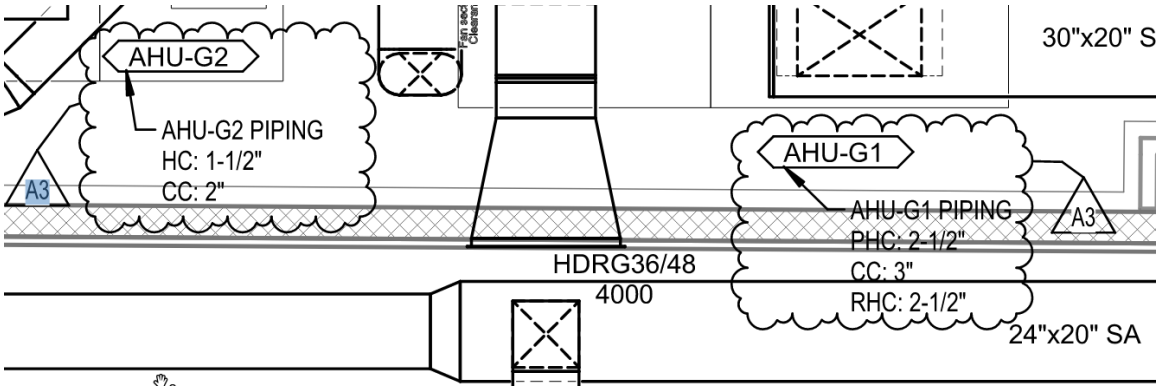
1. MODIFY Drawing as shown below: Modify intake and relief ductwork. Miscellaneous piping and duct sizes added.



5A ENLARGED MECHANICAL ROOM PLAN - UNIT E - CM214
1/4" = 1'-0"

K. **Drawing Number M-406**

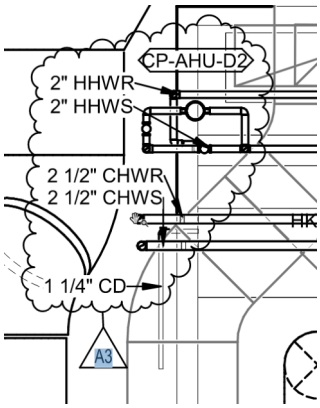
1. MODIFY Drawing as shown below: Piping sizes defined.



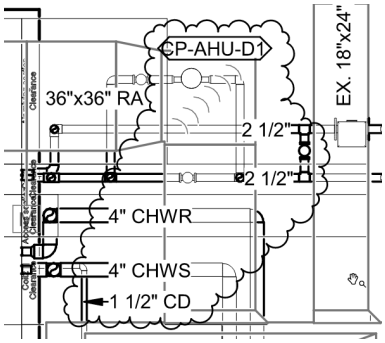
L. **Drawing Number M-404**

1. MODIFY Drawing as follows:

a. AHU-D2 piping sizes defined.



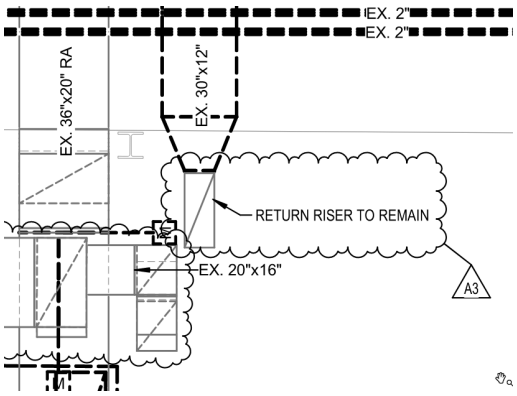
b. AHU-D1 piping sizes defined.



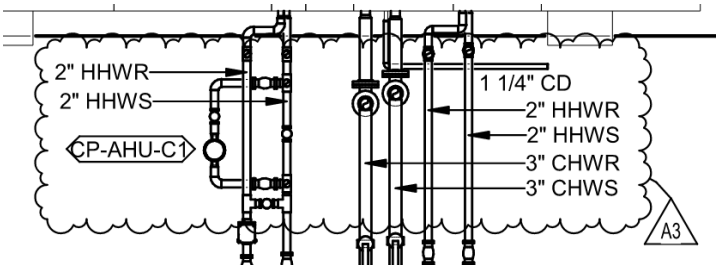
M. **Drawing Number M-407**

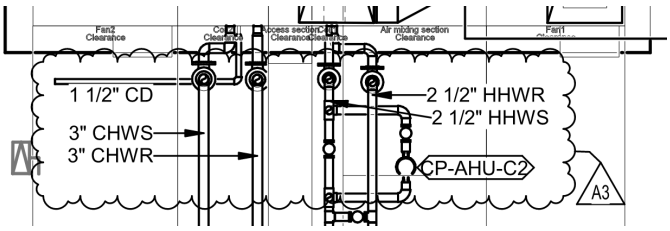
1. MODIFY Drawing as follows:

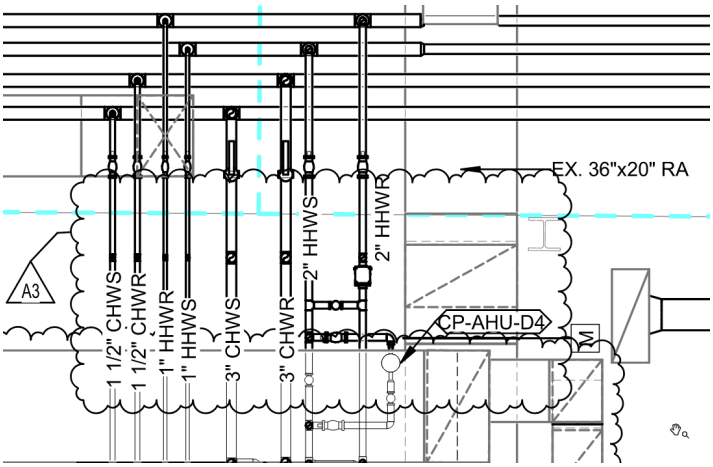
a. Demo view: Changed return riser to remain.



b. New work view: Pipe sizes serving AHUs defined.





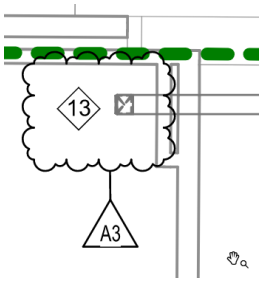


N. **Drawing Number MDP1D2**

1. MODIFY Drawing as follows: Demo and replace existing Tstat for ex. HPUH C6 in mech mezzanine.

O. **Drawing Number MDH1H2**

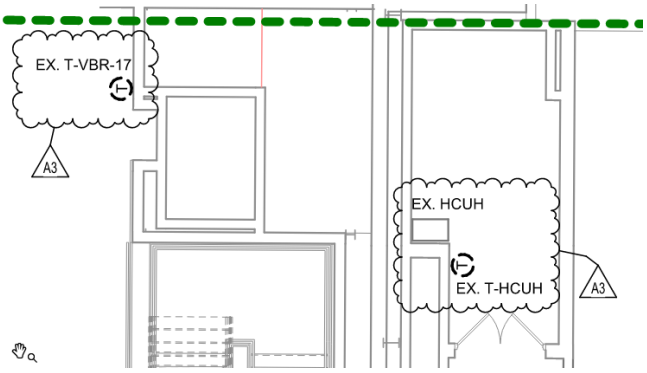
1. MODIFY Drawing as shown below: Northwest storage room, add demo note 13 to existing exhaust grille.



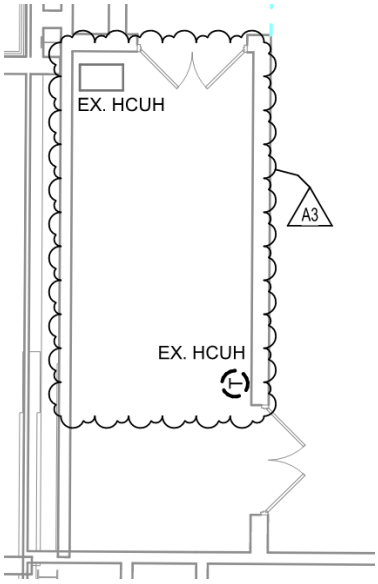
P. **Drawing Number MDP1H2**

1. MODIFY Drawing as shown below: Showing existing HCUH and Tstat/Tsensor replacements.

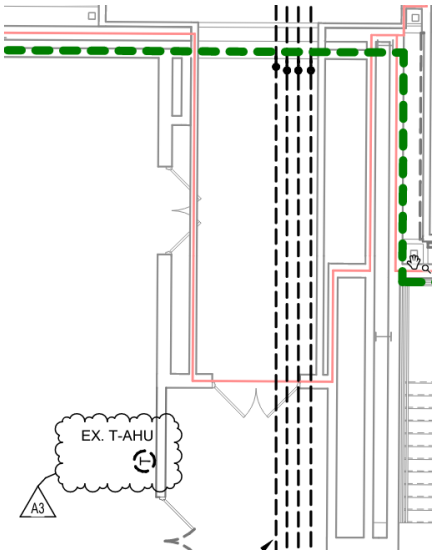
   a. Northwest of gym:



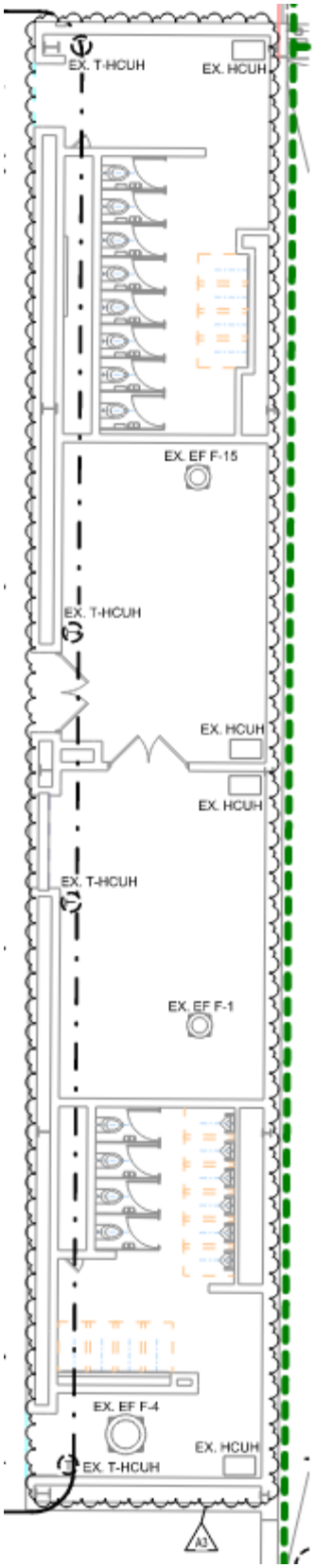
b. Southwest of gym:



c. Northeast of gym:

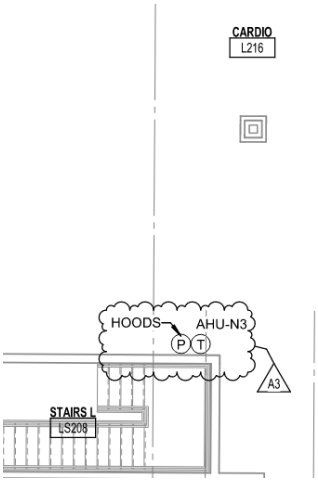


d. East of gym:


EX. T-HCUH
EX. HCUH
EX. EF F-15
EX. T-HCUH
EX. HCUH
EX. HCUH
EX. T-HCUH
EX. EF F-1
EX. EF F-4
EX. HCUH
EX. T-HCUH
A3

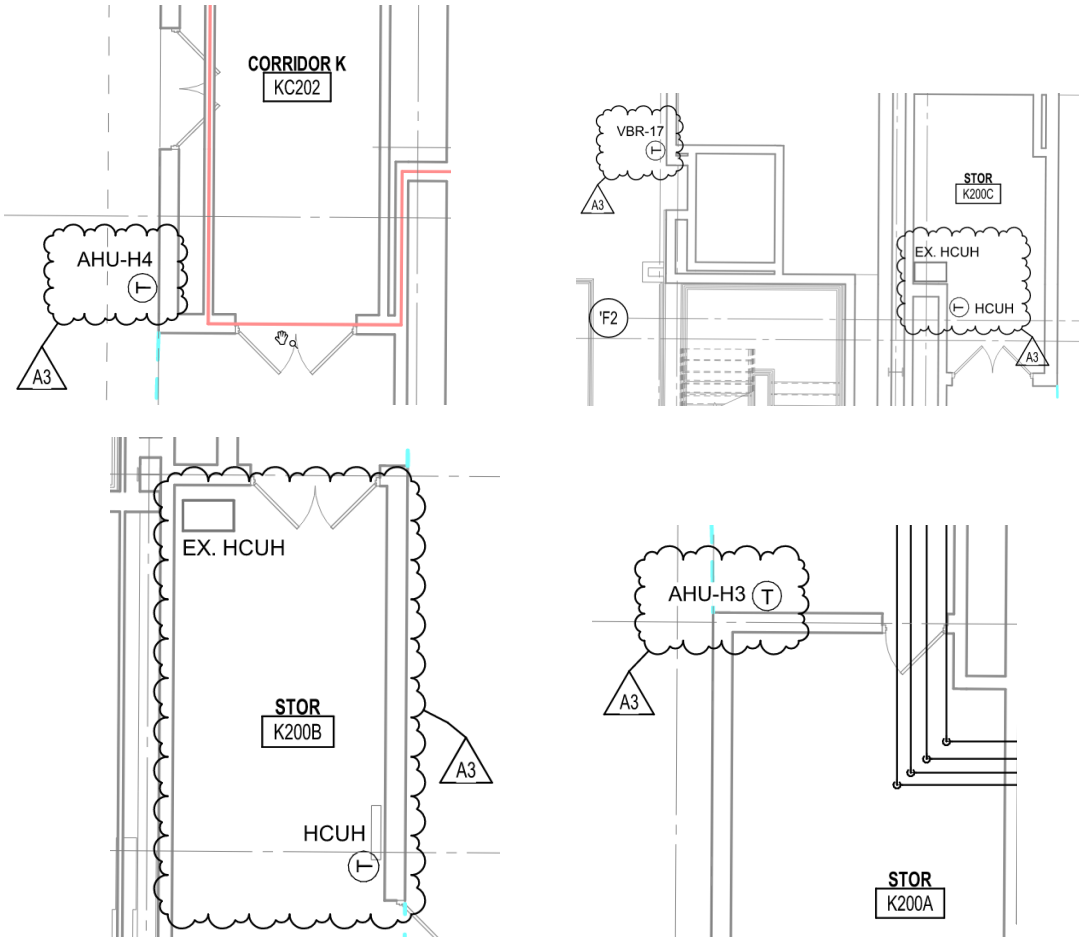
Q. **Drawing Number MP1G2**

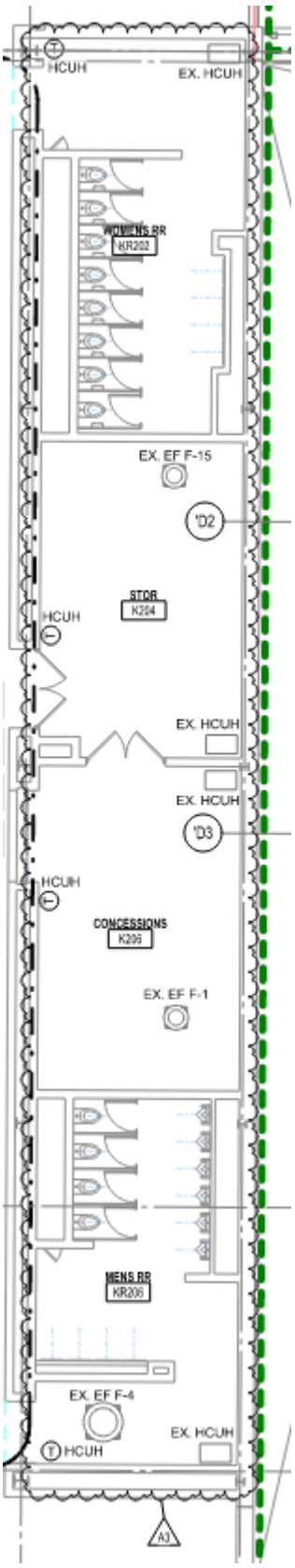
1. MODIFY Drawing as shown below: Showing replacement of Tstat and Pstat.



R. **Drawing Number MP1H2**

1. MODIFY Drawing as shown below: Showing replacement of Tstats.

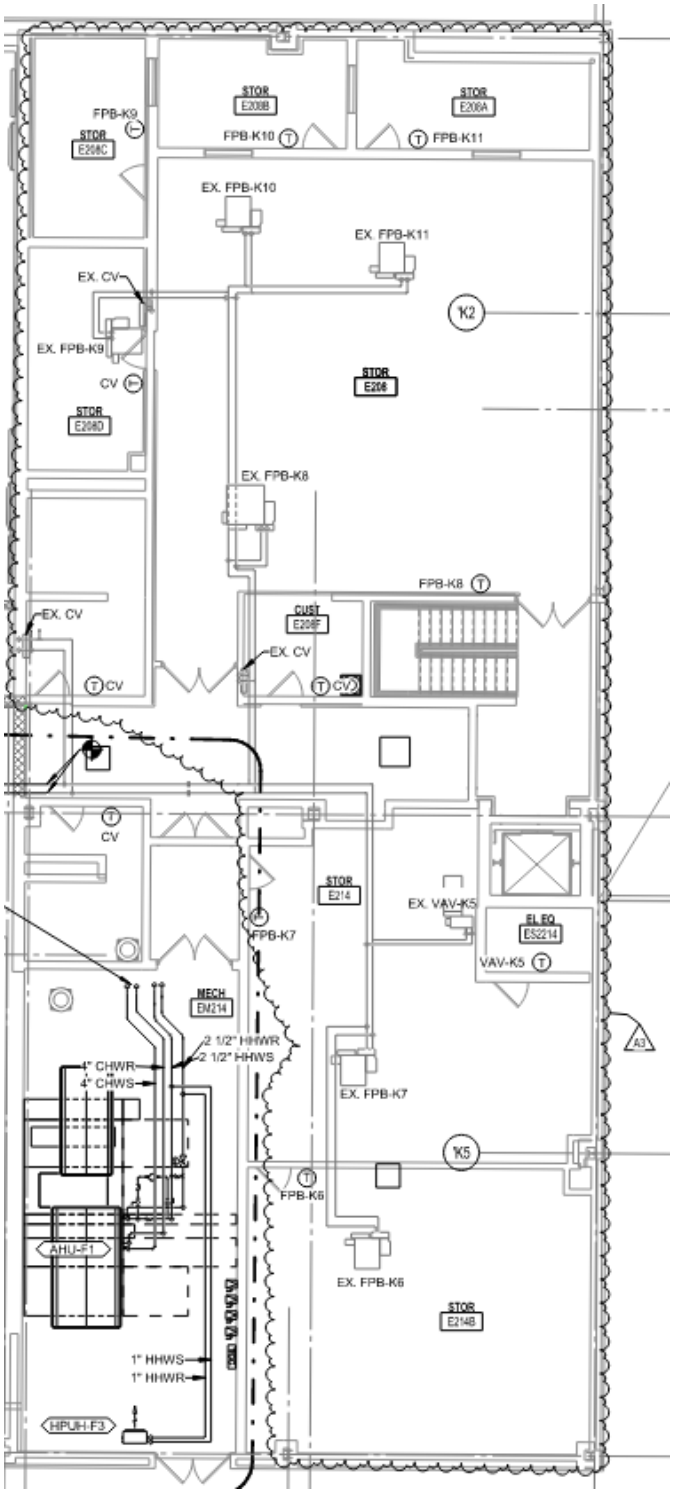



HCUH
EX. HCUH
WOMENS RR
KR202
EX. EF F-15
D2
STOR
K204
HCUH
EX. HCUH
EX. HCUH
D3
HCUH
CONCESSIONS
K206
EX. EF F-1
MENS RR
KR206
EX. EF F-4
EX. HCUH
HCUH
A3

S. **Drawing Number MP1F2**

1. MODIFY Drawing as follows: DELETE text note and branch piping above practice room. Delete note "2-1/2 HHWS & HHWR DN. SEE SHEET MP1F1 FOR CONT."

2. MODIFY Drawing as follows: Showing replacement of Tstats.



T. **Drawing Number MP1H1**

1. DELETE AND REPLACE Drawing IN ITS ENTIRETY per the attached. Drawing clarifies existing equipment to remain and Tstat/Tsensor replacements.

U. **Drawing Number MP1D2**

1. MODIFY Drawing as follows:

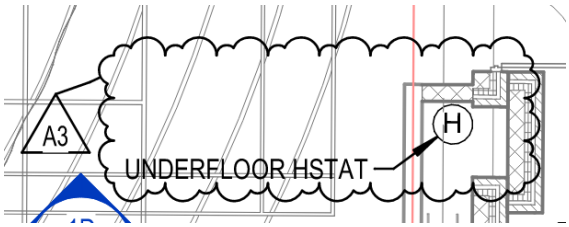
   a. Clarify view references.

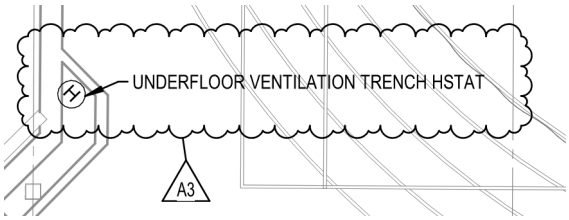
   b. Show replacement of Tstat serving ex. UH-C6.

V. **Drawing Number MP1G1**

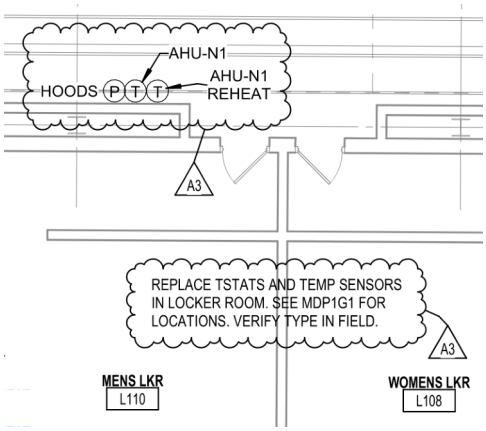
1. MODIFY Drawing as follows:

   a. Add replacement of two underfloor Hstats.





   b. Clarify Tstat and Psensor replacements in fieldhouse and locker room areas.



W. **Drawing Number MDP1H1**

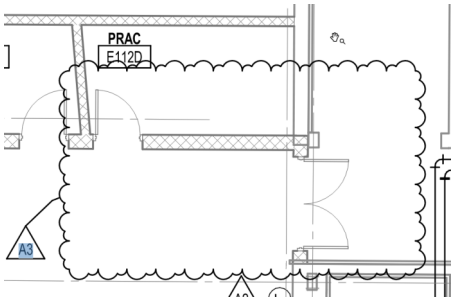
1. DELETE AND REPLACE Drawing IN ITS ENTIRETY per the attached. Drawing clarifies existing equipment to remain and Tstat/Tsensor replacements.

X. **Drawing Number MP1F1**

1. MODIFY Drawing as follows:

   a. Add two pressure sensors serving AHUs F2 and F3.

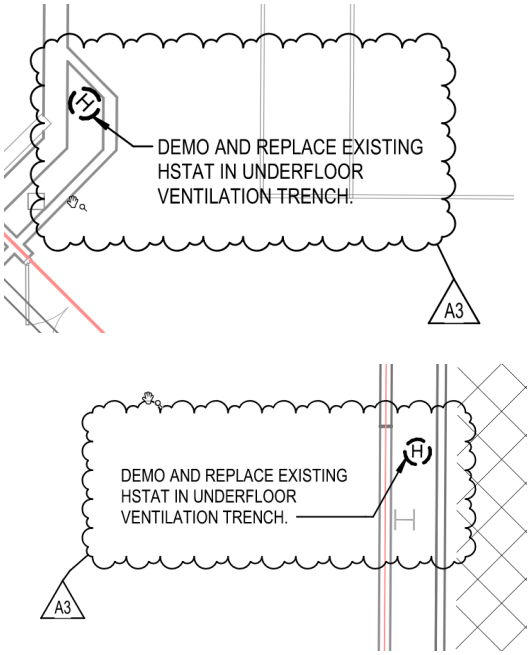
   b. Remove piping scope as shown below:



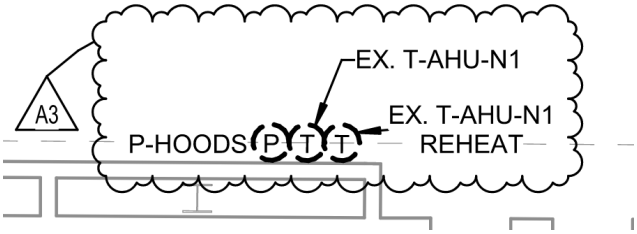
Y. **Drawing Number MDP1G1**

1. MODIFY Drawing as follows:

   a. Add replacement of two underfloor Hstats, as shown below:

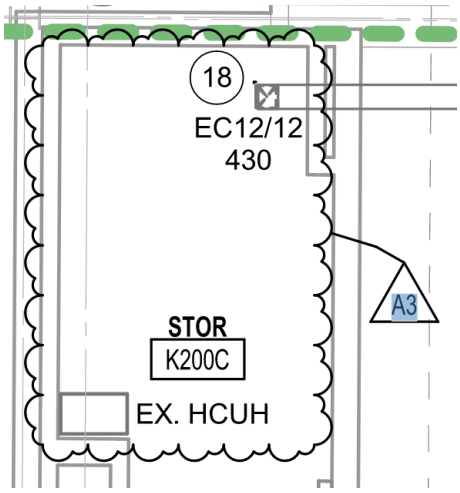


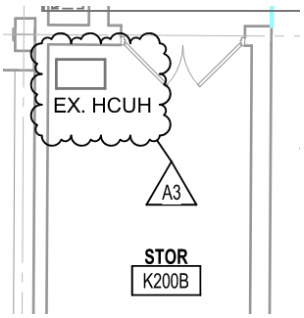
b. Clarify replacement of T and P sensors serving AHU-N1 and relief hoods, as shown below:

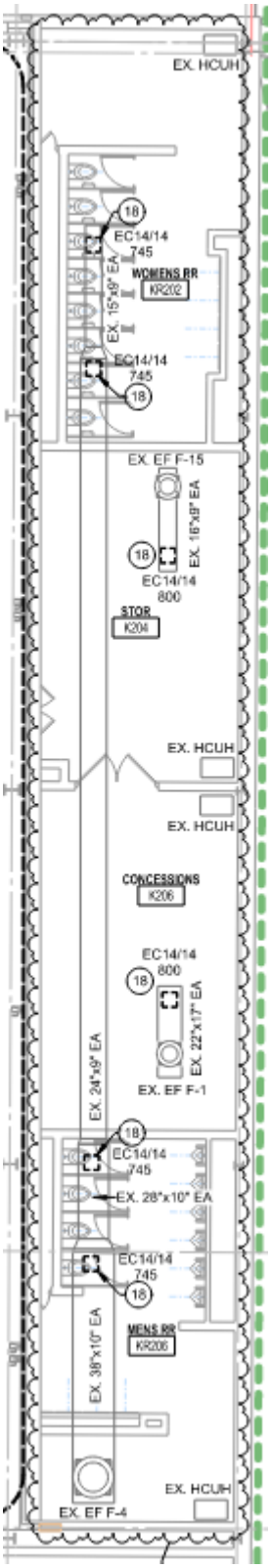


Z. **Drawing Number MH1H2**

1. MODIFY Drawing as shown below: Show existing to remain equipment. Show grille replacements.





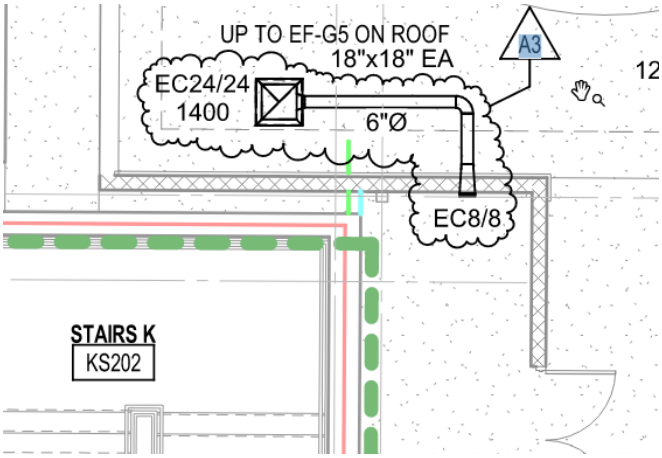

EX. HCUH
18
EC14/14
745
WOMENS RR
KR202
EX. 15"x9" EA
EC14/14
745
18
EX. EF F-15
EX. 16"x9" EA
18
EC14/14
800
STOR
K204
EX. HCUH
EX. HCUH
CONCESSIONS
K206
EC14/14
800
18
EX. 22"x17" EA
EX. EF F-1
EX. 24"x9" EA
18
EC14/14
745
EX. 28"x10" EA
EC14/14
745
18
MENS RR
KR206
EX. 38"x10" EA
EX. HCUH
EX. EF F-4

AA. **Drawing Number MH1G2**

1. MODIFY Drawing as follows:

   a. Clarify view references / callouts.

   b. Add exhaust duct tapped into wrestling room custodial closet as shown below.



BB. **Drawing Number M-604**

1. MODIFY Drawing as follows:

   a. Gravity Ventilator Schedule: Added Gravity relief hood GR-AHU-E6 serving AHU-E6. Size 18/24, model GR.

   b. Split System Condensing Unit Schedule:

      1) Change CU-K1 notes to “2-9”. Note 1 does not apply to CU-K1.

      2) Edited electrical data as shown below:

ELECTRICAL DATA					
PHASE	MCA (A)	MFA (A)	MOCP (A)	RLA (A)	A3 DISC
1	25.0	30	31	8	ELEC
1	25.0	30	31	8	ELEC
1	11.0	30	28	7	ELEC
1	25.0	30	31	8	ELEC
1	11.0	30	28	7	ELEC
1	11.0	30	28	7	ELEC
1	25.0	30	31	8	ELEC
1	25.0	30	31	8	ELEC
1	25.0	30	31	8	ELEC

c. Diffusers, Registers, and Grilles Schedule: Modify as shown below:

DIFFUSERS, REGISTERS, AND GRILLES SCHEDULE

IDENTITY DATA				NECK SIZE (IN)	MODULE SIZE			
MARK	DESCRIPTION	MANUFACTURER	MODEL	Ø	W	L	MATERIAL	NOTES
RCD-30	ROUND CONE DIFFUSER	PRICE	RCD				STEEL	
SMDA24-10	LOUVERED FACE DIRECTIONAL DIFFUSER	PRICE	SMDA				STEEL	
SMDA24-12	LOUVERED FACE DIRECTIONAL DIFFUSER	PRICE	SMDA				STEEL	
LBMHB4/6	LINEAR BAR GRILLE	PRICE	LBMH 27B				ALUMINUM	
LBMH168/4	LINEAR BAR GRILLE	PRICE	LBMH 27B				ALUMINUM	
LBMH24/4	LINEAR BAR GRILLE	PRICE	LBMH 27B				ALUMINUM	
LBMH96/6	LINEAR BAR GRILLE	PRICE	LBMH 27B				ALUMINUM	
LBMH108/6	LINEAR BAR GRILLE	PRICE	LBMH 27B				ALUMINUM	
EC8/6	EGG CRATE FACE RETURN	PRICE	80		6"	6"	STEEL	
EC8/8	EGG CRATE FACE RETURN	PRICE	80		8"	8"	STEEL	
EC10/10	EGG CRATE FACE RETURN	PRICE	80		10"	10"		
EC12/12	EGG CRATE FACE RETURN	PRICE	80		12"	12"	STEEL	
EC14/14	EGG CRATE FACE RETURN	PRICE	80		14"	14"	STEEL	
EC24/12	EGG CRATE FACE RETURN	PRICE	80		24"	12"	STEEL	
EC24/24	EGG CRATE FACE RETURN	PRICE	80		24"	24"	STEEL	
HDRG24/24	HEAVY DUTY GYM GRILLES	PRICE	96		36"	24"		
HDRG24/60	HEAVY DUTY GYM GRILLES	PRICE	96		24"	60"	STEEL	
HDRG20/36	HEAVY DUTY GYM GRILLES	PRICE	96		36"	20"	ALUMINUM	
HDRG36/48	HEAVY DUTY GYM GRILLES	PRICE	96		48"	36"	STEEL	
LBG48/6	LOUVER FACE GRILLE SUPPLY	PRICE	LBP 27B		6"	48"		
LS48-6-2S	LINEAR SLOT DIFFUSER	PRICE	SDBI 100 - 2 SLOT	6"		48"		
LS48-7-2S	LINEAR SLOT DIFFUSER	PRICE	SDBI 100 - 2 SLOT	7"		48"		
LS48-10-3S	LINEAR SLOT DIFFUSER	PRICE	SDBI 100 - 3 SLOT	10"		48"		
LS48-12-3S	LINEAR SLOT DIFFUSER	PRICE	SDBI 100 - 4 SLOT	12"		48"		
RG6/6	LOUVER FACE GRILLE RETURN	PRICE	530		6"	6"		
RG8/6	LOUVER FACE GRILLE RETURN	PRICE	530		8"	6"	STEEL	
RG8/8	LOUVER FACE GRILLE RETURN	PRICE	530		8"	8"		
RG10/6	LOUVER FACE GRILLE RETURN	PRICE	530		10"	6"		
RG10/8	LOUVER FACE GRILLE RETURN	PRICE	530		10"	8"		
RG10/10	LOUVER FACE GRILLE RETURN	PRICE	530		10"	10"		
RG12/10	LOUVER FACE GRILLE RETURN	PRICE	530		12"	10"		
RG14/14	LOUVER FACE GRILLE RETURN	PRICE	530		14"	14"		
RG6/6	LOUVER FACE GRILLE RETURN	PRICE	530		6"	6"		
RG8/6	LOUVER FACE GRILLE RETURN	PRICE	530		8"	6"	STEEL	
RG10/8	LOUVER FACE GRILLE RETURN	PRICE	530		10"	8"		
RG10/10	LOUVER FACE GRILLE RETURN	PRICE	530		10"	10"		
RG12/10	LOUVER FACE GRILLE RETURN	PRICE	530		12"	10"		
RG12/12	LOUVER FACE GRILLE RETURN	PRICE	530		12"	12"	STEEL	
RG12/12	LOUVER FACE GRILLE RETURN	PRICE	530		12"	12"		
RG14/14	LOUVER FACE GRILLE RETURN	PRICE	530		14"	14"		
RG18/18	LOUVER FACE GRILLE RETURN	PRICE	530		18"	18"	STEEL	
RG24/12	LOUVER FACE GRILLE RETURN	PRICE	530		24"	12"	STEEL	
RG24/24	LOUVER FACE GRILLE RETURN	PRICE	530		24"	24"	STEEL	
RG24/24	LOUVER FACE GRILLE RETURN	PRICE	530		24"	24"	STEEL	
SD24-5	SQUARE CONE DIFFUSER	PRICE	SCDA	5"	24"	24"	STEEL	
SD12-06	SQUARE CONE DIFFUSER	PRICE	SCDA	6"	12"	12"	STEEL	
SD24-6	SQUARE CONE DIFFUSER	PRICE	SCDA	6"	24"	24"	STEEL	
SD24-8	SQUARE CONE DIFFUSER	PRICE	SCDA	8"	24"	24"	STEEL	
SD24-10	SQUARE CONE DIFFUSER	PRICE	SCDA	10"	24"	24"	STEEL	
SD24-12	SQUARE CONE DIFFUSER	PRICE	SCDA	12"	24"	24"	STEEL	
SD24-12 (R)	SQUARE CONE DIFFUSER	PRICE	SCDA	12"	24"	24"	STEEL	
SDG10	SPRIAL DUCT GRILLE	PRICE	SDGE		8"	24"		
SDG12	SPRIAL DUCT GRILLE	PRICE	SDGE		8"	24"		
SDG14	SPRIAL DUCT GRILLE	PRICE	SDGE		8"	24"		
SG8/8B	LOUVER FACE GRILLE SUPPLY	PRICE	520		8"	8"	STEEL	
SG12/12B	LOUVER FACE GRILLE SUPPLY	PRICE	520		12"	12"	STEEL	
SG12/12A	LOUVER FACE GRILLE SUPPLY	PRICE	520		12"	12"	STEEL	
SG20/16A	LOUVER FACE GRILLE SUPPLY	PRICE	520		16"	20"	STEEL	
SG36/12	LOUVER FACE GRILLE SUPPLY	PRICE	520		12"	36"	STEEL	
SG36/14	LOUVER FACE GRILLE SUPPLY	PRICE	520		14"	36"	STEEL	
SG36/20A	LOUVER FACE GRILLE SUPPLY	PRICE	520		20"	36"	STEEL	

DIFFUSERS, REGISTERS, AND GRILLES SCHEDULE NOTES:
1. COORDINATE WITH CEILING CONSTRUCTION FOR MOUNTING TYPE.
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING TYPES.
3. ALL GRILLES AND DIFFUSERS SHALL HAVE FRAMES DESIGNED TO BE USED IN VARIOUS CEILING/WALL SYSTEMS IN WHICH UNITS ARE TO BE INSTALLED.
4. STANDARD COLOR TO BE WHITE.
5. LINEAR BAR GRILLE TO HAVE 15 DEGREE DEFLECTION WITH 1/4" SPACING. FINISH TO BE ANODIZED ALUMINUM.
6. LINEAR SLOT DIFFUSER TO INCLUDE CENTER NOTCH TO ALLOW DIFFUSER TO BE INSTALLED IN 24X24 GRID.
7. SLOT DIFFUSER PATTERN CONTROLLER TO BE CONFIGURED FOR HORIZONTAL PROJECTION. SEE SLOT DIFFUSER DETAIL IN M-500 SERIES SHEETS FOR INSTALLATION DETAIL.
8. OPTIONAL OPPOSED BLADE DAMPER ACCESSORY TO BE INSTALLED IN NECK OF DIFFUSER.
9. SPIRAL DUCT GRILLE TO COME WITH OPTIONAL AIR SCOOP.
10. DOUBLE DEFLECTION GRILLE WITH 3/4" BLADE SPACING.
11. NOZZLE TO INCLUDE WALL MOUNTING BRACKET AND APERTURE STYLE DAMPER.
12. REFERENCE DUCTED RETURN PLENUM CONNECTION DETAIL IN M-500 SERIES SHEETS.
13. REFERENCE SUPPLY AIR DIFFUSER CONNECTION DETAIL IN M-500 SERIES SHEETS.
14. DIFFUSERS, REGISTERS, AND GRILLES LOCATED IN LOCKER ROOMS AND SHOWERS TO BE ALUMINUM.

CC. **Drawing Number M-706**

1. DELETE AND REPLACE Drawing in its entirety per the attached.

DD. **Drawing Number M-707**

1. MODIFY Drawing as shown below: Clarification for Chiller refrigerant monitoring scope.

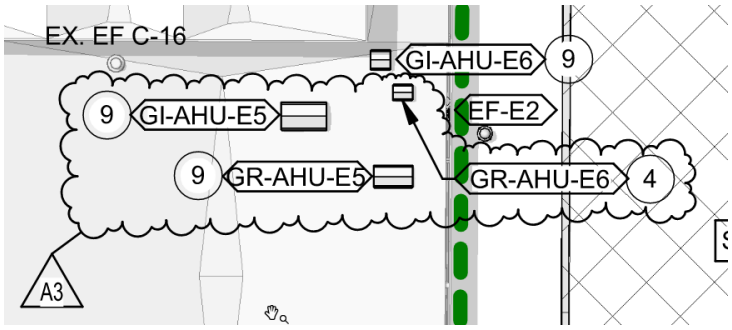
EXISTING CHILLER REFRIGERANT MONITORING

UNIT NUMBER	SPACE SERVED	SCOPE OF WORK	DEMO PNEUMATIC TUBING AND SENSORS	DEMO CONTROL PANEL	DEMO STROBES AND HORNS	DEMO SIGNAGE
RM-1	MECHANICAL PLANT	DEMOLISH	√	√	√	√

KEY: √ = DEMOLISH

EE. **Drawing Number MR102**

1. MODIFY Drawing as shown below: Showing GR-AHU-E6. Location for E5 hoods switched.

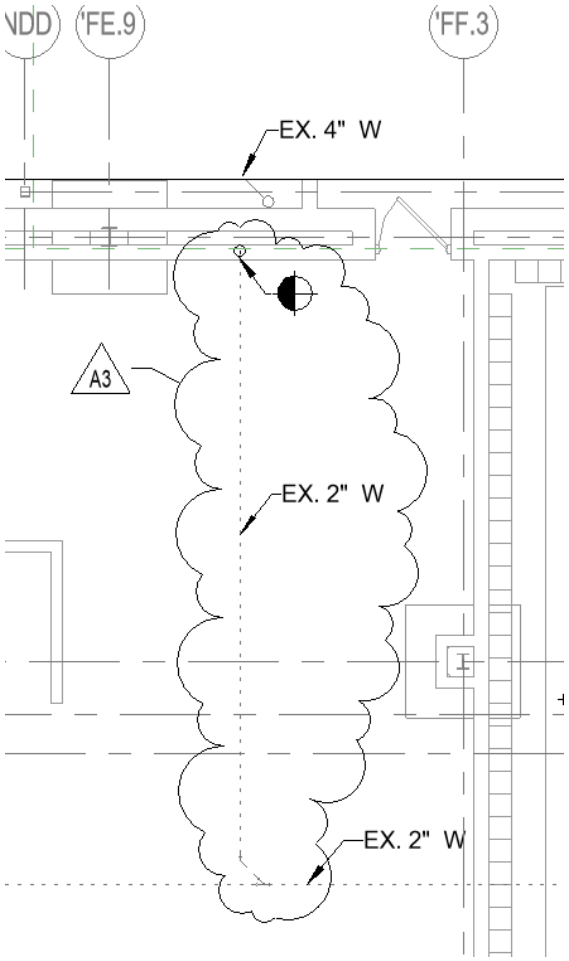


3.6 P-SERIES DRAWINGS

A. **Drawing Number PD1H0**

1. MODIFY Drawing PD1H0 as shown below:

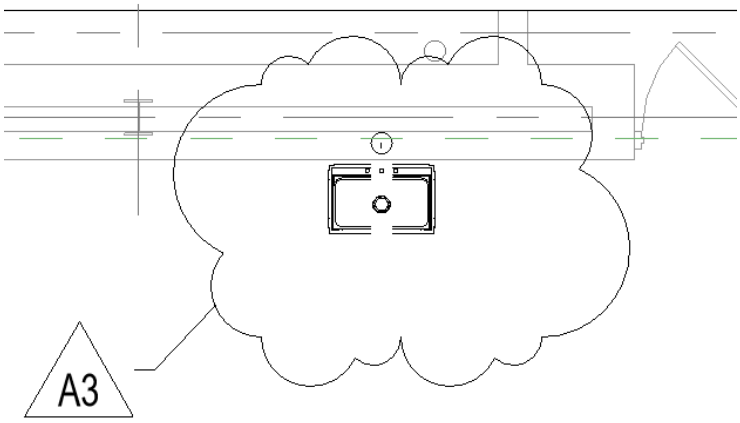
Abandon existing 2” waste piping in place.



B. **Drawing Number PD1H1**

1. MODIFY Drawing PD1H1 as shown below:

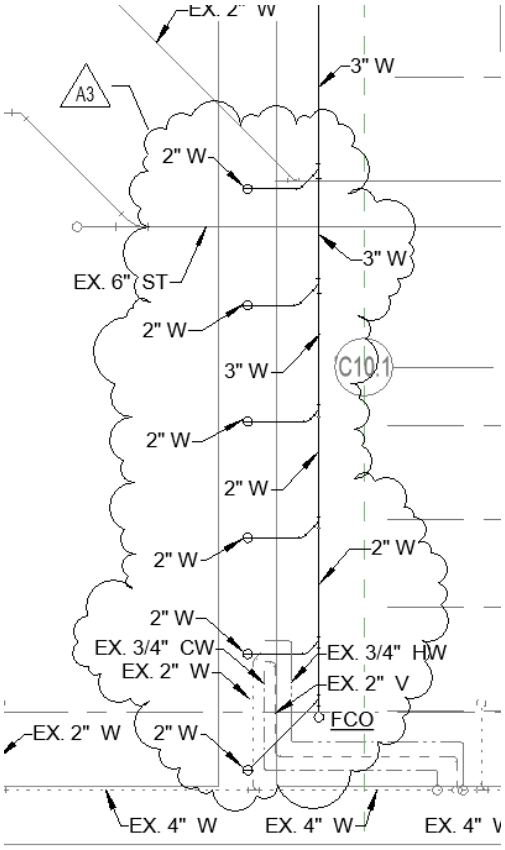
   Remove existing sink and associated piping.



C. **Drawing Number PF1E0**

1. MODIFY Drawing PF1E0 as shown below:

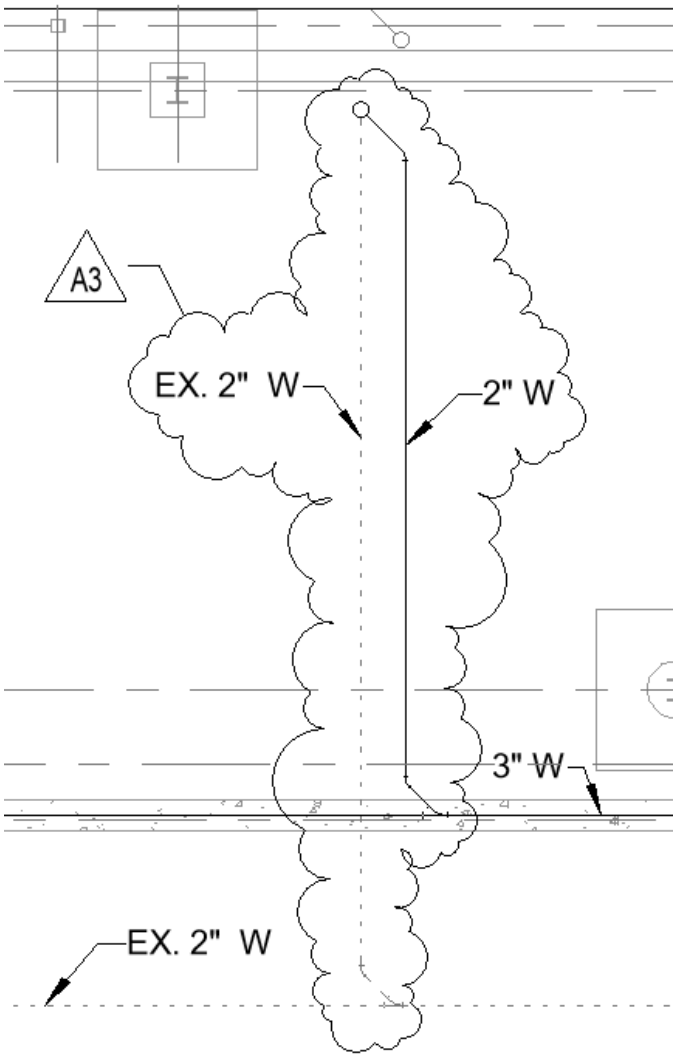
   Modify underground waste piping to Lav's.



D. **Drawing Number PF1H0**

1. MODIFY Drawing PF1H0 as shown below:

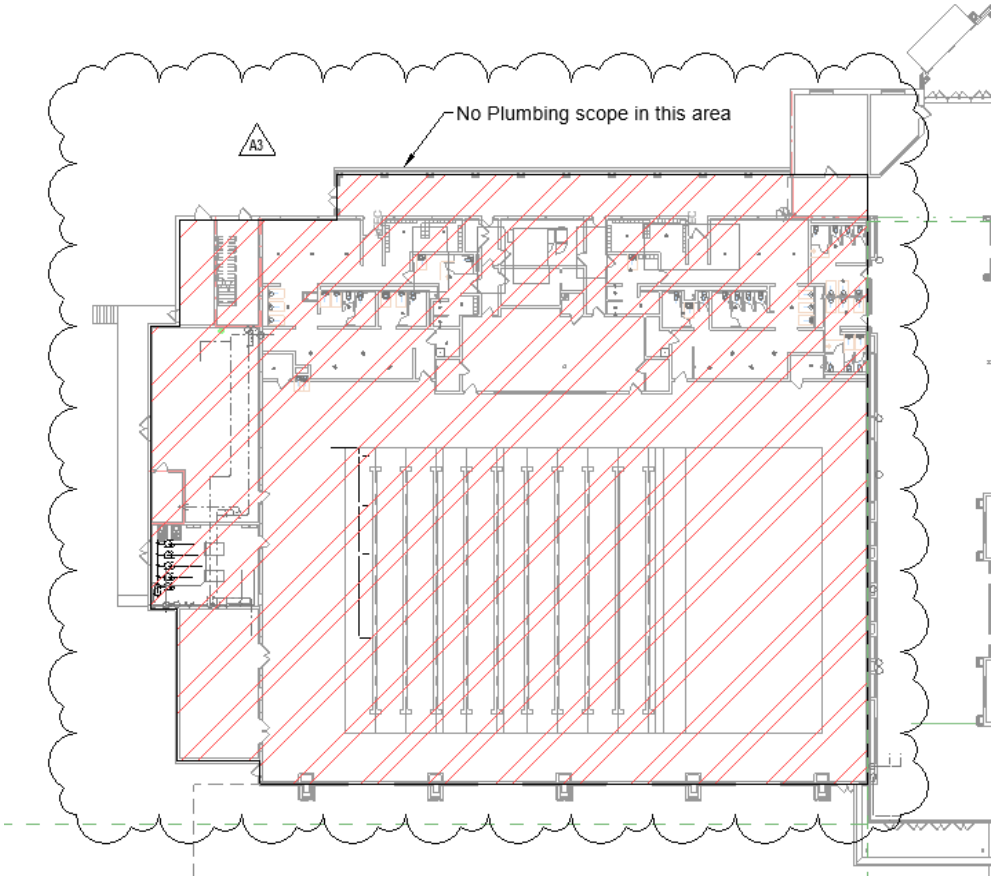
   Add 2” underground waste piping for new sink.



E. **Drawing Number PP101**

1. MODIFY Drawing PP101 as shown below:

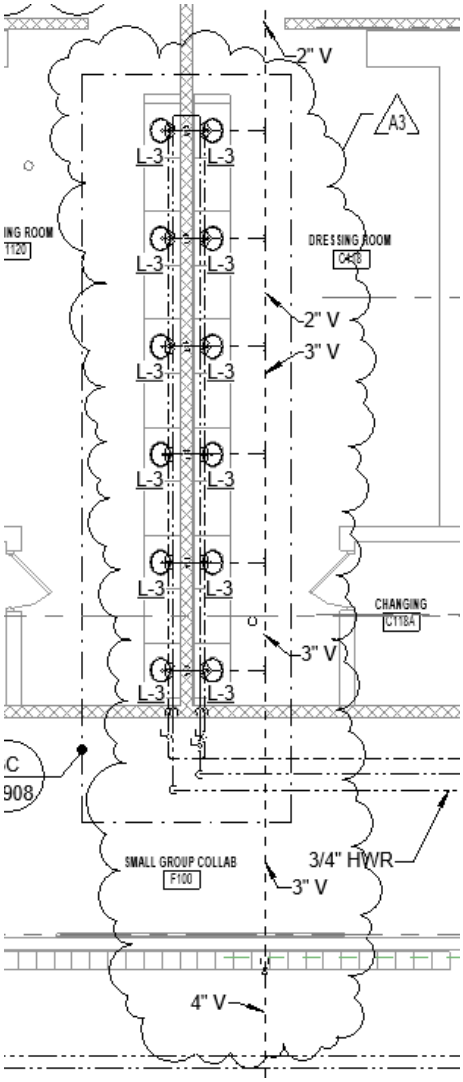
Plumbing scope clarification.



F. **Drawing Number PP1E1**

1. MODIFY Drawing PP1E1 as shown below:.

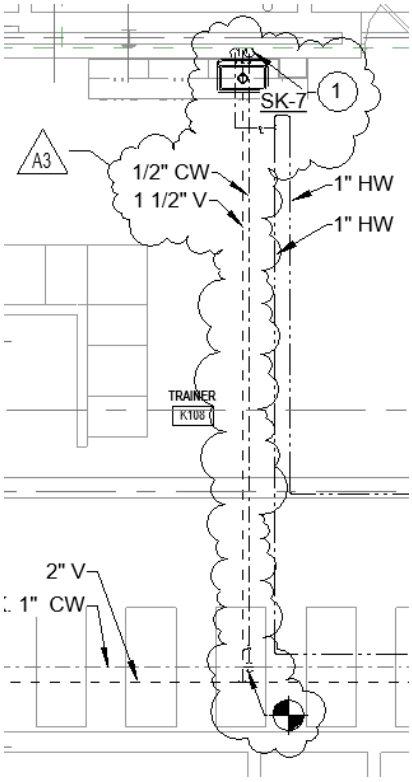
Routing and connections of vent piping changed.



G. **Drawing Number PP1H1**

1. MODIFY Drawing PP1H1 as shown below:

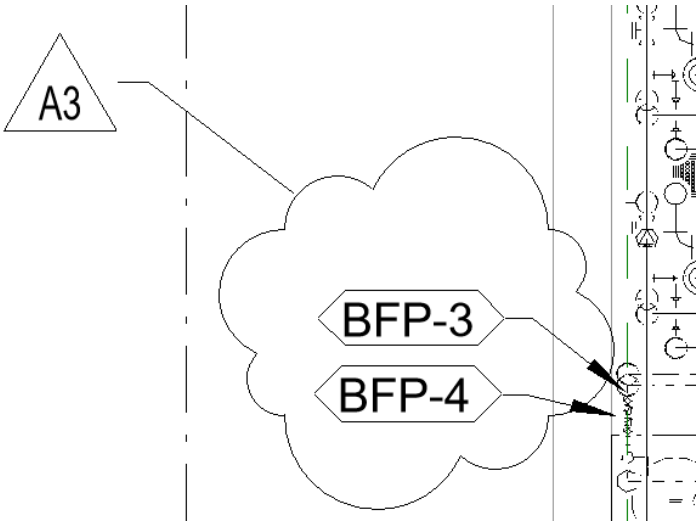
Added SK-7 and associated piping.



H. **Drawing Number PP1H1**

1. MODIFY Drawing PP1H1 as shown below:

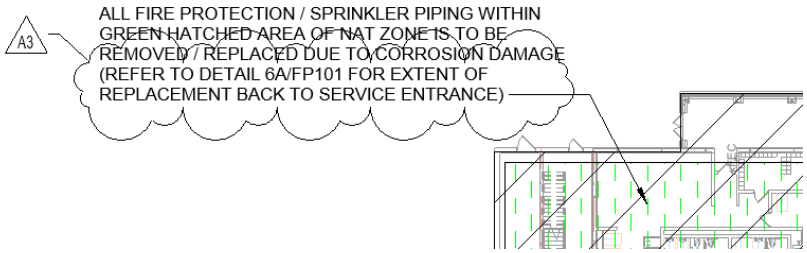
Added tags to backflow preventers.



I. **Drawing Number FPD101**

1. MODIFY Drawing FPD101 as shown below:.

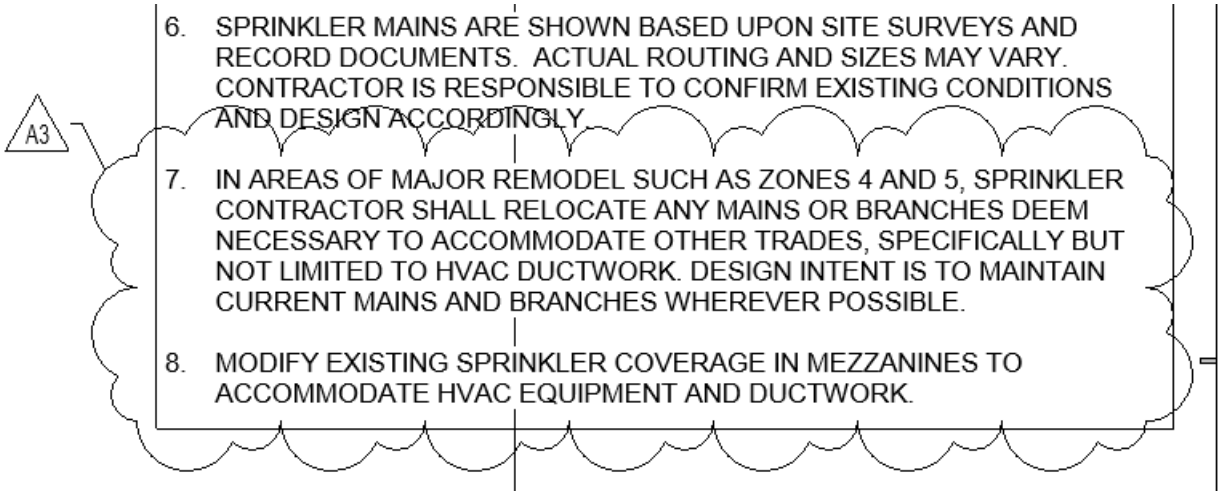
Drawing scope note was updated.



J. **Drawing Number FPD101**

1. MODIFY Drawing FPD101 as shown below:.

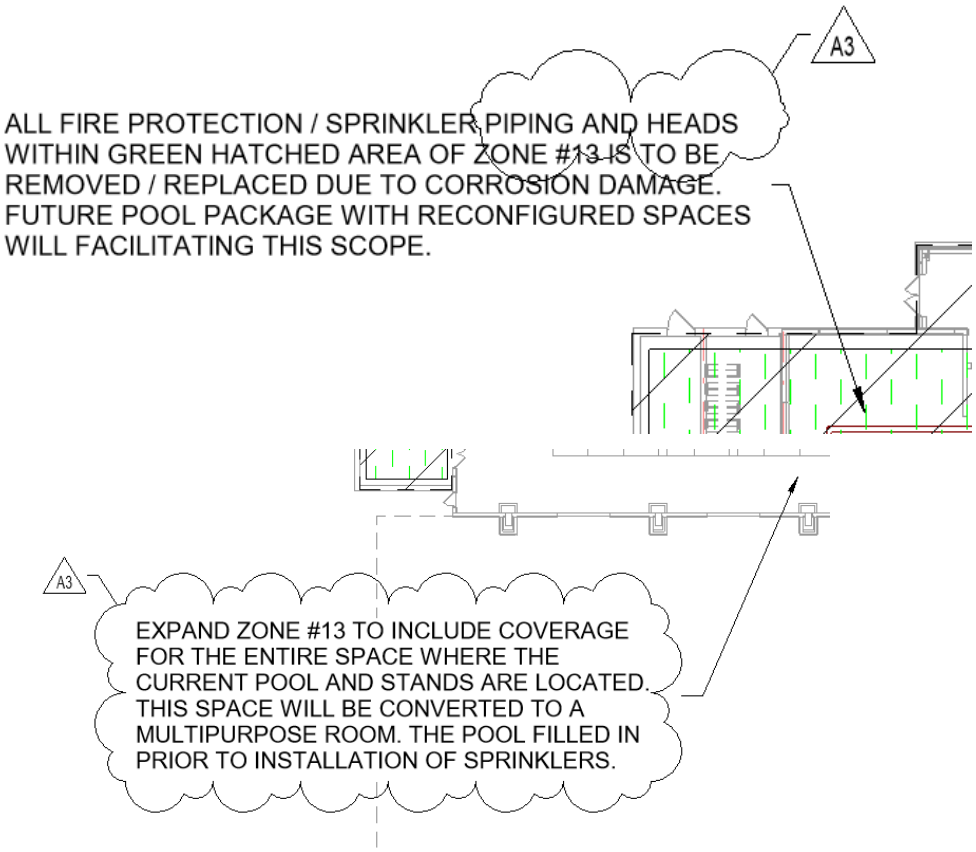
Fire Protection Notes 7 and 8 were updated.



K. **Drawing Number FP101**

1. MODIFY Drawing FP101 as shown below:

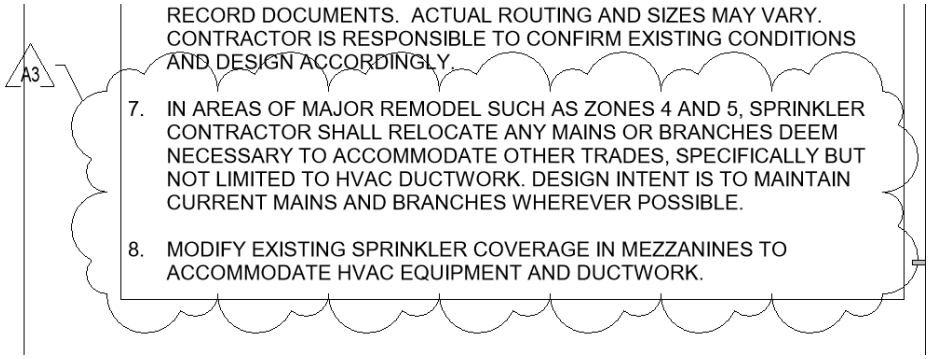
Drawing scope notes were updated.



L. **Drawing Number FP101**

1. MODIFY Drawing FP101 as shown below:

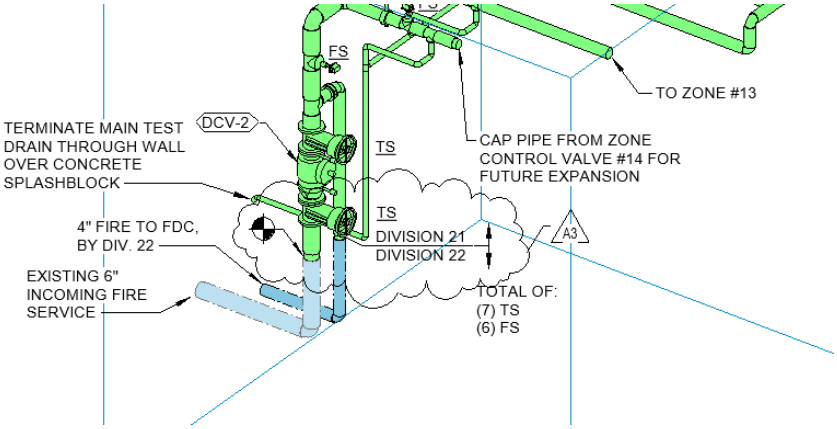
Fire Protection Notes 7 and 8 were updated.



M. **Drawing Number FP101**

1. MODIFY Drawing FP101 as shown below:

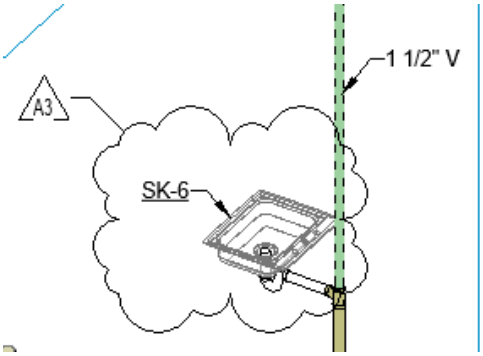
Added scope clarification to detail 6A.

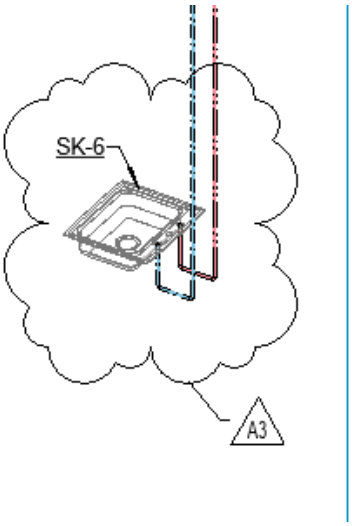


N. **Drawing Number P-903**

1. MODIFY Drawing P-903 as shown below:

SK-6 was not showing up in the ISO.

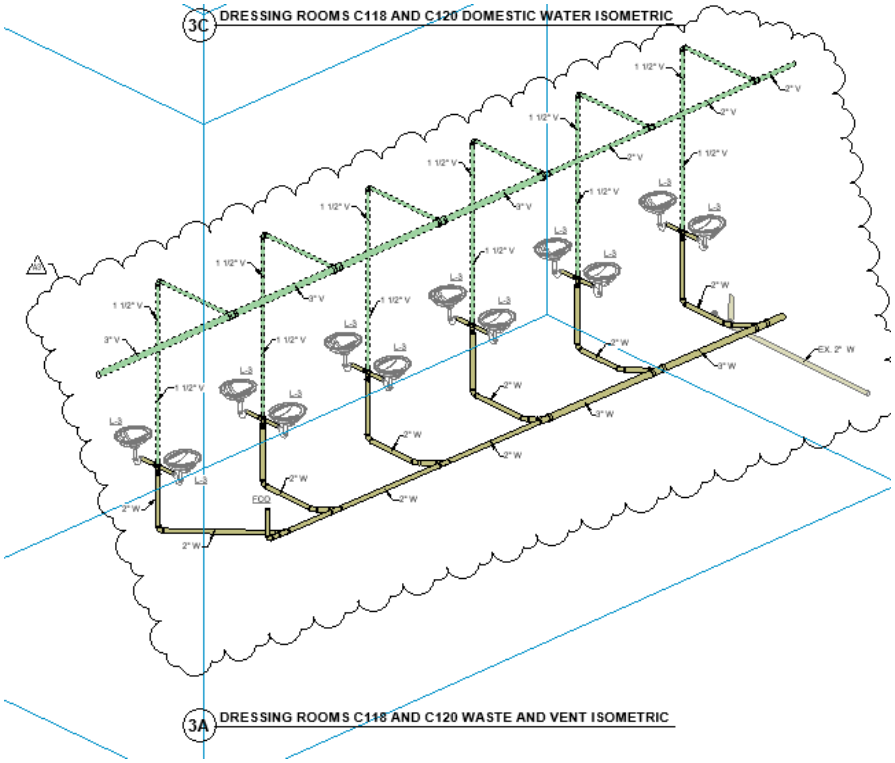




O. **Drawing Number P-908**

1. MODIFY Drawing P-908 as shown below:

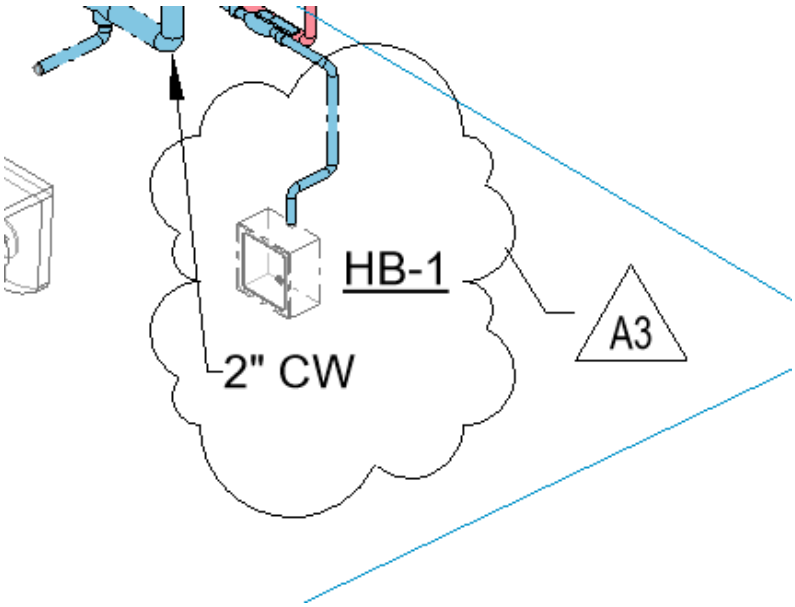
Sanitary waste and vent isometric was updated to match floor plan.



P. **Drawing Number P-909**

1. MODIFY Drawing P-909 as shown below:

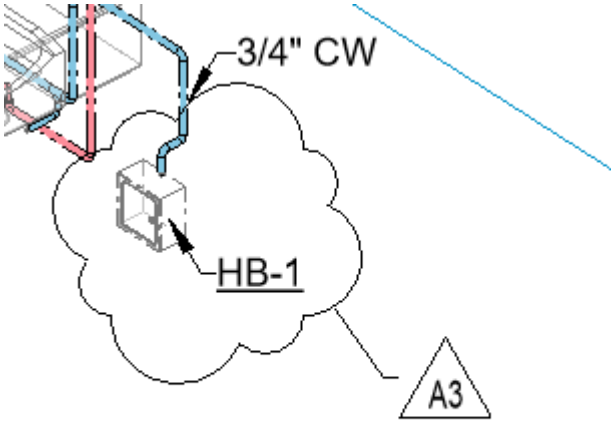
Fixture tag was added to HB-1



Q. **Drawing Number P-910**

1. MODIFY Drawing P-910 as shown below:

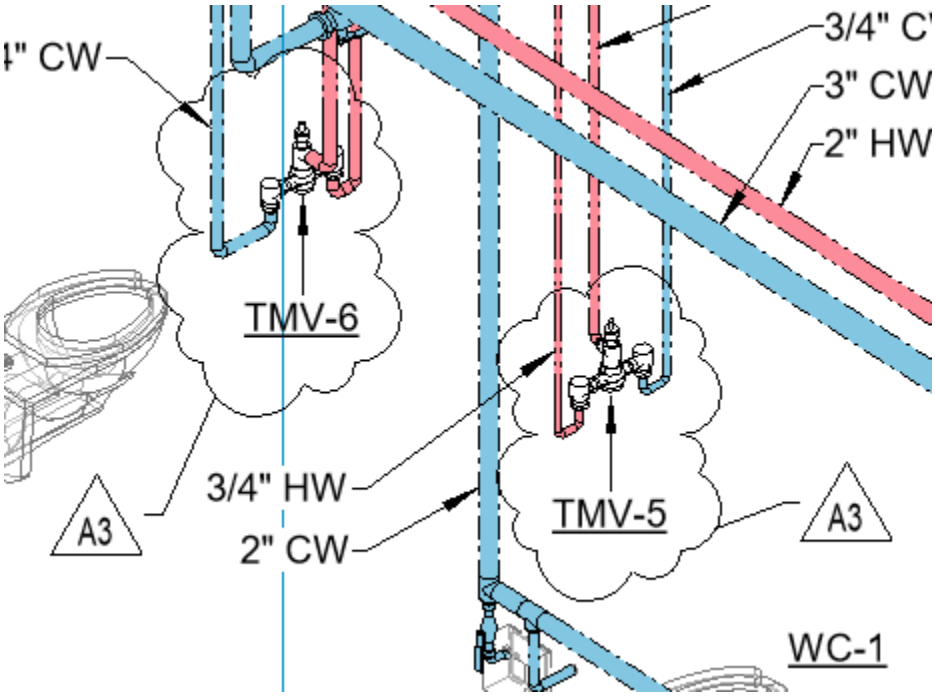
Fixture tag was added to HB-1



R. **Drawing Number P-910**

1. MODIFY Drawing P-910 as shown below:

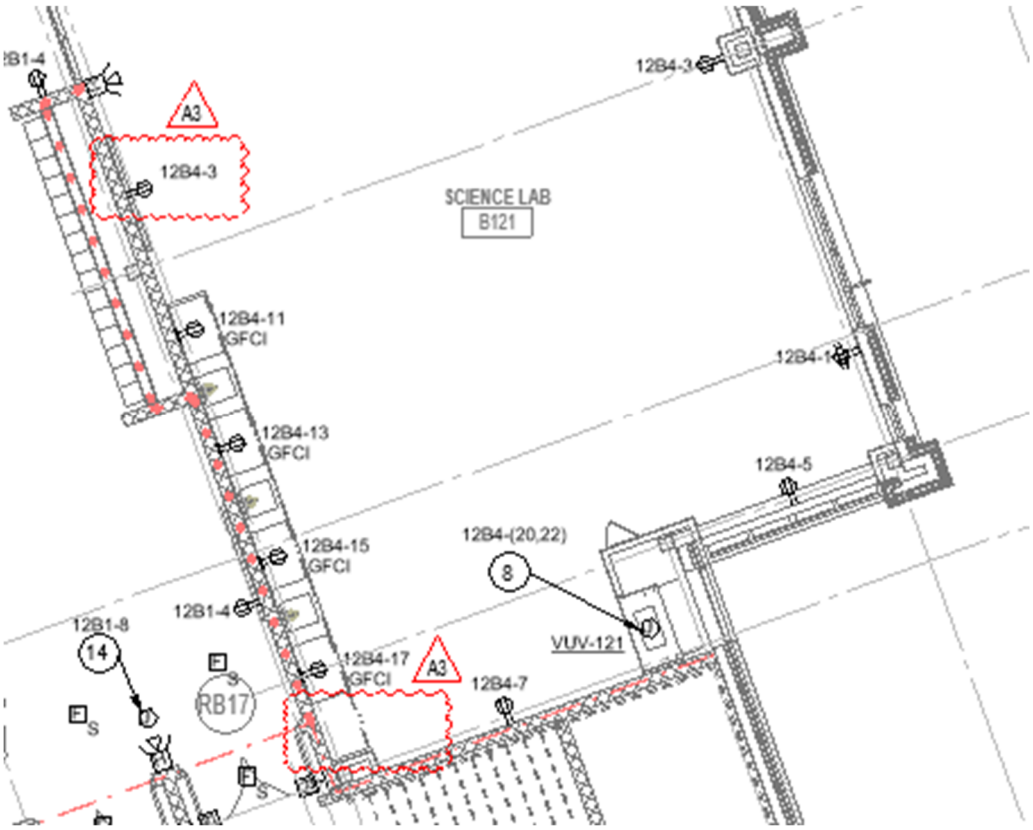
TMV equipment tag was updated.



3.7 E-SERIES DRAWINGS

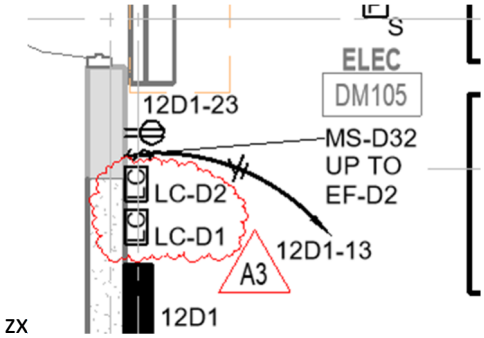
A. **Drawing Number EP1B1.**

1. In B121, change power receptacles as shown below:



B. **Drawing Number EP1D1.**

1. In DM105, add lighting contactor labels as shown below:



C. **Drawing Number EP1F1.**

1. Change MS-F28 label (serves EF-F14) to MS-F42.

D. **Drawing Number EP1H1.**

1. On enlarged plan 6A, change DS-H4 label to DS-H5.

E. **Drawing Number EP1B2.**

1. In B215:

   a. Connect demo table quadraplex receptacle to circuit 22B3-13.

   b. Connect goggle cabinet duplex receptacle to circuit 22B5-1.

2. In B217:

   a. Connect demo table quadraplex receptacle to circuit 22B3-35.

   b. Connect goggle cabinet duplex receptacle to circuit 22B3-33.

3. In B221, connect demo table quadraplex receptacle to circuit 22B4-18.

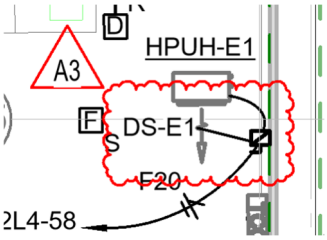
F. **Drawing Number EP1D2.**

1. Change MS-D37 label (serves CP-AHU-C1) to MS-D34.

G. **Drawing Number EP1E2.**

1. In CM214, delete MS-E4 and MS-E6.

2. Add tag for fused disconnect switch serving HPUH-E1 as shown below:



H. **Drawing Number EP1F2.**

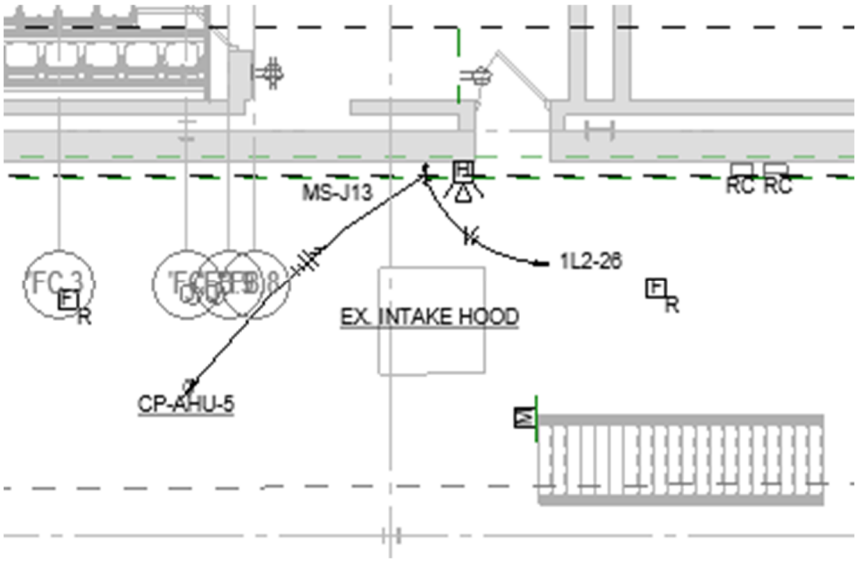
1. Change MS-F25 label (serves CP-AHU-F4) to MS-F41.

I. **Drawing Number EP1G2.**

1. In L216A, change DS-G7 label (serving FCU-G1) to DS-G8.

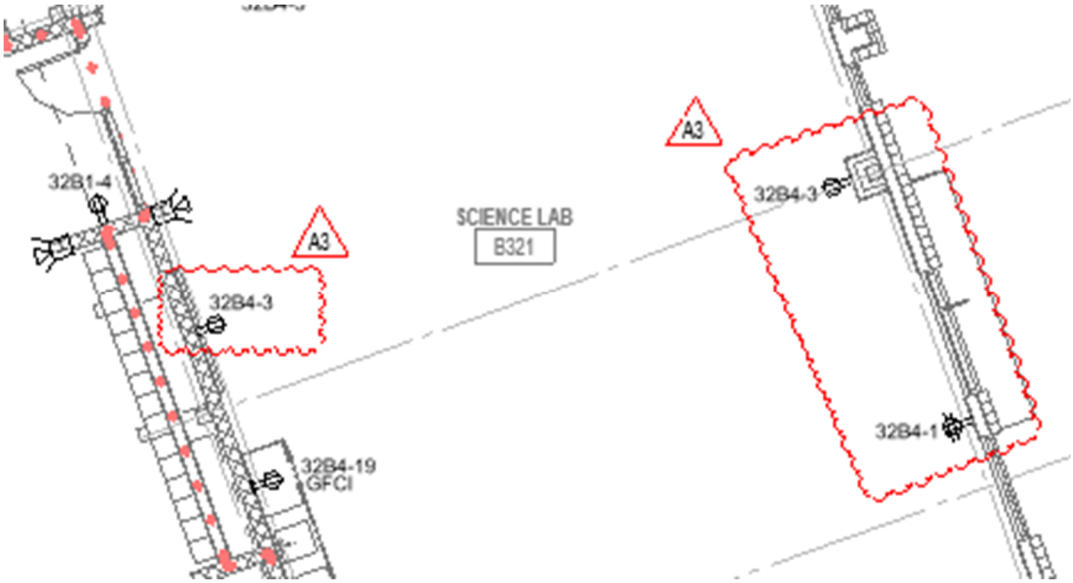
J. **Drawing Number EP1J2.**

1. In Unit J second floor mezzanine, circuit CP-AHU-5 as shown below. Provide 20A circuit breaker.

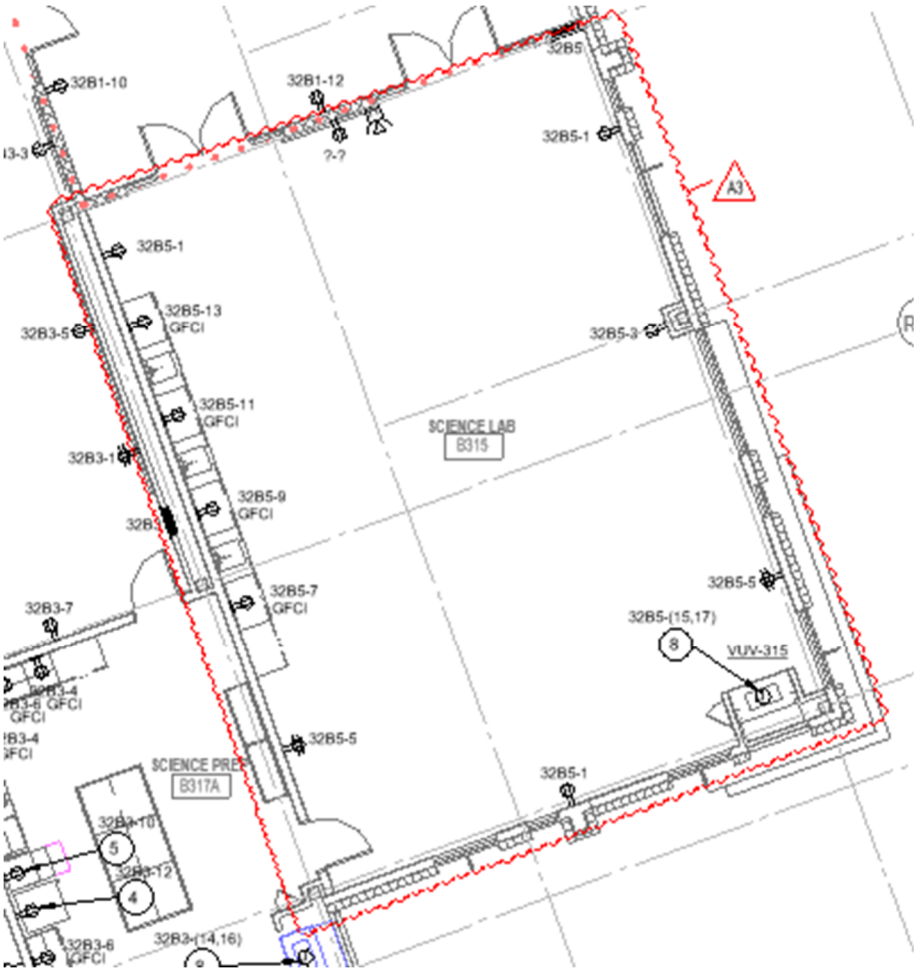


K. **Drawing Number EP1B3.**

1. In B321, change power receptacles as shown below:



2. In B315, change power receptacle circuits as shown below:



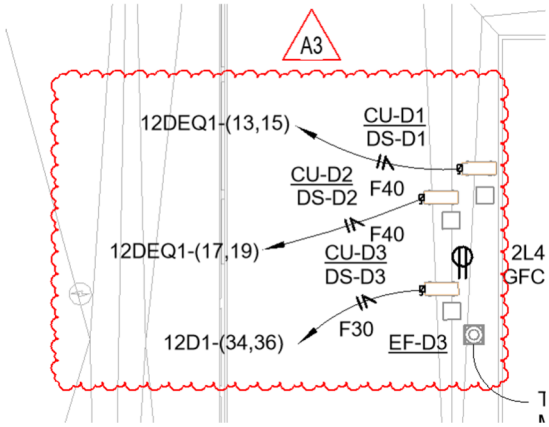
L. **Drawing Number EP1H3.**

1. In Unit H Third Floor Mezzanine, delete MS-H2.

M. **Drawing Number ER101.**

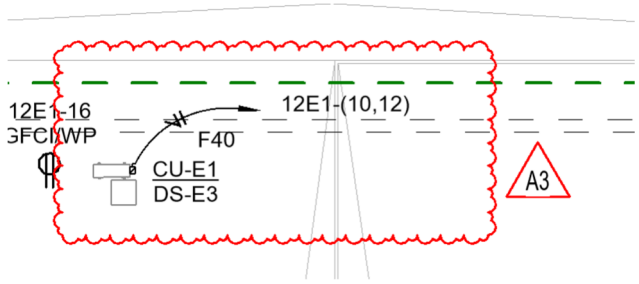
1. At CU-D1 and CU-D2, change circuits as shown below. Provide 40A circuit breakers.

2. At CU-D3, change circuit as shown below. Provide 30A circuit breaker.

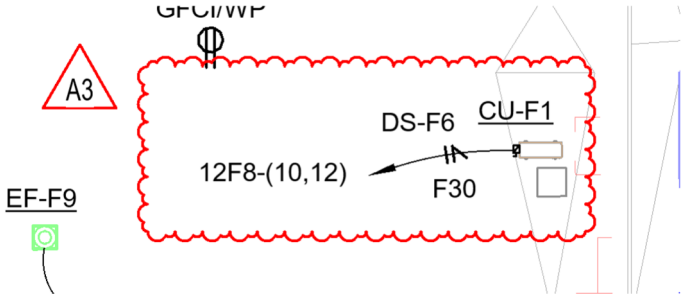


N. **Drawing Number ER102.**

1. At CU-E1, change circuit as shown below. Provide 40A circuit breaker.

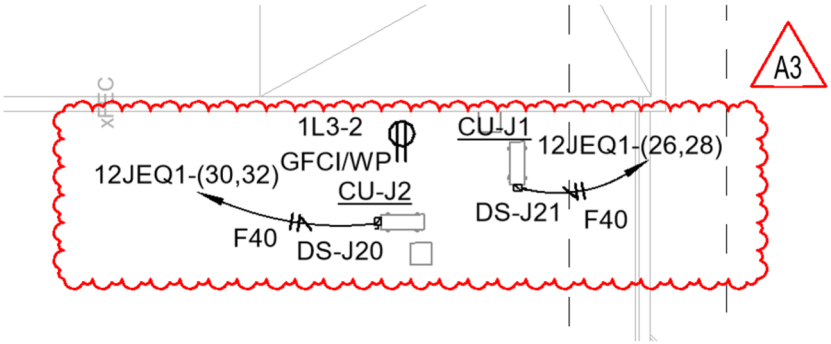


2. At CU-F1, change circuit as shown below. Provide 30A circuit breaker.

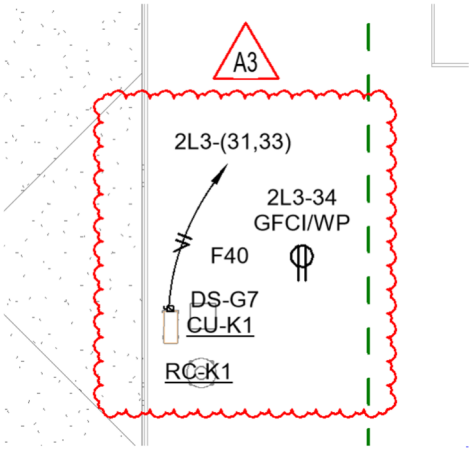


O. **Drawing Number ER103.**

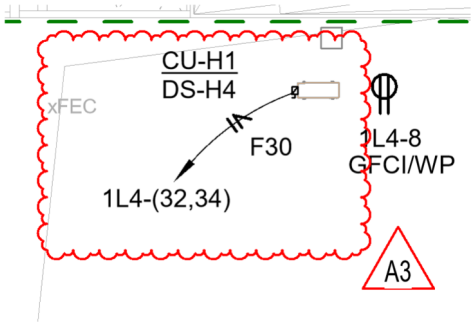
1. At CU-J1 and CU-J2, change circuits as shown below. Provide 40A circuit breakers.



2. At CU-K1, change circuit as shown below. Provide 40A circuit breaker.



3. At CU-H1, change circuit as shown below. Provide 30A circuit breaker.



P. **Drawing Number E-401.**

1. On plan 4A, add wire symbols for (3) poles and (1) ground at feeders serving DS-J1, DS-J2, and DS-J3.

2. On enlarged plans 1A, in Boiler Room, change DS-J20 label (serving FCU-J2) to DS-J22.

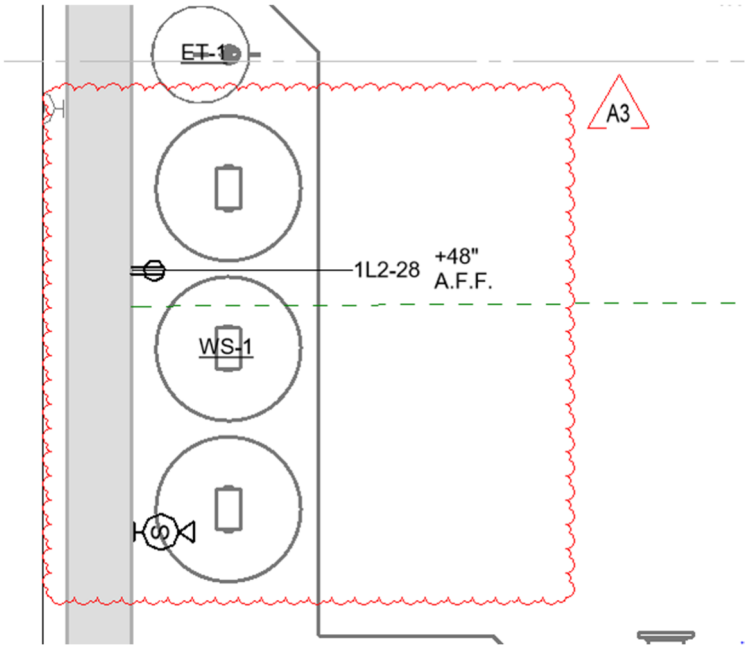
3. On enlarged plan 1A:

   a. Relabel MS-J1 to MS-J14.

   b. Relabel MS-J2 to MS-J15.

   c. Relabel MS-J3 to MS-J16.

4. Add dedicated circuit duplex receptacle behind water softeners as shown below. Provide 20A GFCI breaker.



5. On plan 4A, change the text describing the generator as follows:

   "NEW 480Y/277V,3Ø, 4W, 300KW, 375KVA, DIESEL GENERATOR"

Q. **Drawing Number E-603**

1. Change the following one-line feeder sizes and modify the panelboard size as required to accommodate the increased conductor size:

   a. 1L15 – F600.

   b. 2L4 – F600.

   c. 2H2 – F500.

   d. 1L12 – F350.

   e. 1L4 – F150.

f. 1L11 – F225.

g. 2L3 – F200.

h. LD5 – F1200.

i. LD8 – F1200.

j. 1L1 – F300.

k. 1L6 – F250.

l. 2L2 – F250.

m. BL1 – F175.

n. 1L14 – F350.

o. 12E2 – F350.

R. **Drawing Number E-604**

1. Change the following one-line feeder sizes and modify the panelboard size as required to accommodate the increased conductor size:

a. 2L14 – F175.

b. 2L15 – F300.

c. DS-D1 and T-DEQ1 – F100.

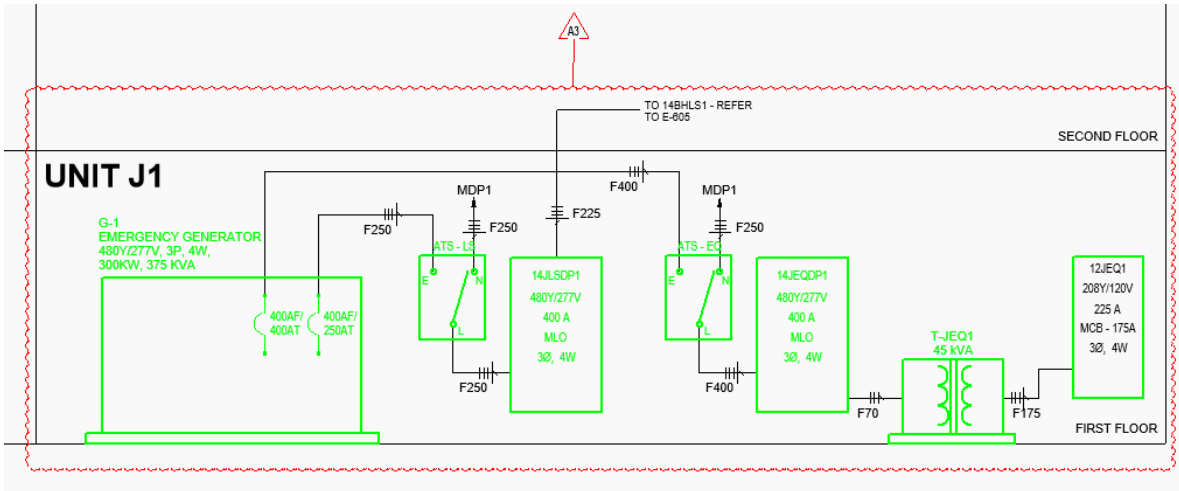
d. 14BLS1 – F225.

e. 14DLS1 – F250.

f. 12D1 – F300.

g. 12D2 – F300.

2. Partially replace the emergency one-line diagram as shown below:



S. **Drawing Number E-605**

1. Change the following one-line feeder sizes and modify the panelboard size as required to accommodate the increased conductor size:

   a. 14BLS1 – F225.

   b. 24BLS1 – F225.

   c. 34BLS1 – F225.

T. **Drawing Number E-608.**

1. On Light Fixture Schedule remove light fixture with blank “Type” located before light fixture type L1.

2. Change lighting Contactor Schedule per attached. Provide 20A circuit breakers.

A3

LABEL	LOCATION		VOLTAGE	COIL CIRCUIT		A
	NUMBER	NAME		PANEL	CIRCUIT	
LC-D1	DM105	ELEC	277 V	14DLS1	15	
LC-D2	DM105	ELEC	277 V	14DLS1	17	

U. **Drawing Number E-609.**

1. Replace sheet in its entirety.

V. **Drawing Number E-610.**

1. At switchboard MDP1, change circuit 7 to a 400A-3P circuit breaker. Change the feeder from this circuit breaker to F400 as shown on one-line diagram.

2. At panel 3H2, change circuits 2, 4, 6 to spares.

3. At panel 1L4, change circuit 36 to spare.

W. **Drawing Number E-611.**

1. At panel 2L3, change circuit 35 to spare.

X. **Drawing Number E-612.**

1. At panel 12E1, change circuit 14 to spare.

2. At switchboard LD2, change circuit 14 circuit description to 12E2.

Y. **Drawing Number E-613.**

1. At panel 12D1, change circuit 38 to spare.

Z. **Drawing Number E-614.**

1. At panel 2H2, change circuits 60, 62, 64, 66, 68, 70 to spares.

AA. **Drawing Number E-615.**

1. At panel 12F8, change circuit 14 to spare.

BB. **Drawing Number E-616.**

1. At panel 12DLS1, change circuits 32, 34, 36, 38, 40, 42 to spares.

CC. **Drawing Number E-619.**

1. Change panel schedules 32B4 as shown below:

PANELBOARD
DESIGNATION: 32B4 — VOLTS:
LOCATION: SCIENCE LAB 8321 — PHASES:
MOUNTING: FLUSH — WIRES:
SUPPLY FROM: 12BSB1 — AIC RATING:

O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A		B
	1	RG SCIENCE LAB 8319		20 A	1	0.72	0.36	
	3	RG SCIENCE LAB 8319		20 A	1			0.54
	5	RG SCIENCE LAB 8319		20 A	1			
	7	RG SCIENCE LAB 8319		20 A	1	0.18	0.00	
–	9	SPARE		20 A	1			0.00
–	11	SPARE		20 A	1			
	13	RG SCIENCE LAB 8319		20 A	1	0.18	0.00	
	15	RG SCIENCE LAB 8319		20 A	1			0.18
	17	RG SCIENCE LAB 8319		20 A	1			
	19	RG SCIENCE LAB 8319		20 A	1	0.18	0.00	
	21	8319 VUV	VUV	25 A	2			1.74
–	23	–	–	–	–			
–	25	SPARE		20 A	1	0.00	0.00	
–	27	SPARE		20 A	1			0.00
–	29	SPARE		20 A	1			
				TOTAL LOAD:		1.62 KVA		2.82 K
				TOTAL AMPS:		14 A		24 A

TOTAL CONNECTED LOAD:	6.72 KVA
TOTAL CONNECTED AMPS:	24 A

PANELBOARD SCHEDULE
VOLTS: 208Y/120 V — MAINS RATING: 225 A
PHASES: 3 — MAINS TYPE: MLO
WIRES: 4 — MCB RATING:
AIC RATING: 10,000 — MCB OPTIONS:

	B		C		P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.	O
.36					1	20 A	RECEPT	8321	2	
	0.54	0.36			1	20 A	RECEPT	8321	4	
			0.36	0.00	1	20 A		SPARE	6	–
.00					1	20 A		SPARE	8	–
	0.00	0.00			1	20 A		SPARE	10	–
			0.00	0.00	1	20 A		SPARE	12	–
.00					1	20 A		SPARE	14	–
	0.18	0.00			1	20 A		SPARE	16	–
			0.18	0.00	1	20 A		SPARE	18	–
.00					1	20 A		SPARE	20	–
	1.74	0.00			1	20 A		SPARE	22	–
			1.74	0.00	1	20 A		SPARE	24	–
.00					1	20 A		SPARE	26	–
	0.00	0.00			1	20 A		SPARE	28	–
			0.00	0.00	1	20 A		SPARE	30	–
A	2.82 KVA		2.28 KVA							
	24 A		20 A							

2. Change panel schedules 32B5 as shown below:

PANELBOARD SCHEDULE

DESIGNATION: 32B5
LOCATION: SCIENCE LAB-1 B315-1
MOUNTING: FLUSH
SUPPLY FROM: 128S81

VOLTS: 208Y/120 V
PHASES: 3
WIRES: 4
AIC RATING: 10,000

O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A		B		C	
	1	B315	RECEPT	20 A	1	0.54	0.00				
	3	B315	RECEPT	20 A	1			0.36	0.00		
	5	B315	RECEPT	20 A	1					0.72	0.00
	7	B315	RECEPT	20 A	1	0.18	0.00				
	9	B315	RECEPT	20 A	1			0.18	0.00		
	11	B315	RECEPT	20 A	1					0.18	0.00
	13	B315	RECEPT	20 A	1	0.18	0.00				
	15	B315 VUV	VUV	25 A	2			1.74	0.00		
–	17	–	–	–	–					1.74	0.00
–	19	SPARE		20 A	1	0.00	0.00				
–	21	SPARE		20 A	1			0.00	0.00		
–	23	SPARE		20 A	1					0.00	0.00
–	25	SPARE		20 A	1	0.00	0.00				
–	27	SPARE		20 A	1			0.00	0.00		
–	29	SPARE		20 A	1					0.00	0.00
					TOTAL LOAD:	0.90 kVA		2.28 kVA		2.64 kVA	
					TOTAL AMPS:	8 A		21 A		24 A	

TOTAL CONNECTED LOAD: 5.82 kVA
TOTAL CONNECTED AMPS: 24 A

NOTES:

END OF ADDENDUM 3

SECTION 264313 - SURGE PROTECTION FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes field-mounted SPDs for low-voltage (120 to 600 V) power distribution and control equipment.

B. Related Requirements:

1. Section 262413 "Switchboards" for factory-installed SPDs.

1.3 DEFINITIONS

A. Inominal: Nominal discharge current.

B. MCOV: Maximum continuous operating voltage.

C. Mode(s), also Modes of Protection: The pair of electrical connections where the VPR applies.

D. MOV: Metal-oxide varistor; an electronic component with a significant non-ohmic current-voltage characteristic.

E. OCPD: Overcurrent protective device.

F. SCCR: Short-circuit current rating.

G. SPD: Surge protective device.

H. VPR: Voltage protection rating.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.

2. Copy of UL Category Code VZCA certification, as a minimum, listing the tested values for VPRs, Inominal ratings, MCOVs, type designations, OCPD requirements, model numbers, system voltages, and modes of protection.

1.5 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

B. Sample Warranty: For manufacturer's special warranty.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For SPDs to include in maintenance manuals.

1.7 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to replace or replace SPDs that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Corporation.
2. Schneider Electric Industries SAS.
3. Siemens Industry, Inc.
4. ABB/GE.

2.2 GENERAL SPD REQUIREMENTS

A. SPD with Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NFPA 70.

C. Comply with UL 1449.

D. MCOV of the SPD shall be at least 125 percent of the nominal system voltage.

2.3 SERVICE ENTRANCE SUPPRESSOR

~~2.~~ SPDs: Listed and labeled by an NRTL acceptable to authorities having jurisdiction as complying with UL 1449, Type 1

1. SPDs with the following features and accessories:

   a. Integral disconnect switch.
   b. Internal thermal protection that disconnects the SPD before damaging internal suppressor components.
   c. Indicator light display for protection status.
   d. Form-C contacts rated at 5 A and 250-V ac, one normally open and one normally closed, for remote monitoring of protection status.
   e. Surge counter.
   f. EMI/RFI filtering, providing up to 50 dB of noise attenuation from 10 kHz to 100 mHz.

A. Peak Surge Current Rating: The minimum single-pulse surge current withstand rating per phase shall not be less than 250kA. The peak surge current rating shall be the arithmetic sum of the ratings of the individual MOVs in a given mode.

B. Protection modes and UL 1449 VPR for grounded wye circuits with 480Y/277 V , three-phase, four-wire circuits shall not exceed the following:

   1. Line to Neutral: 1200 V for 480Y/277 V.
   2. Line to Ground: 1200 V for 480Y/277 V.
   3. Line to Line: 2000 V for 480Y/277 V.

C. SCCR: Equal or exceed 200 kA.

D. Inominal Rating: 20 kA.

2.4 ENCLOSURES

A. Indoor Enclosures: NEMA 250, Type 1.

2.5 CONDUCTORS AND CABLES

A. Power Wiring: Same size as SPD leads, complying with Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

B. Class 2 Control Cables: Multiconductor cable with copper conductors not smaller than No. 18 AWG, complying with Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

C. Class 1 Control Cables: Multiconductor cable with copper conductors not smaller than No. 14 AWG, complying with Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with NECA 1.

B. Install an OCPD or disconnect as required to comply with the UL listing of the SPD.

C. Install SPDs with conductors between suppressor and points of attachment as short and straight as possible, and adjust circuit-breaker positions to achieve shortest and straightest leads. Do not splice and extend SPD leads unless specifically permitted by manufacturer. Do not exceed manufacturer's recommended lead length. Do not bond neutral and ground.

D. Use crimped connectors and splices only. Wire nuts are unacceptable.

E. Wiring:

1. Power Wiring: Comply with wiring methods in Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
2. Controls: Comply with wiring methods in Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

3.2 FIELD QUALITY CONTROL

A. Perform the following tests and inspections with the assistance of a factory-authorized service representative.

1. Compare equipment nameplate data for compliance with Drawings and Specifications.
2. Inspect anchorage, alignment, grounding, and clearances.
3. Verify that electrical wiring installation complies with manufacturer's written installation requirements.

B. An SPD will be considered defective if it does not pass tests and inspections.

C. Prepare test and inspection reports.

3.3 STARTUP SERVICE

A. Complete startup checks according to manufacturer's written instructions.

B. Do not perform insulation-resistance tests of the distribution wiring equipment with SPDs installed. Disconnect SPDs before conducting insulation-resistance tests, and reconnect them immediately after the testing is over.

C. Energize SPDs after power system has been energized, stabilized, and tested.

3.4 DEMONSTRATION

A. Train Owner's maintenance personnel to operate and maintain SPDs.

END OF SECTION 264313