Grove City Area School District
High School Renovations

Project No: 23-S43-01

Grove City Area School District
511 Highland Avenue, Grove City, PA 16127

ADDENDUM 1

2/29/2024

This Addendum forms part of the Contract Documents and modifies the original bidding documents dated 02/19/2024. Acknowledge receipt of this Addendum by inserting its number and date in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

This addendum consists of five (5) pages and the listed attachments (2 Sections and 68 Drawings):

CHANGES TO PRIOR ADDENDA

Item 1.1 None

CHANGES TO PROJECT MANUAL

Item 1.2 SECTION 00 1113 ADVERTISEMENT FOR BIDS

The Pre-Bid Conference has been changed to begin at 3:30pm prevailing time, on Monday, March 4, 2024.

Item 1.3 SECTION 22 4000 PLUMBING FIXTURES

At Article 2.12.A.4, CHANGE article to read as follows:

4. Faucets:
    a. Chicago Faucet Co
    b. Zurn Industries, Inc.
    c. T&S Brass and Bronze Works, Inc.

Item 1.4 SECTION 22 4000 PLUMBING FIXTURES

At Article 2.14.A.3, CHANGE article to read as follows:

3. Faucets:

   a. Chicago Faucet Co

   b. Just Manufacturing

   b. Zurn Industries, Inc.

   c. T&S Brass and Bronze Works, Inc.

Item 1.5 SECTION 23 0593 - TESTING, ADJUSTING, AND BALANCING FOR HVAC

At Article 1.3 A, CHANGE article to read:

1. Air Balancing Engineers Inc. (Berwick PA)
2. Kahoe Air Balance (Eastlake OH, Pittsburgh PA)
3. WAE Balancing Inc. (Mercer PA)
4. Northstar Environmental Ltd. (Beaver PA)

Item 1.6 SECTION 23 2113 - HYDRONIC PIPING

Paragraph 2.8, delete this paragraph. Bypass Bag Filters are not required.

Item 1.7 SECTION 27 5116 - INTEGRATED ELECTRONIC COMMUNICATIONS

CLARIFICATION: The main head end unit for this system including all rack mounted equipment and associated software shall be purchased independently by the School District. All ceiling speakers, wall mounted horns, volume control, wiring and connections from those devices to the head end shall remain as specified in this section and as shown on the Drawings.

Item 1.8 The specification sections listed below are attached to and part of this addendum. They replace previously issued specifications in the Contract Documents. Where they had not been previously issued, they are now added to the Contract Documents. The descriptive information is informational only and is not intended to further modify the Contract Documents.

Section	Paragraph	Comments
11 4000 Food Service Equipment		Equipment Specification Modifications
Food Service Equipment Brochure Booklet		Document's First Issue

CHANGES TO DRAWINGS

Item 1.9: DRAWING E100 ENLARGED BASEMENT PLAN - AREA 'B' - POWER & SIGNAL

Furnish and install 120V power feed from a new 20A/1P circuit breaker installed in Panel 'BC' for Building ATS control panel and Boiler #1 control panel. Coordinate panel locations at site with Mechanical Contractor.

Furnish and install 120V power feed from a new 20A/1P circuit breaker installed in Panel 'BC' for Building Boiler #2 control panel and Boiler #3 control panel. Coordinate panel locations at site with Mechanical Contractor.

Item 1.10: DRAWING E106 FIRST FLOOR PLAN - AREA 'F' - LIGHTING

Ceramics 804 - Change Lighting Control Power Pack that is serving the (5) five DL10 fixtures adjacent to the exterior wall from the Normal Power circuit P-4 to a new Normal / Emergency circuit NEC-10.

Tech Ed 306 - Change Lighting Control Power Pack that is serving the (8) eight DL10 fixtures located in the center of the room from the Normal Power circuit P-5 to a new Normal / Emergency circuit NEC-10.

Kiln Room 309A - Remove the (2) two center DL13 fixtures from the Normal Power circuit P-4. Furnish and install a new Normal/Emergency lighting control power pack connected to Normal / Emergency circuit NEC-10 and connect the two center DL13 fixtures to this power pack.

Item 1.11: DRAWING E202 FIRST FLOOR PLAN - AREA 'B' - POWER & SIGNAL

At New Emergency Generator Location, In lieu of extending existing generator base concrete pad as noted the Electrical Contractor shall furnish and install a new concrete base as shown on drawing E504 under the generator Add Alternate Bid EC-09.

Item 1.12: DRAWING E203 FIRST FLOOR PLAN - AREA 'C' - POWER & SIGNAL

Telecom Room 193A - Replacement Building Wide PA System Rack - Remove this from this contract. The PA equipment rack will be replaced under another contract.

Item 1.13: DRAWING E302 KITCHEN SCHEDULES AND DIAGRAMS

Typical Disposer Service Connections Diagram - Change conduit and wire provided by F.S.E.C to read conduit and wire provided by Electrical Contractor.

Item 1.14: DRAWING E607 AUDIO / VIDEO SYSTEMS RISER DIAGRAMS

Building Wide Public Address (PA) System Diagram - The headend PA System rack will be replaced under another contract. Under this contract the contractor shall furnish and install PA System speakers, volume controls, ETC and associated equipment in renovated areas as shown on floor plans..

Item 1.15: The drawings listed below are attached to this addendum and replace previously issued drawings in the Contract Documents. The descriptive information is informational only and is not intended to further modify the Contract Documents.

Sheet	Detail	Comments
S102	First Floor Plan – Area B	ADD Dowels at exterior concrete slab
S126	Roof Framing Plan – Area F	ADD Section 1
A104	First Floor Plan – Area 'D'	ADD Area of Floor Patch

FS100	Food Service Equipment Schedule and Plan	Modifications to Equipment Schedule
FS102	Electrical Connection Plan and Schedule	Modifications to Schedule and Plan
FS103	Mechanical Connection Plan and Schedule	Additions and Modifications to Design
PD104	Area - D - 1st Flr - Plumbing Demo	Added under slab sanitary piping demo.
P102	Area - B - Plumbing New Work	Added generator gas connection.
P104	Area - D - Plumbing New Work	Added under slab sanitary piping replacement
P105	Area - E - Plumbing New Work	Deleted duplicate fixtures.
P106	Area - F - Plumbing New Work	Clarified existing storm line locations (abv clg vs blw flr)
P108	Area - B - 2nd Flr Plumbing	Added roofing note.
P110	Area - E - 2nd Flr Plumbing	Added roofing note.
P112	Area - G - 2nd Flr Plumbing	Added roofing note.
P402	Area - B Basement - Plumbing	Added hatch drain.
MD100	Basement - Demo	Adjusted piping notes
MD101	Area A 1st Flr - Ductwork Demo	Added general notes
MD102	Area B 1st Flr - Ductwork Demo	Added general notes
MD103	Area C 1st Flr - Ductwork Demo	Added general notes
MD104	Area D 1st Flr - Ductwork Demo	Added general notes
MD105	Area E 1st Flr - Ductwork Demo	Added general notes
MD106	Area F 1st Flr - Ductwork Demo	Added general notes
MD107	Area G 1st Flr - Ductwork Demo	Added general notes
MD108	Area B 2nd Flr - Ductwork Demo	Added general notes
MD109	Area E 2nd Flr - Ductwork Demo	Added general notes
MD111	Area A 1st Flr - Piping Demo	Added general notes
MD112	Area B 1st Flr - Piping Demo	Added general notes
MD113	Area C 1st Flr - Piping Demo	Added general notes
MD114	Area D 1st Flr - Piping Demo	Added general notes
MD115	Area E 1st Flr - Piping Demo	Added general notes
MD116	Area F 1st Flr - Piping Demo	Added general notes
MD117	Area G 1st Flr - Piping Demo	Added general notes
MD118	Area B 2nd Flr - Piping Demo	Added general notes
MD119	Area E 2nd Flr - Piping Demo	Added general notes
MD301	Roof Plan - Demo	Added general notes and clarified PRV notes
M100	Basement - New Work	Adjusted piping notes and relocated refrigerant piping risers
M101	Area A 1st Flr - Ductwork New Work	Added general notes, added smoke detector, and modified drawing clarity
M102	Area B 1st Flr - Ductwork New Work	Added general notes
M103	Area C 1st Flr - Ductwork New Work	Added general notes
M104	Area D 1st Flr - Ductwork New Work	Added general notes
M105	Area E 1st Flr - Ductwork New Work	Added general notes and added smoke detectors
M106	Area F 1st Flr - Ductwork New Work	Added general notes, added smoke detectors, and modified RM 163 equipment
M107	Area G 1st Flr - Ductwork New Work	Added general notes

M108	Area B 2nd Flr - Ductwork New Work	Added general notes and added smoke detector
M109	Area E 2nd Flr - Ductwork New Work	Added general notes
M111	Area A 1st Flr - Piping New Work	Added general notes and located isolation valves
M112	Area B 1st Flr - Piping New Work	Added general notes and located isolation valves
M113	Area C 1st Flr - Piping New Work	Added general notes and located isolation valves and DP sensors
M114	Area D 1st Flr - Piping New Work	Added general notes and located isolation valves
M115	Area E 1st Flr - Piping New Work	Added general notes and located isolation valves
M116	Area F 1st Flr - Piping New Work	Added general notes and located isolation valves and DP sensors
M117	Area G 1st Flr - Piping New Work	Added general notes and located isolation valves and DP sensors
M118	Area B 2nd Flr - Piping New Work	Added general notes and located isolation valves
M119	Area E 2nd Flr - Piping New Work	Added general notes and located isolation valves
M301	Roof Plan - New Work	Added general notes
M401	Enlarged Plans	Added smoke detector
M402	Enlarged Plans	Added smoke detector
M403	Enlarged Plans	Added smoke detector
M404	Enlarged Plans	Relocated refrigerant piping routing to above grade
M405	Enlarged Plans	Added additional duct clean outs
M501	Details	Added components on coil strainers and clarified roofing responsibility
M502	Details	Added components on coil strainers and clarified roofing responsibility
M601	Schedules	Corrected split chiller GPM
M602	Schedules	Corrected several schedules
M701	HW Flow Diagrams	Completed HW flow diagram
M702	CW Flow Diagrams	Completed CW flow diagram
E110	Floor Plan	Added panel schedule for Panel 'DP'
E211	Roof Plan	Updated Roof Warranty Note

SUPPLEMENTAL INFORMATION

The following are provided for bidders' information and are not considered changes to the Contract Documents.

- Construction Manager's RFI report dated 2/29/24

END OF ADDENDUM 1

PRE-BID RFI REPORT

PROJECT: HIGH SCHOOL RENOVATIONS - GROVE
ARCHITECT: DRAW COLLECTIVE
23-S43-01
DATE: 2/29/24 8:25 AM

ID	Sender ID	Discipline	Received	Question	Issued to Bidders	Date Issued to Bidders	Answer
RB-01	Renick Bros.	HVAC	2/28/2024	Gravity roof vents (detail 9 on M501) does not show any motorized damper. Corridors and Unit Vents..... 9 sets @ existing GRV's. New Air Handlers .....19 sets @ existing GRV's. Control Sequences refer to controlling the dampers (AHU operations) or via space static (Corridors and Unit Vents). 1. Are dampers existing or are New Dampers to be installed?			
RB-02	Renick Bros.	HVAC	2/28/2024	Hot water piping detail on M701 does not show New Boiler circulating pumps. 1. Provide new piping layout for pumps. 2. Control sequence refers to boiler isolation valves - none shown on M701 piping. 3. Will 3-way system valve be required with new boiler sequencing? 4. Provide locations for remote HWS/HWR differential pressure sensors.			
RB-03	Renick Bros.	HVAC	2/28/2024	Chilled water piping detail on M701 does not show chiller isolation valve. 1. Provide new piping layout for isolation valves. 2. Provide locations for remote CHWS/CHWR differential pressure sensors.			
RB-04	Renick Bros.	HVAC	2/28/2024	Please provide an explanation of alternate HC-04 as it relates to drawings M106, M116, MD106, MD116, M121, M122. It is confusing what is in the base bid versus the alternate as "base bid" drawings M121 and M122 have the same area clouded as alternate HC-04. Maybe a written explanation would work. I think maybe all the work outlined on M121 and M122 as alternate HC-04 might actually be in the base bid? I think the actual alternate is comparing the M121/M122 drawings to M106/M116 and the difference might be the alternate? The difference in these drawings would be adding HUH-01, adding HUV-08, deleting KVS-01/01 along with various demolition of EF-8 and fin tube radiation.			
RB-05	Renick Bros.	HVAC	2/28/2024	Is the project laydown fence as identified on PH100 to be by HC per the general note or by the GC per project specific note #2?	Add 1	2/29/2024	Temporary laydown area fencing, stone pad and reclamation after construction is to be by GC.
RB-06	Renick Bros.	HVAC	2/28/2024	Can you explain the purpose of the flush of the HVAC system twice per project specific note 7 on PH100?	Add 1	2/29/2024	The intent is to flush the system after major sections of piping is replaced to remove dirt and debris from the piping before the systems are turned back on so as to not damage the existing equipment until it gets replaced and new equipment as it gets installed. These can occur before the systems are put back into operation and do not need to specifically occur in August.
RB-07	Renick Bros.	HVAC	2/28/2024	Please confirm the GC owns the new chiller fence and concrete pad as the note on M102 makes it sound like it is by HVAC where the architectural drawings clearly state by GC.			
RB-08	Renick Bros.	HVAC	2/28/2024	Drawing MD106, planning room 310 has a note to patch the exterior wall after the UV louver is removed. Please confirm all exterior louver patching and cutting is by the GC and NOT the HC.			
RB-09	Renick Bros.	HVAC	2/28/2024	M100 drawing clearly shows the chilled water risers being 10" and 4". M112 shows the same risers as 8" and 4"?			
RB-10	Renick Bros.	HVAC	2/28/2024	M114 is missing chilled water pipe to UV-09? Are the drops to UV-09 to be run exposed or enclosed in painted sheet metal chase or in a drywall chase? Pipe drops happen in several other locations (M112 cafeteria as another example) - exposed versus painted sheet metal enclosure versus drywall chase? If a chase i required, who owns the chase (GC or HVAC)? If pipe drop is exposed and no chase does the pipe require a PVC jacket?			
RB-11	Renick Bros.	HVAC	2/28/2024	Please update M702 (chilled water schematic) to match the plan view drawing on M100. Please also confirm buffer tanks are not required. Please update M701 (hot water schematic) to match the plan view drawing M100 – connections around air sep, etc.			
RB-12	Renick Bros.	HVAC	2/28/2024	Please confirm the PC owns reconnecting all HC equipment ac drains as I see some of the ac drains showing up on the plumbing drawings (P112)....both HVAC and PC drawings are missing AC drain pipe in many locations.	Add 1	2/29/2024	YES THE PLUMBING CONTRACTOR OWNS THE FINAL CONNECTIONS AND CONDENSATE LINES. MISSING AC DRAIN PIPE WILL BE ADDED BY FUTURE ADDENDUM.
RB-13	Renick Bros.	HVAC	2/28/2024	Please confirm who owns the sanitary tank for construction manager trailer as well as servicing this tank during construction.	Add 1	2/29/2024	HC owns the sanitary tank and servicing of the tank.
RB-14	Renick Bros.	HVAC	2/28/2024	Please confirm who is responsible for the rental cost of the construction managers trailer. 01 5000-5 states the GC cleans, maintains and services the trailer.	Add 1	2/29/2024	HC is responsible for the rental of the CM trailer. 01 5000-5 will be removed by addendum. Cleaning of the CM trailer is not required.
RB-15	Renick Bros.	HVAC	2/28/2024	Please confirm who owns project signs for this project as well as exit signs.			
RB-16	Renick Bros.	HVAC	2/28/2024	Please confirm who owns temporary job toilets.	Add 1	2/29/2024	HC owns temporary job toilets for all Contractors on site.
RB-17	Renick Bros.	HVAC	2/28/2024	Please confirm who owns the project sign.			
RB-18	Renick Bros.	HVAC	2/28/2024	Please confirm who owns the garbage dumpsters.	Add 1	2/29/2024	The HC will own dumpsters for the entire project.
RB-19	Renick Bros.	HVAC	2/28/2024	Please confirm who owns final building cleaning and what is required. Broom clean only?			

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RB-20	Renick Bros.	HVAC	2/28/2024	Please address the phasing which states working the project during (2) Summers. Is working during the school year on second shift allowed?	Add 1	2/29/2024	Yes, working during the school year on second shift is allowed. Work within Phases 2, 3 and 4 which occur during the school year can be on first shift since they are isolated from the students.
RB-21	Renick Bros.	HVAC	2/28/2024	Can WAE balancing be used? Specification allows only Air Balancing Engineers.	Add 1	2/29/2024	Yes, Kahoe, WAE and Northstar Environmental have been added by Addendum 1.
RB-22	Renick Bros.	HVAC	2/28/2024	Please confirm if bypass bag filters are required per spec section 232113 par 2.8. If yes, please show these on the mechanical room schematic M701/M702.	Add 1	2/29/2024	Bypass bag filters are not required and have been deleted by Addendum 1.
RB-23	Renick Bros.	HVAC	2/28/2024	Please confirm ALL existing duct to remain is to get third party cleaned? Spec section 233113 par 3.14 mentions duct cleaning of existing.	Add 1	2/29/2024	That is confirmed.
RB-24	Renick Bros.	HVAC	2/28/2024	Schedule drawing M601 requires UV-06 based upon drawing M122 requiring (2), HUV-02 based upon drawing M122, CUH-FO1 based upon drawing M122. Please update as its states not required.			
RB-25	Renick Bros.	HVAC	2/28/2024	Keynotes 1 and 2 on new pipe drawings (ex M111,112,113 ect) call for new ATC actuators on existing equipment (CUH,Conv, FTR,ect). Please confirm if this means an entire new ATC valve or just an actuator on the existing ATC valve. Are the control valves in the boiler plant also to get replaced (off the boilers and three way mixing). Do the existing cabinet heaters and prop heaters have control valves or just aquastats? There are discrepancies between the new pipe drawings and demolition drawings. One drawing might say a unit is a convector and then another says it is a cabinet heater. Maybe provide a detailed listing of the quantity of control valves that are required to be replaced on existing to remain equipment. JCI should have the existing valve schedule.			
RB-26	Renick Bros.	HVAC	2/28/2024	General note 3 on new duct drawings (ex M101,102,103, ect) call for existing cabinet heaters and fin tube to be cleaned. Can you elaborate on what you are looking for in more detail? What about the existing convectors to remain?			
RB-27	Renick Bros.	HVAC	2/28/2024	Please confirm the refrigerant pipe to the 280 ton chillers is to be buried. Can this be run above grade? Chiller manufacturers are recommending we don't bury this pipe. If this pipe can be run above grade, can we also abandon the existing buried refrigerant pipe rather than demo and cut up existing concrete pad? Can the Engineer also confirm whether the interior barrel requires vent lines run to the exterior? If yes, how many and what size? The new chiller pad extension and fence are by the GC. HVAC drawing M404 has a general note stating the existing pad is to be removed. Please confirm the existing pad remains and maybe the existing buried refrigerant lines can be abandoned in place? If existing refrigerant pipe is to be removed and the new refrigerant pipe to be installed below grade, who takes care of cutting and patching the existing concrete slab? Hence, maybe run new pipe above grade and abandon the existing?			
RB-28	Renick Bros.	HVAC	2/28/2024	Please identify the existing roof type and if the roof has an existing warranty.	Add 1	2/29/2024	The School District contracted with David Maines and Associates this past year and the entire roof was replaced and restored with a Tremco roof system with the exception of the area over the kitchen. The roofing over the kitchen will be completed by David Maines and Associates once all of the new Contract work is completed. All roof work necessary under this contract (patching, curb flashings, etc.) that is not within the old roof area over the kitchen, must be completed by David Maines and Associates. Contact: Eric Weaver 717-437-5677 ; eweaver@davidmaines.com for pricing. Tremco Roofing Contact: Jim Burichin 804-229-2791 ; jburichin@tremco.com or Richard Kosuda 724-612-3011 ; rkosuda@tremcoinc.com.
RB-29	Renick Bros.	HVAC	2/28/2024	General note 2 on drawing M111 (as well as others) states "isolation valves should be installed at each pipe branch". Does this mean a branch in which we are only feeding say one terminal device or do you mean where feeding more than one terminal device as each terminal device would have shutoff valves at the unit. Maybe they want them at the corridor in addition to at the unit when only feeding one device? It would be cleaner if shutoff valves were clearly shown on the drawings. Drawing M122 has numerous major branch and sub branch lines as the pipes leave the boiler room below. I don't think the contractor should interpret where to put the shut off valves based upon a simple note on the drawing. Would it be possible to show them on the drawings where they are desired rather than the note? What if the branch pipe is existing to remain? Are we to assume a branch valve exists in these cases?			
RB-30	Renick Bros.	HVAC	2/28/2024	Please address flexible pipe connectors. Spec section 230500-18 leads one to believe that flexible connectors are required on all rotating equipment. Please identify the equipment you want flexible connectors on as your pipe details on M502 do not show flexible connectors. Please address AHUs, Tall UVs, regular UVs, cabinet heaters, prop heaters, ect. Also, the plan drawing M100 shows new 3 HP in line pumps to each boiler. Do we need flexible connectors on these pumps? Please show these pumps on drawing M701.			
RB-31	Renick Bros.	HVAC	2/28/2024	Please reference drawings M100 and M112. M112 shows (2) new 3" hot water lines from the boiler room shaft to the cafeteria. These lines need updated and shown on drawing M100. M100 and MD100 drawings for boiler room shows existing 2.5" hot water to remain. I feel the 2.5" needs removed all the way back to the boiler room and a new 3" tee cut in. Please show this work on M100 detail.			
RB-32	Renick Bros.	HVAC	2/28/2024	Please identify locations where expansion loops are required.			
RB-33	Renick Bros.	HVAC	2/28/2024	230716.3.9.A requires "custom fitted sound covers" on "packaged air-cooled air conditioners" over the compressors (compressor blankets). What items are these custom compressor blankets required to be provided for? The split air cooled chiller? the split DX condenser associated with the split DX/HW admin air handler? Please confirm they are not required for the minisplits. Are these compressor blankets to be provided by the manufacturer or are they field fabricated by the insulator?	Add 1	2/29/2024	The split air cooled chiller. These are not required for the split DX condensing units. if the manufacturer has a sound reduction package, that would be the preferred means, however if not it would be field fabricated.

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RB-34	Renick Bros.	HVAC	2/28/2024	230716.3.11.A (custom blankets) contradicts with 3.11.B (insulate per piping spec) which overlaps/contradicts with 3.11.D. please clarify for which systems and which valves/specialties the custom removable valve blankets are required.	Add 1	2/29/2024	For components identified in Specification 230719, utilize that section for the types of insulation. Anything not indicated in that section shall be insulated as specified in 230716.
RB-35	Renick Bros.	HVAC	2/28/2024	Please provide a specification for what is required for jacketing for exterior exposed refrigerant piping (split chiller piping outdoors, admin AHU exterior condenser piping, minisplit exterior piping)	Add 1	2/29/2024	Utilize the jacketing specified in Specification Section 230719 - HVAC PIPING INSULATION, Paragraph 2.4
RB-36	Renick Bros.	HVAC	2/28/2024	Are pre-insulated linesets with 1" thick insulation and UV resistant ez-pull coating acceptable for minisplit piping? They are named in the split fan coil spec 238126, but 230719 calls for 1-1/2" thick insulation for refrigerant piping	Add 1	2/29/2024	The pre-insulated linesets that have 1" insulation are acceptable. Should the insulation be needed to be field installed, the 1-1/2" should be used.
RB-37	Renick Bros.	HVAC	2/28/2024	Typically for standard split systems it is preferable for the liquid line to be uninsulated to allow it to sub-cool as much as possible. Is the liquid line required to be insulated indoors for the split chillers, and for the split admin air handler/condenser? Is the liquid line required to be insulated outdoors for the split chillers, and for the split admin air handler/condenser?			
RB-38	Renick Bros.	HVAC	2/28/2024	Reference A702,A703,A704,A705,A706 in relation to showing the ceiling mounted UVs. These drawings show a note saying location of ceiling mounted UV location. Does this note indicate the GC is adjusting ceilings for the UV or HVAC? Confused why this shows up on an architectural drawing if by HVAC.			
RB-39	Renick Bros.	HVAC	2/28/2024	Drawing S125 and S126 has a note 2 indicating service catwalks for the air handlers in the gym and aux gym to be by the HVAC contractor. This does not show on the HVAC drawings. Are we sure these would not be better served by the GC seeing he owns all other structural steel? Otherwise, put a note on the HVAC drawings.			
RB-40	Renick Bros.	HVAC	2/28/2024	Roof drawings M301 and MD301 indicate the majority of the roof fans to be replaced in kind with a PRV (power roof ventilator fan). To avoid roofing and patching in 30 plus locations, can curb adaptors be used in this application rather than new curbs? If new curbs are required are the details shown on dwg. M501 & M502 correct that the GC will own install of curbs, rails and pipe portals?			
RB-41	Renick Bros.	HVAC	2/28/2024	Does the GC own all duct openings/lintels for interior walls as applicable per detail 6 on A310?			
RB-42	Renick Bros.	HVAC	2/28/2024	Can the existing chiller water system be down for the duration of this project? If it can't be down for the duration, what months can the chiller system be down?			
RB-43	Renick Bros.	HVAC	2/28/2024	Can Nibco LD-2000 (lugged) or GD-4765 (grooved) valves be used for this project? They meet the specifications in all areas except the disc is aluminum bronze in lieu of stainless steel.	Add 1	2/29/2024	Please provide the specified materials for the purpose of bidding.
RB-44	Renick Bros.	HVAC	2/28/2024	Drawing PH100, project specific note 4 states the HVAC owns ¼" Masonite for corridor floor protection for the project duration. Once this is installed in Summer of 24, can the existing floor protection remain during the school year or will it be removed and reinstalled for the Summer of 25? ¼" Masonite is difficult to find, can .115" Masonite be used as this is more readily available? If .115" Masonite is unacceptable, can ¼" OSB be used?			
RB-45	Renick Bros.	HVAC	2/28/2024	Add Alternate PC-03A shows up on drawing P106, but not on the bid form – Please clarify?	Add 1	2/29/2024	Revised to Add Alternate PC-03 on Drawing P106 under Addendum 1.
RB-46	Renick Bros.	HVAC	2/28/2024	No CD piping is shown on drawing P106 for Alternates PC-03 & PC-03A? Please confirm if CD is by HC or PC and if by PC please provide piping for these alternates.	Add 1	2/29/2024	PLUMBING CONTRACTOR SHALL OWN THE CONDENSATE LINES AND THE FINAL CONNECTION TO THE HVAC UNIT. PIPING WILL BE PROVIDED UNDER FUTURE ADDENDUM.
RB-47	Renick Bros.	HVAC	2/28/2024	Please confirm all work for Add Alternate PC-04 is located in the District Garage E104?			
RB-48	Renick Bros.	HVAC	2/28/2024	On drawing M106 there are (2) duct silencers called out for TV Studio rm 167A please provide a schedule for requirements.			

SECTION 11 400 – FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. This section includes the equipment as indicated on the foodservice series of FS drawings.

1.2 RELATED DOCUMENTS

A. Drawings and other general provisions of Contract, including General and Supplementary

B. Conditions and Division -1 Sections, apply to this Section.

C. Division 22 Sections: Required drain traps, steam traps, atmospheric vents, valves, pipes and pipe fittings, duct work, and other materials necessary to complete mechanical hook up of food service equipment.

D. Division 23 Sections: Ductwork, fans, drives and other materials necessary to complete the mechanical venting hook up of food service equipment.

E. Division 26 Sections: Wiring, disconnects, and other materials necessary to complete electrical hook up of food service equipment.

F. Food service equipment cutbook provided as a supplement to the 114000 specifications.

1.3 SUBMITTALS

A. Food Service Equipment Contractor shall coordinate submittal due dates with the Construction Schedule for this Project.

B. Submit product data and installation instructions for each item; include rough-in dimensions, service connection requirements, performances, materials, manufacturers' model numbers, furnished accessories, power/fuel requirements, water/drainage requirements, and other similar information.

C. Submit shop drawings including dimensioned rough-in drawings showing mechanical and electrical requirements. Submit dimensioned refrigeration system, walk-in cooler/freezer, hood, hood fire suppression, fabrication drawings for custom fabricated equipment including plans, elevations and sections, showing materials and gauges used and any other shop drawings requested in the itemized specification section.

D. All shop drawings to be produced in electronic CAD or BIM software and submitted in PDF format. All drawings must be submitted in black and white. Shop drawings containing line color other than black will be rejected. Shop drawings to be submitted as one complete package. Shop drawings will be held and not reviewed until the entire package is received. Drawings to be submitted as one complete package using individual submittal numbers for each set of drawings

E. Submit maintenance data and parts list for each item of food service equipment. Include these data, product data, shop drawings, and wiring diagrams in maintenance manuals. Two copies of the manual are to be provided.

1.4 QUALITY ASSURANCE

A. Manufacturers' Qualifications: Firms regularly engaged in manufacturer of food service equipment of types, capacities and sizes required, whose products have been in satisfactory use, in similar service, for not less than five projects.

B. Installer's Qualifications: Engage an experienced installer who has completed food service similar in material, design, and extent to that indicated, for a project that has resulted in construction, with a record of successful in-service performance.

C. Codes and Standards:

1. NSF Standards: Comply with applicable National Sanitation Foundation (NSF) standards and recommended criteria. Provide each principal item of food service equipment with a NSF "seal of approval".
2. UL Labels: Where available, provide UL labels on prime electrical components of food service equipment. Provide UL "recognized marking" on other items with electrical components, signifying listing by UL, where available.
3. ANSI Standards: Comply with applicable ANSI standards for electric powered and gas burning appliances, for piping to compressed gas cylinders, and for plumbing fittings, including vacuum breakers and air gaps, to prevent siphonage in water piping.
4. NFPA Codes: Install food service equipment in accordance with the latest version of the following National Fire Protection Association (NFPA) codes:
   a. NFPA 54 - National fuel gas code.
   b. NFPA 70 - National electrical code.
   c. NFPA 96 - Removal of smoke and grease-laden vapors from commercial cooking equipment.
5. ASME Boiler Code: Construct steam-generating and closed steam heating equipment to comply with American Society of Mechanical Engineers (ASME) boiler and pressure vessel code; Section IV for units not exceeding 15 PSI or 250° F (121° C), or Section I for higher pressure/temperature units.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver food service equipment in containers designed to protect equipment and finish until final installation. Make arrangements to receive equipment and hold in warehouse until delivery can be made to job site.

B. Store food service equipment in original containers and in location to provide adequate protection to equipment while not interfering with other construction operations.

C. Handle food service equipment to avoid damage to components, enclosures and finish. Do not install damaged food service equipment; replace and return damaged components to equipment manufacturer.

1.6 PROJECT CONDITIONS

A. Take field measurements to assure accurate fit of fabricated equipment.

B. Check electrical characteristics and water, steam and gas pressure. Provide pressure regulating valves where required for proper operation of equipment.

1.7 REFRIGERATION WARRANTY

A. Special Project Warranty: Provide written warranty, signed by manufacturer, agreeing to replace/repair, within warranty period, refrigeration compressors with inadequate and defective materials and workmanship, including leakage, breakage, improper assembly, or failure to perform as required, provided manufacturer's instructions for handling, installing, protecting and maintaining units have been adhered to during warranty period. This warranty shall be in addition to, and not a limitation of, the rights the owner may have against the contractor under the Contract Documents.

B. Warranty Period: 5 years from date of substantial completion.

C. All equipment items containing refrigerated components are to include a minimum two-year parts and labor, five-year compressor warranty.

PART 2 - PRODUCTS

2.1 FOOD SERVICE EQUIPMENT SCHEDULE

A. Refer to the equipment schedules listed on the food service drawings for the food service equipment required for this project. Refer to the food service drawings for location of the items. Where discrepancies exist in quantity or size between drawings and schedules, the larger quantity/size must be considered as the correct information.

2.2 MATERIALS

A. Stainless Steel: ANSI Type 304. Provide non-magnetic sheets, free of buckles, waves and surface imperfections. Provide No. 4 polished finish for exposed surfaces.
   1. Provide protective covering on polished surfaces of stainless steel sheet work, and retain/maintain until time of final testing, cleaning, start up and substantial completion.

B. Galvanized Sheet Steel: ASTM A 526, except ASTM A 527 for extensive forming; ASTM A 525, G90 zinc coating, chemical treatment.

C. Sheet Steel: ASTM A 569 hot rolled carbon steel.

D. Stainless Steel Tube: ASTM A 554, type 304 with No. 4 polished finish.

E. Aluminum: ASTM B 209 sheet and plate, ASTM B 221 extrusions, 0.40 mil clear anodized finish where exposed, unless otherwise indicated.

F. White Metal: Corrosion resistant metal containing not less than 21 percent nickel. Make castings free from pit marks, runs, checks, burrs and other imperfections; rough grind, polish and buff to bright luster.
   1. In lieu of white metal castings, 18-8 stainless steel die cast or stamped may be used.

G. Plastic Laminate: NEMA LD3, general purpose high pressure type, 0.05 inch thick except 0.042 inch thick for flat work and post forming, smooth texture, and color white unless otherwise indicated.

H. Plastic Materials and Components: Except for plastic laminate, provide plastic materials and components that comply with NSF 51.

I. Hardwood Work Surfaces: Laminated edge-grained hard maple (acer Saccharum), NHLA first grade with knots, holes and other blemishes culled out, kiln dried at 8 percent or less moisture, waterproof glue, machined, sanded and finished with NSF approved oil sealer.

J. Sound Deadening: Heavy bodied resinous coating, filled with granulated cork or other resilient material, compounded for permanent, non-flaking adhesion to metal in 1/8 inch thick coating.
   1. Apply coating of sound deadening material to underside of tops, drainboards, dishtables and sinks.

K. Sealants: ASTM C 920; Type S, Grade NS, Class 25, Use NT. Provide sealant, that when fully cured and washed, meets requirements of Food and Drug Administration regulation 21 CFR 177.2600 for use in areas where it comes in contact with food.
   1. Color: As selected by architect with manufacturer's standard colors.
   2. Backer rod: Closed-cell polyethylene rod stock, larger than joint width.

L. Gaskets: Solid or hollow (not cellular) neoprene or PVC; light gray, minimum 40 shore A hardness, self-adhesive or prepared for either adhesive application or mechanical anchorage.

2.3 FABRICATED PRODUCTS

A. Refrigerator Hardware: Heavy duty, die cast zinc, chrome plated and polished.
   1. Hinges: Edge mounted, self-closing type.
   2. Latches: Edge mounted, arranged for locking devices.

B. Handles and Pulls: Provide stainless steel handles with No. 4 finish, or die cast zinc with polished chrome-plated finish. Provide die stamped stainless steel pulls, recessed rectangular type, with beveled edge frame.

C. Door Slides: Provide stainless steel or galvanized steel door slides with minimum load capacity of 100 pounds per pair, and with positive door stop. Provide ball bearing rollers.

D. Hinges: Provide stainless steel hinges, continuous type or butt type as indicated.

E. Sliding Door Hardware: Provide extruded aluminum door track. Provide galvanized steel door sheave with nylon surface and ball bearing inner races. Provide stainless steel bottom guide pins, spring loaded.

F. Adjustable Shelf Supports: Provide stainless steel shelf supports, snap in type, and stainless steel brackets with countersunk mounting holes.

G. Catches: For hinged doors, provide permanent magnetic catch of sufficient strength to hold door shut.

H. Locks: Manufacturers standard brass 5-pin cabinet type lock. Provide two keys for each lock, keyed separately.

I. Lever Drains: Provide 2-inch, heavy cast bronze body, removable flat stainless steel strainer, twist handle waste outlet, and one piece connected chrome plated brass overflow.

J. Casters: Provide minimum 4-inch diameter wheel casters with 1 1/8 inch tread width, complying with NSF standards. Provide sealed, self-lubricating bearings, cadmium plated or bright zinc plated steel disc wheels, and solid synthetic rubber tires. Provide foot brakes on 2 casters per unit.

2.4 FABRICATION OF EQUIPMENT

A. The following is a list of approved custom fabricators:
1. Keystone Custom Fabricators - Elizabeth, PA (412) 384-9131
2. Bova Corporation – Valencia, PA (724) 898-0288
3. Commercial Stainless – Bloomsburg, PA (570) 387-8980

B. The owner/food service consultant reserves the right to accept or reject any custom fabrication manufacturer. Any deviation from the approved list of fabricators will require written authorization from the food service consultant. The food service equipment contractor must submit for authorization to use a fabricator not listed above. A list of at least three food service consultant references for the fabricator must be provided. The consultants must be members of Fooodservice Consultants Society International (FCSI)

C. Tops: Fabricate of 14 gauge stainless steel, with exposed edges rolled on 1 1/2 inch diameter radius, and with corners bullnosed. Where tops are adjacent to walls or adjoining equipment, turn up ten inches and back two inches on a 45-degree angle, unless otherwise indicated.
1. Backsplashes: Cove horizontal and vertical corners.

D. Dishtables and Drainboards: Fabricate of 14 gauge stainless steel, with exposed edges formed into 1 1/2 inch by 180 degrees rolled rim, approximately 3 inches high. Provide built in pitch of 1/2-inch minimum. Provide ten inch high backsplashes with 2 inch return on 45 degree angle or 1 1/2 inch diameter rolled rim, as indicated. Construct front rim and backsplash on drainboards with continuous level plane with sink it adjoins. Support drainboards up to 36 inches in length, by 1-inch diameter stainless steel tube welded to underside of drainboard and leg gusset. Support drainboards 36 inches and longer with legs. Cove horizontal and vertical corners with not less than 3/4-inch radius.

E. Framing: Mount tops on 4 inch wide by 14 gauge stainless steel channels.
1. Run framework around entire perimeter of unit, and cross brace on centers. For dishtables and drainboards, run framing from front to back at each leg location, and run additional channel lengthwise, located at center of table width and welded to leg channels. Fasten framing to underside of top surfaces with 1/4-inch studs welded at approximately 12-inch centers. Provide each stud with suitable chrome plated lockwashers and capnuts, and make stud lengths such that capnuts can be made up tight bringing top down snugly to framing.

F. Legs and Cross Rails: Construct legs of 1 5/8 inch OD by 16 gauge stainless steel tubing, with fully enclosed stainless steel bullet shaped adjustable foot with minimum adjustment of 1 inch up or down without any threads showing. Fasten legs to 4-inch high stainless steel gusset with top completely sealed by means of stainless steel plate. Weld gusset continuously to bottom of unit framing. Construct cross rails of 1 1/4 inch O.D. by 16-gauge stainless steel tubing. Weld cross rails continuously to legs, grind and polish until smooth.

G. Drawers: Lift out type drawer body, one piece 20 inch by 20 inch by 5 inch die stamped of 18 gauge stainless steel, with inside radiused corners. Construct front of double pan stainless steel, 16-gauge exterior and 20-gauge interior. Provide lock for each drawer.

1. Fasten drawer suspension guides to 16-gauge stainless steel housing suspended from angle framing under fixed top.

H. Cabinet Bodies: Construct of 18 gauge stainless steel, with end panels formed with round corners for freestanding units, and square corners for fixtures that adjoin walls or other fixtures. Provide 90-degree retentions on end panels at front and rear, turned in toward body of cabinet and welded for reinforcement. For cabinets with open shelving, provide double wall inner panels. Weld ends to horizontal angle or channel members to form integral cabinet base. Provide backs of same material as ends, with vertical edges turned in to match edges of ends. Weld making flush joint.

I. Inserts: Where cold pans and other inserts are to be installed in cabinet bases, provide apron full depth of insert and of same material as bodies with reinforced openings as required. Form in openings on all sides.

J. Sliding Doors: Construct of 18 gauge stainless steel with edges formed into channel extending around all sides, forming doors 7/8 inch thick. Insert sound deadening material, and enclose with stainless steel back panel with welded corner joints.
1. Mount doors on sliding door hardware.
2. Construct doors so as to be removable for cleaning purposes, and provide with stops.
3. Provide, on each door, recessed stainless steel pulls and locks.

K. Hinged Doors: Construct same as sliding doors. Mount on stainless steel continuous type hinges, fitted with stainless steel pulls, magnetic catches and locks. Construct so that door face is flush with cabinet body.

L. Shelves: Construct of 14-gauge stainless steel.
1. Bottom shelves: Extend forward and turn down at front so as to be flush with front facing of cabinet.
2. Fixed intermediate shelves: Weld to front stiles and to 14 gauge stainless steel brackets so that shelf is 1 inch away from back and ends of cabinet.
3. Adjustable shelves: Channel on all four sides, weld corners, and mount on removable stainless steel standards.

M. Open Base Shelving: Construct of 16 gauge stainless steel with edges rolled down on open sides, and 2 inch turn up with 3/4 inch radius on rear and ends where adjacent to walls and other equipment. Neatly notch corners and weld to legs. Reinforce shelving longitudinally with 14 gauge formed channel welded to underside. Construct removable shelves as above, but fit over cross rails. Do not exceed shelving sections of 30 inches long; where one section abuts another, turn down edges one inch.

N. Wall Shelves: Construct of 16 gauge stainless steel with 1 1/2 inch roll on front and exposed ends, and with 2 inch turn up on back and ends where adjacent to walls or other fixtures. Weld all corners. Construct wall brackets of 14-gauge stainless steel with 1 1/2-inch flange at wall and completely welded to underside of shelf. Fasten each bracket to wall with minimum of two 1/2-inch bolts anchored to wall. Fasten shelf to wall bracket by means of studs welded to shelf, and secure with lockwasher and chrome plated cap nuts. Install so that shelf sets 1 1/2 inch away from the wall.

O. Overshelves: Set shelves mounted over equipment, not adjacent to walls, on 1 inch by 14 gauge stainless steel tubular standards fitted with stainless steel base flanges. Completely weld top of tubular standards to 14-gauge stainless support channels; run channels full width of overshelf. Run 1/2-inch steel tension rods through counter tops and reinforcing angle framing, secure with nuts and lockwashers to assure stable sway-free structure.
1. Where shelves are mounted over drainboards or dish tables, mount on upturned, rolled edges, omitting flanges, and scribe lower end of tube to match contour of roll.

P. Sinks: Fabricate from 14 gauge stainless steel with interior corners rounded to 1 inch radius, both horizontally and vertically, forming cove in bottom. Construct with butt-edge joints, welded and ground smooth so no evidence of welding will appear. Divide multiple compartment sinks with double wall 14 gauge stainless steel partitions rounded to 1/2 inch radius on top and having corners rounded same as other corners in sinks, continuously welded in place with welds ground smooth and polished. Provide back, bottom and front of one continuous piece with no overlapping joints or open spaces between compartments. Pitch bottom of each compartment and crease to die stamped recess to receive lever type drain, without use of solder, rivets or welding.
1. Finish front and exposed ends of sink with 1 1/2 inch 180 degree rolled edge. Finish back and ends adjacent to walls or other fixtures with splash back. Punch back splash back to receive wall mounted faucets.
2. For sinks in worktops, construct as above, but omit roll edges with splash backs. Fabricate bowl so as to be flush with work surfaces.

Q. Cold Pans: Fabricate with 14-gauge stainless steel lining and 20 gauge stainless steel casing. Cove interior horizontal and vertical corners. Insulate sides, ends and bottom with material thermally equal to 2-inch thickness of fiberglass. Sweat 1/2-inch diameter copper cooling coils to underside of cold pan, and seal in thermostatic material. Turn down countertop 1 inch into pan. Install completely concealed 1-inch wide plastic breaker strip. Install 1-inch chrome plated drain with plug. Provide 1/2 inch high false bottom of 14 gauge perforated stainless steel in removable sections.

2.5 EXHAUST HOOD FABRICATION

A. Comply with NFPA 96, including appendix A.

B. Grease Removal: Provide grease removal devices as called for in the itemized on the manufacturer's provided cutsheet and engineering data.

C. Light Fixtures: Provide light fixtures as called for on the manufacturer's engineering drawings.

PART 3 - EXECUTION

3.1 INSPECTION

A. Rough In Work: Examine roughed in mechanical and electrical services, installation of floors, walls, columns and ceilings, and other conditions under which food service work is to be installed; verify dimensions of services and substrates before fabricating work. Notify contractor of unsatisfactory locations and dimensions of other work and of unsatisfactory conditions for proper installation of food service equipment. Do not proceed with fabrication and installation until unsatisfactory dimensions and conditions have been corrected in a manner satisfactory to installer.

3.2 INSTALLATION

A. Install all equipment, including any existing reused items, per manufacturer's recommendations.

B. Set each item of non-mobile and non-portable equipment securely in place, level and adjust to correct height. Anchor to supporting substrate where indicated and where required for sustained operation and use without shifting or dislocating. Conceal anchorages where possible. Adjust countertops and other work surfaces to level tolerance of 1/16-inch maximum offset, and maximum variation from level or indicated slope of 1/16 inch per foot.
1. W here indicated or required for safety of equipment operator, anchor equipment to floor or wall. Where equipment is indicated to be anchored to floor, provide legs with adjustable flanged foot. Install 2 anchors on each foot.

C. Field Joints: Complete field assembly joints in work (joints cannot be completed in shop) by welding, bolting and gasketing, or similar methods as indicated. Grind welds smooth and restore finish. Set or trim gaskets flush, except for "T" gaskets as indicated.

D. Enclosed Spaces: Treat spaces that are inaccessible, after equipment installation, by covering horizontal surfaces with powdered borax at the rate of 4 ounces per square foot.

E. Closure Plates and Strips: Install where required with joints coordinated with units of equipment.

F. Cutouts: Provide cutouts in food service equipment where required to run plumbing, electric, gas or steam lines through equipment items for final connection.

G. Sealants and Gaskets: Install all around each unit to make joints airtight, water tight, vermin proof and sanitary for cleaning purposes. In general, make sealed joints not less than 1/8 inch wide, and stuff backer rod to shape sealant bead properly at 1/4-inch depth. Shape exposed surfaces of sealant slightly concave with edges flush with faces of materials at joint. At internal corner joints, apply sealant or gaskets to form a sanitary cove of not less than 3/8-inch radius. Provide sealant filled or gasketed joints up to 3/4-inch joint width; metal closure strips for wider joints, with sealant application each side of strips. Anchor gaskets mechanically or with adhesives to prevent displacement.

3.3 RELOCATION OF EXISTING AND BY OWNER FOOD SERVICE EQUIPMENT

A. It is the responsibility of the food service equipment contractor to relocate all existing reused items. The food service equipment contractor must mark all items (existing/relocated and existing/remain) that will require disconnection from the utilities. Electrical, plumbing, and HVAC contractors will disconnect the food service equipment from the utilities. The food service equipment contractor shall then move the existing/reused and existing remain equipment to a location in the school as directed by the school district as well as protect the equipment until time of installation. The food service equipment contractor is to then relocate these items to their final position and make them ready for connection to the utilities by the various trades.

3.3 FIELD QUALITY CONTROL

A. Testing: Coordinate start up of food service equipment when service lines have been tested, balanced and adjusted for pressure, voltage and similar considerations. Do not operate steam lines until they have been cleaned and treated for sanitation. Before testing, lubricate each equipment item in accordance with manufacturers' recommendations.
   1. Test each item of operational equipment to demonstrate that it is operating properly and that controls and safety devices are functioning. Repair or replace equipment found to be defective in its operation, including units that are below capacity or operating with excessive noise or vibration.

3.4 CLEANING

A. After completion of installation and other major work in food service areas, remove protective coverings, if any, and clean food service equipment, internally and externally. Restore exposed and semi-exposed finishes to remove abrasions and other damages; polish exposed metal surfaces and touch up painted surfaces. Replace work that cannot be successfully restored.
   1. Prior to date of substantial completion on food service equipment work, buff exposed stainless steel finishes lightly using power buffer and polishing rouge or grit of No. 400 or finer.

B. Final Cleaning: After testing and start up, but before time of substantial completion, clean and sanitize food service equipment and leave in condition ready for food service.

3.5 CLOSEOUT PROCEDURES

A. Provide services of installer's technical representative and manufacturers technical representative where required, to instruct owner's personnel in operation and maintenance of food service equipment.
   1. Schedule training with owner; provide at least 7 day notice to contractor and architect of training date

ITEM 1. TWO BOWL PREP SINK WITH OVERSHELF by CUSTOM FABRICATOR

This two bowl prep sink with overshelf is to be constructed as per the detailed drawings, custom fabrication details and general specification.

ITEM 2. PRE-RINSE SPRAY ASSEMBLY WITH FAUCET by T & S (Two Required)

These pre-rinse spray assemblies are to be a model # B-0113-12CRBJST series and are to be provided with the following features and accessories:

A - Single hole deck mount design with 18” flexible leads for water connections
B - Approximately 48" height
C - 15" overhang
D - 9" clearance
E - B-0107-J Spray valve
F - Flexible stainless steel hose
G - B-109 wall bracket
H - Add-on faucet with single control valve and 12” swing nozzle

ITEM 3. TWO SECTION REFRIGERATOR by CONTINENTAL

This two section refrigerator is to be model # 2RNSA and is to be provided with full size doors. The left door is to be hinged left and the right door is to be hinged right. This two section refrigerator is to have the following features and accessories:

A - Stainless steel exterior with aluminum interior
B - Digital exterior thermometer control system with hi/lo alarms
C - Self-contained top mounted refrigeration system
D - Refrigeration system to utilize non ozone depleting refrigerant
E - 48 cubic foot net capacity
F - Automatic hot gas condensate evaporator
G - Expansion valve style refrigeration system
H - Cabinet fully insulated with 3" of non-CFC foam insulation
I - Polished chrome door handles
J - Self-closing doors with magnetic snap in gaskets
K - Each door equipped with cylinder locks
L - Pass-through design
M - Automatic interior LED lighting
N - Cam action, lift off hinges
O - Top and side mounted air distribution ducts
P - Mounted on 5" casters, two swivel with brakes
Q- Interior compartments fully equipped with four (4) adjustable shelves per compartment
R - Three year parts, labor, and five year compressor warranty

ITEM 4. UTILITY CART – EXISTING/RELOCATED (Three Required)

ITEM 5. ICE MAKER WITH BIN – EXISTING/RELOCATED with WATER FILTER by EVERPURE

This Everpure water filter is to be a model # EV9324-21

ITEM 6. HAND SINK WITH FAUCET by ADVANCE (Four Required)

These hand sinks with faucets are to be model # 7-PS-96 and are to be provided with the following features and accessories:

A - Deep drawn 10" x 14" x 5" sink bowl
B - Countertop die formed recessed edge with a 3/8" no-drip offset
C - Constructed of type 304 stainless steel
D - Model # K-310 drain strainer basket
E - Two (2) side splashes
F - Built to allow for flush-to-wall mount application
G - Removable access panel
H - Galvanized wall mounting bracket
I - Foot pedal valve for water operation

ITEM 7. PREP TOP REFRIGERATOR – EXISTING/RELOCATED

ITEM 8. SPARE NUMBER

ITEM 9. WORKTABLE – EXISTING

ITEM 10. WORKTABLE – EXISTING

ITEM 11. CAN OPENER – EXISTING

ITEM 12. SHELVING – EXISTING/RELOCATED (Five Sections Required)

ITEM 13. SPARE NUMBER

ITEM 14. SPARE NUMBER

ITEM 15. SPARE NUMBER

ITEM 16. TYPE I HOOD by CADDY

This Type I exhaust hood is to be a model # PB-C-I-76-ND-66 with Ceiling Supply Plenum and is to be provided in one (1) section with size and shape as shown on drawings FS100 and FS103 and on CADDY MADD drawing # MD-0340A. This hood is to be provided with the following features and accessories:

A - Hood constructed in three sections, the two main sections will be separated by a building column from the third section, the gap between these sections is to be in-filled with a solid 18 gauge stainless steel front and bottom panel provided by the hood manufacturer
B - Hood shall be of the high velocity, dry centrifugal extractor type
C - Centrifugal grease extraction to be accomplished within the grease extraction chamber by means of strategically placed baffles located within the path of the high velocity air passing through the chamber. All baffles shall extend the full length of the ventilator. Grease extraction efficiencies to be not less than 90%. All extractor cartridges shall be fully removable. No fixed in place baffles are acceptable. Extractors to be easily removable from the floor by means of an extractor removal tool
D - Hood shall be equipped with a pitched trough with a removable grease collection located at one end
E - Hood shall operate as designed, utilizing exhaust air quantities as portrayed on the drawings, alternate manufactures are to calculate cfm's based on their listings and design recommendations
F - Hood shall be equipped with necessary hanger brackets at front and rear, for suspending from building overhead. Entire top perimeter at front and sides of hood shall be fully enclosed with matching removable stainless steel closure panels (if necessary) to minimum height of 1" above the finished ceiling.
G - Hood shall be equipped with five (5) globe style light fixtures with LED bulbs. Fixtures shall be vapor and greaseproof globe style fixtures, UL Listed for use in commercial kitchen hood applications. Light fixtures shall be factory pre-wired to a single connection point and include LED bulbs.
H - Hood to be UL Listed under the category "Grease Extractors for Exhaust Ducts", UL 710, in compliance with all recommendations of the National Fire Protection Association's standards for kitchen cooking equipment ventilators, approved by the National Sanitation
I - Foundation, approved by BOCA and ICBO, and be in accordance with all local codes having jurisdiction
J - Hood to be constructed of all stainless steel, # 18 gauge type 304, #4 finish, all welded, grease and water tight. No material other than that described above shall be deemed acceptable
K - The top of the hood canopy shall be reinforced with a 16 ga s/s channel running the length of the hood
L - Hood shall be mounted at 6'-8" AFF to bottom of front face
M - Hood to include double wall construction at the rear with 3" air zero clearance integral air gap to adjoin to adjacent hood
L - Hood to be supplied with full length ceiling supply plenum, with 40% open stainless steel perforated panels and volume control damper for discharge of tempered make-up air
P - Item 60, Variable Volume Control System to be integrated as a pre-engineered system into the hood including temperature sensors, optical sensors, and all variable volume control components factory installed by the hood manufacturer.
Q - Hood control keypad with hood fan and light controls to be factory mounted to right front face of hood
R - Provide sliding balancing dampers for exhaust and supply duct collars.
S - Hood manufacturer to provide stamped engineer drawings if required by the authority having jurisdiction, hood manufacturer responsible for one stamped set. Additional sets required will be the responsibility of the food service equipment contractor.
T - Hood control panels to include interlocks for remote wall mounted fan and light switches, switches by electrical contractor
U - Contractor to field verify all dimensions and equipment for proper fit and access into the building

ITEM 17. FIRE SUPPRESSION SYSTEM by ANSUL

This fire suppression system is to be model # R-102 for the Type I Hood (Item 16 and 24) and is to be as follows:

A - Total system to include the following:
  1 - The fire suppression system shall be the pre-engineered, liquid agent, cartridge-operated type with a fixed nozzle agent distribution network -It shall be listed with Underwriters Laboratories, Inc. (UL)
  2 - The system shall be capable of automatic detection and actuation or remote manual actuation
  3 - The system shall have fire suppression capabilities for the following hazard areas: ventilating structures including hoods, ducts, plenums, and filters; deep fat fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas radiant char-broilers

4 - A systems owner's manual shall be provided containing basic information pertaining to system operation. A detailed technical manual shall provide system description, design, installation, recharge, and maintenance procedures, plus accessory installation and reset instructions.

B - The system shall be installed and serviced by authorized distributors that are trained and certified by the manufacturer

C - System equipment is to include the following:
1 - The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knockdown and securement of grease related fires - It shall be available with instructions for liquid agent handling and usage
2 - The agent tank(s) shall be installed in a stainless steel enclosure or wall bracket - The tank(s) shall be stainless steel
3 - The tank(s) shall have a nominal capacity of either 1.5 gallon or 3 gallon with a working pressure of 100 psi, a test pressure of 300 psi, and a minimum burst pressure of 600 psi
4 - The tank(s) shall include an adapter/tube assembly - The adapter shall be chrome-plated steel with a 1/4-18 NPT female inlet and a 1/2-14 NPT male outlet - The pick-up tube shall be carbon steel -1.2 in. O.D. by .028 wall - A vent plug shall be integral to the adapter

D - The regulated release mechanism shall be the spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks, depending on the capacity of the nitrogen cartridge used. It shall contain a factory installed regulator deadset at 100 psi with an internal relief of approximately 145 psi - In the "armed" position; the main spring force to the puncture pin piston shall be 150 pound

E - The mechanism shall have a visual indicator of the cocked or fired condition without having to open the enclosure

F - The regulated release mechanism shall have the following actuation capabilities: automatic actuation by a fusible link detection system; remote manual actuation by a mechanical pull station

G - The regulated release mechanism shall be compatible with mechanical gas line shut-off devices; or, when equipped with a field or factory-installed solenoid and switch, it shall be compatible with electric appliance shut-off devices

H - If more than two agent tanks are required, the regulated actuator(s) shall be available to provide expellant gas for additional tank(s) - It shall be connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent discharge - It shall contain a regulated actuator deadset at 100 psi with an internal relief of approximately 145 psi

I - The regulated actuator assembly shall contain a regulated actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover - The enclosure shall contain knockouts to permit installation of expellant gas line

J - The tank/bracket assembly shall contain a welded steel bracket and agent tank - The bracket shall be provided to mount the agent tank in a minimum amount of space - The tank shall be secured with hinged brackets.

K - Each discharge nozzle shall be tested and listed with the system for specific applications - The nozzle tip shall be chrome-plated brass, and stamped with the part number and flow rating - The nozzle tip retainer and body shall be chrome plated brass - The nozzle strainer shall be brass with stainless 50 mesh screen

L - Each nozzle tip shall be covered by a stainless steel protective blow-off cap

M - The regulated release mechanism shall be compatible with a fusible link detection system

N - The fusible link shall be selected and installed according to the operating temperature in the ventilation system

O - A detector bracket/linkage assembly shall support the fusible link. The detector bracket shall be 16-gauge cold-rolled stainless steel

P - The detector linkage shall be aluminum.

Q - The detector bracket/linkage assembly shall have provisions for connecting 1/2" rigid or EMT thin-wall conduit, and 1/16" diameter flexible stainless steel rope. Changes in direction of the conduit and steel rope shall be accomplished with die cast aluminum alloy, 90 degree pulley elbows

R - All exposed conduits are to be chrome plated

S - If the release mechanism is not accessible for manual actuation, a remote manual pull station(s) shall be provided as the primary means of manual actuation

T - The pull station(s) shall be the recessed type, with conduit run within the walls

U - The pull station(s) shall be the break-rod type, and shall be connected to the release mechanism trip lever by means of a 1/16" diameter stainless steel rope and 1/2" conduit (chrome plated conduit where exposed)

V - The pull station(s) shall be located at a distance not more than 125 feet from the release mechanism

W - The mounting height and location of the pull station shall be in accordance with the authority having jurisdiction

X - A UL listed, electric snap-action switch shall be provided to shut off electrical power to appliances or to activate electrically operated devices. The switch shall allow for connection to the building alarm system - A relay must be supplied if the equipment load exceeds the rated capacity of the switch

Y - This system shall conform to all local, state and national codes having jurisdiction in this location
Z - The installer shall provide one-year service and inspection free of additional charge
AA - Pull stations for the fire suppression system are required to have color and numerical coded signs that correspond with the hood they service. Sign shall be engraved type with foam adhesive backing. Minimum size shall be no less than 2" x 5". Corresponding signs shall be placed at pull stations and on the hoods they service. Signs shall comply with any requirements set forth by the local and state authorities having jurisdiction.
BB - Provide stamped engineered drawings if required by the authority having jurisdiction, service to include one stamped set with additional sets required at the cost of the contractor
CC - Cooking appliances that require Ansul piping to be permanently mounted to the appliance are to include Ansul agent distribution hose with restraint

ITEM 18. TWO BURNER RANGE WITH STORAGE BASE by GARLAND with GAS QUICK DISCONNECT by DORMONT and EQUIPMENT POSITIONING DEVICE by DORMONT

This Garland two burner range with storage base is to be model # MST45-E and is to be provided with the following features and accessories:

A - Stainless steel front and sides
B - Stainless storage base with stainless steel door
C - 7-1/2" deep front rail
D - Two (2) 2-piece burners with removable heads
E - Each burner rated for 30,000 btu
F - Removable ring grate bowl over each burner
G - Cast iron top grates
H - One piece stainless steel drip tray
I - 3/4" rear gas connection with pressure regulator
J - Cap and cover both ends of front manifold
K - Mount on 6" overall height swivel casters, front casters with brakes

This Dormont Manufacturing Company gas quick disconnect kit is to be model # 1675KIT2S Supr-Safe Gas Connector Kit with Supr-Swivel. Length to be 48".

This Dormont equipment positioning device is to be a model # PS

ITEM 19. FORTY GALLON TILT SKILLET - EXISTING/RELOCATED

ITEM 20. DOUBLE DECK CONVEYOR OVEN by LINCOLN with GAS QUICK DISCONNECT by DORMONT (Two Required) EQUIPMENT POSTIONING DEVICE by DORMONT

This Lincoln double deck conveyor oven is to consist of two model # 116-000-U ovens and is to be provided with the following features and accessories:

A - 28" Long Cooking Chamber
B - 250°F to 575°F
C - Self-Contained conveyorized cooking chamber
D - Provided with all hardware and accessories for double stack configuration
E - Mounted on manufacturer's matching mobile stand for double stacked units
F - #4 Finish stainless steel exterior
G - FastBake option for reduced cook times
H - Digital controls with single on/off switch
I - Microprocessor controlled bake time and conveyor speed
J - Display indicating temperature, belt speed, thermostat, and diagnostic temperatures
K - Front load conveyor
L - removable door
M - 18" wide conveyor
N - Removable and reversible conveyor
O - Designed to cook food using air impingement
P - Four separate and removable air distribution fingers
Q - One (1) year parts/labor warranty
R - To include 12" long inclined entry shelf and 16-7/8" exit shelf with stop
S - Ovens mounted to manufacturer's matching mobile stand for double stacked units

T - Provided with all hardware and accessories for double stack installation

These Dormont Manufacturing Company gas quick disconnect kits are to be model # 16175KIT2S Supr-Safe Gas Connector Kit with Supr-Swivel. Length to be 48".

This Dormont equipment positioning device is to be model # PS

ITEM 21. WORK TABLE by CUSTOM FABRICATOR

This work table is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 22. SPARE NUMBER

ITEM 23. ONE SECTION HEATED CABINET – EXISTING (Three Required)

ITEM 24. TYPE I HOOD by CADDY

This Type I exhaust hood is to be a model # PB-C-I-76-ND-66 with Ceiling Supply Plenum and is to be provided in one (1) section with size and shape as shown on drawings FS100 and FS103 and on CADDY MADD drawing # MD-0340A. This hood is to be provided with the following features and accessories:

A - Hood constructed in three sections, the two main sections will be separated by a building column from the third section, the gap between these sections is to be in-filled with a solid 18 gauge stainless steel front and bottom panel provided by the hood manufacturer
B - Hood shall be of the high velocity, dry centrifugal extractor type
C - Centrifugal grease extraction to be accomplished within the grease extraction chamber by means of strategically placed baffles located within the path of the high velocity air passing through the chamber. All baffles shall extend the full length of the ventilator. Grease extraction efficiencies to be not less than 90%. All extractor cartridges shall be fully removable. No fixed in place baffles are acceptable. Extractors to be easily removable from the floor by means of an extractor removal tool
D - Hood shall be equipped with a pitched trough with a removable grease collection located at one end
E - Hood shall operate as designed, utilizing exhaust air quantities as portrayed on the drawings, alternate manufactures are to calculate cfm's based on their listings and design recommendations
F - Hood shall be equipped with necessary hanger brackets at front and rear, for suspending from building overhead. Entire top perimeter at front and sides of hood shall be fully enclosed with matching removable stainless steel closure panels (if necessary) to minimum height of 1" above the finished ceiling.
G - Hood shall be equipped with five (5) globe style light fixtures with LED bulbs. Fixtures shall be vapor and greaseproof globe style fixtures, UL Listed for use in commercial kitchen hood applications. Light fixtures shall be factory pre-wired to a single connection point and include LED bulbs.
H - Hood to be UL Listed under the category "Grease Extractors for Exhaust Ducts", UL 710, in compliance with all recommendations of the National Fire Protection Association's standards for kitchen cooking equipment ventilators, approved by the National Sanitation
I - Foundation, approved by BOCA and ICBO, and be in accordance with all local codes having jurisdiction
J - Hood to be constructed of all stainless steel, # 18 gauge type 304, #4 finish, all welded, grease and water tight. No material other than that described above shall be deemed acceptable
K - The top of the hood canopy shall be reinforced with a 16 ga s/s channel running the length of the hood
L - Hood shall be mounted at 6'-8" AFF to bottom of front face
M - Hood to include double wall construction at the rear with 3" air zero clearance integral air gap to adjoin to adjacent hood
L - Hood to be supplied with full length ceiling supply plenum, with 40% open stainless steel perforated panels and volume control damper for discharge of tempered make-up air
P - Item 60, Variable Volume Control System to be integrated as a pre-engineered system into the hood including temperature sensors, optical sensors, and all variable volume control components factory installed by the hood manufacturer.
Q - Hood control keypad with hood fan and light controls to be factory mounted to right front face of hood
R - Provide sliding balancing dampers for exhaust and supply duct collars.
S - Hood manufacturer to provide stamped engineer drawings if required by the authority having jurisdiction, hood manufacturer responsible for one stamped set. Additional sets required will be the responsibility of the food service equipment contractor.

T - Hood control panels to include interlocks for remote wall mounted fan and light switches, switches by electrical contractor

U - Contractor to field verify all dimensions and equipment for proper fit and access into the building

ITEM 25. SPARE NUMBER

ITEM 26. FULL SIZE COMBI OVEN – EXISTING/RELOCATED with WATER FILTER by EVERPURE, GAS QUICK DISCONNECT by DORMONT, WATER QUICK DISCONNECTS by DORMONT (Two Required) and EQUIPMENT POSITIOINING DEVICE by DORMONT

This Everpure water filter is to be model # EV9797-22 Kleensteam II Twin System

This Dormont Manufacturing Company gas quick disconnect kit is to be model # 1675KIT2S Supr-Safe Gas Connector Kit with Supr-Swivel. Length to be 48".

This Dormont equipment positioning device is to be model # PS

These Dormont water quick disconnects are to be model # W75BP2Q-60

ITEM 27. HALF SIZE COMBI OVEN – EXISTING/RELOCATED with WATER FILTER by EVERPURE, GAS QUICK DISCONNECT by DORMONT, WATER QUICK DISCONNECTS by DORMONT (Two Required) and EQUIPMENT POSITIOINING DEVICE by DORMONT

This Everpure water filter is to be model # EV9797-22 Kleensteam II Twin System

This Dormont Manufacturing Company gas quick disconnect kit is to be model # 1675KIT2S Supr-Safe Gas Connector Kit with Supr-Swivel. Length to be 48".

This Dormont equipment positioning device is to be model # PS

These Dormont water quick disconnects are to be model # W75BP2Q-60

ITEM 28. DOUBLE DECK CONVECTION OVEN – EXISTING/RELOCATED (Two Required) with GAS QUICK DISCONNECT by Dormont (Four Required) and EQUIPMENT POSITIONING DEVICE by DORMONT (Two Required).

These Dormont Manufacturing Company gas quick disconnect kits are to be model # 1675KIT2S Supr-Safe Gas Connector Kit with Supr-Swivel. Length to be 48".

These Dormont equipment positioning devices are to be model # PS

ITEM 29. ROLL-IN PAN RACK – EXISTING (Two Required)

ITEM 30. MOBILE PAN RACK – EXISTING

ITEM 31. SPARE NUMBER

ITEM 32. SPARE NUMBER

ITEM 33. SPARE NUMBER

ITEM 34. WORKTABLE – EXISTING/RELOCATED

ITEM 35. WORKTABLE – EXISTING

ITEM 36. FIVE QUART MIXER – EXISTING

ITEM 37. SPARE NUMBER

ITEM 38. WORKTABLE – EXISTING

ITEM 39. WORKTABLE WITH SINK by CUSTOM FABRICATOR with FAUCET by T&S

This worktable with sink is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 40. TWO SECTION REACH-IN REFRIGERATOR – EXISTING

ITEM 41. ONE SECTION REACH-IN REFRIGERATOR – EXISTING

ITEM 42. ONE-SECTION ROLL-IN REFRIGERATOR – EXISTING (Two Required)

ITEM 43. ONE SECTION REACH-IN REFRIGERATOR – EXISTING

ITEM 44. SERVING COUNTER – EXISTING

ITEM 45. SERVING COUNTER – EXISTING

ITEM 46. SPARE NUMBER

ITEM 47. SPARE NUMBER

ITEM 48. THREE HORSE POWER DISPOSER WITH CONTROLS by INSINKERATOR

This three horsepower disposer with controls is to be model # SS-300 and is to be provided with the following features and accessories:

A - 3 H.P. motor with built-in overload protection
B - Stainless steel and chrome plated finish
C - Stainless steel grind chamber
D - #7 collar adaptor with sink opening of 6-5/8" – to include splash baffle and stopper, vacuum breaker, solenoid valve and flow control
E - CC101K-7 control panel to include NEMA 4 water tight stainless steel enclosure, auto-reversing and automatic shut-off for power interruption.
F - Provide support leg for disposer

ITEM 49. EYE WASH STATION by T&S

This eye wash station is to be model # EW-7360B and is to be provided with the following features and accessories:

A - 1/2" inlet for hot and cold water
B - 4-1/2 " centers
C - 3/4" tempered water outlet
D - Tempering valve
E - Stainless steel basin with drain
F - Push lever operated
G - Furnish with model # EW-9201EF thermostatic mixing valve

ITEM 50. THREE BOWL POT AND PAN SINK WITH OVERSHELF by CUSTOM FABRICATOR with FAUCETS by T&S (Two Faucets Required)

This Custom Fabricated three bowl pot and pan sink with overshelf is to be constructed as per the detailed drawings, custom fabrication details and general specification.

These T & S faucets are to be model # B-0230 and are to be provided with the following features and accessories:

A - Splash mounted mixing faucet on 8" centers
B - Swivel base faucet
C - Lever handles
D - 18" swivel nozzle
E - Two (2) supply nipples # B-0425
F - Two (2) short elbows # 006895-20

ITEM 51. THREE HORSE POWER DISPOSER WITH CONTROLS by INSINKERATOR

This three horsepower disposer with controls is to be model # SS-300 and is to be provided with the following features and accessories:

A - 3 H.P. motor with built-in overload protection
B - Stainless steel and chrome plated finish
C - Stainless steel grind chamber
D - Type “C” 15” cone assembly – to include splash baffle and stopper, vacuum breaker, solenoid valve and flow control
E - CC101K-7 control panel to include NEMA 4 water tight stainless steel enclosure, auto-reversing and automatic shut-off for power interruption.
F - Provide support leg for disposer

ITEM 52. PRE-RINSE SPRAY ASSEMBLY by T & S (two Required)

These pre-rinse spray assemblies are to be model # B-0113-CR-V-BC and are to be provided with the following features and accessories:

A - Single hole deck mount design with 18” flexible leads for water connections
B - Approximately 48" height
C - 15" overhang
D - 9" clearance
E - B-0107-C Spray valve
F - Flexible stainless steel hose
G - B-109 wall bracket
H - Ceramic cartridge
I - In-line vacuum breaker

ITEM 53. SOILED DISHTABLE WITH PRE-RINSE SINK by CUSTOM FABRICATOR

This soiled dishtable with pre-rinse sink is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 54. SIXTY SIX INCH CONVEYOR DISHMACHINE by HOBART with WATER FILTER by EVERPURE

This Hobart sixty six inch conveyor dishmachine is to be a model # CLP66En-EGR and is to be provided with the following features and accessories:

A - Electric tank heat unit with drain water energy recovery
B - Capacity of 202 racks per hour
C - Drain water tempering device
D - Rapid return conveyor drive
E - Internal stainless steel pressure less 30 KW booster heater designed to boost incoming water temperature from 110 degrees F to 180 degrees F
F - 0.62 gallons of water per rack
G - Triple swing out insulated doors for access to all scrapping and wash compartments
H - 19-1/2” tall chamber height for washing of 18”x26” sheet pans
I - Top mounted microprocessor control panel
J - Dirty water indicator
K - Low temperature alert
L - NSF rated pot/pan conveyor dwell mode
M - Delime notification
N - Built-in service diagnostic system
O - Self-aligning wash manifolds
P - Stainless steel anti-clogging wash arms
Q - Removable pump intake screen
R - Stainless steel self-draining pump and impeller
S - Single sloping scrap screen and deep scrap basket
T - Stainless steel bottom enclosure apron
U - Door actuated drain closure
V - Vent fan control
W - Booster heater control

X - Energy star certified
Y - Standard size extended stainless steel vent hoods at load and unload end
Z - Table limit switch
AA - Water shock absorber kit
BB - Hobart factory authorized installation and start-up
CC - Built-in drain water tempering for maximum drain water temperature of less than 140° F
DD - Provide with two sheet pan racks
EE - Provide with four universal peg racks
FF - Right to left operation

This Everpure water filter is to be model # Kleenware HTS-10 and is to be provided with the following features and accessories:

A - 19 3/4" wide mounting bracket
B - 3/4" inlet and 3/4" outlet water connections
C - Service flow rate up to 15 gpm
D - Minimum pressure of 100 psi, and 150 psi maximum pressure
E - 170° maximum water temperature at inlet

ITEM 55. PANT LEG DUCT by CUSTOM FABRICATOR

This pant leg duct is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 56. CLEAN DISHTABLE WITH OVERSHELF by CUSTOM FABRICATOR

This clean dishtable with overshelf is to be constructed as per the detailed drawings, custom fabrication details and general specifications.

ITEM 57. CLEAN POT AND PAN SHELVING - EXISTING/RELOCATED (Three Sections Required)

ITEM 58. CHEMICAL STORAGE SHELVING by METRO or FERMOD (Two Sections of Shelving Required)

This "Metroseal 3" shelving with "Super Erecta Shelf Design" is to have the following features and accessories:

A - 12-year limited warranty against rust formation
B - Self-sealing hydrated chromate base layer
C - Epoxy coating with microban
D - Provide split sleeves
E - Capacity of 800 pounds for shelves under 48" in length and 600 pounds for shelves over 48" in length
F - Shelves adjustable in 1" increments

Each shelving section is to include four (4) shelves, four (4) posts, two (2) swivel casters and two (2) swivel brake casters. This shelving is to consist of the following components:

A - Four (4) model # 2142NK3 shelves
B - Four (4) model # 2460NK3 shelves
C - Eight (8) model # 74UPK3 posts
D - Four (4) model # 5MP 5" non-marking polyurethane swivel casters
E - Four (4) model # 5MPB 5" non-marking polyurethane swivel casters with brakes

ITEM 59. MOP SINK by ADVANCE TABCO

This mop sink is to be a model # 9-OP-40DF provided with the following features and accessories:

A - Type 300 stainless steel constructed
B - Seamless deep drawn sink bowl
C - "V" edge on three sides
D - Tile edge on rear
E - Model # K-240 faucet
F - Drop front design

ITEM 60. VARIABLE VOLUME CONTROLS by ECO AZAR or MELINK

This variable volume hood control system is to control the hood light(s) and fan speed(s) for Items 16 and 24, and is to be provided with the following features and accessories.

A - Smart Hood system to be installed as a pre-engineered system into Items 16 and 24 Type I Hoods
B - Smart Hood system to consist of the following components:
  1 - I/O Processor that sends 0-10VDC or 4-20mA signal to each exhaust and make-up air unit VFD 's – Exhaust VFD's furnished by variable volume controls manufacturer and mounted in stainless steel cabinet located within the kitchens space as indicated on the food service drawings – cabinet furnished by the variable volume controls manufacrurer
  2 - Keypad(s) to control lights and fans for all hoods connected to system (Keypads mounted to hoods in locations as indicated on food service equipment plan)
  3 - Temperature sensors to monitor exhaust air temperature at duct
  4 - Optic sensors with APU to monitor smoke load inside hood
  5 - Electronic exhaust and motor starters to vary fan speed
  6 - Plug-n-play cables to link I/O processor to keypad, sensors, and VFDs
C - Pre-mount Smart Hood system processor and auxiliary light controller in stainless steel cabinet and pre-wire system components at factory and mount in wall mounted location as shown on food service drawings
D - Controls to be pre-programed system based on application and include factory start-up
E - Electrical contractor to field wire I/O processor and branch to hood lights
F - Electrical contractor to field wire the electronic motor starter (VFDs) and branch to respective fans
G - Mechanical contractor to connect plug-n-play cables from I/O processor to each hood
H - Mechanical contractor to start up system and correct fan rotation if necessary
I - Air balance contractor to balance system per hood control system instructions
J - Variable volume control system to be UL and CSA listed and to conform to NFPA 96, BOCA, SBCCI, ICBO, NSF, and CE
K - Variable volume system to be warranted against defects in material and workmanship for a period of three years from purchase date
L - Variable volume system furnished with exhaust VFD's with Bypass Feature for service to exhaust fans of Items 16 and 24. Make-up Air Units to receive 0-10-VDC signal from Smart Hood process for fan speed control
M - Smart Hood system to be programmed for auto start/stop
N - Capable of controlling fan speeds from 50% to 100% based on temperature and optical effluent detection or at the speeds required to allow the exhaust and make-up air units function properly.
O - Locations of all VFD's to be confirmed with the mechanical engineer
P - Variable volume control system to be capable of BacNet/MSTP controls interface for integration into the building automation system
Q - System to include auxiliary light controllers as required
R - Variable volume control manufacturer to include two onsite visits, one reserved for coordination and system start-up and an additional visit to be onsite during balancing.

END OF SECTION 11 4000

GROVE CTY HS

FOODSERVICE EQUIPMENT
BROCHURE BOOKLET

February 29, 2024

REFER TO FOOD SERVICE EQUIPMENT SCHEDULE ON FS100 FOR EQUIPMENT LISTING, QUANTITIES AND DESCRIPTIONS.

Manufacturer's specification sheets are not available for custom fabricated items or items noted as being furnished by owner, beverage vendor, or other trades.

T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

Model No.
B-0133-12CRBJST

Item No.

This Space for Architect/Engineer Approval

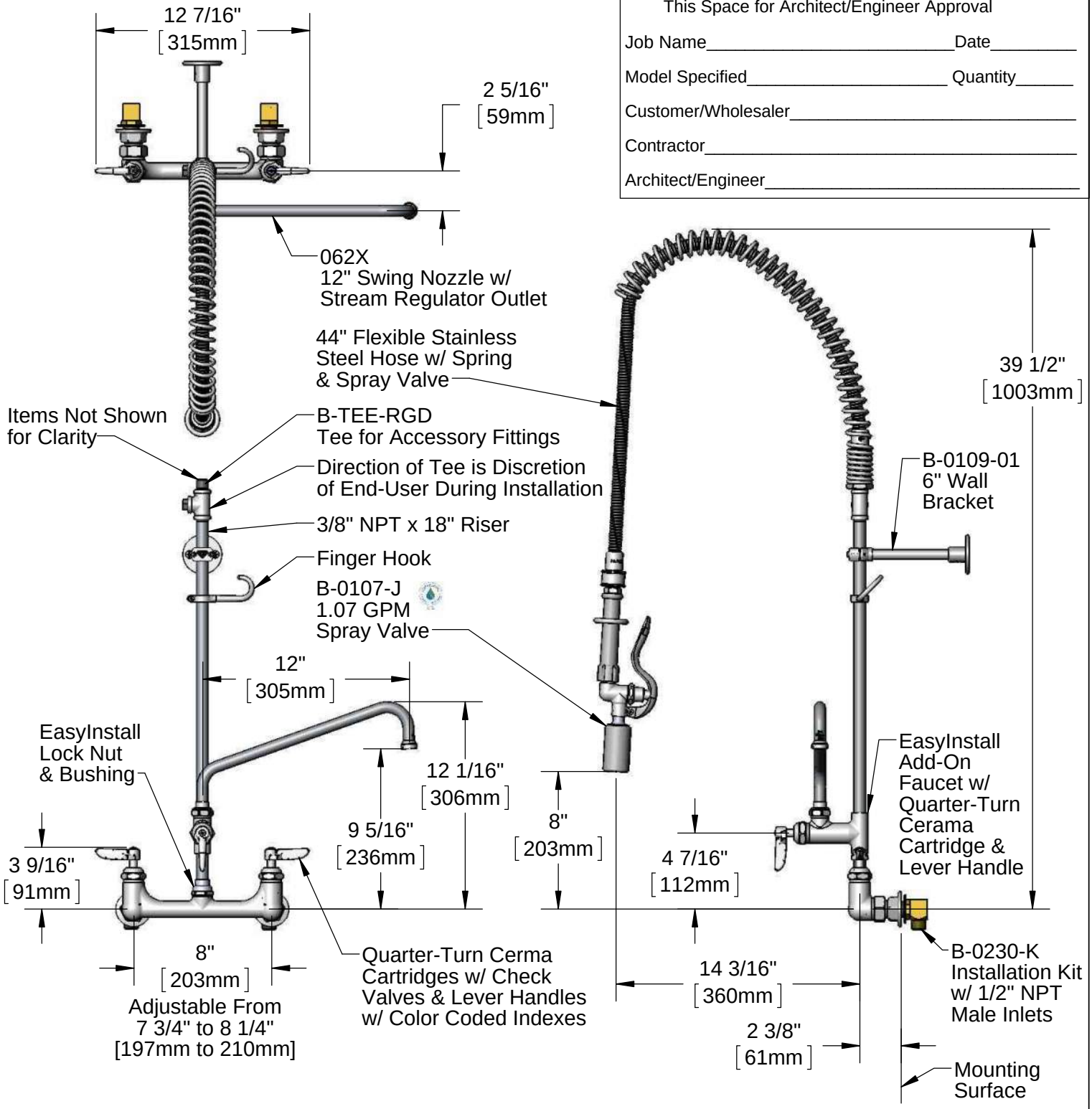
Job Name_____Date_____

Model Specified_____ Quantity_____

Customer/Wholesaler_____

Contractor_____

Architect/Engineer_____



Product Specifications:

EasyInstall Pre-Rinse Unit:
8" Wall Mount Mixing Faucet, Quarter-Turn Cerama Cartridges w/ Check Valves, Lever Handles, Add-On Faucet w/ 12" Swing Nozzle, 44" Flexible Stainless Steel Hose, 1.07 GPM Spray Valve w/ Swivel, 6" Wall Bracket, Accessory Fitting Tee & Installation Kit

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
EPAct 2005 (PRSV)
EPA WaterSense (PRSV)

Drawn:	Checked:	Approved:	Date:	Scale:	Sheet:
KJG	DHL	JHB	03/24/15	1:8	1 of 2

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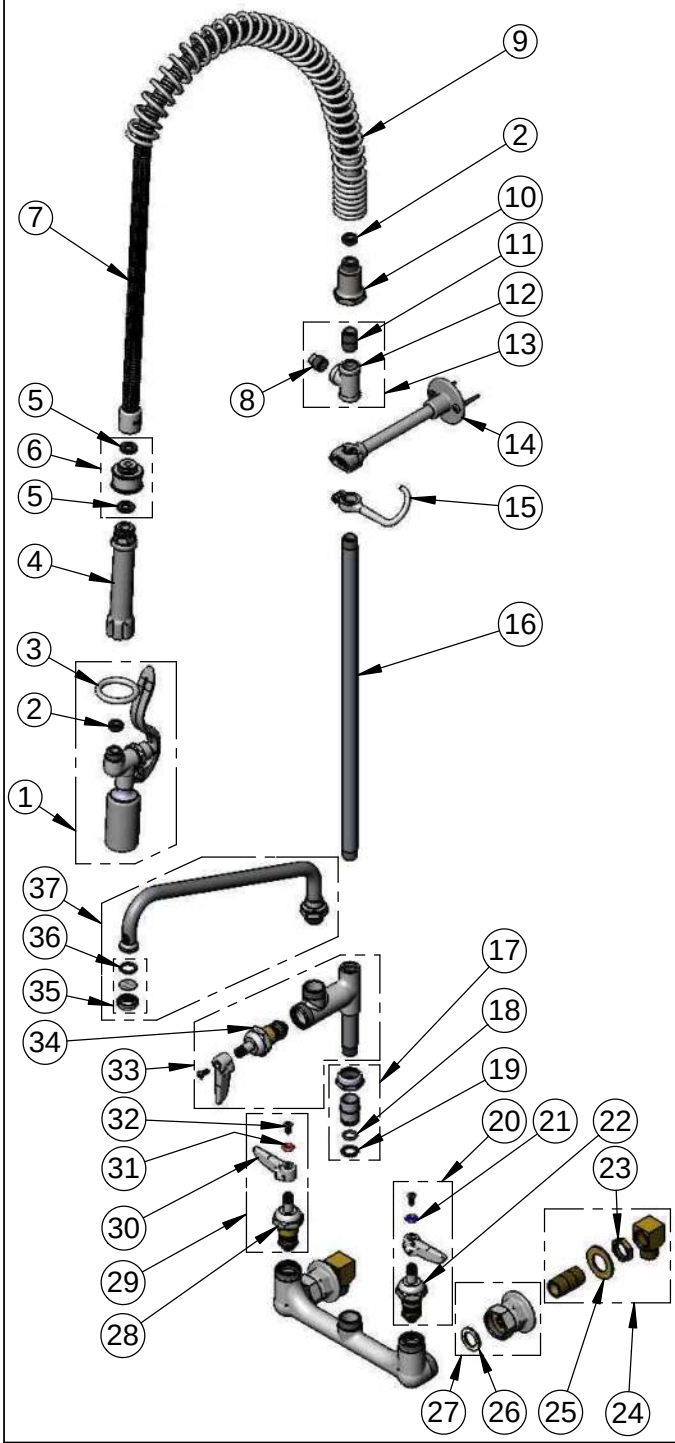
Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

Model No.
B-0133-12CRBJST

Item No.



ITEM NO.	SALES NO.	DESCRIPTION
1	B-0107-J	1.07 GPM Spray Valve
2	010476-45	#27 Washer
3	000907-45	Spray Valve Hold Down Ring
4	002987-40	Grip Handle
5	001014-45	Washer, B-0100 Hose Barrel
6	018200-40	Pre-Rinse Swivel
7	B-0044-H2A	44" Flexible Stainless Steel Hose, Less Handle
8	002369-25	3/8" NPT Plug
9	000888-45	EasyInstall Overhead Spring
10	000821-40	Spring Body
11	002535-25	3/8" NPT Close Nipple
12	001614-40	3/8" NPT Tee
13	B-TEE-RGD	Rigid Tee
14	B-0109-01	6" Wall Bracket
15	004R	Finger Hook
16	000369-40	3/8" NPT x 18" Riser
17	EZ-K	EasyInstall Kit: Nut, Bushing, O-ring & Lock Washer
18	001065-45	O-Ring
19	014200-45	Star Washer, Anti-Rotation
20	012447-25	Quarter-Turn Cerama Cartridge, LTC w/ Check Valve, Handle, Index & Screw
21	001660-45	Blue Index-CW
22	012395-25	Quarter-Turn Cerama Cartridge, LTC w/ Check Valve
23	002954-45	Shank Lock Nut
24	B-0230-K	Short Elbow Installation Kit
25	000999-45	Brass Lock Washer
26	001019-45	Coupling Nut Washer
27	00AA	1/2" NPT Female Eccentric Flange
28	012394-25	Quarter-Turn Cerama Cartridge, RTC w/ Check Valve
29	012446-25	Quarter-Turn Cerama Cartridge, RTC w/ Check Valve, Handle, Index & Screw
30	001638-45	Lever Handle
31	001661-45	Red Index-HW
32	000922-45	Lever Handle Screw
33	B-0155-CR-LN	Add-On Faucet, Less Nozzle
34	011278-25	Quarter-Turn Cerama Cartridge, RTC
35	B-PT	Stream Regulator Outlet
36	001048-45	Nozzle Tip Washer
37	062X	12" Swing Nozzle

Product Specifications:

EasyInstall Pre-Rinse Unit:
8" Wall Mount Mixing Faucet, Quarter-Turn Cerama Cartridges w/ Check Valves, Lever Handles, Add-On Faucet w/ 12" Swing Nozzle, 44" Flexible Stainless Steel Hose, 1.07 GPM Spray Valve w/ Swivel, 6" Wall Bracket, Accessory Fitting Tee & Installation Kit

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
EPAct 2005 (PRSV)
EPA WaterSense (PRSV)

Drawn:	Checked:	Approved:	Date:	Scale:	Sheet:
KJG	DHL	JHB	03/24/15	NTS	2 of 2

REACH-IN REFRIGERATOR

Model: 2RN

Natural Refrigerant R-290 Model

2-Section Reach-In Refrigerator

ENERGY STAR® Qualified Commercial Refrigerator

2RN - Stainless steel front, aluminum end panels and interior
2RNSA - Stainless steel exterior, aluminum interior
2RNSS - Stainless steel exterior and interior

Options and Accessories

(upcharge and lead times may apply)

Stainless steel case back	Shallow depth (consult factory)
Additional epoxy coated steel shelves	Hinged glass door (consult factory)
Chrome or stainless steel shelves	Special electrical req. (consult factory)
Heavy duty pilaster strips	Rehinging of doors (consult factory)
Adjustable legs	**Correctional Facility Options**
Custom laminates	• One way security screws
Half doors	• Locking hasp (lock not included)
Pass-Thru (consult factory)	• Stainless steel mesh cover
Pan slide assemblies	• Coverless hinges
Wine Rack	

Consult factory for other model configurations, options and accessories.

Continental® Refrigerator

Toll-Free: 800-523-7138
Phone: 215-244-1400
Fax: 215-244-9579

539 Dunksferry Road
Bensalem, PA 19020
www.continentalrefrigerator.com

Project Name:

Model Specified:

Location:

Item No: **Quantity:**

AIA #: **SIS #:**

Standard Model Features

REFRIGERATION SYSTEM

- Self contained, performance rated refrigeration system
- Natural, environmentally safe, high efficiency R-290 refrigerant[1]
- Automatic, electric condensate evaporator
- Expansion valve system

CABINET ARCHITECTURE

- 3” non-CFC polyurethane foam insulation
- Smooth, polished chrome workflow door handles
- Cam action, lift off hinges
- Self-closing doors
- Magnetic snap in Santoprene™ door gaskets
- Cylinder lock in each door
- Heavy duty, epoxy coated steel shelves
- 5” casters

MODEL FEATURES

- LED interior lighting
- Electronic controller with digital display & hi-low alarm
- Off-cycle defrost

[1] R-290 refrigerant meets all federal and state regulatory requirements.

APPROVAL:

Model Specifications

DIMENSIONAL DATA

Net Capacity (cubic feet)	48 (1359 cu l)
Width, Overall (inches)	52 (1321 mm)
Depth, Overall (inches) (including handles)	35 ⅜ (899 mm)
Depth (inches) (less doors)	32 (813 mm)
Depth (inches) (doors open 90°)	55 ½ (1410 mm)
Clear Door Width (inches)	19 ⅜ (492 mm)
Clear Door Height (inches)	58 ⅝ (1489 mm)
Height, Overall (inches) (including 5" casters)	82 ¼ (2089 mm)
Number of Doors	2
Number of Shelves	6
Shelf Area (square feet)	40.8 (3.8 sq m)
Tray Slide Capacity (per section)	24

REFRIGERANT DATA

Condensing Unit Size (H.P.)	⅓+
Capacity (BTU per hour)*	2560

ELECTRICAL DATA

Voltage (International)	115/60/1 (220/50/1)
Feed Wires (including ground)	3
Total Amps (International)	8.1 (4.9)
10 ft. Cord/Plug [attached] (International)	Yes (No)

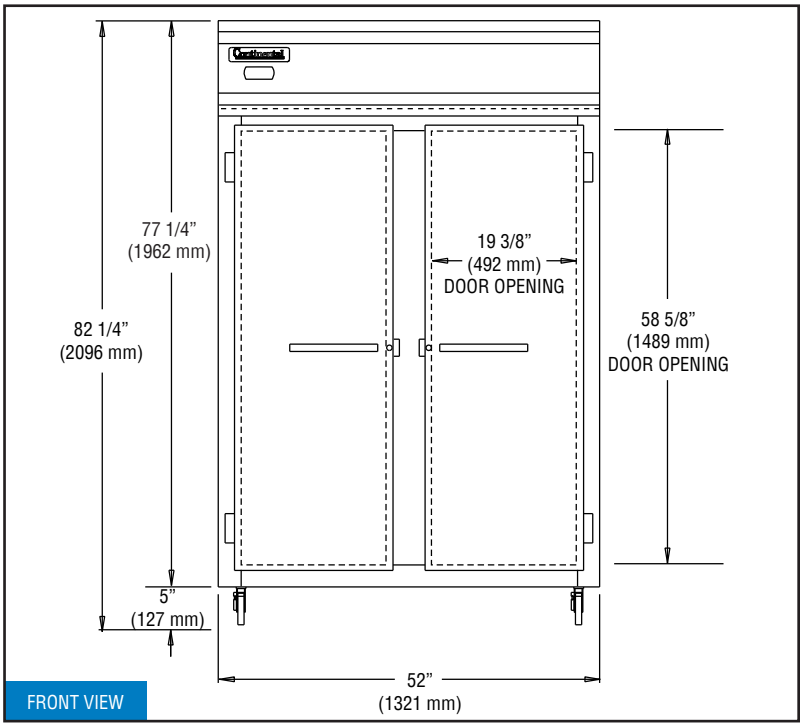
SHIPPING DATA

Height - Crated (inches)	85 ½ (2172 mm)
Width - Crated (inches)	64 (1626 mm)
Depth - Crated (inches)	42 (1067 mm)
Volume - Crated (cubic feet)	133 (3766 cu l)
Weight Std - Crated (pounds)	433 (196 kg)
Weight SS - Crated (pounds)	455 (206 kg)

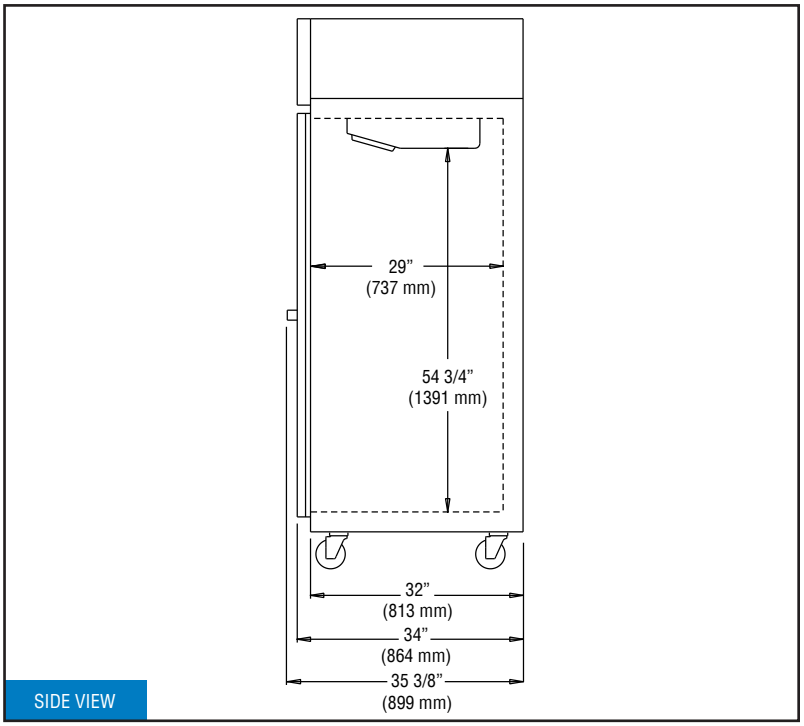
* Rating @ +25°F evaporator, 90°F ambient
Figures in parentheses reflect metric equivalents rounded to the nearest whole unit.

Equipped with one NEMA-5-15P Plug
(varies by country)

Model Plan Views



FRONT VIEW



SIDE VIEW

IMPORTANT NOTE: If the cabinet is located directly against a wall and/or under a low ceiling, a minimum clearance of 12" is required on top and 3" on sides and rear.

Continental Refrigerator

Toll-Free: 800-523-7138
Phone: 215-244-1400
Fax: 215-244-9579

539 Dunksferry Road
Bensalem, PA 19020
www.continentalrefrigerator.com

Due to our continued efforts in developing innovative products, specifications subject to change without notice.

Proudly Designed and Assembled in the USA

REVISED: 4/6/2022

EV9324-21

Insurice Single PF-i2000² System

Delivers premium quality water for ice applications

Insurice Single PF-i2000² System: EV9324-21

i2000² Replacement Cartridge: EV9612-22

EC210 Prefilter Cartridge: EV9534-26

BENEFITS

Reduces water-related ice machine problems caused by scale build-up from dirt and dissolved minerals

New and improved Micro-Pure II media inhibits the growth of bacteria

Reduces chlorine taste and odor and other offensive contaminants

Self-contained scale inhibitor feed keeps ice machines functioning at full capacity

Reduces maintenance and service costs by reducing scale and clogging of distribution lines, evaporator plate and pump

Precoat submicron technology reduces dirt and particles as small as 1/2 micron in size and reduces possible health contaminants such as cysts

20" prefilter reduces dirt and particles

Sanitary cartridge replacement is simple, quick and clean. Internal filter parts are never exposed to handling or contamination

INSTALLATION TIPS

Choose a mounting location suitable to support the full weight of the system when operating

Never use saddle valve for connection

Use 3/8" water line

Do not connect system to water-cooled condenser

Install vertically with cartridges hanging down and allow 2-1/2" clearance below the cartridge for easy cartridge replacement

Flush cartridges by running water through system for five minutes at full flow

OPERATION TIPS

Change cartridges on a regular 6 month preventative maintenance program

Change cartridges when capacity is reached or when pressure falls below 10 psi

Service flow rate must not exceed 1.67 gpm

Always flush the filter cartridge at time of installation and cartridge change

Inspect EC210 cartridge periodically to determine dirt load

Replace EC210 cartridge when dirt has penetrated through to the inner core of the cartridge

APPLICATION/SIZING

For ice machine applications

Most cubers up to 750 lbs./day

Most flakers up to 1,500 lbs./day

Rated Capacity: 9,000 gallons

Insurice Single PF-i2000² System

SPECIFICATIONS

Overall Dimensions:
28"H x 20"W x 6"D

Inlet connection: 3/8"

Outlet connection: 3/8"

Service Flow Rate:
Maximum 1.67 gpm (6.3 Lpm)

Rated Capacity: 9,000 gallons

Pressure Requirements:
10 - 125 psi (0.7 – 8.6 bar), non-shock

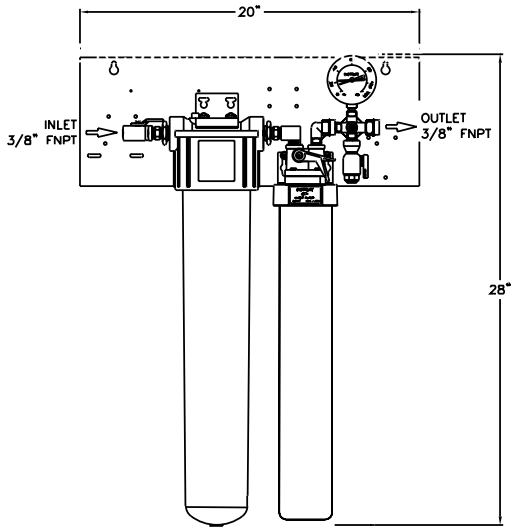
Temperature: 35 - 100°F (2 - 38°C)

No electrical connection required

Shipping Weight: 18 lbs.

Operating Weight: 24 lbs.

The contaminants or other substances removed or reduced by this drinking water system are not necessarily in your water. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used with disinfected water that may contain filterable cysts.



WARRANTY

Everpure water treatment systems (excluding replaceable elements) are covered by a limited warranty against defects in material and workmanship for a period of five years after date of purchase. Everpure replaceable elements (filter cartridges and water treatment cartridges) are covered by a limited warranty against defects in material and workmanship for a period of one year after date of purchase. See printed warranty for details. Everpure will provide a copy of the warranty upon request.

EVERPURE®

EVERPURE, LLC
1040 Muirfield Drive
Hanover Park, Illinois 60133
Toll Free (800) 323-7873
Tel (630) 307-3000
Fax (630) 307-3030
http://www.everpure.com

In Europe:
N.V. EVERPURE (EUROPE) S.A.
Industriepark Wolfstee
Toekomstlaan 30
B-2200 Herentals
Belgium
Tel 32 -14-283500
Fax 32-14-283505

In Japan:
EVERPURE JAPAN LLC
Hashimoto MN Bldg. 7F
3-25-1 Hashimoto Sagamihara-Shi
Kanagawa 229-1103
Japan
Tel 81-(0)42-775-3011
Fax 81-(0)42-775-3015

Everpure, LLC
1040 Muirfield Drive
Hanover Park, IL 60133
Ph: 630-307-3000 Fax: 630-307-3030

ADVANCE TABCO
SMART FABRICATION™

STAINLESS STEEL

HAND SINKS

PEDESTAL BASE

Conforms To NSF 61/9 Lead Free Requirements

7-PS-90

7-PS-96

7-PS-95

7-PS-99

7-PS-18

Item #:_____ **Qty #:** _____

Model #: _____

Project #: _____

FEATURES:

One piece **Deep Drawn** sink bowl design.

Sink bowl is 10" x 14" x 5"*.

(***7-PS-18** sink bowl is 14" x 16" x 6")

All sink bowls have a large liberal radii with a minimum dimension of 2" and are rectangular in design for increased capacity.

Stainless steel basket drain 1-1/2" IPS.

Flush-to-wall unit.

"Hands Free" splash mounted gooseneck faucet furnished with aerator. (**Faucet Flow Rate:** 1.0 GPM/3.8 LPM aerator. 60 PSI.)

Foot Pedal Valve for water operation.

Easy removable panel to access hidden plumbing.

Specific Features:

7-PS-95 towel dispenser with hinged towel box. Unit uses standard C-fold towels. Liquid Soap dispenser.

7-PS-96 includes two 7-3/4" high Side Splashes.

7-PS-99 towel dispenser & soap dispenser plus trash receptacle & cabinet storage.

CONSTRUCTION:

All TIG welded.

Welded areas blended to match adjacent surfaces and to a satin finish.

Die formed Countertop Edge with a No-Drip offset.

One sheet of stainless steel - No Seams.

MATERIAL:

Heavy gauge type 304 series stainless steel.

Wall mounting bracket is galvanized and of offset design.

All fittings are brass / chrome plated unless otherwise indicated.

MECHANICAL:

Single pedal mixing valve with 3/8" NPT Female. Built in check valve. Front operated temperature adjustment.

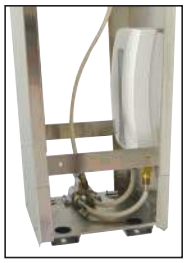
(Contractor on site must connect faucet to foot pedal operated valves.)

NOW AVAILABLE

Tankless Electric Heater

Only Needs Cold Water Supply

7-PS-92



Please See Tankless Heater Specification Sheet for Details

⚠ WARNING:

Equipment that includes a faucet may expose you to chemicals, including lead, that are known to the State of California to cause cancer or birth defects or other reproductive harm. For more Info.,visit www.p65warnings.ca.gov.

ADVANCE TABCO
SMART FABRICATION™
www.advancetabco.com

Customer Service Available To Assist You 1-800-645-3166 8:30 am - 7:00 pm E.S.T.

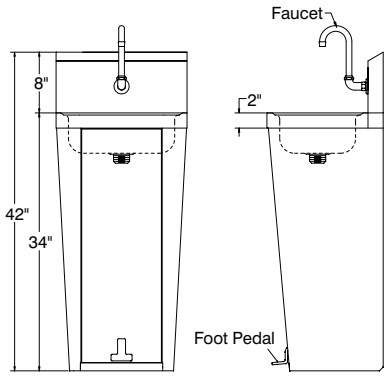
For Orders & Customer Service:
Email: customer@advancetabco.com or Fax: 631-242-6900

For Smart Fabrication™ Quotes:
Email: smartfab@advancetabco.com or Fax: 631-586-2933

DIMENSIONS and SPECIFICATIONS

TOL Overall: ± .500” Interior: ± .250” **FITTINGS SUPPLIED AS SHOWN** **ALL DIMENSIONS ARE TYPICAL**

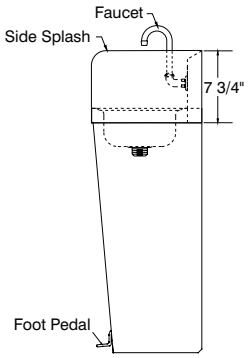
7-PS-90



Pedestal Base Front View
For 7-PS-90 & 7-PS-96

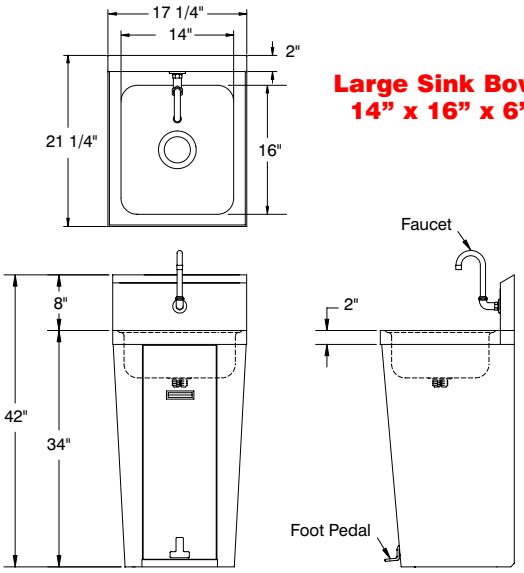
41 lbs.

7-PS-96



47 lbs.

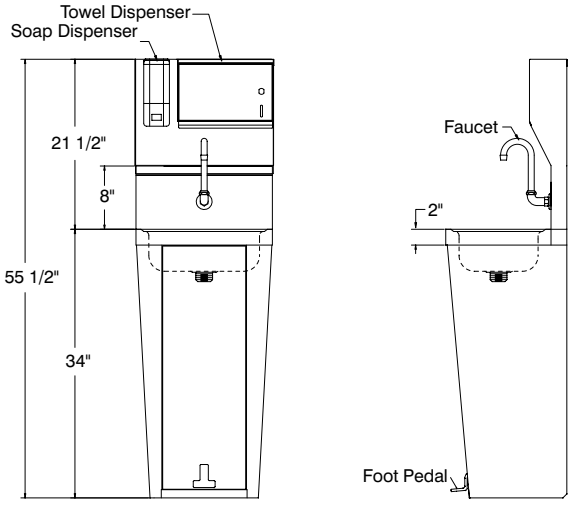
7-PS-18



Large Sink Bowl
14” x 16” x 6”

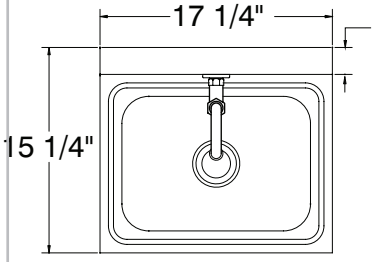
50 lbs.

7-PS-95

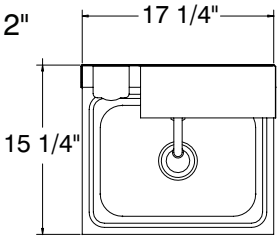


54 lbs.

TOP VIEW 7-PS-90 & 7-PS-96

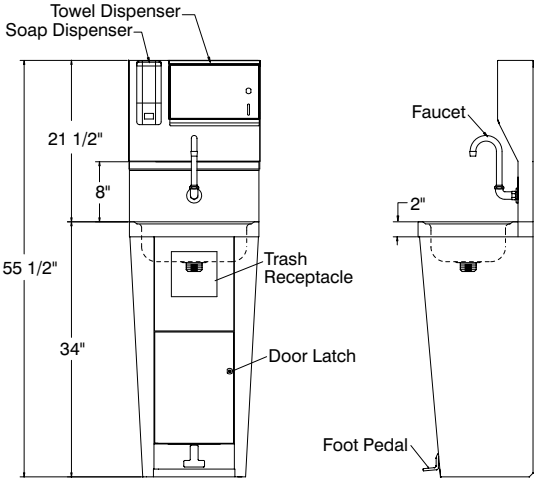


TOP VIEW 7-PS-95 & 7-PS-99



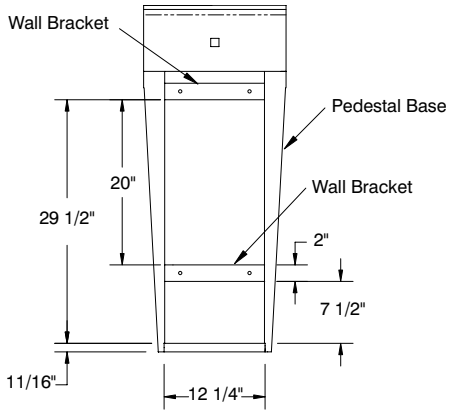
Sink Bowls 10” x 14” x 5”

7-PS-99



59 lbs.

REAR VIEW OF STANDARD PEDESTAL BASE UNITS

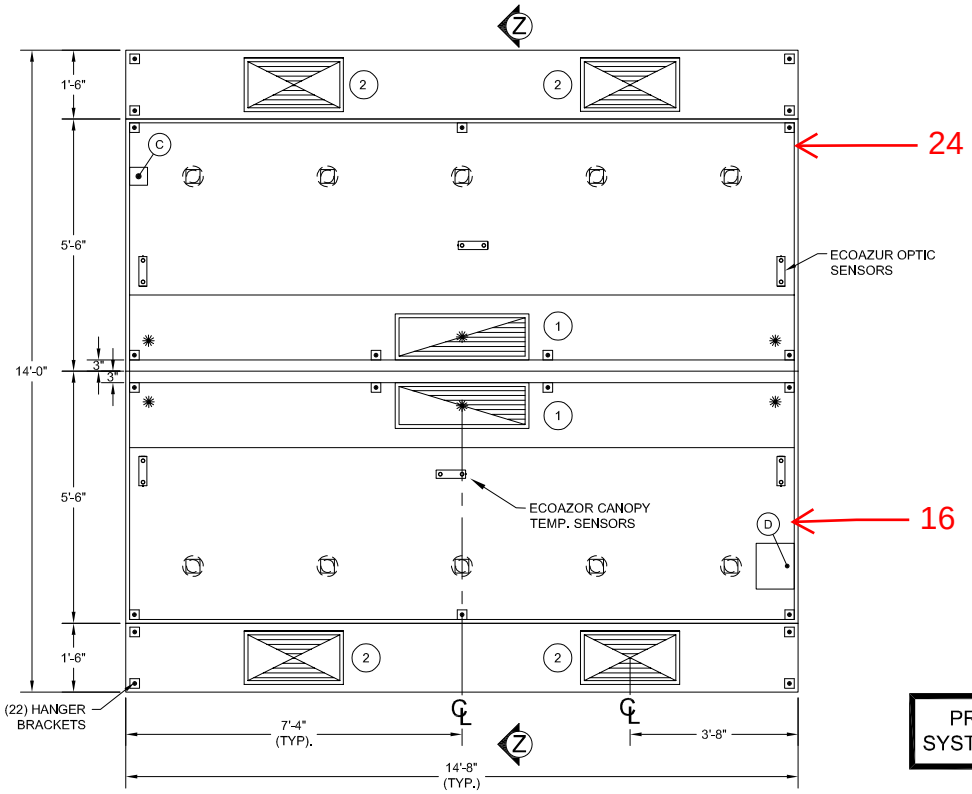


ADVANCE TABCO
SMART FABRICATION™

325 Wireless Boulevard, Hauppauge, NY 11788

ADVANCE TABCO is constantly engaged in a program of improving our products. Therefore, we reserve the right to change specifications without prior notice.

16



PLAN
NO SCALE

OPTIONS

4" EXHAUST DUCT
(2) ECOAZUR TEMP. SENSORS
(4) ECOAZUR OPTIC SENSORS
(6) SLIDING DAMPERS IN EXHAUST AND SUPPLY
ECOAZUR SYSTEM

TOTAL EXHAUST : 8,214 C.F.M.	
TOTAL SUPPLY : 6,572 C.F.M.	

PROVIDE RESPONSE TO RFI ON ECOAZUR SYSTEM REQUIREMENTS AND WIRING DETAILS.

[ ] VERIFY INSTALL LOCATION OF THE ECOAZUR SYSTEM CONTROL PANEL, AND KEYPAD.

[ ] VERIFY QUANTITY, MAKE, MODEL, & HP OF THE EXHAUST AND SUPPLY FANS.

D (10) LED LIGHT FIXTURES
(0.12 K.W., 120/1/60 FROM ECOAZUR)

1 10" X 33" EXHAUST DUCTS 4,107 C.F.M. EACH @ 1.00" S.P.	2 12" X 24" SUPPLY DUCTS 1,643 C.F.M. EACH @ 0.20" S.P.

FIRE PROTECTION SYSTEM : ANSUL R-102
(SURFACE, PLENUM, AND DUCT COLLAR PROTECTION).

TOTAL EST. HANGING WT. : 2,640 LBS.

CADDY AirSystems
509 SHARPTOWN ROAD
P.O. BOX 345 BRIDGEPORT NJ 08014
Tel:(856) 467-4222 Fax:(856) 467-5511

THIS DRAWING IS PROVIDED AS A PRELIMINARY DESIGN DATA SHEET.
IT IS NOT TO BE USED FOR CONSTRUCTION OR FABRICATION APPROVAL PURPOSES.

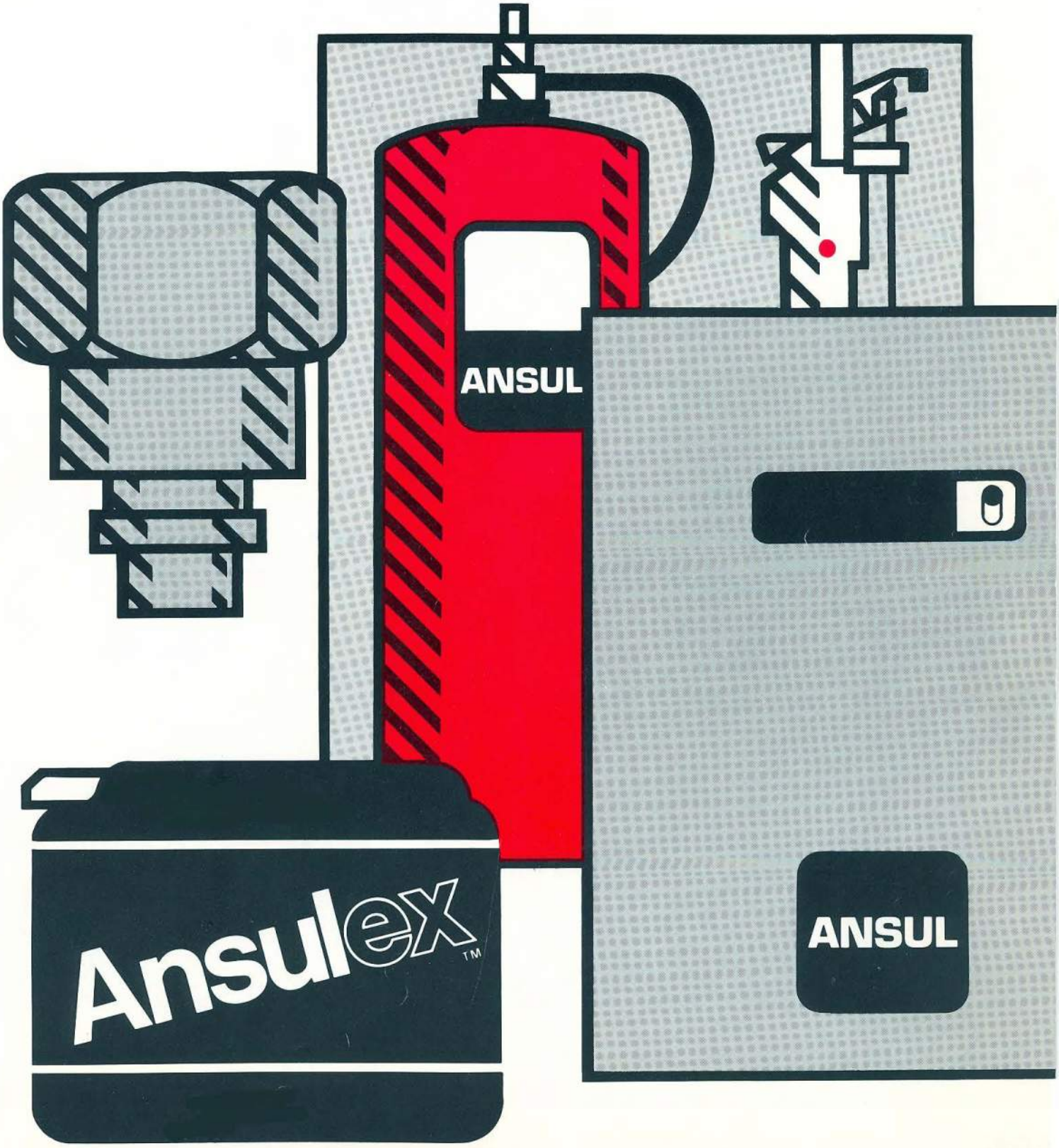
Mechanical Air Data & Dimensions

ITEM #: 1	CADDY #: 38874	MODEL #: PB-C-I-176-ND-66 W/ CEILING SUPPLY PLENUMS
JOB NAME: GROVE CITY HS GROVE CITY, PA		DATE: 12/23/23
		DR. BY: SHUBHAM
		SH. #: 1 OF 4

MD-03440A 02/20/24 B.S. ECOAZUR COMPONENTS & SUPPLY PLENUMS ADDED AS PER 2/19 REQUEST.

ANSUL®

Restaurant Fire Suppression Systems

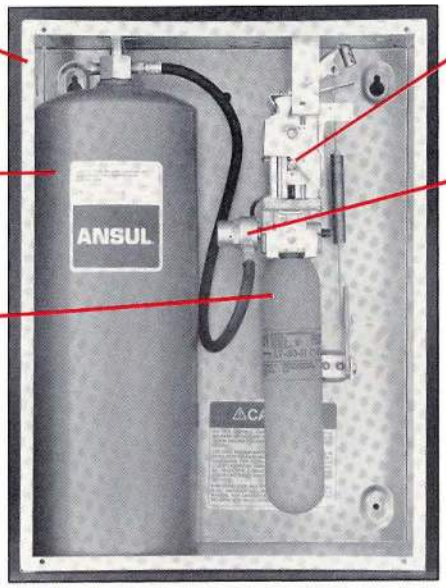


Check out the features of the Ansul R-102 System...

Stainless Steel Enclosure... An Ansul exclusive... aesthetically appealing... blends in with kitchen equipment... protects against tampering, damage.

Agent Storage Tank... Carbon steel... pressurized only when system is actuated... leak-proof... low maintenance... allows for fast, on-site recharging.

Nitrogen Cartridge... Positive seal, self-contained, no maintenance of valve required.

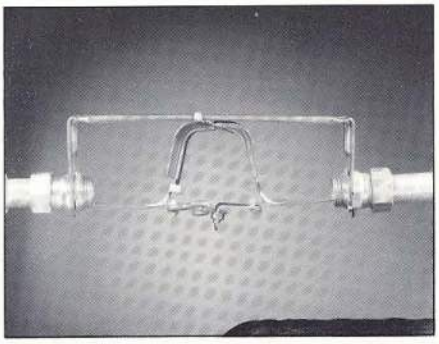


ANSUL AUTOMAN Release... Visible cocked/fired indicator... provides positive actuation of system... needs no periodic adjustment.

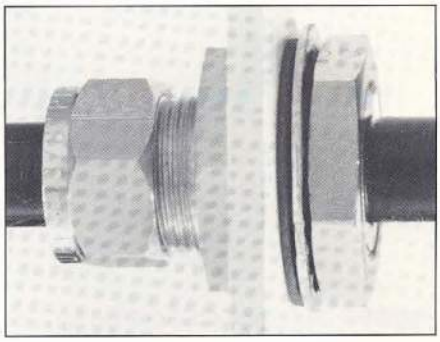
Regulator... 100 psi regulated pressure ensures constant flow of agent and consistent nozzle discharge pattern.

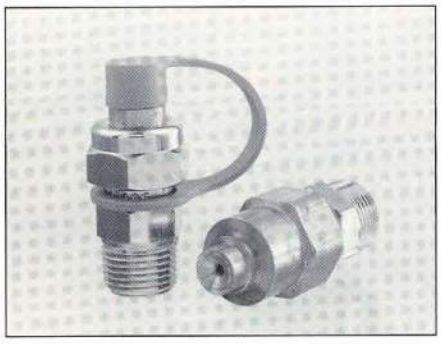
Manual Pull Station... Permits quick, sure manual actuation of the system by anyone regardless of fire fighting experience... break rod indicating manual system operation.

Fuse Link Detection System... Unique bracketing provides positive actuation upon exposure to heat.



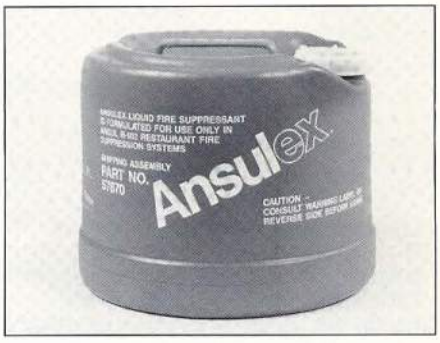
Hood-Seal Adaptors... Threaded or compression-seal options provide tight seal for hood penetrations required for distribution pipe or detection lines... more aesthetically appealing than welded seal.





Nozzles... Designed to provide agent discharge coverage to each special hazard area... special blow-off caps reduce the risk of grease vapor contamination... chrome plating matches hood and appliances.

Mechanical or Electrical Gas Shutoff Valve... Shuts off fuel or power source upon detection of fire... clearly marked open/closed indicator.



ANSULEX Liquid Fire Suppressant... Effective fire suppression for all restaurant duct, hood and appliance hazard areas... helps to prevent fire reflash... easy, fast clean up after discharge... rechargeable on-site with minimum downtime.

ANSUL®

RESTAURANT FIRE SUPPRESSION SYSTEMS DATA SHEET

GENERAL SPECIFICATIONS MODEL R-102

Total System

The restaurant fire suppression system shall be the pre-engineered, liquid agent, cartridge-operated type with a fixed nozzle agent distribution network. It shall be listed with Underwriters Laboratories, Inc. (UL).

The system shall be capable of automatic detection and actuation with local or remote manual actuation. Accessories shall be available for mechanical or electrical gas line shut-off applications.

The system shall have fire suppression capabilities for the following restaurant hazard areas: ventilating structures including hoods, ducts, plenums, and filters; deep-fat fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas-radiant char-broilers.

A system owner's manual* shall be available containing basic information pertaining to system operation. A detailed technical manual shall be available including system description, design, installation, recharge, and maintenance procedures, plus accessory installation and reset instructions.

The system shall be installed and serviced by authorized distributors that are trained and certified by the manufacturer.

System Equipment

Agent – The extinguishing agent shall be a potassium carbonate, potassium acetate-based formulation designed for flame knockdown and securement of grease-related fires. It shall be available in plastic containers with instructions for liquid agent handling and usage.

Agent Tank – The agent tank shall be installed in a stainless steel enclosure or wall bracket. The tank shall be stainless steel or deep drawn carbon steel finished in red enamel. The tank shall be hydrostatically tested at intervals not exceeding 12 years.

The tank shall have a nominal capacity of 1.5 gal. (5.7 L) or 3 gal. (11.4 L) with a working pressure of 100 psi (690 kPa), a test pressure of 300 psi (2069 kPa), and a minimum burst pressure of 600 psi (4137 kPa).

The tank shall include an adaptor/tube assembly. The adaptor shall be chrome-plated steel with a 1/4-18 NPT female inlet and a 1/2-14 NPT male outlet. The pick-up tube shall be carbon steel – 1/2 in. O.D. by .028 wall. A vent plug shall be integral to the adaptor.

* The Ansul R-102 Restaurant Fire Suppression System Installation, Recharge, and Maintenance Manual is Part No. 71961.

Regulated Release Mechanism – The regulated release mechanism shall be the spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks, depending on the capacity of the nitrogen cartridge used. It shall contain a factory-installed regulator deadset at 100 psi (690 kPa) with an internal relief of approximately 130-150 psi (896-1034 kPa). In the "armed" position, the main spring force to the puncture pin piston shall be 150 lb. (68 kg). The mechanism shall have a visual indicator of the cocked or fired condition without having to open the enclosure.

The regulated release mechanism shall have the following actuation capabilities: automatic actuation by a fusible link detection system; remote manual actuation by a mechanical pull station; local manual actuation by a push button located at the front of the release mechanism enclosure.

The regulated release mechanism shall contain a release assembly, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover. The enclosure shall contain knock-outs for 1/2 in. conduit. The cover shall contain openings for the push button and visual indicator.

The regulated release mechanism shall be compatible with mechanical gas line shut-off devices; or, when equipped with a field or factory-installed solenoid and switch, it shall be compatible with electric gas line or appliance shut-off devices.

Regulated Actuator – When more than two agent tanks are required, the regulated actuator(s) shall be available to provide expellant gas for additional tank(s). It shall be connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent discharge. It shall contain a regulated actuator deadset at 100 psi (690 kPa) with an internal relief of approximately 130 to 150 psi (896 to 1034 kPa).

The regulated actuator assembly shall contain a regulated actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover. The enclosure shall contain knockouts to permit installation of expellant gas line.

Tank/Bracket Assembly – The tank/bracket assembly shall contain a welded steel bracket and agent tank. The bracket shall be provided to mount the agent tank in a minimum amount of space. The tank shall be secured with hinged bracket bands.

Discharge Nozzles – Each discharge nozzle shall be tested and listed with the restaurant system for specific applications. The nozzle tip shall be brass or chrome-plated brass, and stamped with the part number and flow rating. The nozzle tip retainer and body shall be chrome-plated brass. The nozzle strainer shall be brass with stainless 50 mesh screen. Each nozzle tip shall be covered by a protective blow-off cap.

Detection System – The regulated release mechanism shall be compatible with a fusible link detection system.

The fusible link shall be selected and installed according to the operating temperature in the ventilating system.

The fusible link shall be supported by a detector bracket/linkage assembly. The detector bracket shall be 16 ga. cold-rolled stainless steel. The detector linkage shall be 20 ga. cold-rolled stainless steel.

The detector bracket/linkage assembly shall have provisions for connecting 1/2 in. rigid or EMT thin-wall conduit, and 1/16 in. (1.6 mm) diameter flexible stainless steel rope. Changes in the direction of the conduit and steel rope shall be accomplished with die cast aluminum alloy, 90° pulley elbows.

Accessory Equipment

The following accessory equipment shall be available, and shall be compatible with the liquid agent restaurant fire suppression system:

Remote Manual Pull Station – If the release mechanism is not accessible for manual actuation, a remote manual pull station shall be provided as the primary means of manual actuation. The pull station shall be the break-rod type, and shall be connected to the release mechanism trip lever by means of a 1/16 in. (1.6 mm) diameter stainless steel rope and 1/2 in. conduit. The pull station shall be located at a distance of not more than 125 ft. (38 m) from the release mechanism. The mounting height of the pull station shall be in accordance with the authority having jurisdiction.

Mechanical Gas Line Shut-Off Valve – A UL listed, mechanical gas valve shall be provided when automatic gas line shut-off is required for indoor applications. It shall be adapted to the release mechanism cartridge receiver by means of a pneumatic piston-type air cylinder. The valve shall have resilient seating with an aluminum body and stainless steel internal parts. It shall be a two-way valve requiring 4-15 lb. (1.8-6.8 kg) of pull force to trip. The valve (3/4 to 2 in.) shall have an external visual indicator of the closed or open position.

Electric Gas Line Shut-Off Valve – A UL listed, electric gas valve shall be provided when an electrical means of gas line shut-off is required for indoor applications. The gas valve shall incorporate an electric snap-action switch and a manual reset relay with its electric circuit for 110 VAC, 50/60 Hz or 24 VAC, 50/60 Hz. In 24 VAC applications, a transformer with the appropriate voltage rating shall be provided. The gas valve shall be constructed of aluminum with an operating temperature range of 32 °F to 120 °F (0 °C to 49 °C).

Electric Switch – A UL listed, electric snap-action switch shall be provided to shut off electrical power to appliances, or to activate electrically-operated devices. Depending on the application, the switch shall be either single-pole, double-throw; double-pole, double-throw; or four-pole, double-throw. The switch shall have a rating of 15 amps, 1/3 hp, 125 or 250 VAC with 5 amps at 125 VAC "L," 1/2 amp at 125 VDC, or 1/4 amp at 250 VDC. A relay shall be supplied if the equipment load exceeds the rated capacity of the switch.

Pressure Switch – A UL listed, pneumatically-operated switch shall be provided to shut off electrical power to appliances, or to activate electrically-operated devices. The switch shall be connected to the release mechanism cartridge receiver utilizing 1/8 in. copper tubing and fittings. Depending on the application, the switch shall be single-pole, double-throw or double-pole, double-throw. The switch shall have a rating of 20 amps – 125, 250, or 480 VAC with 10 amps at 125 VAC "L," 1 hp-115 VAC, 2 hp-230 VAC; 1/2 amp at 125 VDC; or 1/4 amp at 250 VDC. A relay shall be supplied if the equipment load exceeds the rated capacity of the switch.

Garland

Master Series Open Burner Range Attachment

Item: _____

Quantity: _____

Project: _____

Approval: _____

Date: _____

Models

☐ MST4S ☐ MST4S-E ☐ MST4T ☐ MST4T-E

17" Range Attachment With 2 Open Burners

Model MST4S
(valve control panel not as depicted)

Standard Features:

- Stainless steel front and sides
- Stainless steel door
- 6" (152mm) chrome steel adj. legs
- 7-1/2" (191mm) stainless steel front rail
- Two (2), two -piece Starfire burners with removable heads, rated 30,000 BTU (8.78 kW) CE approved or 35,000 BTU (10.25 Kw) CSA approved models (natural or propane gas)
- Removable ring grate bowl over each burner
- Cast iron top grates
- One piece stainless steel drip tray
- Storage base interior of aluminized steel
- Electric Spark ignition on all pilots Suffix -E models
- Sentry total flame failure protection for all burners

Optional Features:

- ☐ Stainless steel main back
- ☐ Stainless steel common front rail up to 102" (2591mm) wide (two or more units in a battery)
- ☐ Gas regulator 3/4" or 1-1/4"
- ☐ Gas shut off valve; 3/4", 1" or 1-1/4" NPT
- ☐ Gas flex hose & quick disconnect (3/4", 1" or 1-1/4" NPT x 5') w/ restraining device, please specify
- ☐ Rear gas connection, 3/4" NPT
- ☐ End caps and cover (NC, Specify)
- ☐ Polyurethane non-marking swivel casters (4) w/front brakes
- ☐ 6" (152mm) stainless steel adj. legs
- ☐ Modular stand, (T model)
- ☐ Stainless steel tubular high shelf, single or double deck
- ☐ Stainless steel backguard: 10" (354mm), 17" (432mm) or 33" (838mm) high
- ☐ 230 volt, 50 cycle components electric ignition (export)

Specifications:

Heavy-duty gas range attachment with storage base, Model MST4S. Two (2) 30,000 BTU (8.78 kW) two piece Starfire burners. Sentry total flame failure protection for all burners. Heavy-duty cast iron top grate/ ring grates. 17" (432mm) wide x 38" (965mm) deep, including 7-1/2" (191 mm) deep stainless steel front rail. Stainless steel front and sides. 60,000 BTU (17.57 kW) total. Natural or propane gas. Also available with modular top, suffix T.

NOTE: Attachments suppled with casters must be installed with an approved restraining device.

Garland Commercial Ranges Ltd.
1177 Kamato Road,
Mississauga, Ontario
L4W 1X4 CANADA

General Inquires 1-905-624-0260
USA Sales, Parts and Service 1-800-424-2411
Canadian Sales 1-888-442-7526
Canada or USA Parts/Service 1-800-427-6668

Manitowoc

Master Series Open Burner Range Attachment

Garland

Master Series Open Burner Range Attachment

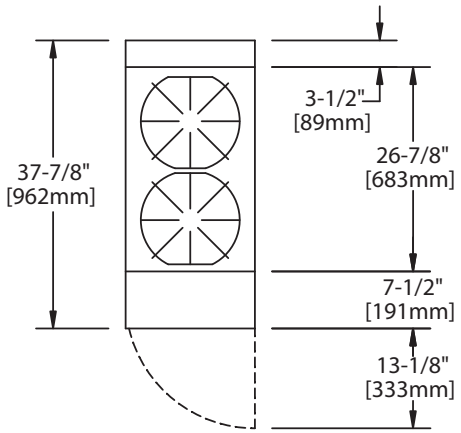
Product	Width: In(mm)	Depth: In(mm)	Height: In(mm) (w/ NSF Legs)	Height: In(mm) (w/o NSF Legs)	Storage Base Interior: in(mm)		
					Width	Depth	Height
MST4S	17(432)	38(965)	36-3/8(924)	30-3/8(772)	14(356)	32-1/2(826)	20-1/2(519)
MST4T	17(432)	38(965)	36-3/8(924) w/stand	9-1/2(241) w/o stand*	N/A	N/A	N/A

*Modular top has 1-1/2" seating flanges.

INPUT-BTU/hr (Natural Gas)	MST4S	MST4T
CE Approved Models 2 Open Burners (30,000 BTU each)	60,000 (17.57kW)	60,000 (17/57kW)
CSA Approved Models 2 Open Burners (35,000 BTU each)	70,000 (20.50 kW)	70,000 (20.50 Kw)

S=Range w/Storage Base T=Modular Top

INSTALLATION NOTES			Shipping (Lb/Kg) – Cu Ft
Combustible Wall Clearances [1]	**Entry Clearances**	**Manifold Operating Pressure**	
Sides: 14" (356mm) Back: 6" (152mm)	Crated: 22 1/4" (565mm) Uncrated: 17-1/4" (438mm)	Natural: 6" WC (15mbar) Propane: 10" WC (25mbar)	MST4S 200/91 – 26 MST4T 120/55 – 9

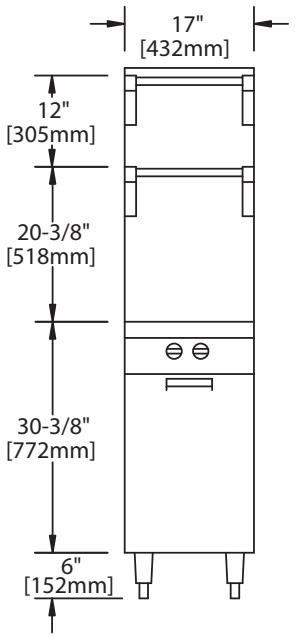


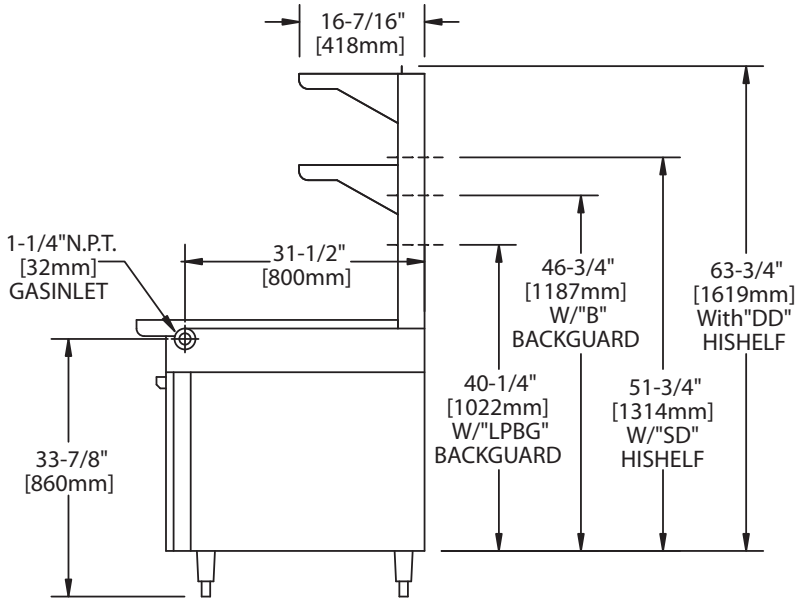
[1]NOTE: Installation clearance reductions are applicable only where local codes permit.

Gas input ratings shown here are for installations up to 2,000 ft. (610m) above sea level. Specify altitudes over 2,000 ft.
Please specify gas type when ordering.

Electrical characteristics: **Each RC oven** –1/3 HP motor, 120 VAC, single phase, 3.4 amps (c/w 6 ft. (1.8m) power cord with NEMA 5-15P plug). 230 VAC export is direct connect, single phase, 50 Hz. **Electrical Spark Ignition** (suffix "E") – 0.1 amps for 115V 60Hz 1 Phase (c/w NEMA 5-15P cord & plug on models with out RC oven) and 0.05 amps for240C 50Hz 1 phase.

This product is not approved for residential use.





Form# MST4SMST4T (05/27/13)

Garland Commercial Ranges Ltd.
1177 Kamato Road,
Mississauga, Ontario
L4W 1X4 CANADA

General Inquires 1-905-624-0260
USA Sales, Parts and Service 1-800-424-2411
Canadian Sales 1-888-442-7526
Canada or USA Parts/Service 1-800-427-6668

Manitowoc

For Commercial Applications

Job Name _____
Job Location _____
Engineer _____
Approval _____

Contractor _____
Approval _____
Contractor's P.O. No. _____
Representative _____
SKU _____

Double Swivel MAX® /SnapFast® Quick-Disconnect Assemblies

Sizes: ½" to 1¼" (15 to 32mm)

Double Swivel MAX/SnapFast Quick-Disconnect Assemblies feature flexible movement and the one-handed quick-disconnect fitting with a unique thermal shut-off design that automatically shuts off the gas when the internal temperature exceeds 350°F (177°C). The 360° movement of Swivel MAX at both ends gives maximum protection to the life of the connector and greatly increases kitchen aisle space by allowing the appliance to be closer to the wall.

Features

Swivel MAX®

Multi-plane Fitting	Aluminum body, plated steel fitting
Movement	360° rotational end fitting

SnapFast® One-Handed Quick-Disconnect

Quick-Disconnect	Brass body, aluminum collar
Thermal Shut-off	Shuts off gas when internal temperatures exceed 350°F (177°C)

Specifications

The Dormont Blue Hose®

Tubing	Annealed, 304 stainless steel
Braiding	Multi-strand, stainless steel wire
Coating	Blue antimicrobial PVC, melts at 350°F (177°C), coating will not hold a flame
End Fittings	Carbon steel; zinc trivalent chromate
Stress Guard®	360° rotational end fitting at both ends

Additional Components

Restraining Device	PVC coated, steel multi-strand cable and mounting hardware
Valve	Full port, brass body

Approvals & Certifications

NSF/ANSI 169 – Special-purpose food equipment and devices
ANSI Z21.69 / CSA 6.16 – Connectors for moveable gas appliances
ANSI Z21.41 / CSA 6.9 – Quick-Disconnect Devices for use with gas fuel appliances
ANSI Z21.15 / CSA 9.1 – Manually operated gas valves for appliances, appliance connectors
UL 567 _ Pipe connectors for flammible and combustible liquids and LP gas
Meets requirements of ANSI Z223.1 / NFPA 54 National Fuel Gas Code
Not for use in temperatures less than 32°F (0°C). For indoor use only.
Max operating pressure 1/2 psi.
Refer to the catalog for additional approvals and certifications or go to www.dormont.com.
A restraining device is required for all moveable gas equipment.

Safety System™ The Dormont Safety System™ is the first and only complete gas equipment connection system specifically engineered for the commercial kitchen. The Safety System consists of the famous Dormont Blue Hose and a variety of accessories designed for improved safety and performance in commercial kitchens. Because they are manufactured in the USA under an ISO qualified production process and to multiple design certifications, you can Connect with Confidence with the Dormont Safety System.

Dormont®

Double Swivel MAX® with SnapFast® Quick-Disconnect Deluxe Kit Assembly

Ordering Information

		LENGTH				
Configuration	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
Deluxe Kit* Basic Kit** Hose Assembly***	½" (15mm)	1650KIT2S24 1650BPQ2SR24 1650BPQ2S24	1650KIT2S36 1650BPQ2SR36 1650BPQ2S36	1650KIT2S48 1650BPQ2SR48 1650BPQ2S48	1650KIT2S60 1650BPQ2SR60 1650BPQ2S60	1650KIT2S72 1650BPQ2SR72 1650BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	¾" (20mm)	1675KIT2S24 1675BPQ2SR24 1675BPQ2S24	1675KIT2S36 1675BPQ2SR36 1675BPQ2S36	1675KIT2S48 1675BPQ2SR48 1675BPQ2S48	1675KIT2S60 1675BPQ2SR60 1675BPQ2S60	1675KIT2S72 1675BPQ2SR272 1675BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1" (25mm)	16100KIT2S24 16100BPQ2SR24 16100BPQ2S24	16100KIT2S36 16100BPQ2SR36 16100BPQ2S36	16100KIT2S48 16100BPQ2SR48 16100BPQ2S48	16100KIT2S60 16100BPQ2SR60 16100BPQ2S60	16100KIT2S72 16100BPQ2SR72 16100BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1¼" (32mm)	16125KIT2S24 16125BPQ2SR24 16125BPQ2S24	16125KIT2S36 16125BPQ2SR36 16125BPQ2S36	16125KIT2S48 16125BPQ2SR48 16125BPQ2S48	16125KIT2S60 16125BPQ2SR60 16125BPQ2S60	16125KIT2S72 16125BPQ2SR72 16125BPQ2S72

BTU/hr Flow Capacity Natural Gas (Flow rating BTU/hr 0.64 SP. GR. @ 0.5 inch WC pressure drop)

		LENGTH				
Model	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
1650BPQ2S	½" (15mm)	77,000	69,000	60,000	54,000	48,000
1675BPQ2S	¾" (20mm)	205,000	193,000	160,000	140,000	124,000
16100BPQ2S	1" (25mm)	366,000	336,000	295,000	261,000	247,000
16125BPQ2S	1¼" (32mm)	472,000	461,000	449,000	441,000	440,000

***Deluxe Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, restraining device and full port valve
****Basic Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, and restraining device
*****Hose Assemblies include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast

Typical Installation

The Dormont Blue Hose®

The Dormont Blue Hose is a commercial, moveable-grade gas connector designed for use with moveable equipment.

Moveable equipment is defined in ANSI Standard Z21.69/CSA 6.16 as gas utilization equipment that may be mounted on casters or otherwise be subject to movement.

SwivelMAX

- Reduces stress on connector
- Increases kitchen aisle space by allowing connector to be positioned closer to the wall

SnapFast

- One-handed quick-disconnect fitting
- Thermal shut-off when internal temperature exceeds 350°F (177°C)

Restraining Device

- ANSI Z21.69 Standard section 1.7.4 states: Connectors when used on caster-mounted equipment shall be installed with a restraining device, which prevents transmission of the strain to the connector

We guarantee our commercial gas connectors for the life of the original appliance to which it is connected.

Dormont®

A Watts Water Technologies Company

USA: Export, PA • Tel. (724) 733-4800 • Fax: (724) 733-4808 • www.dormont.com

Lincoln

1100 Series Impinger® II Conveyorized Oven

Models

- [ ] 1116-xxx-U
- [ ] 1117-xxx-U
- [ ] 1130-xxx-U
- [ ] 1131-xxx-U
- [ ] 1132-xxx-U
- [ ] 1133-xxx-U
- [ ] 1134-xxx-N
- [ ] 1135-xxx-N
- [ ] 1151-xxx-N
- [ ] 1154-xxx-E
- [ ] 1155-xxx-E
- [ ] 1157-xxx-N
- [ ] 1158-xxx-N
- [ ] 1164-xxx-E

Lincoln *Impinger* Conveyor Ovens are the premier continuous cook platform for the food service industry. Using the latest advancements in air impingement technology, *Impinger* ovens allow for rapid heating, cooking, baking, and crisping of foods, typically done two to four times faster than conventional ovens.

Lincoln IMPINGER® FASTBAKE

Benefits

Faster Bake Times

- Improved Response to Customer
- Optional FastBake Technology Reduces Cook Time by Up to An Additional 35% With No Food Quality Loss or Noise Increase

Easier Operation

- Digital Controls with Single On/Off Switch
- Microprocessor Controlled Bake Time/Conveyor Speed
- Locked Setting to Prevent Unintended Changes
- Fluorescent Display Indicating Temperature, Belt Speed, Thermostat, and Diagnostic Messages

Easier Cleaning

- Front Load Conveyor
- Removable Door

Unparalleled Support

- Customer-specific Finger Setup for Menu Flexibility
- Research and Applications Team Help Achieve Ideal Cooking Results
- Manitowoc Star Service Committed to Owner Satisfaction

Specifications

General

Stainless Steel Top, Front and Sides
28" (711mm) Long Baking Chamber
Front Removable Fingers
Stackable Up To Three High
Includes Oven Start-Up/Check-Out by Manitowoc STAR Authorized Service Agent

Conveyor

18" (457mm) Wide
Front Removable
Product Stop
One to Thirty Minute Cook Time
Reversible

Cooking

Customer Specific Finger Setup
Temperature Range 250°F to 575°F (121°C to 302°C)
Front Loading Glass Access Door with Cool to the Touch Handle
Digital Controls

Optional

FastBake Technology Reduces Cook Time by Up to An Additional 35% With No Food Quality Loss or Noise Increase
Entry and Exit Shelves
Flexible Gas Connector
Split Belt

18301 St. Clair Street
Cleveland, OH 44110

Tel: 888-417-5462
Fax: 800-285-9511
E mail: info@lincolnfp.com

www.lincolnfp.com
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Manitowoc

Lincoln

Gas Supply Pressure Recommendations

Gas Type	Supply (Inlet) Pressure (mbar)	Recommended Minimum Gas Pipe Size
Natural	7-12"WC (1.7 kPA / 17.4 mbar - 2.9 kPa / 29.9 mbar)	1½" (38 mm)
LP	11-12" WC (2.7 kPa / 27.36 mbar - 2.9kPa / 29.9 mbar)	1½" (38 mm)

*Gas supply pressures are dependent on local gas type and on all applicable local codes. Agency approved flexible connection to each oven must be minimum ¾" (19 mm) NPT and length must not exceed six (6) feet (1829 mm).

Electrical Service

Each oven deck requires voltage, phase and hertz as indicated by model number. Neutral must be grounded at electrical service and receptacle properly polarized. Gas 120V units have a cord with NEMA 5-15 plug. All other models have terminal block connections. It is recommended that a separate circuit breaker be provided for each oven deck.

Recommended Minimum Clearances

Rear of oven to Combustible Surface: 6" (152mm). Additional clearance on right hand side from other cooking equipment: 24" (610mm). The conveyor is removable from the front.

Warranty

All new *Impinger* ovens installed in the United States and Canada come with a one (1) year parts and labor warranty starting from the date of start-up/check-out. All ovens installed in locations other than in the US and Canada are warranted for one (1) year parts and ninety (90) days labor starting from the date of start-up/check-out. Start-up must occur within 24 months of date of manufacture.

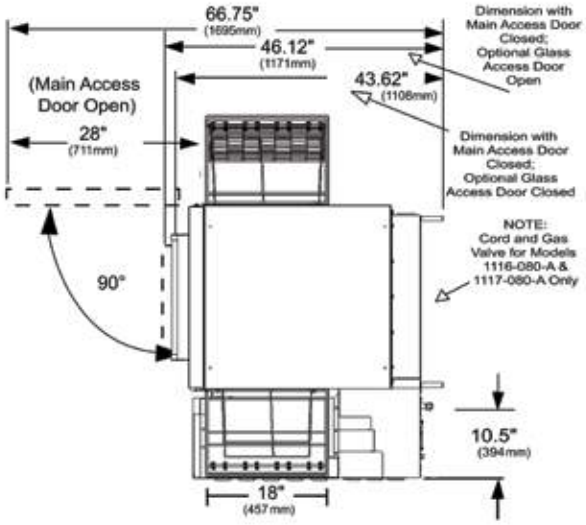
General Information

All 1100 Models	Length	Depth	Height Single	Height Double Stacked	Height Triple Stacked
	56" (1422 mm)	39" (991 mm)	42" (1067 mm)	59½" (1511 mm)	62" (1575 mm)

Model Number	Agency	Utility	Input Rate	Voltage	Amps	Hertz	Phase	Supply Wires
1116-xxx-U	UL EPH/CSA	Natural	40,000 BTU/Hr. 11.7 kW/42.2 MJ	120	7	60	1	3, 1 Pole+N+G
1154-xxx-E	AGA/UL EPH/CE	Natural		230	2	50	1	3, 1 Pole+N+G
1157-xxx-N	UL EPH	Natural		220		60	1	3, 2 Pole+G
1117-xxx-U	UL EPH/CSA	LP		120	7	60	1	3, 1 Pole+N+G
1155-xxx-E	AGA/UL EPH/CE	LP		230	2	50	1	3, 2 Pole+G
1158-xxx-N	UL EPH	LP		220		60	1	3, 2 Pole+G
1130-xxx-U	UL EPH/UL/cUL	Electric	10 kW	120/208	48	60	1	3, 2 Pole+G
1131-xxx-U	UL EPH/UL/cUL	Electric		120/240	42	60	1	3, 2 Pole+G
1132-xxx-U	UL EPH/UL/cUL	Electric		208	28	60	3	4, 3 Pole+G
1133-xxx-U	UL EPH/UL/cUL	Electric		240	25	60	3	4, 3 Pole+G
1134-xxx-N	UL EPH	Electric		380/208		50	3	5, 3 Pole+N+G
1135-xxx-U	UL	Electric		480	15	60	3	4, 3 Pole+G
1151-xxx-N	UL EPH	Electric		200	29	50/60	3	4, 3 Pole+G
1164-xxx-E	CE/UL EPH	Electric		400/230	15	50	3	5, 3 Pole+N+G

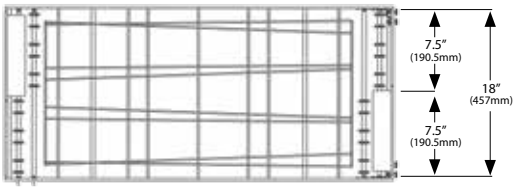
NOTE: Panel setups are added as kit numbers to the end of the model number to complete the oven order
(Ex. 1116-000-U-K1837 is a 1116-000-U with Standard setup, Left to Right)

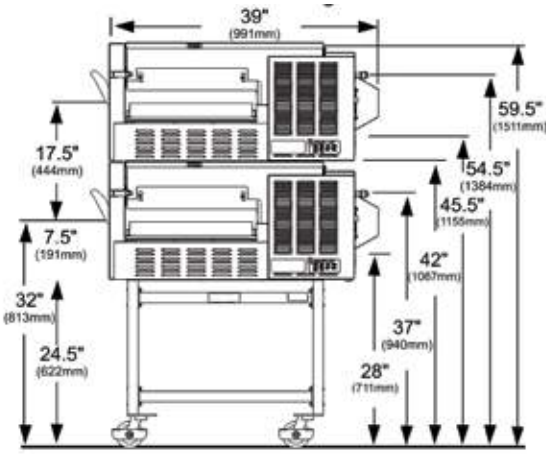
Lincoln

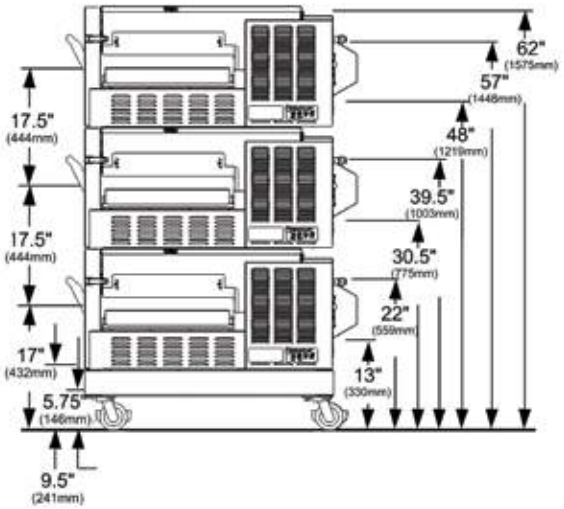


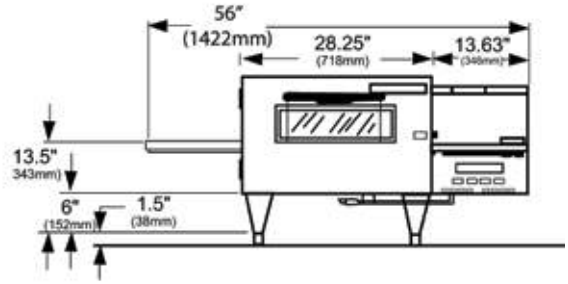
Conveyor Opening: 3" (76.2 mm)

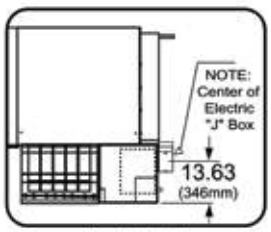
Optional Split Belt (50/50):











Electric Models

NOTE: Specifications subject to change without notification.

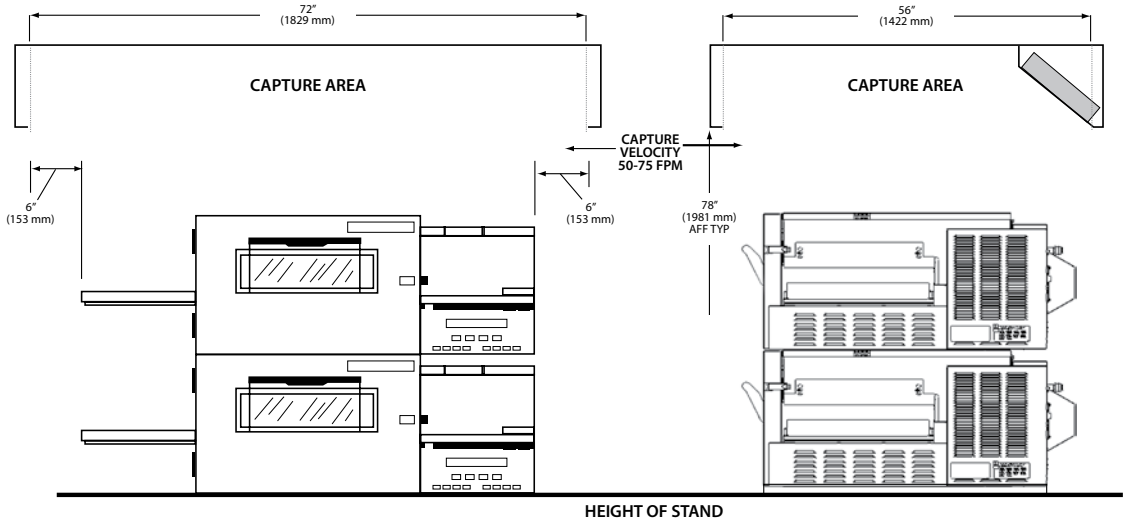
Lincoln

Capacity Estimates | Pies Per Hour

	BAKE TIME								
Pie Size	**3 min.**	**3½ min.**	**4 min.**	**4½ min.**	**5 min.**	**5½ min.**	**6 min.**	**6½ min.**	**7 min.**
12" (30 cm)	53	46	40	35	32	29	26	25	23
14" (36 cm)	41	35	31	27	25	23	21	19	18
16" (41 cm)	35	30	26	24	21	19	18	16	15

Ventilation Requirements

Ventilation is required on all gas ovens. Ventilation is not required on electric models except when triple stacked. Local codes prevail. These are the "authority having jurisdiction" as stated by the National Fire Protection Association, Inc. in NFPA 96-1994. Estimates of CFM requirements can vary from 400 to as high as 2800 CFM exhaust. In all cases, the ambient temperature around the oven must not exceed 95°F (35°C) when the oven is operating. **In the case where a gas single or double stack oven is installed, the following information can be used as a guideline for ventilation.**



1. Double Stack: Range of 800-1200 cfm for double gas 1100 series oven.
   Single Stack: Range of 450-800 cfm for single gas 1100 series oven.
2. The capture velocity across the apron of canopy is to be 50-75 FPM at sides and front.
3. Double Stack: Width should be 72" (1828 mm) - inside dimensions. Depth should be 50" (1270 mm) - inside front to filters.
   Single Stack: Width should be 48" (1219 mm) - inside dimension. Depth should be 50" (1270 mm) - inside front to filters.
4. The ovens are to be centered in the canopy space left-to-right and front-to-back if possible.
5. Room air diffusers must not be directed onto the oven and should be positioned a minimum of 3 feet from the perimeter of the hood to keep them from affecting the oven.
6. Bottom of canopy should be 78" (1981 mm) above finished floor (AFF).
7. Recommend 70% make-up air provided outside of the canopy through perf metal diffusers directed straight down... not at the oven; located at front, sides or both.
8. Use of a Type I or Type II application and overall final installation is determined per local codes.

NOTE: Specifications subject to change without notification.

18301 St. Clair Street
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Manitowoc

For Commercial Applications

Job Name _____
Job Location _____
Engineer _____
Approval _____

Contractor _____
Approval _____
Contractor's P.O. No. _____
Representative _____
SKU _____

Double Swivel MAX® /SnapFast® Quick-Disconnect Assemblies

Sizes: ½" to 1¼" (15 to 32mm)

Double Swivel MAX/SnapFast Quick-Disconnect Assemblies feature flexible movement and the one-handed quick-disconnect fitting with a unique thermal shut-off design that automatically shuts off the gas when the internal temperature exceeds 350°F (177°C). The 360° movement of Swivel MAX at both ends gives maximum protection to the life of the connector and greatly increases kitchen aisle space by allowing the appliance to be closer to the wall.

Features

Swivel MAX®

Multi-plane Fitting	Aluminum body, plated steel fitting
Movement	360° rotational end fitting

SnapFast® One-Handed Quick-Disconnect

Quick-Disconnect	Brass body, aluminum collar
Thermal Shut-off	Shuts off gas when internal temperatures exceed 350°F (177°C)

Specifications

The Dormont Blue Hose®

Tubing	Annealed, 304 stainless steel
Braiding	Multi-strand, stainless steel wire
Coating	Blue antimicrobial PVC, melts at 350°F (177°C), coating will not hold a flame
End Fittings	Carbon steel; zinc trivalent chromate
Stress Guard®	360° rotational end fitting at both ends

Additional Components

Restraining Device	PVC coated, steel multi-strand cable and mounting hardware
Valve	Full port, brass body

Approvals & Certifications

NSF/ANSI 169 – Special-purpose food equipment and devices
ANSI Z21.69 / CSA 6.16 – Connectors for moveable gas appliances
ANSI Z21.41 / CSA 6.9 – Quick-Disconnect Devices for use with gas fuel appliances
ANSI Z21.15 / CSA 9.1 – Manually operated gas valves for appliances, appliance connectors
UL 567 _ Pipe connectors for flammible and combustible liquids and LP gas
Meets requirements of ANSI Z223.1 / NFPA 54 National Fuel Gas Code
Not for use in temperatures less than 32°F (0°C). For indoor use only.
Max operating pressure 1/2 psi.
Refer to the catalog for additional approvals and certifications or go to www.dormont.com.
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Dormont®

Double Swivel MAX® with SnapFast® Quick-Disconnect Deluxe Kit Assembly

Ordering Information

		LENGTH				
Configuration	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
Deluxe Kit* Basic Kit** Hose Assembly***	½" (15mm)	1650KIT2S24 1650BPQ2SR24 1650BPQ2S24	1650KIT2S36 1650BPQ2SR36 1650BPQ2S36	1650KIT2S48 1650BPQ2SR48 1650BPQ2S48	1650KIT2S60 1650BPQ2SR60 1650BPQ2S60	1650KIT2S72 1650BPQ2SR72 1650BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	¾" (20mm)	1675KIT2S24 1675BPQ2SR24 1675BPQ2S24	1675KIT2S36 1675BPQ2SR36 1675BPQ2S36	1675KIT2S48 1675BPQ2SR48 1675BPQ2S48	1675KIT2S60 1675BPQ2SR60 1675BPQ2S60	1675KIT2S72 1675BPQ2SR272 1675BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1" (25mm)	16100KIT2S24 16100BPQ2SR24 16100BPQ2S24	16100KIT2S36 16100BPQ2SR36 16100BPQ2S36	16100KIT2S48 16100BPQ2SR48 16100BPQ2S48	16100KIT2S60 16100BPQ2SR60 16100BPQ2S60	16100KIT2S72 16100BPQ2SR72 16100BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1¼" (32mm)	16125KIT2S24 16125BPQ2SR24 16125BPQ2S24	16125KIT2S36 16125BPQ2SR36 16125BPQ2S36	16125KIT2S48 16125BPQ2SR48 16125BPQ2S48	16125KIT2S60 16125BPQ2SR60 16125BPQ2S60	16125KIT2S72 16125BPQ2SR72 16125BPQ2S72

BTU/hr Flow Capacity Natural Gas (Flow rating BTU/hr 0.64 SP. GR. @ 0.5 inch WC pressure drop)

		LENGTH				
Model	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
1650BPQ2S	½" (15mm)	77,000	69,000	60,000	54,000	48,000
1675BPQ2S	¾" (20mm)	205,000	193,000	160,000	140,000	124,000
16100BPQ2S	1" (25mm)	366,000	336,000	295,000	261,000	247,000
16125BPQ2S	1¼" (32mm)	472,000	461,000	449,000	441,000	440,000

***Deluxe Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, restraining device and full port valve
****Basic Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, and restraining device
*****Hose Assemblies include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast

Typical Installation

The Dormont Blue Hose®

The Dormont Blue Hose is a commercial, moveable-grade gas connector designed for use with moveable equipment.

Moveable equipment is defined in ANSI Standard Z21.69/CSA 6.16 as gas utilization equipment that may be mounted on casters or otherwise be subject to movement.

SwivelMAX

- Reduces stress on connector
- Increases kitchen aisle space by allowing connector to be positioned closer to the wall

SnapFast

- One-handed quick-disconnect fitting
- Thermal shut-off when internal temperature exceeds 350°F (177°C)

Restraining Device

- ANSI Z21.69 Standard section 1.7.4 states: Connectors when used on caster-mounted equipment shall be installed with a restraining device, which prevents transmission of the strain to the connector

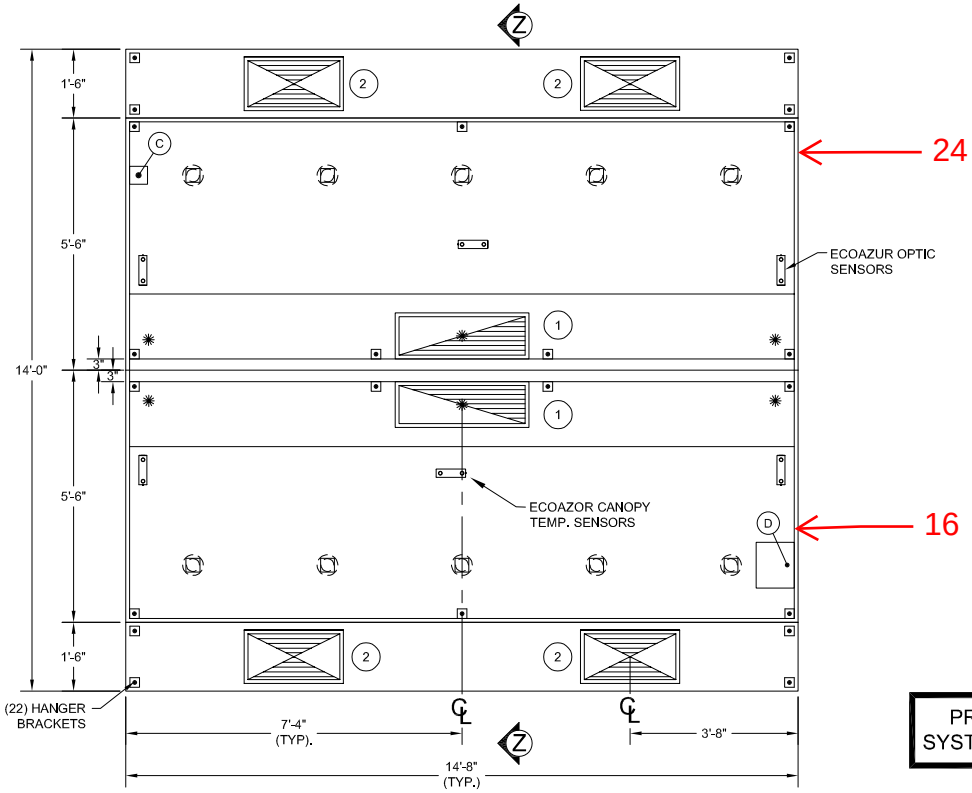
We guarantee our commercial gas connectors for the life of the original appliance to which it is connected.

Dormont®

A Watts Water Technologies Company

USA: Export, PA • Tel. (724) 733-4800 • Fax: (724) 733-4808 • www.dormont.com

24



PLAN
NO SCALE

OPTIONS

4" EXHAUST DUCT
(2) ECOAZUR TEMP. SENSORS
(4) ECOAZUR OPTIC SENSORS
(6) SLIDING DAMPERS IN EXHAUST AND SUPPLY
ECOAZUR SYSTEM

TOTAL EXHAUST : 8,214 C.F.M.	
TOTAL SUPPLY : 6,572 C.F.M.	

1	10" X 33" EXHAUST DUCTS 4,107 C.F.M. EACH @ 1.00" S.P.	2	12" X 24" SUPPLY DUCTS 1,643 C.F.M. EACH @ 0.20" S.P.

PROVIDE RESPONSE TO RFI ON ECOAZUR SYSTEM REQUIREMENTS AND WIRING DETAILS.

[ ] VERIFY INSTALL LOCATION OF THE ECOAZUR SYSTEM CONTROL PANEL, AND KEYPAD.

[ ] VERIFY QUANTITY, MAKE, MODEL, & HP OF THE EXHAUST AND SUPPLY FANS.

D (10) LED LIGHT FIXTURES
(0.12 K.W., 120/1/60 FROM ECOAZUR)

FIRE PROTECTION SYSTEM : ANSUL R-102
(SURFACE, PLENUM, AND DUCT COLLAR PROTECTION).

TOTAL EST. HANGING WT. : 2,640 LBS.

CADDY AirSystems
509 SHARPTOWN ROAD
P.O. BOX 345 BRIDGEPORT NJ 08014
Tel:(856) 467-4222 Fax:(856) 467-5511

THIS DRAWING IS PROVIDED AS A PRELIMINARY DESIGN DATA SHEET.
IT IS NOT TO BE USED FOR CONSTRUCTION OR FABRICATION APPROVAL PURPOSES.

Mechanical Air Data & Dimensions

ITEM #:	CADDY #:	MODEL #:
1	38874	PB-C-I-176-ND-66 W/ CEILING SUPPLY PLENUMS

JOB NAME: GROVE CITY HS
GROVE CITY, PA

DATE: 12/23/23
DR. BY: SHUBHAM
SH. #: 1 OF 4

MD-03440A 02/20/24 B.S. ECOAZUR COMPONENTS & SUPPLY PLENUMS ADDED AS PER 2/19 REQUEST.

Job Name _____
Job Location _____
Engineer _____
Approval _____

Contractor _____
Approval _____
Contractor's P.O. No. _____
Representative _____
SKU _____

Double Swivel MAX® /SnapFast® Quick-Disconnect Assemblies

Sizes: ½" to 1¼" (15 to 32mm)

Double Swivel MAX/SnapFast Quick-Disconnect Assemblies feature flexible movement and the one-handed quick-disconnect fitting with a unique thermal shut-off design that automatically shuts off the gas when the internal temperature exceeds 350°F (177°C). The 360° movement of Swivel MAX at both ends gives maximum protection to the life of the connector and greatly increases kitchen aisle space by allowing the appliance to be closer to the wall.

Features

Swivel MAX®

Multi-plane Fitting	Aluminum body, plated steel fitting
Movement	360° rotational end fitting

SnapFast® One-Handed Quick-Disconnect

Quick-Disconnect	Brass body, aluminum collar
Thermal Shut-off	Shuts off gas when internal temperatures exceed 350°F (177°C)

Specifications

The Dormont Blue Hose®

Tubing	Annealed, 304 stainless steel
Braiding	Multi-strand, stainless steel wire
Coating	Blue antimicrobial PVC, melts at 350°F (177°C), coating will not hold a flame
End Fittings	Carbon steel; zinc trivalent chromate
Stress Guard®	360° rotational end fitting at both ends

Additional Components

Restraining Device	PVC coated, steel multi-strand cable and mounting hardware
Valve	Full port, brass body

Approvals & Certifications

NSF/ANSI 169 – Special-purpose food equipment and devices
ANSI Z21.69 / CSA 6.16 – Connectors for moveable gas appliances
ANSI Z21.41 / CSA 6.9 – Quick-Disconnect Devices for use with gas fuel appliances
ANSI Z21.15 / CSA 9.1 – Manually operated gas valves for appliances, appliance connectors
UL 567 _ Pipe connectors for flammible and combustible liquids and LP gas
Meets requirements of ANSI Z223.1 / NFPA 54 National Fuel Gas Code
Not for use in temperatures less than 32°F (0°C). For indoor use only.
Max operating pressure 1/2 psi.
Refer to the catalog for additional approvals and certifications or go to www.dormont.com.
A restraining device is required for all moveable gas equipment.

Safety System™ The Dormont Safety System™ is the first and only complete gas equipment connection system specifically engineered for the commercial kitchen. The Safety System consists of the famous Dormont Blue Hose and a variety of accessories designed for improved safety and performance in commercial kitchens. Because they are manufactured in the USA under an ISO qualified production process and to multiple design certifications, you can Connect with Confidence with the Dormont Safety System.

Dormont®

Double Swivel MAX® with SnapFast® Quick-Disconnect Deluxe Kit Assembly

Ordering Information

		LENGTH				
Configuration	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
Deluxe Kit* Basic Kit** Hose Assembly***	½" (15mm)	1650KIT2S24 1650BPQ2SR24 1650BPQ2S24	1650KIT2S36 1650BPQ2SR36 1650BPQ2S36	1650KIT2S48 1650BPQ2SR48 1650BPQ2S48	1650KIT2S60 1650BPQ2SR60 1650BPQ2S60	1650KIT2S72 1650BPQ2SR72 1650BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	¾" (20mm)	1675KIT2S24 1675BPQ2SR24 1675BPQ2S24	1675KIT2S36 1675BPQ2SR36 1675BPQ2S36	1675KIT2S48 1675BPQ2SR48 1675BPQ2S48	1675KIT2S60 1675BPQ2SR60 1675BPQ2S60	1675KIT2S72 1675BPQ2SR272 1675BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1" (25mm)	16100KIT2S24 16100BPQ2SR24 16100BPQ2S24	16100KIT2S36 16100BPQ2SR36 16100BPQ2S36	16100KIT2S48 16100BPQ2SR48 16100BPQ2S48	16100KIT2S60 16100BPQ2SR60 16100BPQ2S60	16100KIT2S72 16100BPQ2SR72 16100BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1¼" (32mm)	16125KIT2S24 16125BPQ2SR24 16125BPQ2S24	16125KIT2S36 16125BPQ2SR36 16125BPQ2S36	16125KIT2S48 16125BPQ2SR48 16125BPQ2S48	16125KIT2S60 16125BPQ2SR60 16125BPQ2S60	16125KIT2S72 16125BPQ2SR72 16125BPQ2S72

BTU/hr Flow Capacity Natural Gas (Flow rating BTU/hr 0.64 SP. GR. @ 0.5 inch WC pressure drop)

		LENGTH				
Model	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
1650BPQ2S	½" (15mm)	77,000	69,000	60,000	54,000	48,000
1675BPQ2S	¾" (20mm)	205,000	193,000	160,000	140,000	124,000
16100BPQ2S	1" (25mm)	366,000	336,000	295,000	261,000	247,000
16125BPQ2S	1¼" (32mm)	472,000	461,000	449,000	441,000	440,000

***Deluxe Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, restraining device and full port valve
****Basic Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, and restraining device
*****Hose Assemblies include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast

Typical Installation

The Dormont Blue Hose®

The Dormont Blue Hose is a commercial, moveable-grade gas connector designed for use with moveable equipment.

Moveable equipment is defined in ANSI Standard Z21.69/CSA 6.16 as gas utilization equipment that may be mounted on casters or otherwise be subject to movement.

SwivelMAX

- Reduces stress on connector
- Increases kitchen aisle space by allowing connector to be positioned closer to the wall

SnapFast

- One-handed quick-disconnect fitting
- Thermal shut-off when internal temperature exceeds 350°F (177°C)

Restraining Device

- ANSI Z21.69 Standard section 1.7.4 states: Connectors when used on caster-mounted equipment shall be installed with a restraining device, which prevents transmission of the strain to the connector

We guarantee our commercial gas connectors for the life of the original appliance to which it is connected.

Dormont®

A Watts Water Technologies Company

USA: Export, PA • Tel. (724) 733-4800 • Fax: (724) 733-4808 • www.dormont.com

Water Connector

Related Information

Applications:

- Utility distribution systems
- Steam kettles
- Steamtables
- Combi-ovens

Product Information

Dormont Hi-PSI® Flex connectors provide long, trouble-free service life and permit quick, safe connection of hot and cold water service lines and steam lines to all types of moveable/castered and stationary foodservice equipment. Antimicrobial Coating

Diameter: ½", ¾" 1"
Length: 24", 26", 48" 60", 72"
Options: 2-Way Shut-Off Water QD can also be purchased for these connectors

EV9797-22

Kleensteam II Twin System

Everpure's second generation of total water treatment system for steam applications

Kleensteam II Twin System: EV9797-22

7CB5 Replacement Cartridge: EV9618-11

SS-10 Cartridge: EV9799-02

BENEFITS

A total system delivering high quality filtered water with scale inhibition and deliming capabilities

New dual cartridge design provides enhanced performance for low or high flow capacity steamers

Fine filters incoming water to improve the performance, maximize energy efficiency and increase the life of steam equipment

Reduces chlorine-induced corrosion

System is simple to install, operate and maintain

Easy deliming with Everpure's ScaleKleen, which is fed directly into the boiler through the SR-X bowl without use of hazardous chemicals or special piping

Long lasting SS-10 cartridge is more effective in higher alkalinty/hardness/TDS/temperature installations.

Sophisticated Hydroblend compound prevents limescale formation in high temperature steam applications

INSTALLATION TIPS

Choose a mounting location suitable to support the full weight of the system when operating

Use minimum 1/2" inlet water line (3/4" preferred)

Connect the system to the boiler feed water line only! Do not connect to the condenser water line!

Install vertically with cartridges hanging down

Allow 2-1/2" clearance below the cartridge for easy cartridge replacement

Flush cartridges by running water through filter for five minutes at full flow

OPERATION TIPS

Change 7CB5 cartridge on a regular 6 month preventative maintenance program, when capacity is reached or when pressure falls below 10 psi

Change SS-10 cartridge before Hydroblend™ compound is completely used up

Service flow rate must not exceed 2.5 gpm for single cartridge systems or 5.0 for dual cartridge systems

Always flush the filter cartridge at time of installation and cartridge change

Use for periodic deliming as needed by installing the dip tube assembly in place of the SS-10 and dissolving Scale Kleen in SR-X housing. Full deliming instructions are provided with the system

APPLICATION/SIZING

For commercial steam applications

For use with foodservice steamer and combi-oven applications

The Kleensteam II Twin System is shipped with two 7CB5 cartridges and no filter head plug

Kleensteam II Twin System

SPECIFICATIONS

Overall Dimensions:
25.5"H x 20.5"W x 7"D

Inlet connection: 3/4" FNPT

Outlet connection: 3/4" FNPT

Service Flow Rate:
Maximum 5.0 gpm (18.9 Lpm) - twin cartridges

Pressure Requirements:
10 - 125 psi (0.7 – 8.6 bar), non-shock

Maximum water temperature at inlet:
100°F (38°C)

Alkalinity range:
2 to 12 grains per gallon

No electrical connection required

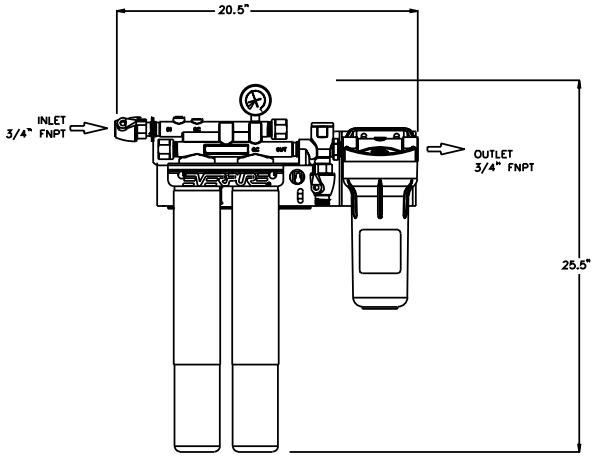
Shipping Weight: 28 lbs.

Operating Weight: 35 lbs.

The contaminants or other substances removed or reduced by this drinking water system are not necessarily in your water. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used with disinfected water that may contain filterable cysts.

ScaleStick is NSF Certified under NSF/ANSI Standard 42 for materials

KleenSteam II - Twin Cartridge



WARRANTY

Everpure water treatment systems (excluding replaceable elements) are covered by a limited warranty against defects in material and workmanship for a period of five years after date of purchase. Everpure replaceable elements (filter cartridges and water treatment cartridges) are covered by a limited warranty against defects in material and workmanship for a period of one year after date of purchase. See printed warranty for details. Everpure will provide a copy of the warranty upon request.

EVERPURE

EVERPURE, LLC
1040 Muirfield Drive
Hanover Park, Illinois 60133
Toll Free (800) 323-7873
Tel (630) 307-3000
Fax (630) 307-3030
http://www.everpure.com

In Europe:
N.V. EVERPURE (EUROPE) S.A.
Industriepark Wolfstee
Toekomstlaan 30
B-2200 Herentals
Belgium
Tel 32 -14-283500
Fax 32-14-283505

In Japan:
EVERPURE JAPAN LLC
Hashimoto MN Bldg. 7F
3-25-1 Hashimoto Sagamihara-Shi
Kanagawa 229-1103
Japan
Tel 81-(0)42-775-3011
Fax 81-(0)42-775-3015

Everpure, LLC
1040 Muirfield Drive
Hanover Park, IL 60133
Ph: 630-307-3000 Fax: 630-307-3030

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

SKU _____

Double Swivel MAX® /SnapFast® Quick-Disconnect Assemblies

Sizes: ½" to 1¼" (15 to 32mm)

Double Swivel MAX/SnapFast Quick-Disconnect Assemblies feature flexible movement and the one-handed quick-disconnect fitting with a unique thermal shut-off design that automatically shuts off the gas when the internal temperature exceeds 350°F (177°C). The 360° movement of Swivel MAX at both ends gives maximum protection to the life of the connector and greatly increases kitchen aisle space by allowing the appliance to be closer to the wall.

Features

Swivel MAX®

Multi-plane Fitting	Aluminum body, plated steel fitting
Movement	360° rotational end fitting

SnapFast® One-Handed Quick-Disconnect

Quick-Disconnect	Brass body, aluminum collar
Thermal Shut-off	Shuts off gas when internal temperatures exceed 350°F (177°C)

Specifications

The Dormont Blue Hose®

Tubing	Annealed, 304 stainless steel
Braiding	Multi-strand, stainless steel wire
Coating	Blue antimicrobial PVC, melts at 350°F (177°C), coating will not hold a flame
End Fittings	Carbon steel; zinc trivalent chromate
Stress Guard®	360° rotational end fitting at both ends

Additional Components

Restraining Device	PVC coated, steel multi-strand cable and mounting hardware
Valve	Full port, brass body

Approvals & Certifications

NSF/ANSI 169 – Special-purpose food equipment and devices
ANSI Z21.69 / CSA 6.16 – Connectors for moveable gas appliances
ANSI Z21.41 / CSA 6.9 – Quick-Disconnect Devices for use with gas fuel appliances
ANSI Z21.15 / CSA 9.1 – Manually operated gas valves for appliances, appliance connectors
UL 567 _ Pipe connectors for flammible and combustible liquids and LP gas
Meets requirements of ANSI Z223.1 / NFPA 54 National Fuel Gas Code
Not for use in temperatures less than 32°F (0°C). For indoor use only.
Max operating pressure 1/2 psi.
Refer to the catalog for additional approvals and certifications or go to www.dormont.com.
A restraining device is required for all moveable gas equipment.

Safety System™ The Dormont Safety System™ is the first and only complete gas equipment connection system specifically engineered for the commercial kitchen. The Safety System consists of the famous Dormont Blue Hose and a variety of accessories designed for improved safety and performance in commercial kitchens. Because they are manufactured in the USA under an ISO qualified production process and to multiple design certifications, you can Connect with Confidence with the Dormont Safety System.

Dormont®

Double Swivel MAX® with SnapFast® Quick-Disconnect Deluxe Kit Assembly

Ordering Information

		LENGTH				
Configuration	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
Deluxe Kit* Basic Kit** Hose Assembly***	½" (15mm)	1650KIT2S24 1650BPQ2SR24 1650BPQ2S24	1650KIT2S36 1650BPQ2SR36 1650BPQ2S36	1650KIT2S48 1650BPQ2SR48 1650BPQ2S48	1650KIT2S60 1650BPQ2SR60 1650BPQ2S60	1650KIT2S72 1650BPQ2SR72 1650BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	¾" (20mm)	1675KIT2S24 1675BPQ2SR24 1675BPQ2S24	1675KIT2S36 1675BPQ2SR36 1675BPQ2S36	1675KIT2S48 1675BPQ2SR48 1675BPQ2S48	1675KIT2S60 1675BPQ2SR60 1675BPQ2S60	1675KIT2S72 1675BPQ2SR272 1675BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1" (25mm)	16100KIT2S24 16100BPQ2SR24 16100BPQ2S24	16100KIT2S36 16100BPQ2SR36 16100BPQ2S36	16100KIT2S48 16100BPQ2SR48 16100BPQ2S48	16100KIT2S60 16100BPQ2SR60 16100BPQ2S60	16100KIT2S72 16100BPQ2SR72 16100BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1¼" (32mm)	16125KIT2S24 16125BPQ2SR24 16125BPQ2S24	16125KIT2S36 16125BPQ2SR36 16125BPQ2S36	16125KIT2S48 16125BPQ2SR48 16125BPQ2S48	16125KIT2S60 16125BPQ2SR60 16125BPQ2S60	16125KIT2S72 16125BPQ2SR72 16125BPQ2S72

BTU/hr Flow Capacity Natural Gas (Flow rating BTU/hr 0.64 SP. GR. @ 0.5 inch WC pressure drop)

		LENGTH				
Model	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
1650BPQ2S	½" (15mm)	77,000	69,000	60,000	54,000	48,000
1675BPQ2S	¾" (20mm)	205,000	193,000	160,000	140,000	124,000
16100BPQ2S	1" (25mm)	366,000	336,000	295,000	261,000	247,000
16125BPQ2S	1¼" (32mm)	472,000	461,000	449,000	441,000	440,000

***Deluxe Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, restraining device and full port valve
****Basic Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, and restraining device
*****Hose Assemblies include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast

Typical Installation

The Dormont Blue Hose®

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Moveable equipment is defined in ANSI Standard Z21.69/CSA 6.16 as gas utilization equipment that may be mounted on casters or otherwise be subject to movement.

SwivelMAX

- Reduces stress on connector
- Increases kitchen aisle space by allowing connector to be positioned closer to the wall

SnapFast

- One-handed quick-disconnect fitting
- Thermal shut-off when internal temperature exceeds 350°F (177°C)

Restraining Device

- ANSI Z21.69 Standard section 1.7.4 states: Connectors when used on caster-mounted equipment shall be installed with a restraining device, which prevents transmission of the strain to the connector

We guarantee our commercial gas connectors for the life of the original appliance to which it is connected.

Dormont®

A Watts Water Technologies Company

USA: Export, PA • Tel. (724) 733-4800 • Fax: (724) 733-4808 • www.dormont.com

Water Connector

Related Information

Applications:

- Utility distribution systems
- Steam kettles
- Steamtables
- Combi-ovens

Product Information

Dormont Hi-PSI® Flex connectors provide long, trouble-free service life and permit quick, safe connection of hot and cold water service lines and steam lines to all types of moveable/castered and stationary foodservice equipment. Antimicrobial Coating

Diameter: ½", ¾" 1"
Length: 24", 26", 48" 60", 72"
Options: 2-Way Shut-Off Water QD can also be purchased for these connectors

EV9797-22

Kleensteam II Twin System

Everpure's second generation of total water treatment system for steam applications

Kleensteam II Twin System: EV9797-22

7CB5 Replacement Cartridge: EV9618-11

SS-10 Cartridge: EV9799-02

BENEFITS

A total system delivering high quality filtered water with scale inhibition and deliming capabilities

New dual cartridge design provides enhanced performance for low or high flow capacity steamers

Fine filters incoming water to improve the performance, maximize energy efficiency and increase the life of steam equipment

Reduces chlorine-induced corrosion

System is simple to install, operate and maintain

Easy deliming with Everpure's ScaleKleen, which is fed directly into the boiler through the SR-X bowl without use of hazardous chemicals or special piping

Long lasting SS-10 cartridge is more effective in higher alkalinty/hardness/TDS/temperature installations.

Sophisticated Hydroblend compound prevents limescale formation in high temperature steam applications

INSTALLATION TIPS

Choose a mounting location suitable to support the full weight of the system when operating

Use minimum 1/2" inlet water line (3/4" preferred)

Connect the system to the boiler feed water line only! Do not connect to the condenser water line!

Install vertically with cartridges hanging down

Allow 2-1/2" clearance below the cartridge for easy cartridge replacement

Flush cartridges by running water through filter for five minutes at full flow

OPERATION TIPS

Change 7CB5 cartridge on a regular 6 month preventative maintenance program, when capacity is reached or when pressure falls below 10 psi

Change SS-10 cartridge before Hydroblend™ compound is completely used up

Service flow rate must not exceed 2.5 gpm for single cartridge systems or 5.0 for dual cartridge systems

Always flush the filter cartridge at time of installation and cartridge change

Use for periodic deliming as needed by installing the dip tube assembly in place of the SS-10 and dissolving Scale Kleen in SR-X housing. Full deliming instructions are provided with the system

APPLICATION/SIZING

For commercial steam applications

For use with foodservice steamer and combi-oven applications

The Kleensteam II Twin System is shipped with two 7CB5 cartridges and no filter head plug

Kleensteam II Twin System

SPECIFICATIONS

Overall Dimensions:
25.5"H x 20.5"W x 7"D

Inlet connection: 3/4" FNPT

Outlet connection: 3/4" FNPT

Service Flow Rate:
Maximum 5.0 gpm (18.9 Lpm) - twin cartridges

Pressure Requirements:
10 - 125 psi (0.7 – 8.6 bar), non-shock

Maximum water temperature at inlet:
100°F (38°C)

Alkalinity range:
2 to 12 grains per gallon

No electrical connection required

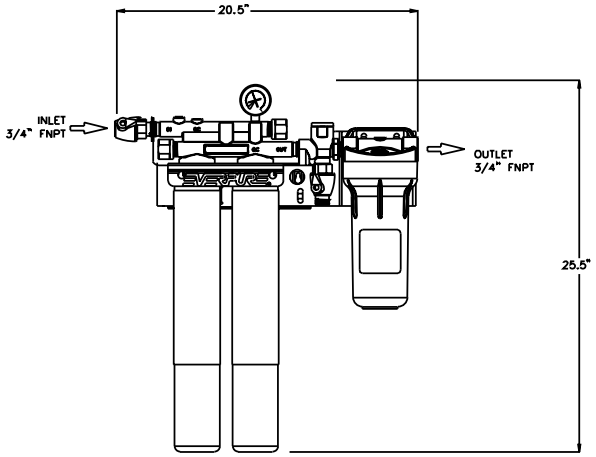
Shipping Weight: 28 lbs.

Operating Weight: 35 lbs.

The contaminants or other substances removed or reduced by this drinking water system are not necessarily in your water. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used with disinfected water that may contain filterable cysts.

ScaleStick is NSF Certified under NSF/ANSI Standard 42 for materials

KleenSteam II - Twin Cartridge



WARRANTY

Everpure water treatment systems (excluding replaceable elements) are covered by a limited warranty against defects in material and workmanship for a period of five years after date of purchase. Everpure replaceable elements (filter cartridges and water treatment cartridges) are covered by a limited warranty against defects in material and workmanship for a period of one year after date of purchase. See printed warranty for details. Everpure will provide a copy of the warranty upon request.

EVERPURE

EVERPURE, LLC
1040 Muirfield Drive
Hanover Park, Illinois 60133
Toll Free (800) 323-7873
Tel (630) 307-3000
Fax (630) 307-3030
http://www.everpure.com

In Europe:
N.V. EVERPURE (EUROPE) S.A.
Industriepark Wolfstee
Toekomstlaan 30
B-2200 Herentals
Belgium
Tel 32 -14-283500
Fax 32-14-283505

In Japan:
EVERPURE JAPAN LLC
Hashimoto MN Bldg. 7F
3-25-1 Hashimoto Sagamihara-Shi
Kanagawa 229-1103
Japan
Tel 81-(0)42-775-3011
Fax 81-(0)42-775-3015

Everpure, LLC
1040 Muirfield Drive
Hanover Park, IL 60133
Ph: 630-307-3000 Fax: 630-307-3030

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

SKU _____

Double Swivel MAX® /SnapFast® Quick-Disconnect Assemblies

Sizes: ½" to 1¼" (15 to 32mm)

Double Swivel MAX/SnapFast Quick-Disconnect Assemblies feature flexible movement and the one-handed quick-disconnect fitting with a unique thermal shut-off design that automatically shuts off the gas when the internal temperature exceeds 350°F (177°C). The 360° movement of Swivel MAX at both ends gives maximum protection to the life of the connector and greatly increases kitchen aisle space by allowing the appliance to be closer to the wall.

Features

Swivel MAX®

Multi-plane Fitting	Aluminum body, plated steel fitting
Movement	360° rotational end fitting

SnapFast® One-Handed Quick-Disconnect

Quick-Disconnect	Brass body, aluminum collar
Thermal Shut-off	Shuts off gas when internal temperatures exceed 350°F (177°C)

Specifications

The Dormont Blue Hose®

Tubing	Annealed, 304 stainless steel
Braiding	Multi-strand, stainless steel wire
Coating	Blue antimicrobial PVC, melts at 350°F (177°C), coating will not hold a flame
End Fittings	Carbon steel; zinc trivalent chromate
Stress Guard®	360° rotational end fitting at both ends

Additional Components

Restraining Device	PVC coated, steel multi-strand cable and mounting hardware
Valve	Full port, brass body

Approvals & Certifications

NSF/ANSI 169 – Special-purpose food equipment and devices
ANSI Z21.69 / CSA 6.16 – Connectors for moveable gas appliances
ANSI Z21.41 / CSA 6.9 – Quick-Disconnect Devices for use with gas fuel appliances
ANSI Z21.15 / CSA 9.1 – Manually operated gas valves for appliances, appliance connectors
UL 567 _ Pipe connectors for flammible and combustible liquids and LP gas
Meets requirements of ANSI Z223.1 / NFPA 54 National Fuel Gas Code
Not for use in temperatures less than 32°F (0°C). For indoor use only.
Max operating pressure 1/2 psi.
Refer to the catalog for additional approvals and certifications or go to www.dormont.com.
A restraining device is required for all moveable gas equipment.

Safety System™ The Dormont Safety System™ is the first and only complete gas equipment connection system specifically engineered for the commercial kitchen. The Safety System consists of the famous Dormont Blue Hose and a variety of accessories designed for improved safety and performance in commercial kitchens. Because they are manufactured in the USA under an ISO qualified production process and to multiple design certifications, you can Connect with Confidence with the Dormont Safety System.

Dormont®

Double Swivel MAX® with SnapFast® Quick-Disconnect Deluxe Kit Assembly

Ordering Information

		LENGTH				
Configuration	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
Deluxe Kit* Basic Kit** Hose Assembly***	½" (15mm)	1650KIT2S24 1650BPQ2SR24 1650BPQ2S24	1650KIT2S36 1650BPQ2SR36 1650BPQ2S36	1650KIT2S48 1650BPQ2SR48 1650BPQ2S48	1650KIT2S60 1650BPQ2SR60 1650BPQ2S60	1650KIT2S72 1650BPQ2SR72 1650BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	¾" (20mm)	1675KIT2S24 1675BPQ2SR24 1675BPQ2S24	1675KIT2S36 1675BPQ2SR36 1675BPQ2S36	1675KIT2S48 1675BPQ2SR48 1675BPQ2S48	1675KIT2S60 1675BPQ2SR60 1675BPQ2S60	1675KIT2S72 1675BPQ2SR272 1675BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1" (25mm)	16100KIT2S24 16100BPQ2SR24 16100BPQ2S24	16100KIT2S36 16100BPQ2SR36 16100BPQ2S36	16100KIT2S48 16100BPQ2SR48 16100BPQ2S48	16100KIT2S60 16100BPQ2SR60 16100BPQ2S60	16100KIT2S72 16100BPQ2SR72 16100BPQ2S72
Deluxe Kit* Basic Kit** Hose Assembly***	1¼" (32mm)	16125KIT2S24 16125BPQ2SR24 16125BPQ2S24	16125KIT2S36 16125BPQ2SR36 16125BPQ2S36	16125KIT2S48 16125BPQ2SR48 16125BPQ2S48	16125KIT2S60 16125BPQ2SR60 16125BPQ2S60	16125KIT2S72 16125BPQ2SR72 16125BPQ2S72

BTU/hr Flow Capacity Natural Gas (Flow rating BTU/hr 0.64 SP. GR. @ 0.5 inch WC pressure drop)

		LENGTH				
Model	Size I.D.	24" (607mm)	36" (914mm)	48" (1,219mm)	60" (1,524mm)	72" (1,829mm)
1650BPQ2S	½" (15mm)	77,000	69,000	60,000	54,000	48,000
1675BPQ2S	¾" (20mm)	205,000	193,000	160,000	140,000	124,000
16100BPQ2S	1" (25mm)	366,000	336,000	295,000	261,000	247,000
16125BPQ2S	1¼" (32mm)	472,000	461,000	449,000	441,000	440,000

***Deluxe Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, restraining device and full port valve
****Basic Kits include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast, and restraining device
*****Hose Assemblies include:** The Dormont Blue Hose, Double Swivel MAX, SnapFast

Typical Installation

The Dormont Blue Hose®

The Dormont Blue Hose is a commercial, moveable-grade gas connector designed for use with moveable equipment.

Moveable equipment is defined in ANSI Standard Z21.69/CSA 6.16 as gas utilization equipment that may be mounted on casters or otherwise be subject to movement.

SwivelMAX

- Reduces stress on connector
- Increases kitchen aisle space by allowing connector to be positioned closer to the wall

SnapFast

- One-handed quick-disconnect fitting
- Thermal shut-off when internal temperature exceeds 350°F (177°C)

Restraining Device

- ANSI Z21.69 Standard section 1.7.4 states: Connectors when used on caster-mounted equipment shall be installed with a restraining device, which prevents transmission of the strain to the connector

We guarantee our commercial gas connectors for the life of the original appliance to which it is connected.

Dormont®

A Watts Water Technologies Company

USA: Export, PA • Tel. (724) 733-4800 • Fax: (724) 733-4808 • www.dormont.com

PROJECT: _____ **ITEM NO.:** _____

IN SINK ERATOR

3 H.P. heavy duty disposer is designed for continuous operation in restaurants, hotels, hospitals and cafeterias. Food waste including steak bones is quickly and efficiently removed with this labor-saving, self-cleaning, environmentally sound disposer.

3 H.P. MODEL SS-300

SPECIFICATIONS

GRIND CHAMBER - Corrosion Resistant Stainless Steel

MOUNTING - 3/4" rubber mounting above grinding chamber isolates sound and eliminates vibration. Mounting is enclosed in chrome plated covers for sanitation and appearance.

MOTOR - 3 HP Induction Motor, 1725 RMPS, totally enclosed to provide protection against outside moisture. Controlled power air flow cools motor for efficiency and longer life. Built-in thermal overload protection.

CUTTING ELEMENTS - Stationary and rotating shredding elements made from cast nickel chrome alloy for long life and corrosion resistance, designed for reverse action grinding.

MAIN BEARINGS - Double-tapered Timken roller bearings provide a shock absorbing cushion.

MOTOR SEALS - Triple lip seal protects motor from water damage. Secondary spring-loaded oil seal provides double protection against water and loss of grease.

FINISH - All Stainless Steel and Chrome plated. Paint-free for lasting sanitation.

WARRANTY - 1 year full warranty from date of installation.

BASE DISPOSER/ELECTRICAL REQUIREMENTS

- ☐ 208 volts, 3 phase, 6.0 amps
- ☐ 230 volts, 3 phase, 7.4 amps
- ☐ 460 volts, 3 phase, 3.7 amps

NOTE: All amp ratings denote the amp draw during a grind load.

DISPOSER MOUNTING ASSEMBLIES

☐ #6 Collar Adapter for welding into trough, provides 6⅝" opening, includes splash baffle

☐ #7 Collar Adapter for welding into sink, provides 6⅝" opening, includes splash baffle and stopper

☐ Type A Sink Bowl Assembly*

☐ Type B Sink Bowl Assembly*

☐ Type C Sink Bowl Assembly*

Select Sink Bowl Assembly Size

- ☐ 12" with one adjustable water nozzle
- ☐ 15" with one adjustable water nozzle
- ☐ 18" with two adjustable water nozzles

*If using Type A, B, or C, you must specify either a 12", 15" or 18" sink bowl.

ELECTRICAL CONTROLS

☐ Manual Reverse Switch (Dual Direction)

☐ Low Voltage Magnetic Starter (Single Direction)

☐ CC-202 Control Center (Auto-Reversing)

☐ CC-101 Control Center (Auto-Reversing)

☐ AS-101 Control Center "Aqua Saver" (Auto-Reversing)

WATER CONTROLS

- ☐ Solenoid Valve
- ☐ Syphon Breaker
- ☐ Flow Control Valve

Recommended Water Usage

Standard	Optional
8 GPM	7 GPM

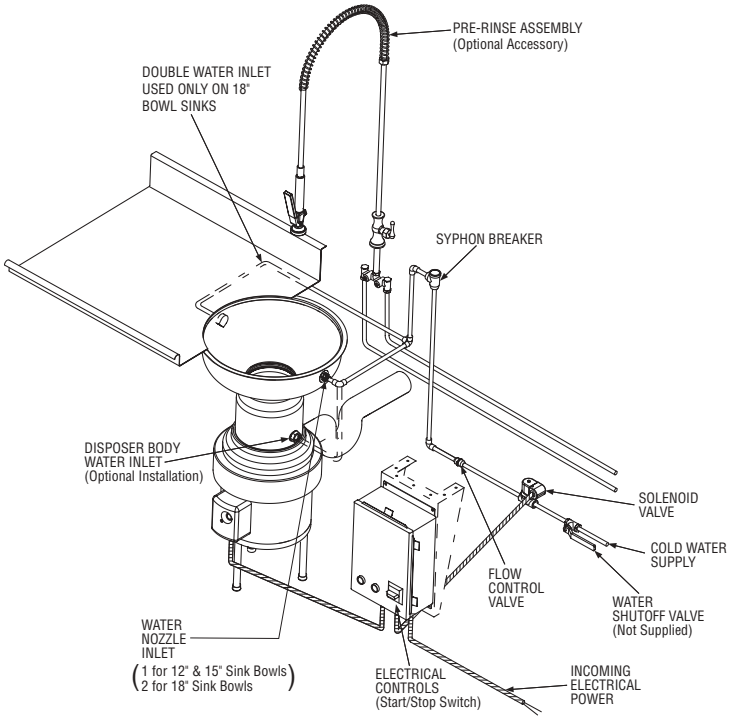
A COMMERCIAL DISPOSER PACKAGE INCLUDES:
1 Mounting/Bowl Assembly, 1 Electrical Control, 1 Syphon Breaker, 1 Solenoid Valve, and 1 Flow Control Valve. The standard Flow Control Valve will be sent with the unit unless the optional valve is specified.

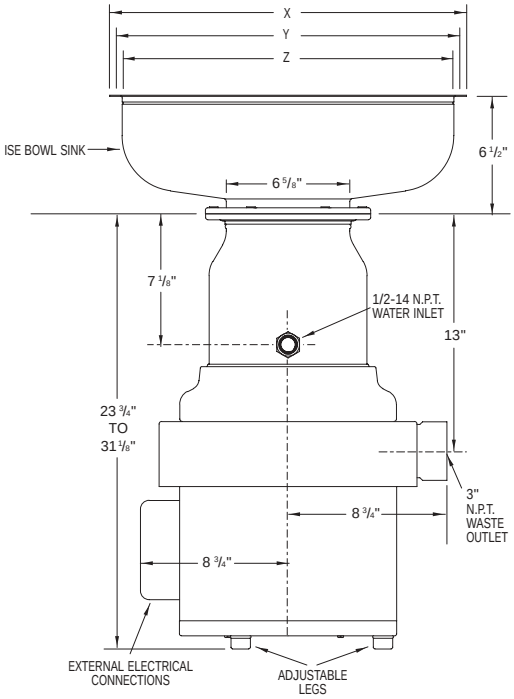
For additional information, see Commercial Product Information Binder.

IN SINK ERATOR
4700 21st STREET
RACINE, WI 53406-5093
TEL: 800-558-5712 x8025, 8030, 8083
FAX: 262 554-3620
www.insinkerator.com

RECOMMENDED INSTALLATION

MODEL SS-300





IMPORTANT: Use dimension chart below for adaptor height in place of ISE bowl sink height when mounting directly to a sink.

DIMENSIONS
X — Flange O.D.
Y — Diameter of Work Table Hole
Z — Flange I.D.

BOWL SINKS	X	Y	Z	HEIGHT
12"	13 1/2"	12 1/4"	12"	6 1/2"
15"	16 1/2"	15 1/4"	15"	6 1/2"
18"	19 1/2"	18 1/4"	18"	6 1/2"
ADAPTORS	**X**	**Y**	**Z**	**HEIGHT**
No.6	7 13/16"	6 7/8"	6 5/8"	1 3/16"
No.7	9 1/8"	7 7/8"	7 5/8"	2 1/16"

3 H.P. COMMERCIAL DISPOSER

SAMPLE SPECIFICATION

ITEM NO. _____ DISPOSER
Quantity: One required (1)
Manufacturer: IN-SINK-ERATOR
Commercial Division, Racine, WI
Model: SS-300-15B/CC101
Electrical Requirements: _____ volts/
_____ phase
Install in _____, Item _____.

NOTE:
- Adaptors are available upon request for all competitor sink bowls or cones.
- Please have sink bowl/cone type with the necessary dimensions when ordering adaptors.
- Also available as short body model. Reduces overall height of disposer by 3-1/2".

PROJECT: _____ **ITEM NO.:** _____

CONTROL CENTER MODEL CC-101

WATER/ENERGY SAVING FEATURE • AUTOMATIC REVERSING ACTION

SPECIFICATIONS

STAINLESS STEEL ENCLOSURE
- NEMA 4
- Stainless steel construction
- Easy to clean and keep clean

AUTOMATIC REVERSING CONTROL
- Reverses direction of motor at each startup
- Increases cutting element life and reduces jams

REVERSING DELAY
- Disposer will not reverse while motor is in motion
- Protects motor from burn out from operator misuse

AUTOMATIC DROP OUT SYSTEM
- If a power loss occurs, control will automatically disengage power lines
- Disposer must be restarted

DISCONNECT SWITCH
- Disconnects electrical power beyond switch for service
- Interlock with front cover

SOLID STATE CONTROL
- Operates on 24V

SOLID STATE CONTROL CIRCUIT
- Printed circuit board with control diagnostic/function lights, delay timers and timed run pin and reversing control

POST WATER FLUSH
- Adjustable timer allows water to run automatically for up to 10 minutes, flushing disposer and drain lines after disposer is shut off

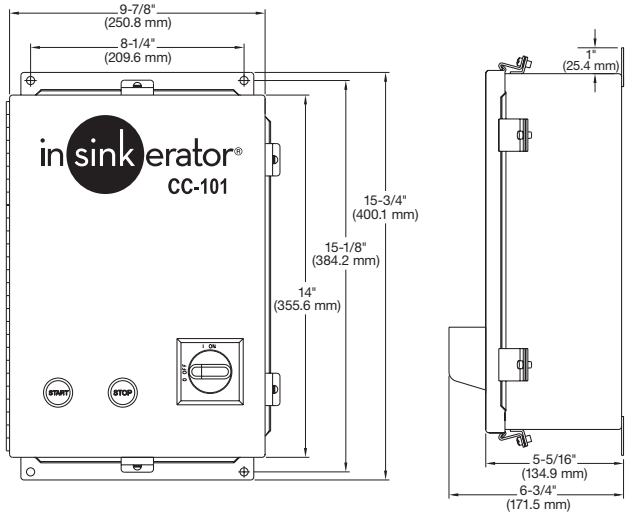
TIMED RUN OR CONTINUOUS RUN
- Selected at your discretion, simply by moving the plug-in in on the printed circuit board
- Timed run shuts off disposer automatically after 10 minutes
- Can be shut off manually any time

SOLENOID VALVE
- Packed unattached inside control center carton
- Ensures that water is flowing into disposer while disposer is operating

VOLTAGE/PHASE AVAILABILITY

Model	Voltage/Hz	Phase	Disposer Models
CC101K-5	120V, 50/60 Hz	1 Ph	SS-50 to SS-200
CC101K-6	208-240V, 50/60 Hz	1 Ph	SS-50 to SS-200
CC101K-7	208-240V, 50/60 Hz	3 Ph	SS-50 to SS-1000
CC101K-8	380-460V, 50/60 Hz	3 Ph	SS-50 to SS-1000

DIMENSIONS



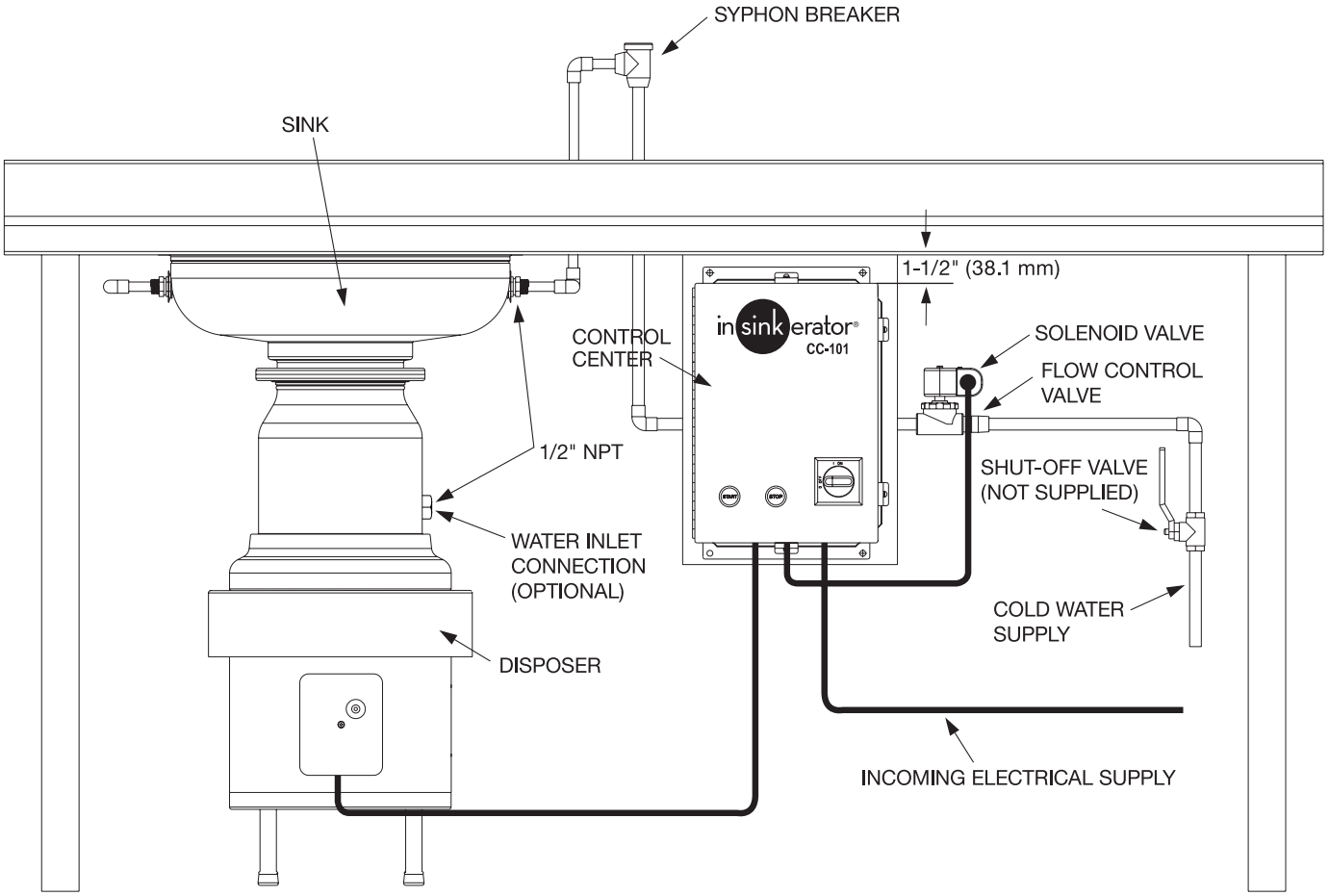
A complete collection of our product drawings is available for download at the **InSinkErator Revit/CAD** Library, which can be found at www.insinkerator.com/foodservice. Product information is also accessible on ***The KCL CADalog***. More information is available from KCL at www.kclcad.com.

4700 21st STREET
RACINE, WI 53406
TEL: 800-845-8345
FAX: 262 554-3620
www.insinkerator.com

c UL us LISTED

ISO 9001 QUALITY SYSTEMS CERTIFIED

RECOMMENDED INSTALLATION



NOTE: The CC-101 control center should be mounted 1-1/2" (38.1 mm) back from the front surface of the table.

T&S BRASS AND BRONZE WORKS, INC.
2 SADDLEBACK COVE / P.O. BOX 1088 / TRAVELERS REST, SC 29690
PHONE 800-476-4103 - FAX 864- 834-3518

REG.#A2601
ISO #9001

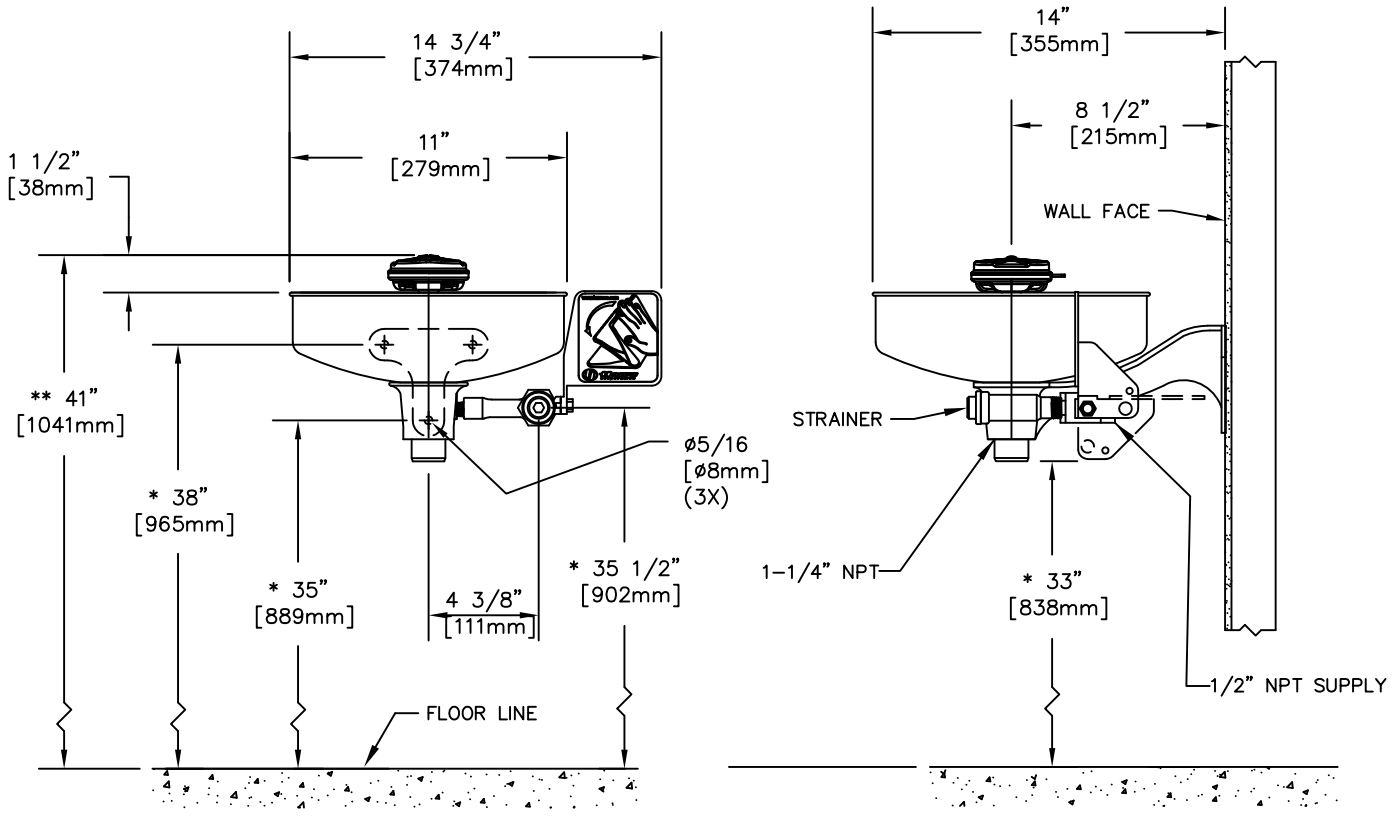
Sales No. EW-7

RELIABILITY BUILT IN

Job Name:

Architect/Engineer Approval:

Notes:



NOTES:

1. ** ANSI STANDARD Z358.1 SPECIFIES EYEWASH NOZZLES TO BE 33" [838mm] TO 45" [1143mm] ABOVE THE FLOOR.

2. * THESE DIMENSIONS ARE FOR REFERENCE

Product Description:	Drawn:	Checked	Scale:
EYEWASH, WALL MOUNT	DMH	GEF	1:8
	Approved		Date:
	JHB		12/20/10

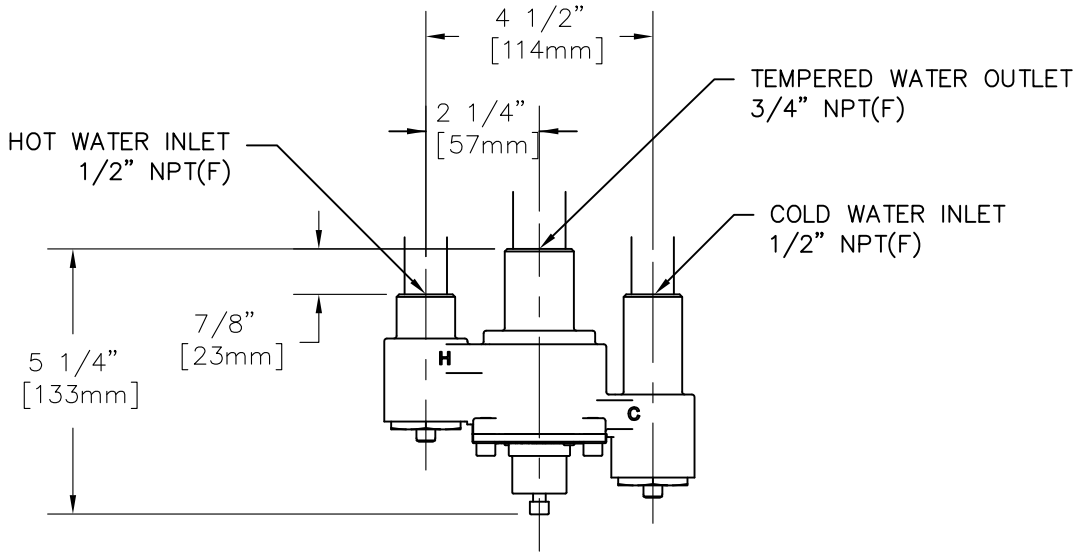
T&S BRASS AND BRONZE WORKS, INC.
2 SADDLEBACK COVE / P.O. BOX 1088 / TRAVELERS REST, SC 29690
PHONE 800-476-4103 - FAX 864- 834-3518

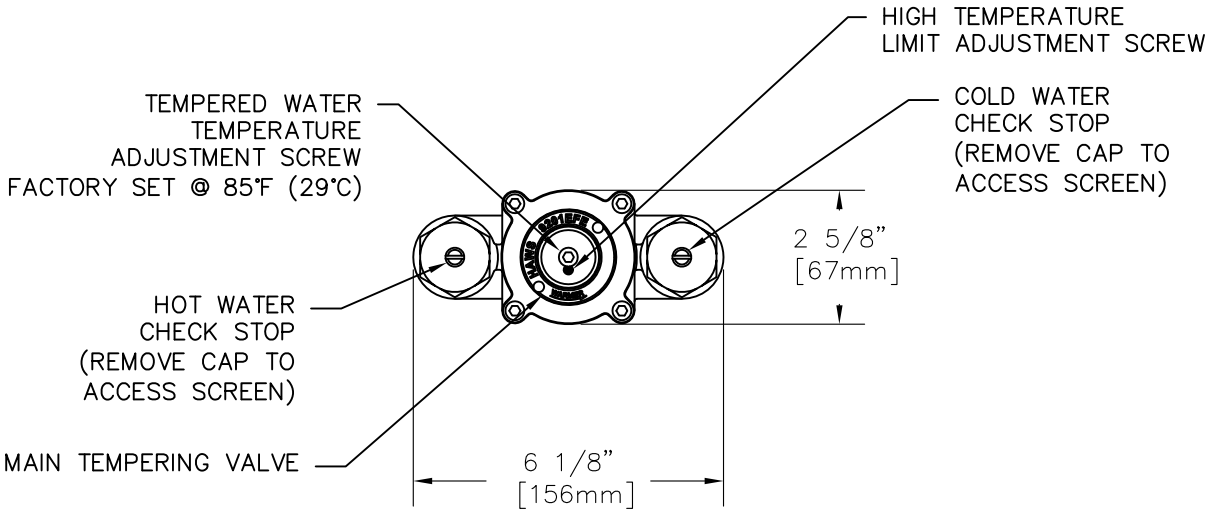
Sales No.
EW-9201EF
RELIABILITY BUILT IN

Job Name:

Architect/Engineer Approval:

Notes:





NOTES:

1. THERMOSTATIC MIXING VALVE TO SUPPLY TEMPERED WATER FROM 1 TO 12 GPM.

2. INLETS 1/2" NPT, OUTLET 3/4" NPT.

Product Description:	Drawn:	Checked	Scale:
THERMOSTATIC MIXING VALVE	DMH	KJG	1:4
	Approved		Date:
	JHB		11/21/12

T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

REG. #A2601
ISO #9001

Travelers Rest, SC: 800-476-4103 Simi Valley, CA: 800-423-0150 Fax: 864-834-3518 www.tsbrass.com

Model No.
B-0230

Item No.

This Space for Architect/Engineer Approval

Job Name_____Date_____

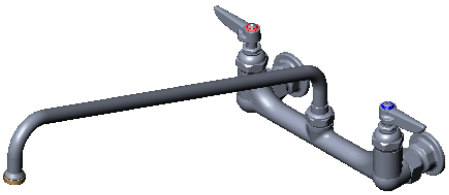
Model Specified_____ Quantity_____

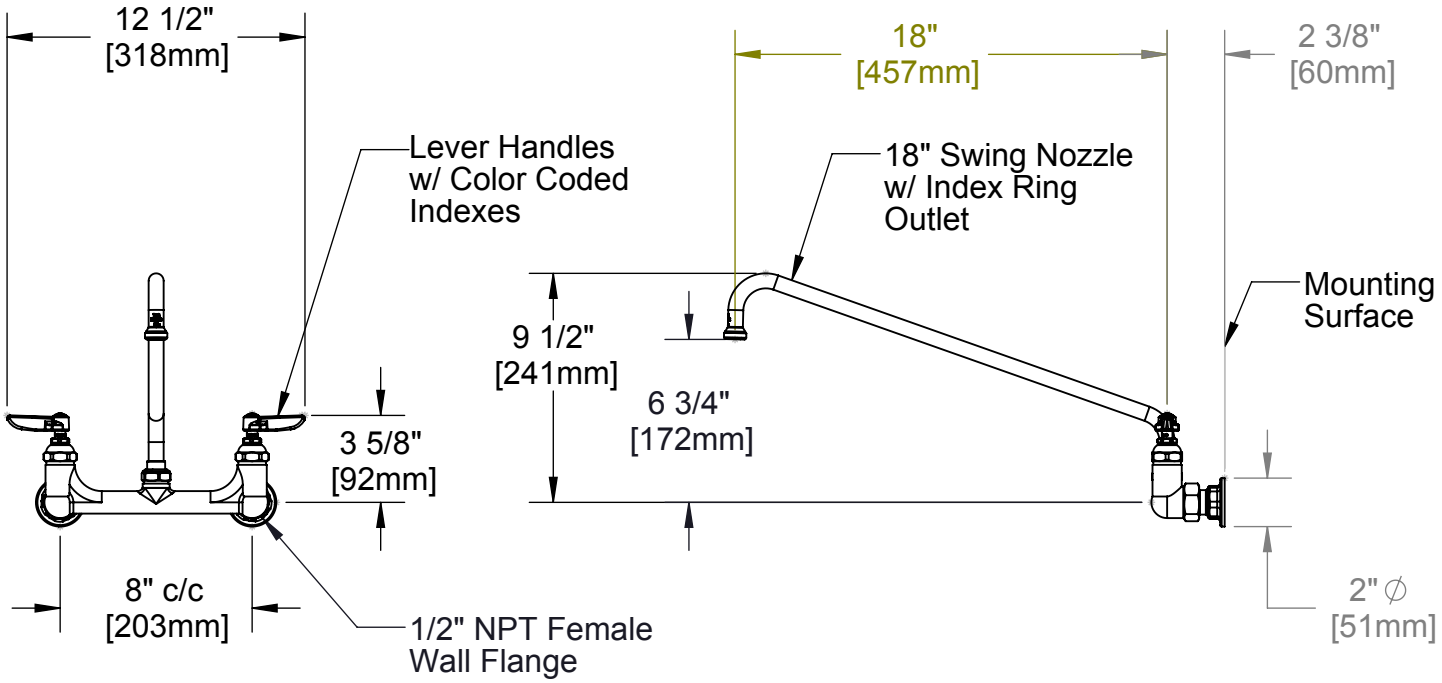
Customer/Wholesaler_____

Contractor_____

Architect/Engineer_____

ADA Compliant





Product Specifications:

Double Pantry Faucet, Lever Handles, 18" Swivel Nozzle w/ Index Ring Outlet & Wall Flanges

Drawn	Checked	Approved
KJG	DHL	JHB
Scale: 1:8		Date: 09/07/07

PROJECT: _____ **ITEM NO.:** 51

IN SINK ERATOR

3 H.P. heavy duty disposer is designed for continuous operation in restaurants, hotels, hospitals and cafeterias. Food waste including steak bones is quickly and efficiently removed with this labor-saving, self-cleaning, environmentally sound disposer.

3 H.P. MODEL SS-300

SPECIFICATIONS

GRIND CHAMBER - Corrosion Resistant Stainless Steel

MOUNTING - 3/4" rubber mounting above grinding chamber isolates sound and eliminates vibration. Mounting is enclosed in chrome plated covers for sanitation and appearance.

MOTOR - 3 HP Induction Motor, 1725 RMPS, totally enclosed to provide protection against outside moisture. Controlled power air flow cools motor for efficiency and longer life. Built-in thermal overload protection.

CUTTING ELEMENTS - Stationary and rotating shredding elements made from cast nickel chrome alloy for long life and corrosion resistance, designed for reverse action grinding.

MAIN BEARINGS - Double-tapered Timken roller bearings provide a shock absorbing cushion.

MOTOR SEALS - Triple lip seal protects motor from water damage. Secondary spring-loaded oil seal provides double protection against water and loss of grease.

FINISH - All Stainless Steel and Chrome plated. Paint-free for lasting sanitation.

WARRANTY - 1 year full warranty from date of installation.

BASE DISPOSER/ELECTRICAL REQUIREMENTS

- ☐ 208 volts, 3 phase, 6.0 amps
- ☐ 230 volts, 3 phase, 7.4 amps
- ☐ 460 volts, 3 phase, 3.7 amps

NOTE: All amp ratings denote the amp draw during a grind load.

DISPOSER MOUNTING ASSEMBLIES

☐ #6 Collar Adapter for welding into trough, provides 6⅝" opening, includes splash baffle

☐ #7 Collar Adapter for welding into sink, provides 6⅝" opening, includes splash baffle and stopper

☐ Type A Sink Bowl Assembly*

☐ Type B Sink Bowl Assembly*

☐ Type C Sink Bowl Assembly*

Select Sink Bowl Assembly Size

- ☐ 12" with one adjustable water nozzle
- ☐ 15" with one adjustable water nozzle
- ☐ 18" with two adjustable water nozzles

*If using Type A, B, or C, you must specify either a 12", 15" or 18" sink bowl.

ELECTRICAL CONTROLS

☐ Manual Reverse Switch (Dual Direction)

☐ Low Voltage Magnetic Starter (Single Direction)

☐ CC-202 Control Center (Auto-Reversing)

☐ CC-101 Control Center (Auto-Reversing)

☐ AS-101 Control Center "Aqua Saver" (Auto-Reversing)

WATER CONTROLS

- ☐ Solenoid Valve
- ☐ Syphon Breaker
- ☐ Flow Control Valve

Recommended Water Usage

Standard	Optional
8 GPM	7 GPM

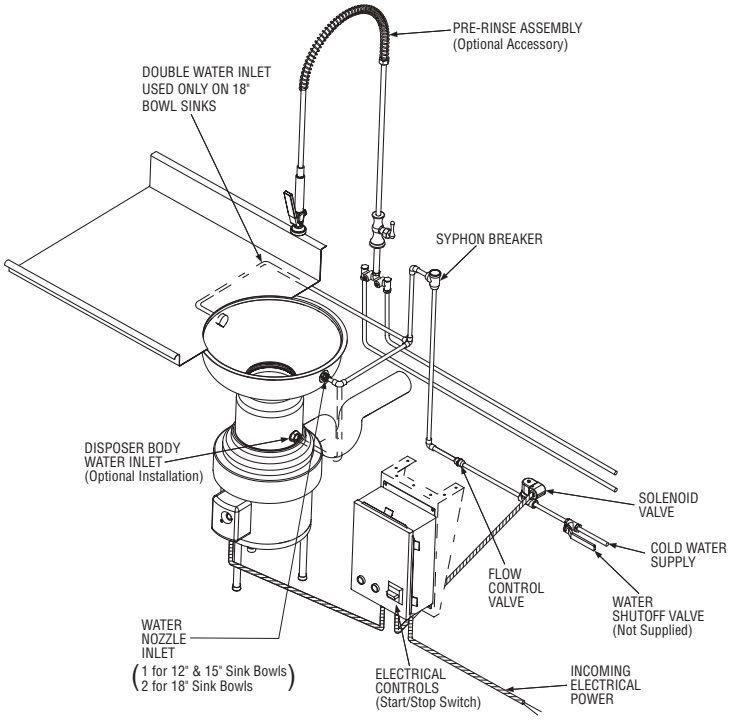
For additional information, see Commercial Product Information Binder.

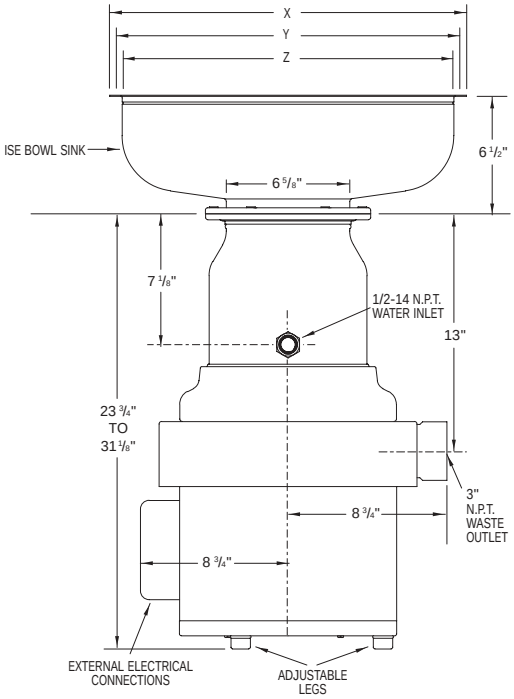
A COMMERCIAL DISPOSER PACKAGE INCLUDES:
1 Mounting/Bowl Assembly, 1 Electrical Control, 1 Syphon Breaker, 1 Solenoid Valve, and 1 Flow Control Valve. The standard Flow Control Valve will be sent with the unit unless the optional valve is specified.

IN SINK ERATOR
4700 21st STREET
RACINE, WI 53406-5093
TEL: 800-558-5712 x8025, 8030, 8083
FAX: 262 554-3620
www.insinkerator.com

RECOMMENDED INSTALLATION

MODEL SS-300





IMPORTANT: Use dimension chart below for adaptor height in place of ISE bowl sink height when mounting directly to a sink.

DIMENSIONS
X — Flange O.D.
Y — Diameter of Work Table Hole
Z — Flange I.D.

BOWL SINKS	X	Y	Z	HEIGHT
12"	13 1/2"	12 1/4"	12"	6 1/2"
15"	16 1/2"	15 1/4"	15"	6 1/2"
18"	19 1/2"	18 1/4"	18"	6 1/2"
ADAPTORS	**X**	**Y**	**Z**	**HEIGHT**
No.6	7 13/16"	6 7/8"	6 5/8"	1 3/16"
No.7	9 1/8"	7 7/8"	7 5/8"	2 1/16"

3 H.P. COMMERCIAL DISPOSER

SAMPLE SPECIFICATION

ITEM NO. _____ DISPOSER
Quantity: One required (1)
Manufacturer: IN-SINK-ERATOR
Commercial Division, Racine, WI
Model: SS-300-15B/CC101
Electrical Requirements: _____ volts/
_____ phase
Install in _____, Item _____.

NOTE:
- Adaptors are available upon request for all competitor sink bowls or cones.
- Please have sink bowl/cone type with the necessary dimensions when ordering adaptors.
- Also available as short body model. Reduces overall height of disposer by 3-1/2".

PROJECT: _____ **ITEM NO.:** _____

CONTROL CENTER MODEL CC-101

WATER/ENERGY SAVING FEATURE • AUTOMATIC REVERSING ACTION

SPECIFICATIONS

STAINLESS STEEL ENCLOSURE
- NEMA 4
- Stainless steel construction
- Easy to clean and keep clean

AUTOMATIC REVERSING CONTROL
- Reverses direction of motor at each startup
- Increases cutting element life and reduces jams

REVERSING DELAY
- Disposer will not reverse while motor is in motion
- Protects motor from burn out from operator misuse

AUTOMATIC DROP OUT SYSTEM
- If a power loss occurs, control will automatically disengage power lines
- Disposer must be restarted

DISCONNECT SWITCH
- Disconnects electrical power beyond switch for service
- Interlock with front cover

SOLID STATE CONTROL
- Operates on 24V

SOLID STATE CONTROL CIRCUIT
- Printed circuit board with control diagnostic/function lights, delay timers and timed run pin and reversing control

POST WATER FLUSH
- Adjustable timer allows water to run automatically for up to 10 minutes, flushing disposer and drain lines after disposer is shut off

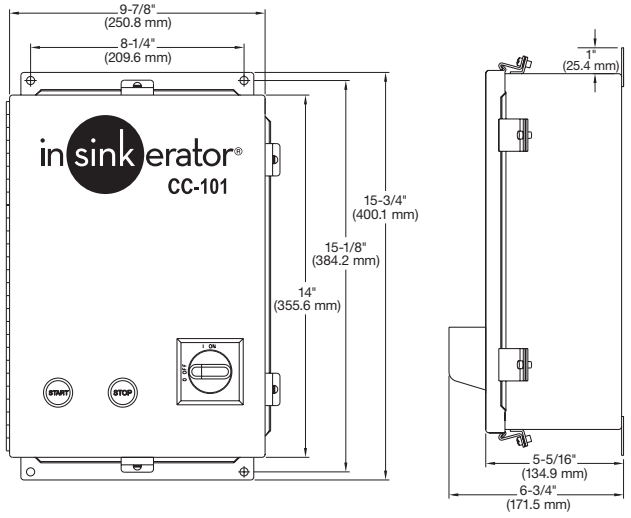
TIMED RUN OR CONTINUOUS RUN
- Selected at your discretion, simply by moving the plug-in in on the printed circuit board
- Timed run shuts off disposer automatically after 10 minutes
- Can be shut off manually any time

SOLENOID VALVE
- Packed unattached inside control center carton
- Ensures that water is flowing into disposer while disposer is operating

VOLTAGE/PHASE AVAILABILITY

Model	Voltage/Hz	Phase	Disposer Models
CC101K-5	120V, 50/60 Hz	1 Ph	SS-50 to SS-200
CC101K-6	208-240V, 50/60 Hz	1 Ph	SS-50 to SS-200
CC101K-7	208-240V, 50/60 Hz	3 Ph	SS-50 to SS-1000
CC101K-8	380-460V, 50/60 Hz	3 Ph	SS-50 to SS-1000

DIMENSIONS



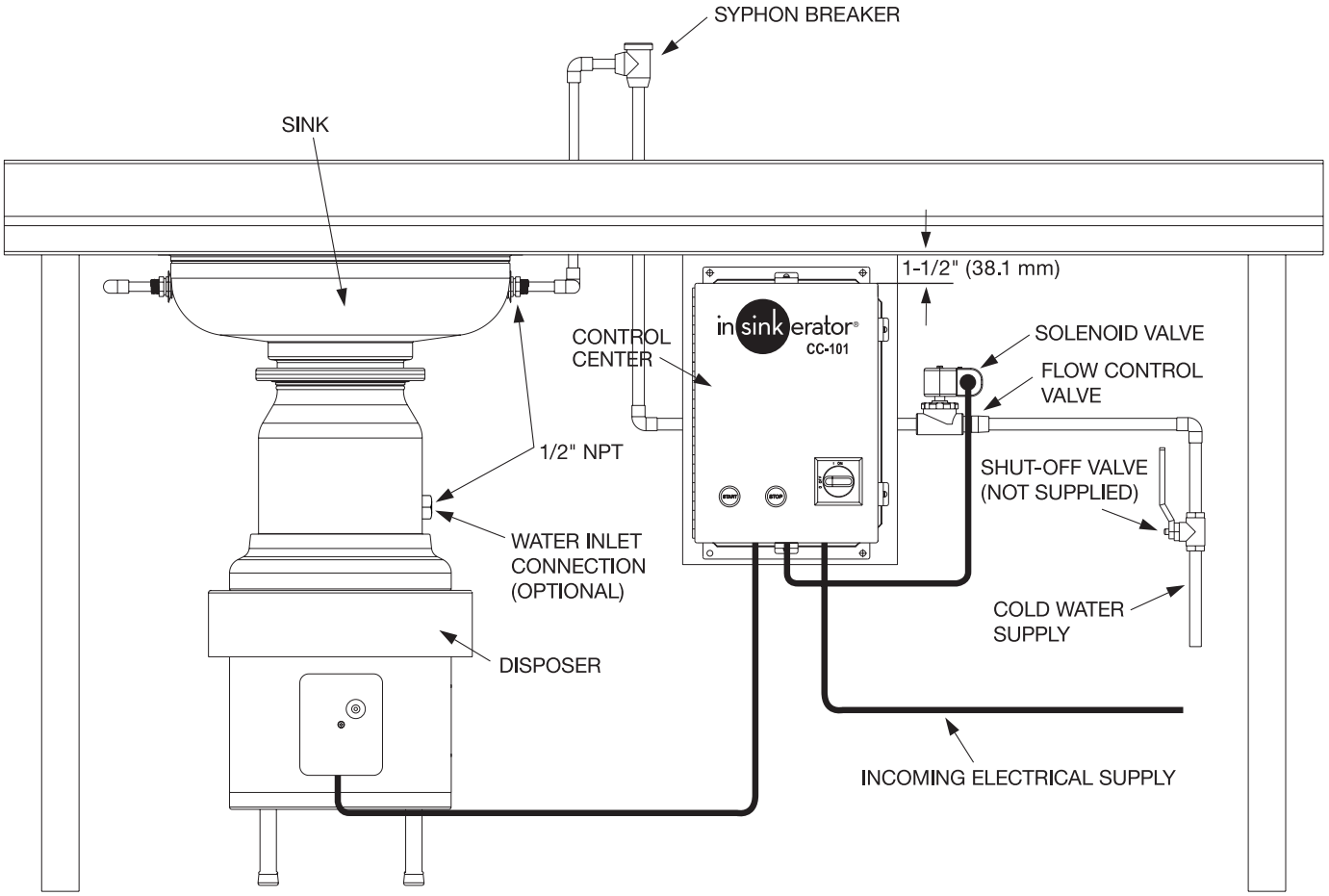
A complete collection of our product drawings is available for download at the **InSinkErator Revit/CAD** Library, which can be found at www.insinkerator.com/foodservice. Product information is also accessible on ***The KCL CADalog***. More information is available from KCL at www.kclcad.com.

4700 21st STREET
RACINE, WI 53406
TEL: 800-845-8345
FAX: 262 554-3620
www.insinkerator.com

c UL us LISTED

ISO 9001 QUALITY SYSTEMS CERTIFIED

RECOMMENDED INSTALLATION



NOTE: The CC-101 control center should be mounted 1-1/2" (38.1 mm) back from the front surface of the table.

T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
Travelers Rest, SC 29690

Travelers Rest, SC: 800-476-4103 • Simi Valley, CA: 800-423-0150 • Fax: 864-834-3518 • www.tsbrass.com

Model No.
B-0113-CR-V-B

Item No.

This Space for Architect/Engineer Approval

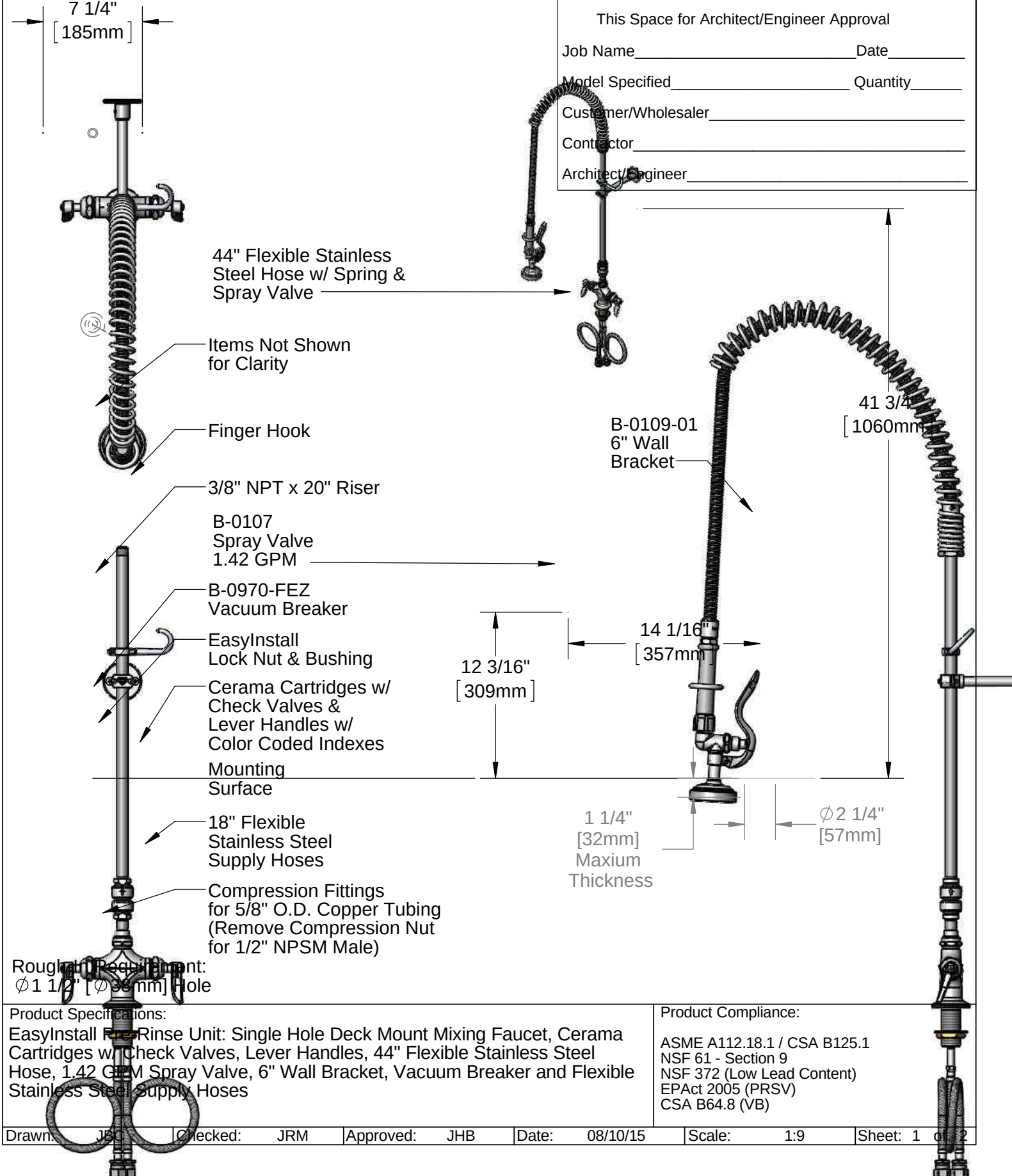
Job Name_____Date_____

Model Specified_____ Quantity_____

Customer/Wholesaler_____

Contractor_____

Architect/Engineer_____



Product Specifications:

EasyInstall Pre-Rinse Unit: Single Hole Deck Mount Mixing Faucet, Cerama Cartridges w/ Check Valves, Lever Handles, 44" Flexible Stainless Steel Hose, 1.42 GPM Spray Valve, 6" Wall Bracket, Vacuum Breaker and Flexible Stainless Steel Supply Hoses

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
EPAct 2005 (PRSV)
CSA B64.8 (VB)

Drawn:	JSC	Checked:	JRM	Approved:	JHB	Date:	08/10/15	Scale:	1:9	Sheet:	1 of 2

T&S BRASS AND BRONZE WORKS, INC.

2 Saddleback Cove / P.O. Box 1088
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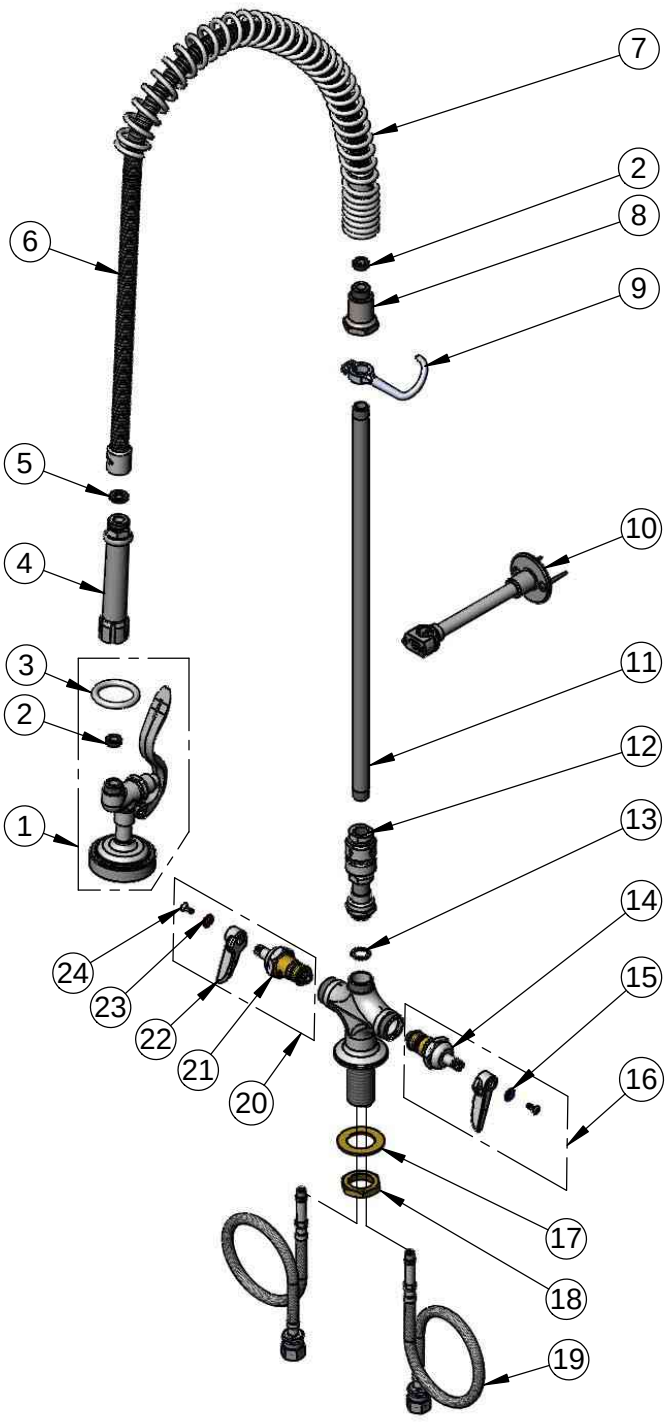
Model No.
B-0113-CR-V-B

Item No.



ITEM NO.	SALES NO.	DESCRIPTION
1	B-0107	1.42 GPM Spray Valve
2	010476-45	#27 Washer
3	000907-45	Spray Valve Hold Down Ring
4	002987-40	Handle Grip
5	001014-45	Washer, B-0100 Hose Barrel
6	B-0044-H2A	44" Flexible Stainless Steel Hose, Less Handle
7	000888-45	EasyInstall Overhead Spring
8	000821-40	Spring Body
9	004R	Finger Hook
10	B-0109-01	6" Wall Bracket
11	000370-40	3/8" NPT x 20" Riser
12	B-0970-FEZ	EasyInstall 3/8" NPT Vacuum Breaker
13	014200-45	Star Washer, Anti-Rotation
14	012395-25	Cerama Cartridge, LTC w/ Check Valve
15	001660-45	Blue Index-CW
16	012447-25	Quarter-Turn Cerama Cartridge, LTC w/ Check Valve, Handle, Index and Screw
17	002290-45	Lock Washer
18	000965-45	Lock Nut
19	012534-45	18" Flexible Supply Hose (2)
20	012446-25	Quarter-Turn Cerama Cartridge, RTC w/ Check Valve, Handle, Index and Screw
21	012394-25	Cerama Cartridge, RTC w/ Check Valve
22	001638-45	Lever Handle
23	001661-45	Red Index-HW
24	000922-45	Lever Handle Screw

Product Specifications:

EasyInstall Pre-Rinse Unit: Single Hole Deck Mount Mixing Faucet, Cerama Cartridges w/ Check Valves, Lever Handles, 44" Flexible Stainless Steel Hose, 1.42 GPM Spray Valve, 6" Wall Bracket, Vacuum Breaker and Flexible Stainless Steel Supply Hoses

Product Compliance:

ASME A112.18.1 / CSA B125.1
NSF 61 - Section 9
NSF 372 (Low Lead Content)
EPAct 2005 (PRSV)
CSA B64.8 (VB)

Drawn:	Checked:	Approved:	Date:	Scale:	Sheet:
JBC	JRM	JHB	08/10/15	NTS	2 of 2

HOBART

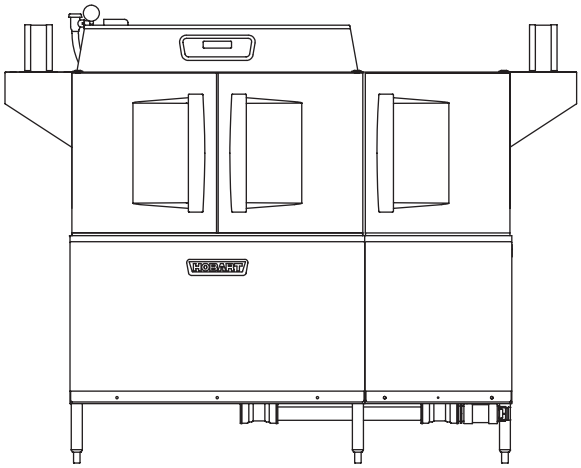
Project _____

AIA # _____ SIS # _____

Item # _____ Quantity _____ C.S.I. Section 114000

CLPS66*e*N-EGR ELECTRIC

High Temperature Rack Conveyor Dishwashing Machine



SPECIFIER STATEMENT

Specified dishwasher will be Hobart CLPS66*e*N Energy Recovery electric tank heat model with drain water energy recovery (DWER) and Opti-Rinse™. Includes 22" power scrapper, insulated ergonomic cabinet style doors, dirty water indicator, configurable "intelligent" de-lime notification, top mounted computer controls, and NSF approved pot and pan cycle mode. The wash tank utilizes durable precision pressure sensor monitors in lieu of conventional mechanical floats. The 19.5" standard chamber height will accommodate up to (6) standard sheet pans at a time on an open-end sheet pan rack.

STANDARD FEATURES

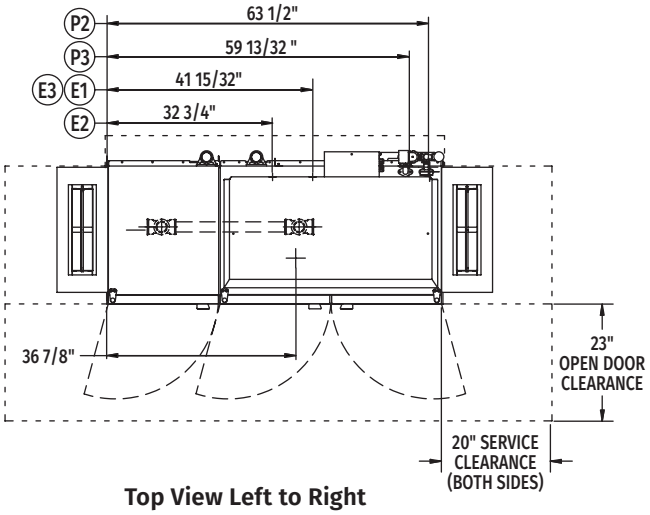
+ 202 racks per hour
+ 22" power scrapper
+ Drain water energy recovery (DWER)
+ Opti-Rinse™ system
+ Drain water tempering kit
+ Rapid return conveyor drive mechanism
+ Internal stainless steel pressure-less 30 KW booster heater
  - ❑ Dual point electrical connection standard on 208/60/3 and 240/60/3 voltage machines, when equipped with internal booster; single point kits available (see page 3)
  - ❑ Single point connection standard on 480/60/3 and 600/60/3 voltage machines, when equipped with internal booster
+ Large double door opening for ease of cleaning
+ Doors are insulated & hinged with door interlock switches
+ 19.5" chamber height opening (accepts sheet pans)
+ Top mounted micro-processor control module
+ Energy saver mode (programmable auto-shut down)
+ Dirty water indicator
+ Manager activated low temperature alert
+ NSF rated configurable pot and pan dwell mode
+ Configurable "intelligent" delime notification
+ Service diagnostics
+ Self-aligning wash manifolds
+ Stainless steel anti-clogging wash arms
+ Removable pump intake screen
+ Stainless steel self-draining pump and impeller
+ Single, sloping scrap screen and deep scrap basket
+ Stainless panels enclose perimeter and bottom
+ Door actuated drain closure
+ Vent fan control
+ Booster heater control
+ Power scrapper vent cowl curtain kit
+ ENERGY STAR® Certified

OPTIONS & ACCESSORIES (Available at extra cost)

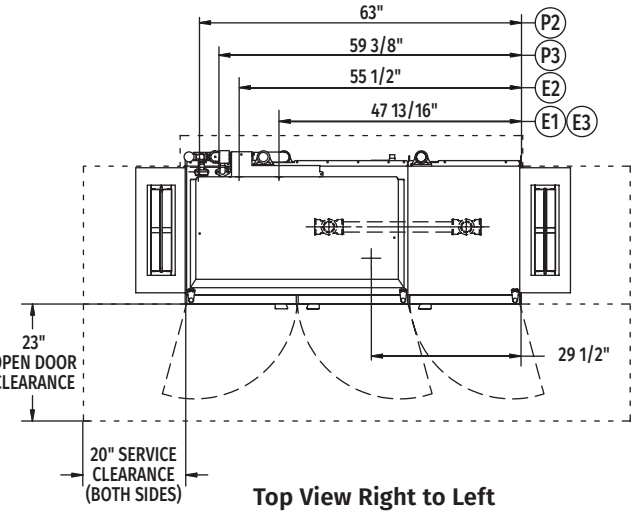
- ❑ Standard, short, and extended stainless steel vent hoods
- ❑ Direct drive unloader – adds 38" length. Reference spec F39520 for more details
- ❑ Side loader – SL23 adds 23" length, SL30 adds 30" length. Reference specs F40926 and F40927 for more details
- ❑ Blower-dryer – adds 33⅛" to length. Reference spec F40252 for more details (ships separate from dishmachine, contact Hobart Service for installation)
- ❑ Flanged feet kit (requires two kits)
- ❑ Higher than standard chamber (24" opening)
- ❑ Table limit switch with 10' wire
- ❑ Correctional package (contact Hobart for details)
- ❑ Pressure regulator valve (PRV), for use with external booster
- ❑ Water shock absorber kit
- ❑ Factory-mounted circuit breakers (contact Hobart for details)
- ❑ Field installed single point kits available for 208/60/3 and 240/60/3 machines when equipped with internal booster

Approved by _____ Date _____ Approved by _____ Date _____

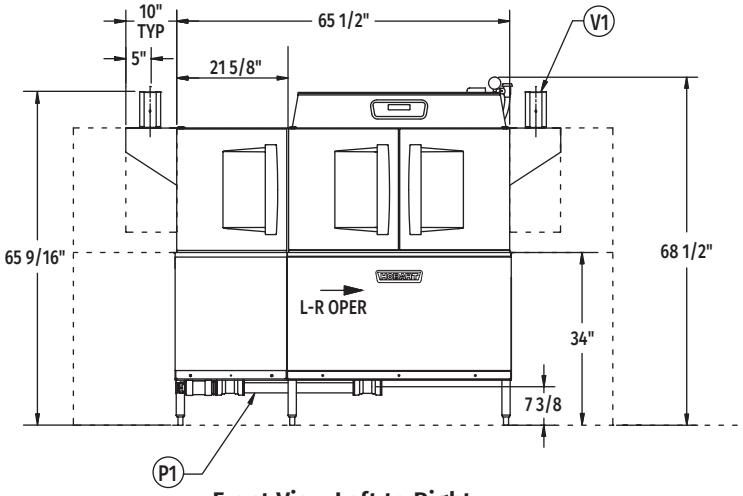
CLPS66*e*N-EGR ELECTRIC
High Temperature Rack Conveyor Dishwashing Machine



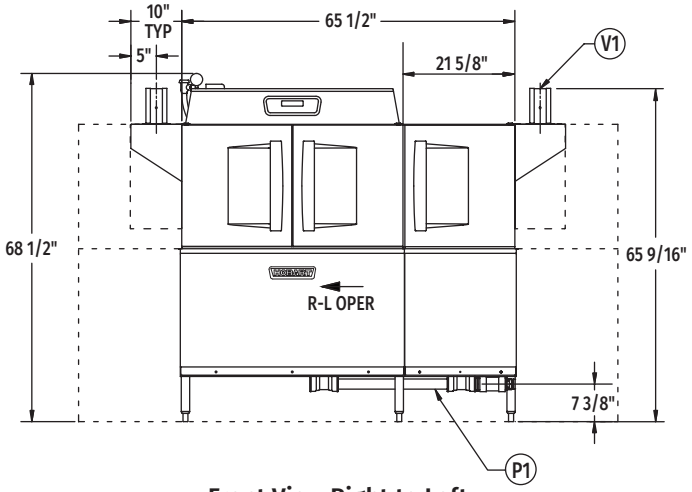
Top View Left to Right



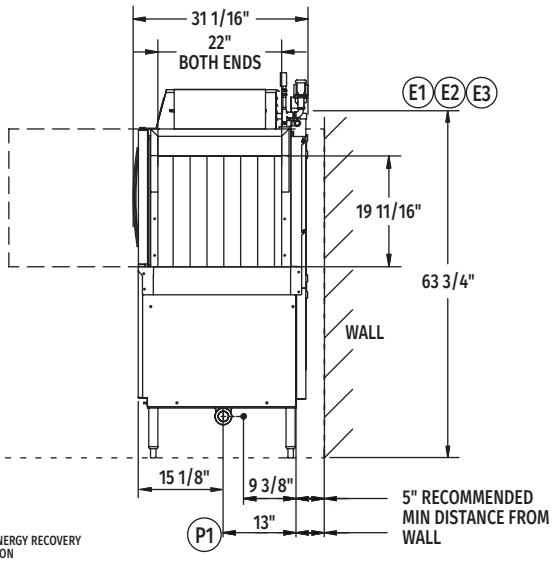
Top View Right to Left



Front View Left to Right



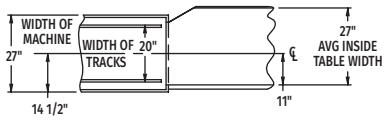
Front View Right to Left



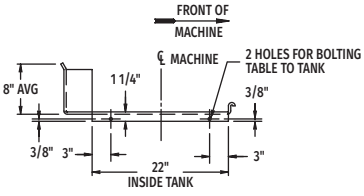
MODEL:
CLPS76*e*N ENERGY RECOVERY
L-R OPERATION
D-974809
REV B

Side View

Tabling Connection: 66" inside tank (at table connection)



Suggested Track and Table Layout



View Showing Hole Locations in Turned Down Portion of Table

MODEL:
CLPS76*e*N ENERGY RECOVERY
R-L OPERATION
D-974808
REV B

CAD and/or Revit Files Available

CLPS66*e*N-EGR ELECTRIC
High Temperature Rack Conveyor Dishwashing Machine

LEGEND

Electrical Connections	
Required when machine equipped with **SINGLE POINT ELECTRICAL CONNECTION**	
E1	Tank heat, motors, controls AND 30kW booster heater – multiple knockouts provided, 63-3/4" AFF.
Required when machine equipped with **DUAL POINT ELECTRICAL CONNECTION**	
E2	Tank heat, motors and controls – multiple knockouts provided, 63-3/4" AFF.
E3	Internal 30kW booster heater – multiple knockouts provided, 63-3/4" AFF.
Multiple knockouts provided for 2", 1" and 1/2" trade size conduits.	
Plumbing Connections	
P1	Drain. May be drained to either side of valve, plug opposite side 2" FPT. Recommend a floor drain minimum of 12" from machine for access and maintenance. 7-3/8" AFF.
P2	Hot water. 1/2" FPT connection. 1/2", 11-3/16" AFF. See plumbing notes for required temperatures.
P3	Cold water connection 1/2" FPT, cold water temperature 80°F, maximum 7-3/8" AFF.
Vent Connections	
V1	Optional vent hoods, 4" x 16" vent stack with damper.

SPECIFICATIONS

Capacities

Racks per Hour (NSF rated) 202
Wash Tank (U.S. gallons) 23
Power Scrapper (U.S. gallons) 23
Conveyor Speed (feet per minute) 5.6

Motor Horsepower

Drive 1/6
Wash 2
Power Scrapper 2

Water Consumption

U.S. Gallons per Hour (maximum use at 20 PSI) 126
U.S. Gallons per Rack 0.62
Peak Drain Flow (U.S. gallons per minute) 38

Heating

Tank Heat, Electric (kW) 15
Electric Booster (built-in) (kW for 70°F rise) 30

Venting

Load End (minimum CFM) 200
Unload End (minimum CFM) 400

Shipping Weight (approximate) . . . . . 895 lbs.

Crated Dimensions . . . . . 76"L x 38"W x 78"H

E1	Single Point Electrical Connection with internal 30 kW Booster Heater		
Voltage	(E1) Tank Heat, Motors, Controls 30kW Booster Heater		Single Point Service Connection
	Rated Amps	Minimum Supply Circuit Ampacity / Maximum Protective Device	
208/60/3	144.5	175	Field Installed **SGLPT-KIT4-CLE** required, order separately
240/60/3	138.2	150	Field Installed **SGLPT-KIT2-CLE** required, order separately
480/60/3	70.7	90	Ships Standard, Factory Installed
600/60/3	49.4	60	Ships Standard, Factory Installed

E2 E3	Dual Point Electrical Connection with Internal 30 kW Booster Heater				
Voltage	(E2) Tank Heat, Motors, Controls		(E3) 30kW Booster Heater		Dual Point Service Connection
	Rated Amps	Minimum Supply Circuit Ampacity / Maximum Protective Device	Rated Amps	Minimum Supply Circuit Ampacity / Maximum Protective Device	
208/60/3	60.6	80	83.9	90	Dual Point Ships Standard
240/60/3	58.0	80	80.2	90	Dual Point Ships Standard
480/60/3	30.6	40	40.1	50	Field Convertible
600/60/3	22.6	35	26.9	40	Field Convertible

CLPS66*e*N-EGR ELECTRIC
High Temperature Rack Conveyor Dishwashing Machine

WARNING: Plumbing and electrical connections should be made by qualified personnel who will observe all the applicable plumbing, sanitary, safety codes and National Electrical Code.

Plumbing Notes: Minimum incoming water temperatures: 110° F for 30kW internal booster. Building flowing water pressure to dish machine is 20 PSI, (+/- 5 PSI).

Single cold water connection supplies both drain water energy recovery and drain water tempering.

Recommended water hardness to be 3 grains or less for best results.

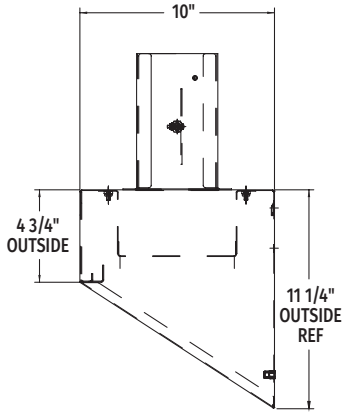
Electrical Note: Dishmachine not provided with internal GFCI protection.

CLPS66*e*N-EGR Electric Heat Dissipation	
BTU/HR.	
Latent	Sensible
43,100	18,500

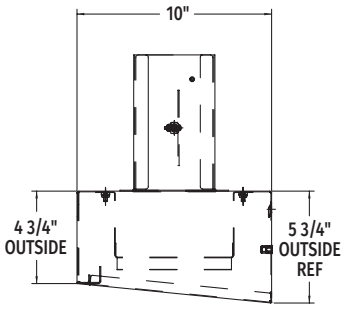
NOTE: Additional CL*e*N Voltages and Amperages are available, see document F40972.

VENT HOOD OPTIONS (Adjustable, vent stack can be adjusted 1" to either side)

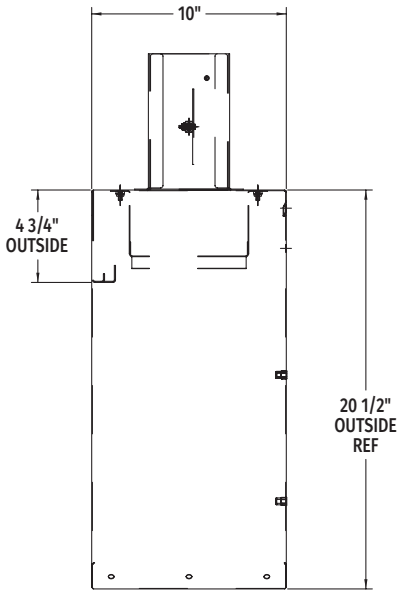
Standard



Short



Extended



EV9799-10

Kleenware HTS-10 System

Scale prevention and corrosion control for warewashing equipment

Kleenware HTS-10 System: EV9799-10
HT-10 Replacement Cartridge: EV9799-22

BENEFITS

Scale control system features HydroBlend which inhibits mineral deposits and provides corrosion protection

Extends the life of expensive foodservice equipment

Clear (amber shaded) high temperature bowl allows for hot water (up to 170°F) feed installations

Transparent replacement cartridge containing HydroBlend scale inhibitor, which is effective up to 200°F

Specially designed flow through head assures consistent, predictable product feed rates

INSTALLATION TIPS

The HTS-10 system must be used as a unit (i.e. high temperature bowl, head and cartridge)

Install vertically using the mounting bracket provided

Use 3/4" water line and observe proper inlet/outlet water directions

Some pressure relief mechanism should be provided downstream of the system to permit releasing line pressure when changing cartridges

Deliming of equipment prior to installation is recommended, but not required

OPERATION TIPS

Inspect HT-10 cartridge at least every 6 months for replacement

Pre-existing equipment scale may be dislodged and settle to the bottom of a chamber which can clog drain initially. Remove any settled scale

In new installations, the HydroBlend usage rate may start high, but will be reduced as existing scale is removed

Replace HT-10 cartridge before HydroBlend™ compound is completely used up

APPLICATION/SIZING

Commercial dishwashers

Commercial glassware washers

Warewashing booster heaters

Kleenware HTS-10 System

SPECIFICATIONS

Overall Dimensions:
12-1/2"H x 4-3/4"W x 4-5/8"D

Inlet connection: 3/4"

Outlet connection: 3/4"

Service Flow Rate:
Maximum 15 gpm (56.8 Lpm)

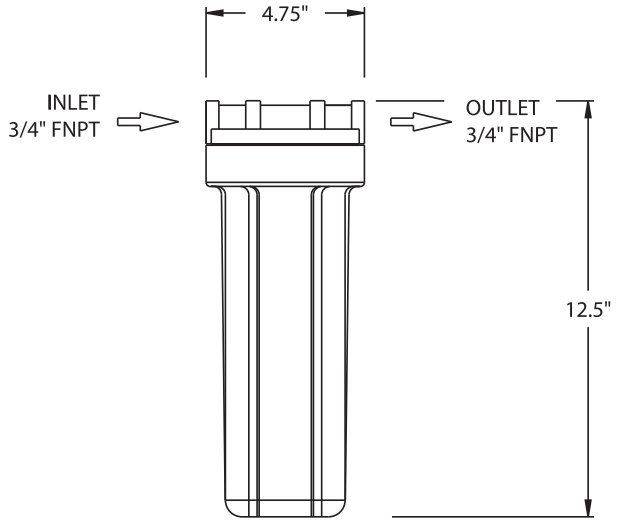
Pressure Requirements:
10 - 150 psi (0.7 – 10.3 bar), non-shock

Temperature: 170°F (77°C)

No electrical connection required

Shipping Weight: 7 lbs.

Operating Weight: 8 lbs.



WARRANTY

Everpure water treatment systems (excluding replaceable elements) are covered by a limited warranty against defects in material and workmanship for a period of five years after date of purchase. Everpure replaceable elements (filter cartridges and water treatment cartridges) are covered by a limited warranty against defects in material and workmanship for a period of one year after date of purchase. See printed warranty for details. Everpure will provide a copy of the warranty upon request.

EVERPURE, LLC
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Hanover Park, Illinois 60133
Toll Free (800) 323-7873
Tel (630) 307-3000
Fax (630) 307-3030
http://www.everpure.com

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Industriepark Wolfstee
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Tel 32 -14-283500
Fax 32-14-283505

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Hashimoto MN Bldg. 7F
3-25-1 Hashimoto Sagamihara-Shi
Kanagawa 229-1103
Japan
Tel 81-(0)42-775-3011
Fax 81-(0)42-775-3015

Everpure, Inc.
1040 Muirfield Drive
Hanover Park, IL 60133
Phone: 800-323-7873 Fax: 800-942-0081

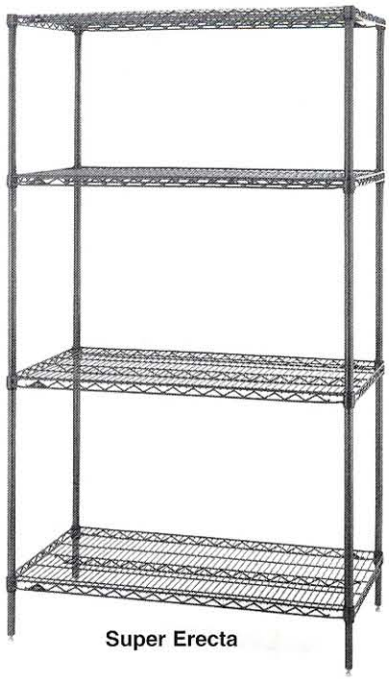
METRO®

METRO® SEAL 3
with Microban® Antimicrobial Protection

Metroseal 3 is available on Super Erecta and Super Adjustable Super Erecta shelving systems. Metroseal 3 is applied using an exclusive state-of-the-art finishing and coating process that creates an attractive and corrosion-resistant finish. Metroseal 3 is enhanced with built-in Microban® antimicrobial product protection, which protects the Metroseal 3 coating from bacteria, mold, mildew and fungi that cause odors, stains and product degradation.

- **Exclusive Protection:** Metro's new proprietary epoxy coating now contains Microban® antimicrobial product protection. Microban® protects the epoxy coating from bacteria, mold, mildew and fungi that cause odors, stains and product degradation. The storage system remains cleaner between cleanings.
- **Attractive, Corrosion-Resistant Finish:** Metroseal 3 is an attractive corrosion-resistant finish that protects the shelving against corrosive conditions found in walk-in coolers.
- **Metro® Shelving Systems:** Metroseal 3 is a finish for the world's most popular shelving systems, Super Erecta and Super Adjustable Super Erecta. Both systems provide easy assembly without the use of special tools, adjustability at 1" (25mm) increments, greater air circulation and light penetration, a large selection of accessories, and the versatility to change as your storage needs change. Super Adjustable Super Erecta has the added feature of a unique patented corner release making it the easiest to adjust shelving system ever.
- **Economical:** Metroseal 3 storage shelving is an economical alternative to stainless steel, for use in environments that tend to corrode other metals.
- **12-Year Limited Warranty:** Metroseal 3 is a corrosion-resistant finish for environments which can cause other metals to corrode. Metroseal 3 has a 12-year limited warranty against rust formation.

Super Adjustable Super Erecta



Super Erecta

NSF

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METRO®
InterMetro Industries Corporation
North Washington Street
Wilkes-Barre, PA 18705
www.metro.com

EMERSON
Storage Solutions

SUPER ERECTA® AND SUPER ADJUSTABLE SUPER ERECTA®

METROSEAL 3 SHELVING

Metroseal 3 Shelves

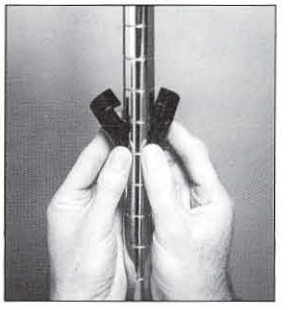
Cat. No. Super Adjustable	Cat. No. Super Erecta	Width (in.)	Width (mm)	Length (in.)	Length (mm)	Approx. Pkd Wt. (lbs.)	Approx. Pkd Wt. (kg)
A1424NK3	1424NK3	14	355	24	610	6	2.7
A1430NK3	1430NK3	14	355	30	760	7	3.2
A1436NK3	1436NK3	14	355	36	914	8	3.6
A1442NK3	1442NK3	14	355	42	1066	9 1/2	4.3
A1448NK3	1448NK3	14	355	48	1219	10 1/2	4.7
A1460NK3	1460NK3	14	355	60	1524	14	6.3
A1472NK3	1472NK3	14	355	72	1825	17	7.7
A1824NK3	1824NK3	18	457	24	610	7	3.2
A1830NK3	1830NK3	18	457	30	760	8	3.6
A1836NK3	1836NK3	18	457	36	914	9 1/2	4.3
A1842NK3	1842NK3	18	457	42	1066	11	5.0
A1848NK3	1848NK3	18	457	48	1219	12	5.4
A1854NK3	1854NK3	18	457	54	1370	14 1/2	6.6
A1860NK3	1860NK3	18	457	60	1524	17	7.7
A1872NK3	1872NK3	18	457	72	1825	20	9.1
A2124NK3	2124NK3	21	530	24	610	8	3.6
A2130NK3	2130NK3	21	530	30	760	9	4.1
A2136NK3	2136NK3	21	530	36	914	11	5.0
A2142NK3	2142NK3	21	530	42	1066	12	5.4
A2148NK3	2148NK3	21	530	48	1219	14	6.4
A2154NK3	2154NK3	21	530	54	1370	16	7.3
A2160NK3	2160NK3	21	530	60	1524	18	8.2
A2172NK3	2172NK3	21	530	72	1825	24	10.9
A2424NK3	2424NK3	24	610	24	610	9	4.1
A2430NK3	2430NK3	24	610	30	760	11	5.0
A2436NK3	2436NK3	24	610	36	914	13	5.9
A2442NK3	2442NK3	24	610	42	1066	15	6.8
A2448NK3	2448NK3	24	610	48	1219	16	7.3
A2454NK3	2454NK3	24	610	54	1370	19	8.6
A2460NK3	2460NK3	24	610	60	1524	21	9.5
A2472NK3	2472NK3	24	610	72	1825	26	11.8
A3036NK3		30	760	36	914	15	6.8
A3048NK3		30	760	48	1219	21	9.5
A3060NK3		30	760	60	1524	26 1/2	11.8
A3072NK3		30	760	72	1825	31	14.0
A3636NK3		36	914	36	914	18	8.2
A3648NK3		36	914	48	1219	23	10.4
A3660NK3		36	914	60	1524	29	13.1
A3672NK3		36	914	72	1825	34 1/2	15.4

SiteSelect™ Posts

Cat. No. Metroseal 3	Height* (in.)	Height* (mm)	Approx. Pkd. Wt. (lbs.)	Approx. Pkd. Wt. (kg)
13PK3	14 1/2	368	1	0.5
33PK3	34 1/2	877	2	0.9
54PK3	54 9/16	1386	3	1.4
63PK3	62 9/16	1589	3 1/2	1.6
74PK3	74 5/8	1895	4	1.8
86PK3	86 5/8	2200	5	2.3

*Height includes leveling bolt and cap.

Every Metroseal 3 shelf and post is backed by a limited 12-year warranty against surface rust formation.



Super Erecta Split Sleeves

Super Adjustable Wedges and Corner Release System

Important: When ordering by components remember that stability decreases as the ratio of height to width increases. Units should be kept as wide and low as possible.

SiteSelect™ Posts are grooved at 1" (25mm) increments and numbered at 2" (50mm) increments. Posts are double-grooved every 8" (203mm) for easy identification.

All Metro Catalog Sheets are available on our Web Site: **www.metro.com**

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
Phone: 570-825-2741 • Fax: 570-825-2852
For Product Information Call: 1-800-433-2232

L02-010B
Printed in U.S.A. Rev. 11/02

Item # _____

Job _____

METRO®
STEM CASTERS

- **Metro Stem-Type Casters** are designed to fit Super Erecta Shelf® posts to form shelf carts and other mobile units.
- **Stainless Steel, Cart-Washable Casters** offer grease seals and zerk fittings. Can withstand high-pressure washings.
- **Polymer Horn Casters:** Innovative polymer stem casters offer corrosion resistance and enhanced durability. For all medium-duty applications.
- **Resilient Rubber Tread:** A molded, soft tread that provides good floor protection along with quiet operation. Non-marking.
- **Polyurethane Tread:** Long-wearing; resists abrasion. Non-marking, shock absorbing.
- **Wheel Brakes:** Foot-operated. Available on all caster models.
- **Caster Load Ratings:** From 125 lbs. to 300 lbs. (57 to 136kg) See chart.
- **Donut Bumpers:** Furnished standard on all Metro stem casters.
- **Additional Caster Types Available.**

Note: SPECIAL WHEELS — V-groove, Conductive, Steel and Phenolic — are available on request. For additional information, contact InterMetro Industries Corporation or your InterMetro representative.

Resilient Rubber

5MB Wheel Brake
Includes Donut Bumper (not shown)

5M Resilient
Includes Donut Bumper (not shown)

Stainless Steel, Cart Washable

5MDBGSA

5MDGSA

Polymer Horn Casters

5PCB

5PC

InterMetro Industries Corporation
North Washington Street
Wilkes-Barre, PA 18705
www.metro.com

Job _____

METRO®

STEM CASTERS

Dimensions

Standard Casters — Stem Type

Cat. No.	Wheel Diameter (in.)	(mm)	Face (in.)	(mm)	Load Rating (lbs.)	(kg)	Type	Wheel Tread	Approx. Pkd. Wt. (lbs.)	(kg)
4LD	4	102	1/2	12	125	56	Stem/Swivel	Resilient	1 1/2	.6
5LD	5	127	1/2	12	125	56	Stem/Swivel	Resilient	2	.9
5M	5	127	1 1/4	32	200	90	Stem/Swivel	Resilient	2 1/2	1.1
5MB	5	127	1 1/4	32	200	90	Stem/Brake	Resilient	2 3/4	1.2
5MR	5	127	1 1/4	32	200	90	Stem/Rigid	Resilient	3 1/2	1.5
5MDA	5	127	1 1/4	32	250	111	Stem/Swivel	High Modulus Donut	2 1/2	1.1
5MDBA	5	127	1 1/4	32	250	111	Stem/Brake	High Modulus Donut	2 5/8	1.17
5MDRA	5	127	1 1/4	32	250	111	Stem/Rigid	High Modulus Donut	2 3/8	1.08
5MP	5	127	1 1/4	32	300	135	Stem/Swivel	Polyurethane	2 1/8	.94
5MPB	5	127	1 1/4	32	300	135	Stem/Brake	Polyurethane	2 1/4	1
5MPR	5	127	1 1/4	32	300	135	Stem/Rigid	Polyurethane	2	.9

NOTE 1: Stem casters are shipped with donut bumper **at no additional charge.**
NOTE 2: Rigid casters are held in position by a connecting channel. When ordering rigid casters, shelf width **must be** known.
NOTE 3: Load Height for all 5M, 5MD and 5MP casters — 6 3/32" ± 1/16" (155 ± 1.5mm).
NOTE 4: Load Height for 4LD caster — 4 5/8" ± 1/16" (118 ± 1.5mm).
NOTE 5: Load Height for 5LD caster — 5 5/8" ± 1/16" (143 ± 1.5mm).
NOTE 6: Brakes are foot-operated.

Stainless Steel Cart-Washable Casters — Stem Type

Cat. No.	Wheel Diameter (in.)	(mm)	Face (in.)	(mm)	Load Rating (lbs.)	(kg)	Type	Wheel Tread	Approx. Pkd. Wt. (lbs.)	(kg)
5MDGSA	5	122	1 1/4	32	150	68	Swivel	High Modulus Donut	2 1/2	1.1
5MDBGSA	5	122	1 1/4	32	150	68	Brake	High Modulus Donut	2 5/8	1.17
5MDRGSA	5	122	1 1/4	32	150	68	Rigid	High Modulus Donut	2 3/8	1.08
5MPGSA	5	127	1 1/4	32	300	135	Swivel	Polyurethane	2 1/8	.94
5MPBGSA	5	127	1 1/4	32	300	135	Brake	Polyurethane	2 1/4	1
5MPRGSA	5	127	1 1/4	32	300	135	Rigid	Polyurethane	2	.9

NOTE 1: Stem casters are shipped with donut bumper **at no additional charge.**
NOTE 2: Rigid casters are held in position by a connecting channel. When ordering rigid casters, shelf width **must be** known.
NOTE 3: Load Height for all 5MD and 5MP casters — 6 3/32" ± 1/16" (155 ± 1.5mm).
NOTE 4: All casters are grease sealed with zerk fittings in swivel and axle.
NOTE 5: Brakes are foot-operated.
NOTE 6: "D" in model number designates donut wheel made of high-modulus rubber.

Polymer Casters — Stem Type

Cat. No.	Wheel Diameter (in.)	(mm)	Face (in.)	(mm)	Load Rating (lbs.)	(kg)	Type	Wheel Tread	Approx. Pkd. Wt. (lbs.)	(kg)
5PC	5	127	1 1/4	32	300	135	Swivel	Polyurethane	2	.9
5PCB	5	127	1 1/4	32	300	135	Brake	Polyurethane	2	.9
5PCR	5	127	1 1/4	32	300	135	Rigid	Polyurethane	2	.9

NOTE 1: Optional thread guards (blue) may be ordered by adding "-TG" to the desired model number (eg. 5PC-TG, 5PCB-TG, 5PCR-TG).
NOTE 2: Stem casters are shipped with donut bumper **at no additional charge.**
NOTE 3: Rigid casters are held in place by a connecting channel. When ordering, shelf depth **must be** provided.

Manufactured by:

InterMetro Industries Corporation
North Washington Street, Wilkes-Barre, PA 18705
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For Product Information Call: 1-800-433-2232
Visit Our Web Site: www.metro.com

L02-041
Rev. 9/00
Printed in U.S.A.

ADVANCE TABCO
SMART FABRICATION™

STAINLESS STEEL

FABRICATED FLOOR MOP SINKS

Item #: _____ **Qty #:** _____
Model #: _____
Project #: _____

Standard Mop Sink
9-OP-20 Shown

Drop Front Mop Sink
9-OP-40DF Shown

FEATURES:

Floor mounted unit eliminates the need of lifting heavy containers.

Tile edge furnished on the rear.

Bowls rectangular in design for increased capacity.

K-16 3-1/2" Free Flow Drain. Connects to a 2" drain pipe.

-DF models feature a notched out front which allows for ease of emptying mop bucket).

CONSTRUCTION:

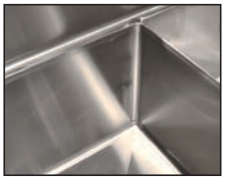
All TIG welded.

Welded areas blended to match adjacent surfaces and to a satin finish.

MATERIAL:

16 Gauge type "304" series stainless steel sink bowl & Apron.

Notched Out Front Allows Ease of Emptying Mop Bucket



Fabricated Bowls are Welded Together at the Seams

* NSF Compliant

	Model #	Bowl Size (A x B x C)	O.A. Dimension (W x L x H)	Drain Distance (E)	Drain Distance (F)	Approx. Wt.	Approx. Cu.
STANDARD	9-OP-20*	16" x 20" x 6"	21" x 25" x 10"	10-1/2"	12-1/2"	33 lbs.	4
	9-OP-28*	20" x 28" x 6"	25" x 33" x 10"	12-1/2"	16-1/2"	47 lbs.	7
	9-OP-40*	16" x 20" x 12"	21" x 25" x 16"	10-1/2"	12-1/2"	45 lbs.	6
	9-OP-48*	20" x 28" x 12"	25" x 33" x 16"	12-1/2"	16-1/2"	62 lbs.	9
LARGE BOWL	9-OP-44	24" x 24" x 12"	29" x 29" x 16"	14-1/2"	14-1/2"	70 lbs.	9
	9-OP-33	24" x 36" x 12"	29" x 41" x 16"	14-1/2"	20-1/2"	80 lbs.	12
	9-OP-34	24" x 48" x 12"	29" x 53" x 16"	14-1/2"	26-1/2"	90 lbs.	15
DROP FRONT	9-OP-40DF	16" x 20" x 12"	18-1/2" x 25" x 16"	10-1/2"	12-1/2"	85 lbs.	9
	9-OP-48DF	20" x 28" x 12"	22-1/2" x 33" x 16"	12-1/2"	16-1/2"	110 lbs.	15

MOP SINK ACCESSORIES

16" High Side & Back Splashes for 9-OP Series Mop Sinks

Splashes on All 3 Sides

Model #	Fits Units:	Model #	Fits Units:
K-298	9-OP-20 9-OP-40	K-298D	9-OP-40DF
K-299	9-OP-28 9-OP-48	K-299D	9-OP-48DF
K-300	9-OP-44	-	-
K-303	9-OP-33	-	-
K-304	9-OP-34	-	-

Splash on Left or Right & Back

Model #	Fits Units:	Model #	Fits Units:
K-288LorR	9-OP-20 9-OP-40	K-288LDorRD	9-OP-40DF
K-290LorR	9-OP-28 9-OP-48	K-290LDorRD	9-OP-48DF
K-291LorR	9-OP-44	-	-
K-293LorR	9-OP-33	-	-
K-294LorR	9-OP-34	-	-

Height Above Finished Floor (A.F.F.)
9-OP-20/9-OP-28 = 26" High 9-OP-40/9-OP-40DF/9-OP-44/9-OP-48/ 9-OP-48DF = 32" High

Left & Right Splashes Shown

K-16 Replacement drain for floor mop sinks
K-240 Service Faucet*
K-242 23" wide mop hanger
K-243 Stainless steel mop drainage tray
K-244 Hose and hanger
K-245 8" x 24" utility shelf
K-246 8" x 36" utility shelf

*Does not meet Federal Lead Free Standards as it is not intended for potable water.

K-243

K-240

K-245

K-242

K-16

K-244

ADVANCE TABCO
SMART FABRICATION™
www.advancetabco.com

Customer Service Available To Assist You 1-800-645-3166 8:30 am - 7:00 pm E.S.T.

For Orders & Customer Service:
Email: customer@advancetabco.com or Fax: 631-242-6900

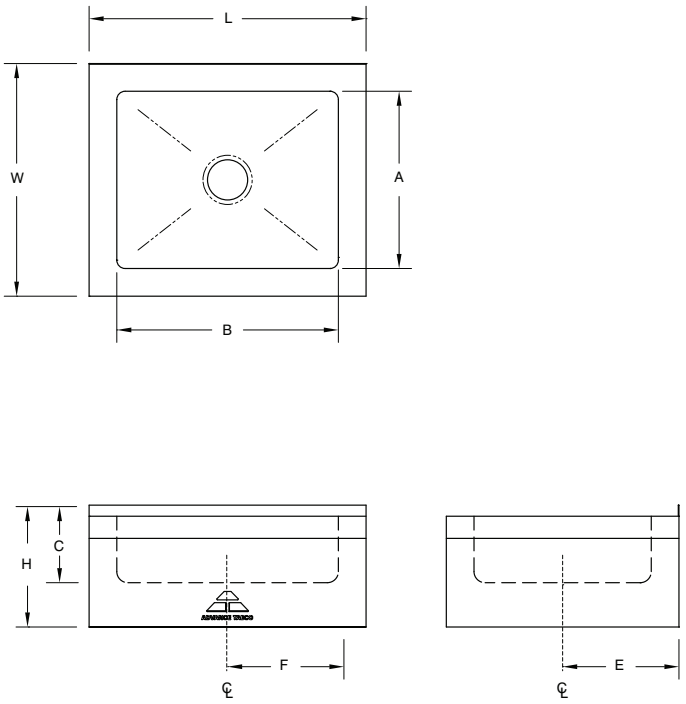
For Smart Fabrication™ Quotes:
Email: smartfab@advancetabco.com or Fax: 631-586-2933

DIMENSIONS and SPECIFICATIONS

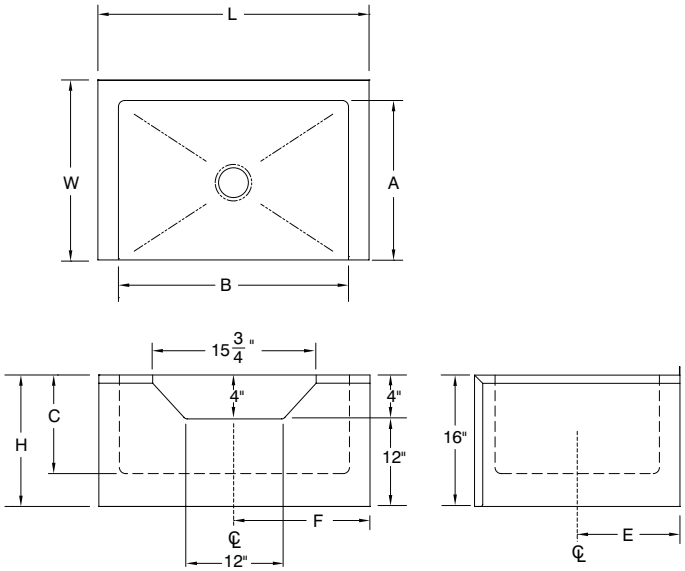
TOL Overall: ± .500”
Interior: ± .250”

ALL DIMENSIONS ARE TYPICAL

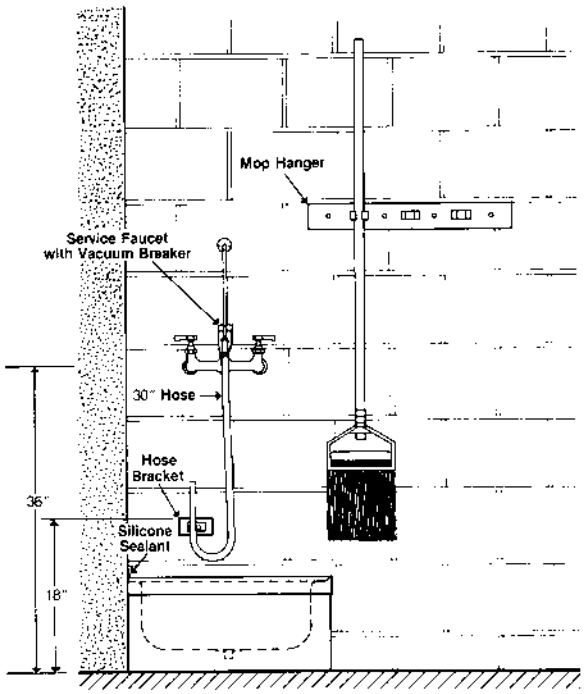
STANDARD MOP SINK



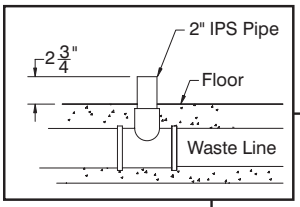
DROP FRONT MOP SINK

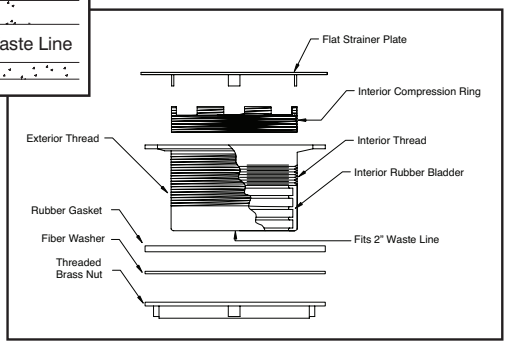


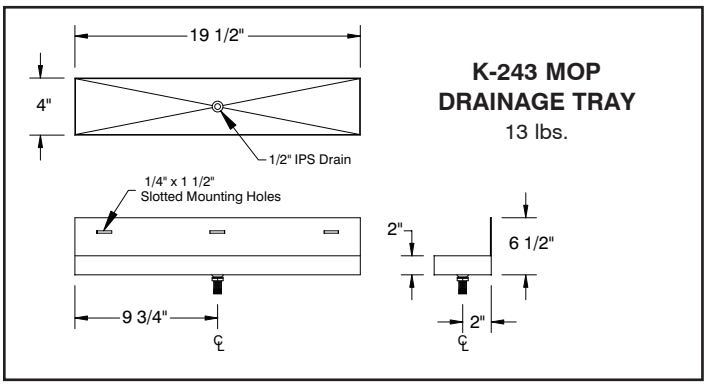
SUGGESTED INSTALLATION



MOP SINK DRAIN ASSEMBLY







K-243 MOP DRAINAGE TRAY
13 lbs.

ADVANCE TABCO
SMART FABRICATION™

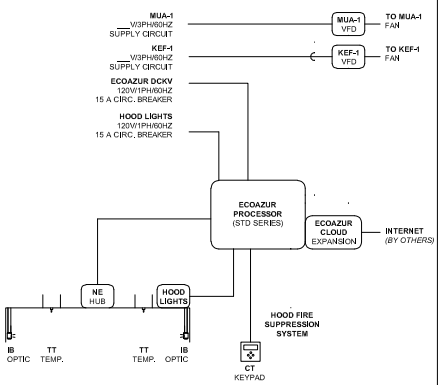
325 Wireless Boulevard, Hauppauge, NY 11788

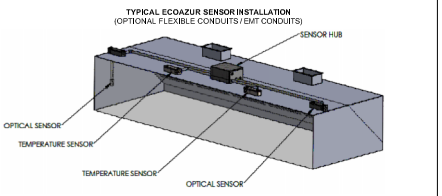
ADVANCE TABCO is constantly engaged in a program of improving our products. Therefore, we reserve the right to change specifications without prior notice.

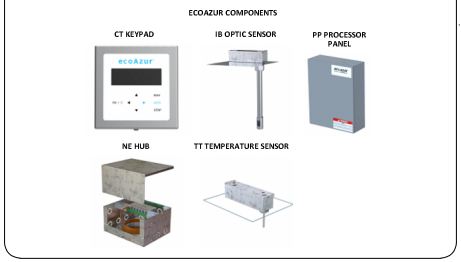
ECOAZUR STANDARD SERIES DCKV SYSTEM
TEMPERATURE - OPTICS - CLOUD ANALYTICS

60

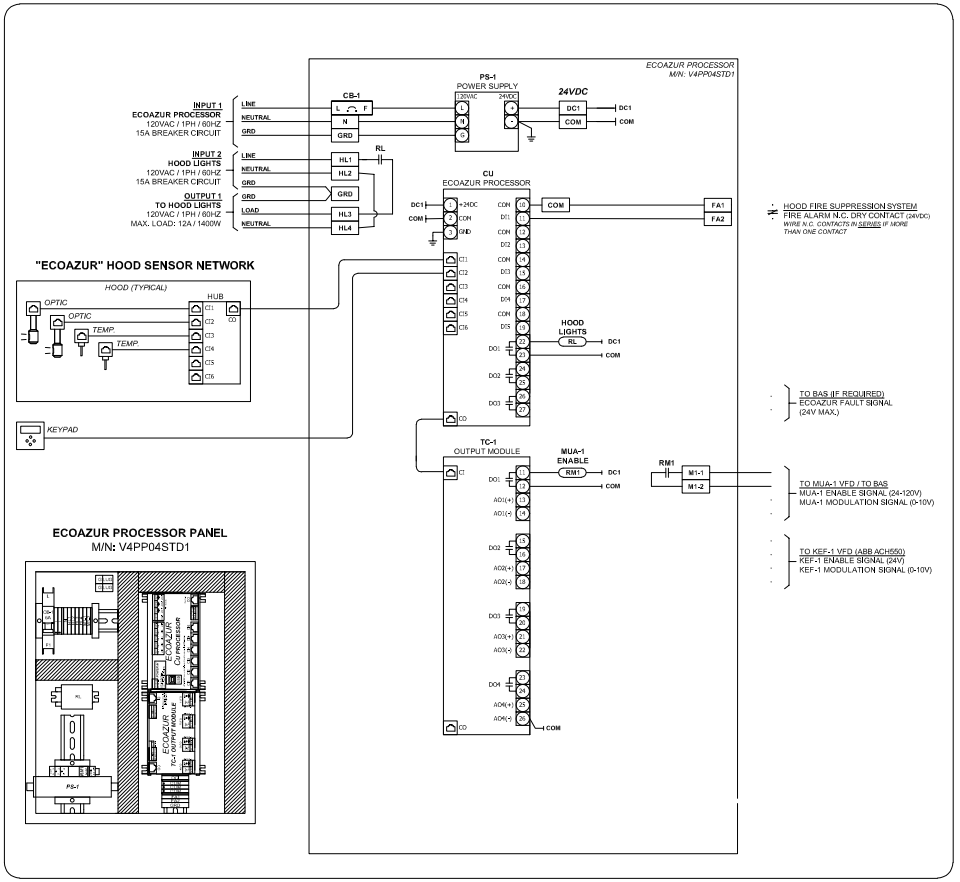
SYSTEM OVERVIEW







ELECTRICAL DIAGRAM



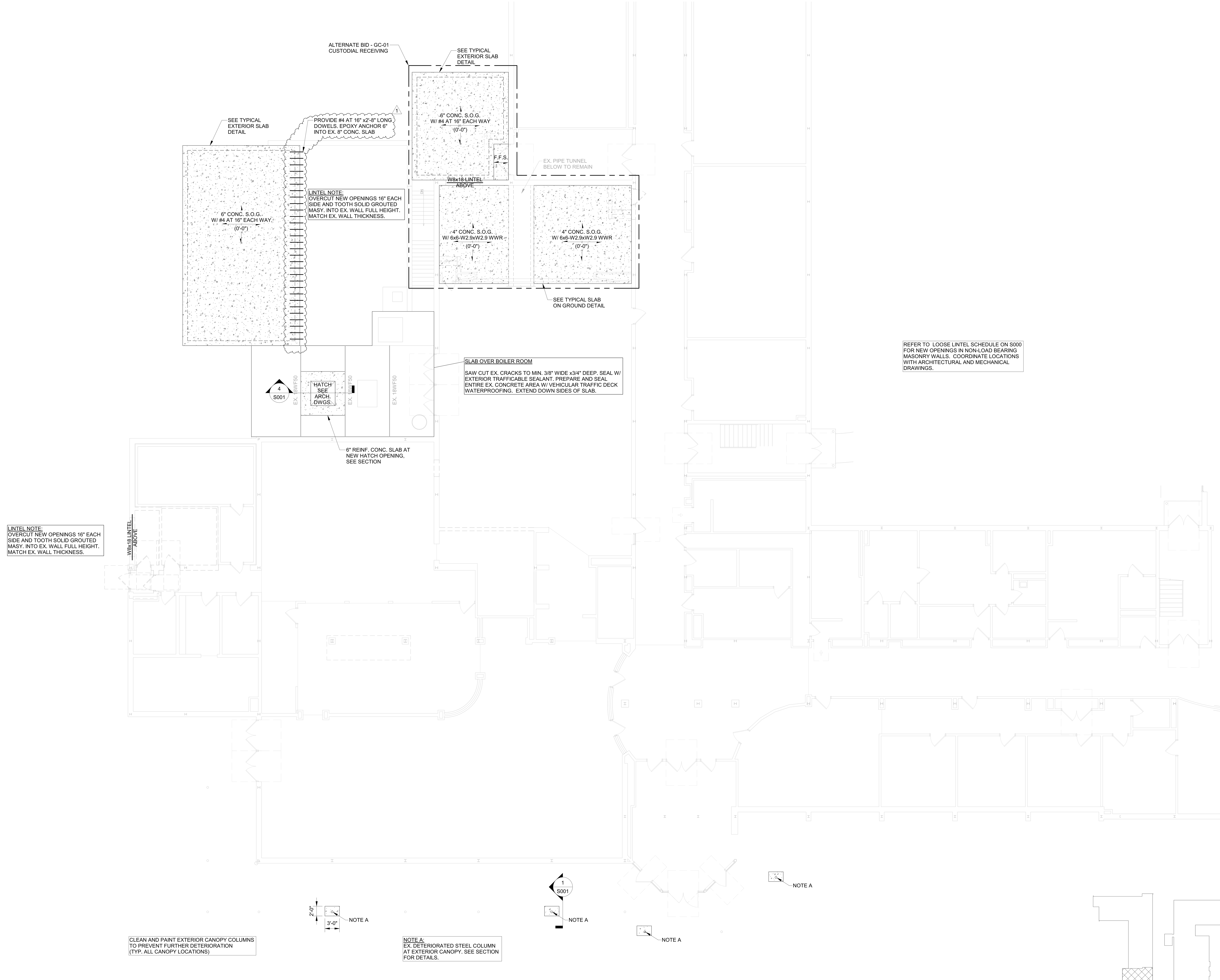
CADDY **AirSystems**
509 SHARPTOWN ROAD
P.O. BOX 345 BRIDGEPORT NJ 08014
Tel:(856) 467-4222 Fax:(856) 467-5511

Mechanical Air Data & Dimensions

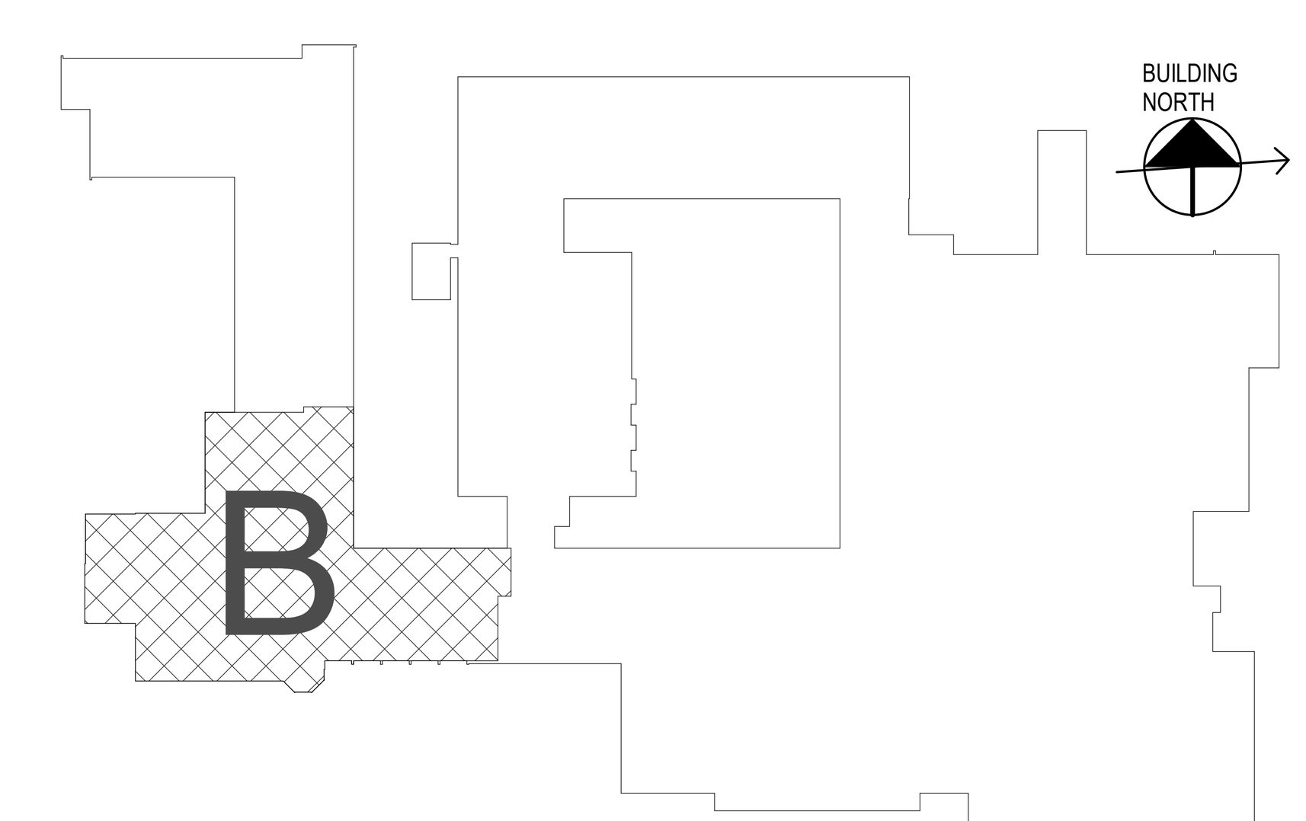
ITEM #:	CADDY #: 38874	MODEL #: ECOAZUR SYSTEM
JOB NAME: GROVE CITY HS GROVE CITY, PA		DATE: 12/23/23 DR. BY: SHUBHAM SH. #: 4 OF 4

THIS DRAWING IS PROVIDED AS A PRELIMINARY DESIGN DATA SHEET.
IT IS NOT TO BE USED FOR CONSTRUCTION OR FABRICATION APPROVAL PURPOSES.

MD-03440A 02/20/24 B.S. ECOAZUR COMPONENTS ADDED AS PER 2/19 REQUEST



FIRST FLOOR PLAN - AREA B
1/8" = 1'-0"



KEY PLAN

DRAW COLLECTIVE
470 Washington Road, Pittsburgh, PA 15228
412.561.7117 www.DRAWcollective.com

BARBER & HOFFMAN, INC.
Consulting Engineers
1659 Route 228, Suite 200
Cranberry Twp., PA 16066-5319
(724) 741-0848
e-mail: bh@barberhoffman.com

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — JAMES DAVID SCHREIB — BARBER & HOFFMAN, INC.

REVISIONS
1 02/29/2024 ADDENDUM NO. 1

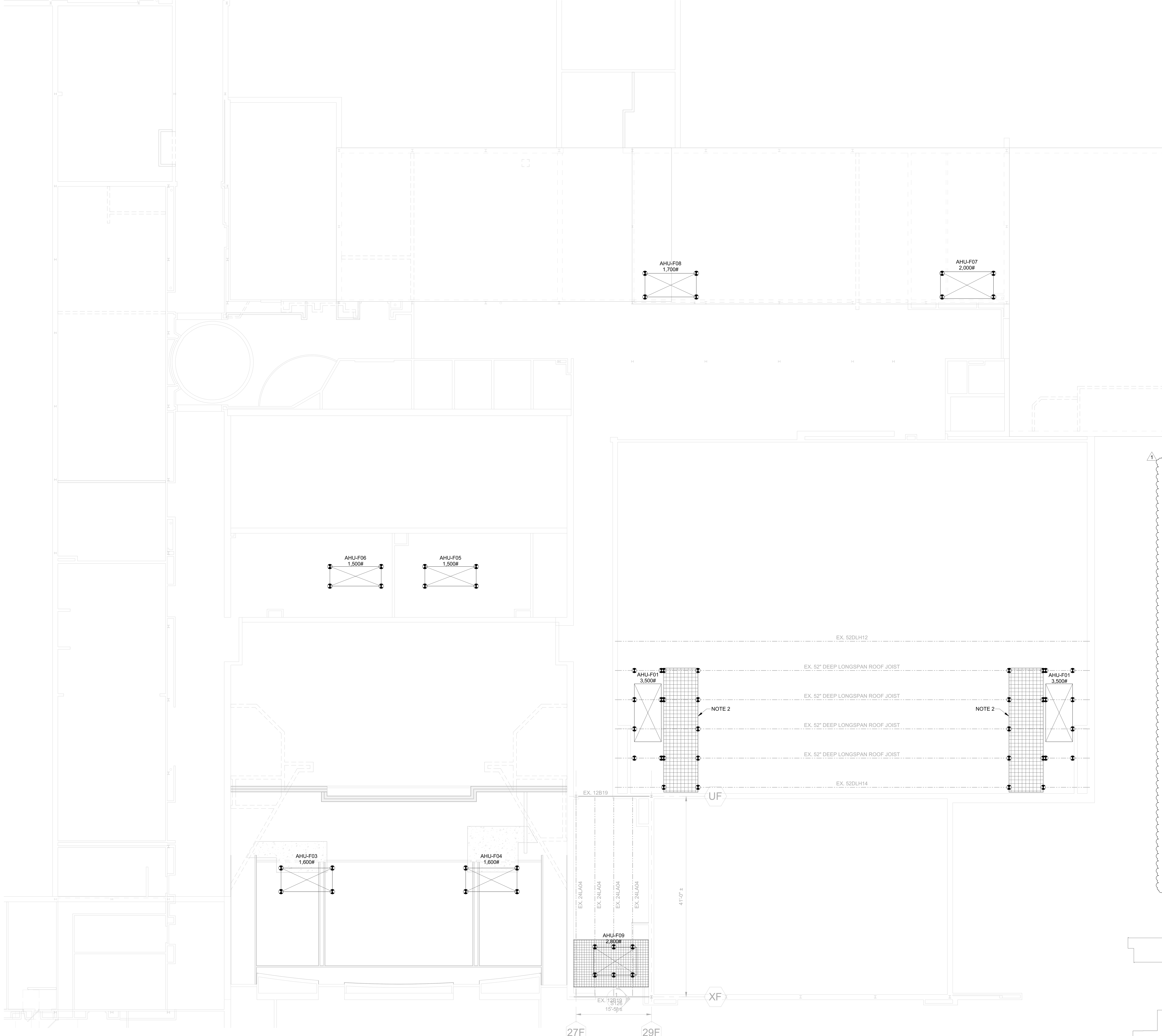
BID SET 02/19/2024

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA B

Proj No. 23-S43-01
Issue Date 02/19/2024

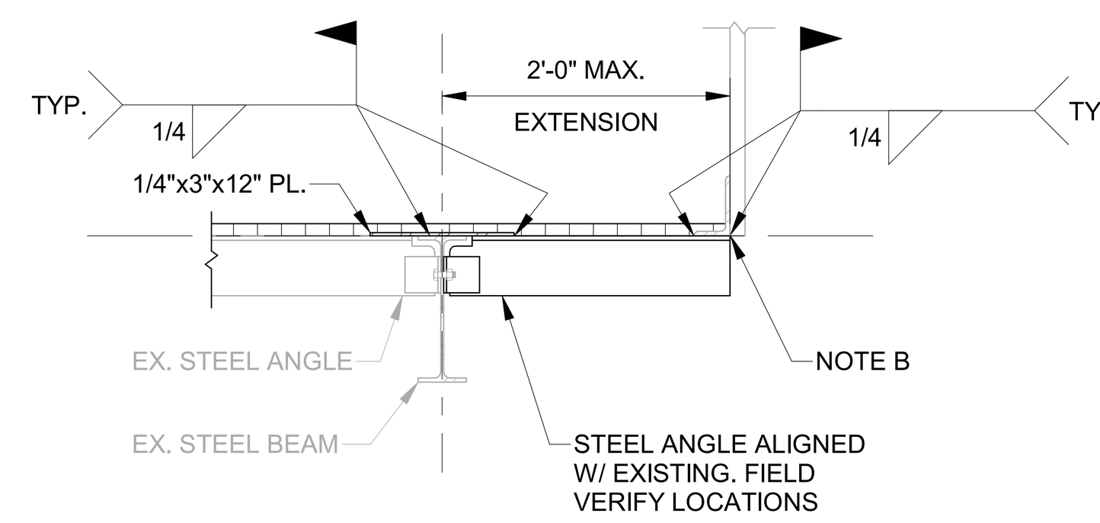
S102



NOTES:
1. (symbol) : DENOTES APPROXIMATE HANGER LOCATION FOR MECHANICAL UNIT. COORDINATE SIZE, DIMENSIONS, AND FINAL LOCATION OF UNIT WITH MECHANICAL DRAWINGS AND EQUIPMENT SUPPLIER. MAXIMUM HANGER LOAD = 500#
2. MECHANICAL UNIT SERVICE CATWALK BY MECHANICAL CONTRACTOR. APPROXIMATE SIZE & LOCATION SHOWN ON PLAN. COORDINATE EXACT SIZE AND LOCATION WITH MECHANICAL EQUIPMENT SUPPLIER. CATWALK TO BE DESIGNED FOR A UNIFORM LIVE LOAD OF 40 PSF. SUBMIT CALCULATIONS AND DRAWINGS STAMPED BY A REGISTERED PROFESSIONAL LICENSED IN PENNSYLVANIA FOR REVIEW. MAXIMUM HANGER LOAD TO ROOF JOIST = 500# LIVE LOAD AND 250# DEAD LOAD

ROOF FRAMING PLAN - AREA F

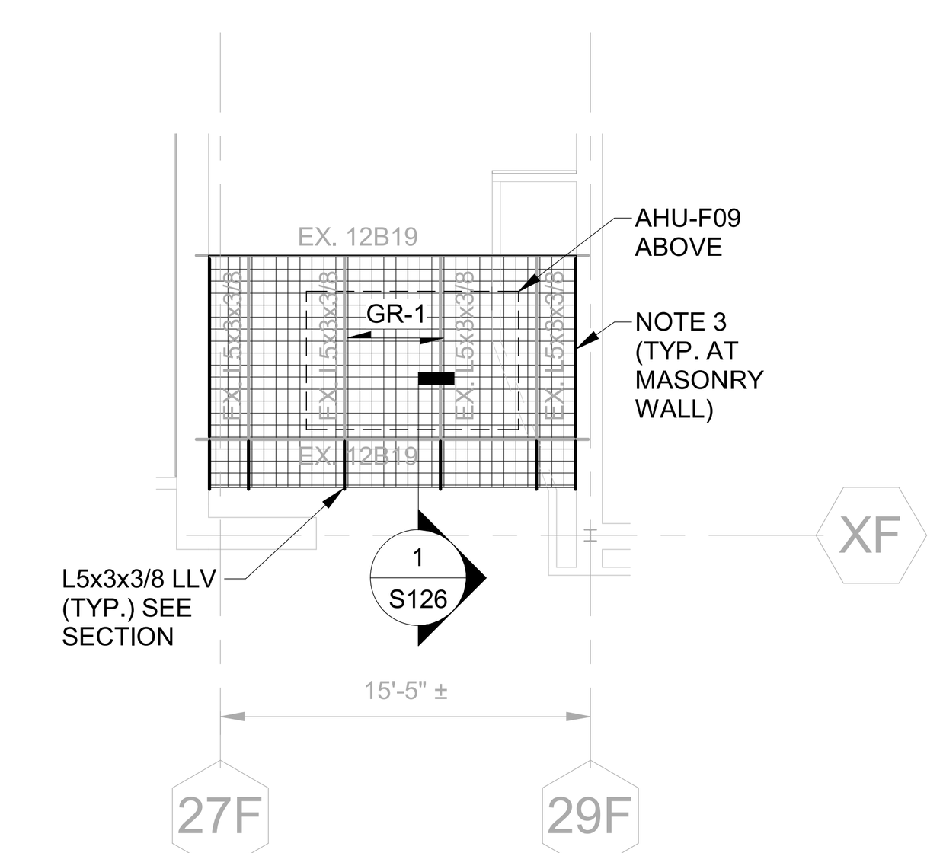
1/8" = 1'-0"



NOTES:
A. REMOVE EX. WOOD FLOORING AND EXTEND MEZZANINE PLATFORM AS REQ. FOR NEW AHU CLEARANCES. COORD. W/ MECHANICAL SUPPLIER.
B. REMOVE AND RELOCATE EXISTING PERIMETER ANGLE AND RAILING.

SECTION 1

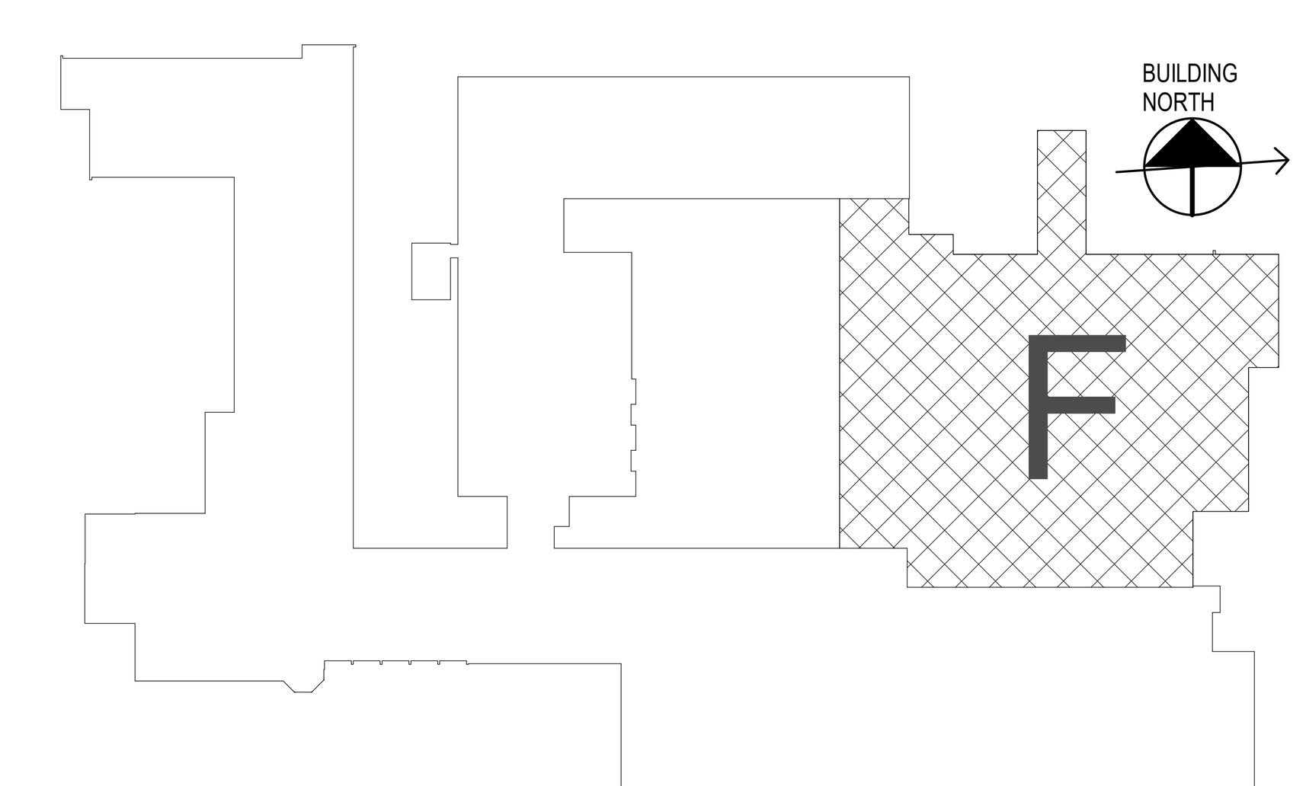
3/4" = 1'-0"



NOTES:
1. GR-1: DENOTES 19-W-4 (1"x1/8") GALVANIZED STEEL GRATING.
2. COORDINATE EXACT SIZE AND LOCATION OF MECHANICAL UNIT WITH MECHANICAL EQUIPMENT SUPPLIER.
3. L5x3x3/8 LLV W/ 3/4"ø ADHESIVE ANCHORS AT 2'-0" SPACING AND 8" FROM ENDS (ANCHOR MATERIAL: A36 ROD) 6 3/4" EMBEDMENT IN GROUTED CELLS.

MEZZANINE FRAMING PLAN - AREA F

1/8" = 1'-0"



KEY PLAN

DRAW COLLECTIVE
470 Washington Road, Pittsburgh, PA 15228
412.561.7117 www.DRAWcollective.com

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BARBER & HOFFMAN, INC.
Consulting Engineers

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JAMES DAVID POSPISIL
PE060376
BARBER & HOFFMAN, INC.

REVISIONS
1 02/29/2024 ADDENDUM NO. 1

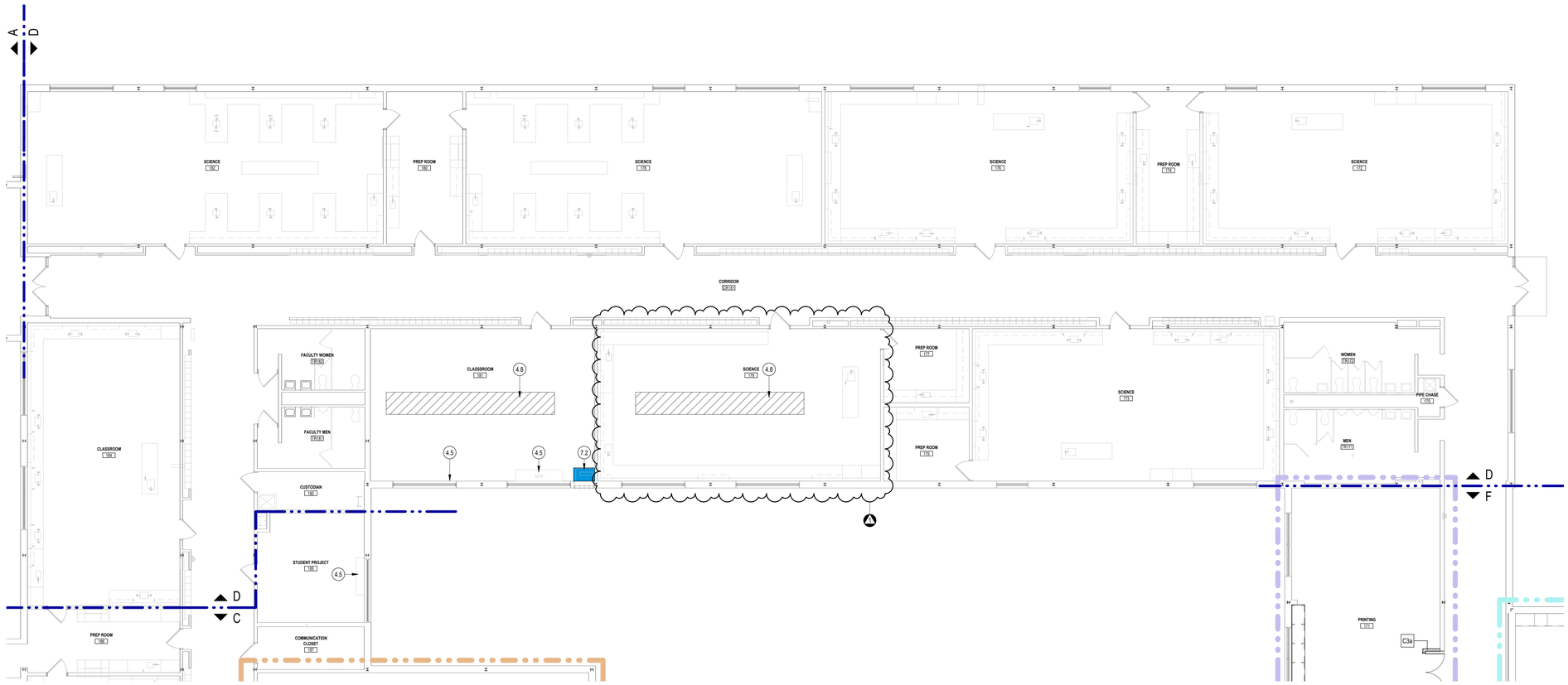
BID SET 02/19/2024

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

ROOF FRAMING PLAN - AREA F

Proj No. 23-S43-01
Issue Date 02/19/2024

S126



1 A104 FIRST FLOOR PLAN - AREA 'D'

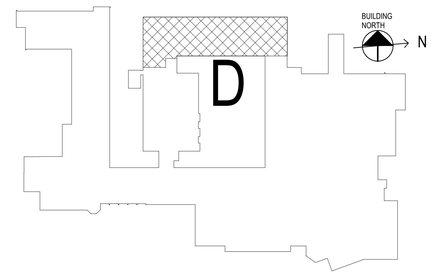
1/8" = 1'-0"

CONSTRUCTION NOTES

# NUM	DESCRIPTION
1.1	NEW CONCRETE CURB AND SIDEWALK TO MATCH EXISTING ADJACENT CONCRETE WIDTH, TYPE, AND FINISH. THIS SECTION SHALL SLOPE FROM EXISTING PARKING LOT GRADE TO NEW ADJACENT SECTION AT 1" PER 12" MAX.
1.2	NEW CONCRETE CURB AND SIDEWALK TO MATCH EXISTING ADJACENT CONCRETE WIDTH, TYPE, AND FINISH. THIS SECTION SHALL BE LEVEL WITH INTERIOR FLOOR SURFACE OF 'RECEIVING 101' AND SHALL SLOPE AWAY FROM THE BUILDING FOR DRAINAGE PURPOSES.
1.3A	CLEAR JOINTS AND INTERFACES BETWEEN SLAB AND ADJACENT MATERIALS TO A MINIMUM DEPTH OF 4". FILL VOIDS WITH SEALANT AS SPECIFIED.
1.3B	ROUTE EXISTING CRACKS, NEW AND PREVIOUSLY TREATED, TO A MIN 3/8" WIDE X 3/4" DEEP. SEAL WITH EXTERIOR TRAFFICABLE SEALANT. COORDINATE SEALANT COMPATIBILITY WITH DECK WATERPROOFING.
1.3C	ROUTE AND CLEAN EXITING JOINTS BETWEEN CONCRETE SLAB SECTIONS TO A MIN 3/8" WIDE X 3/4" DEEP. SEAL WITH EXTERIOR TRAFFICABLE SEALANT. COORDINATE SEALANT COMPATIBILITY WITH DECK WATERPROOFING.
1.3D	PATCH OPENING IN CONCRETE SLAB. COORD WITH NEW WORK ASSOCIATED WITH NEW IN-FLOOR ACCESS AHATCH AND WATERPROOFING. SEE STRUCTURAL DRAWINGS.
1.3E	PROVIDE NEW IN-FLOOR HATCH AS SPECIFIED. COORDINAE WITH CONCRETE PATCH AND WATERPROOFING WORK. SEE PLUMBING DRAWINGS FOR DRAIN CONNECTION.
1.4	NEW STEEL BOLLARD, SEE STRUCT DWGS.
1.5	NEW CHAIN LINK FENCE. HEIGHT TO MATCH EXISTING. SEE DRAWING A500 FOR DETAILS AND COORDINATE WITH SLAB DETAILS AS OUTLINED ON STRUCTURAL DRAWINGS.
3.1	PATCH AND LEVEL FLOOR IN THIS AREA AS REQUIRED FOR NEW FLOOR FINISH. SEE SPECIFICATIONS FOR LEVELING MATERIAL OPTIONS.
3.2	PATCH AND REPAIR WALL AS NECESSARY AFTER RAISED SLAB DEMOLITION AND PREPARE FOR NEW FINISHES AS SCHEDULED.
3.3	BUILD WALL ATOP EXISTING WALL CONSTRUCTION TO EXTEND GWB TO DECK ABOVE.
3.4	EXTENTS OF EXISTING PIPE TUNNEL CAP BELOW EXISTING STAGE CONSTRUCTION. SEE STRUCTURAL DRAWINGS FOR INFORMATION REGARDING NEW CONCRETE SLABS BEING INSTALLED ADJACENT TO THIS SLAB.
3.5	EXTENTS OF GEOFOAM AND CONCRETE SLAB INFILL
3.6	AREA OF STAGE FLOORING APPLICATION (2,450 S.F.). SEE SPECIFICATIONS FOR MANUFATURER'S INSTALLATION REQUIREMENTS.
3.7	RELOCAITE EXISTING LADDER TO THIS LOCATION. MODIFY EXISTING LADDER AND MEZZANINE PLATFORM AS REQ'D. SEE DETAILS ON A 311 FOR PROPOSED ALTERATIONS.
3.8	MODIFY EXISTING STAGE EDGE TO ELIMINATE VERTICAL LIP. SEE DETAILS ON A310.
4.1	PAINT COLUMN TO MATCH NEW WALL PAINT.
4.2	AREA SHALL RECEIVE QT-1 AND QT-2 IN A CHECKERED PATTERN TO DISCERN THE PATH OF EGRESS. SEE A932.
4.3	PATCH TOP OF GWB COLUMN SURROUND AS REQUIRED AFTER SOFFIT DEMOLITION. PREPARE TO RECEIVE NEW BLACK CERAMIC TILE TO MATCH EXISTING. TILING SHALL OCCUR ON ALL FOUR SIDES OF THE COLUMN SURROUND FROM THE POINT OF EXISTING SOFFIT INTERFACE TO AN ELEVATION ABOVE THE EXISTING CEILING PLANE (APPROX 24 VERT INCHES).
4.4	RELOCATED FIRE EXTINGUISHER CABINET
4.5	LOCATION OF EXISTING FLOOR MOUNTED MECHANICAL UNIT OR FIN TUBE TO BE REMOVED. INFILL INTERIOR AND EXTERIOR WALL VOIDS PER DETAILS. PATCH FLOOR AS REQUIRED WITH MATERIAL OUTLINED IN THE FINISH SCHEDULE. PAINT ENTIRE WALL WITH PROJECT'S ROOM'S ACCENT COLOR AS NOTED ON FINISH SCHEDULE.
4.6	LOCATION OF EXISTING FLOOR MOUNTED MECHANICAL UNIT TO BE REPLACED. PATCH FLOOR AS REQUIRED WITH MATERIAL AS OUTLINED IN FINISH SCHEDULE. PAINT ENTIRE WALL WITH PROJECT'S ROOMS ACCENT COLOR AS NOTED ON FINISH SCHEDULE.
4.7	RELOCATED WOOD PLANK (BUTCHER BLOCK) COUNTERTOP ON NEW CABINETS. SEE DEMOLITION PLAN FOR ORIGINAL LOCATION. PROVIDE NEW 1" X 4" WOOD BACKSPLASH TO MATCH WOOD SPECIES OF COUNTERTOP. COUNTERTOPS SHALL RECEIVE AN EPOXY TREATMENT TO FILL ANY GAPS BETWEEN THE EXISTING PLANKS. THE COUNTERTOPS SHALL THEN BE PLANED AND SANDED A MINIMAL AMOUNT TO PRODUCE A FLAT, FLUSH, UNFINISHED SURFACE.
4.8	PATCH VCT AS REQUIRED WITH MATERIAL OUTLINED IN THE FINISH SCHEDULE. SEE PLUMBING DRAWINGS. VERIFY EXTENTS IN FIELD.
7.2	NEW VERTICAL UNIT VENTILATOR LOCATION, SEE MECH DRAWINGS. SEE ARCH DETAILS PERTAINING TO WALL PENETRATIONS.

CLASSIFICATION OF WORK

- **EXISTING BUILDING - LIMITED WORK** EXTENTS OF BUILDING FIRST FLOOR. LIMITED WORK AS NOTED
- **BASE BID** INCLUDES ADDITIONS AND RENOVATIONS
- **ALTERNATE BID** GC-01 - CUSTODIAL RECEIVING
- **ALTERNATE BID** GC-02 - LIBRARY AREA
- **ALTERNATE BID** GC-03, GC-03A - VISUAL ARTS
- **ALTERNATE BID** GC-04, GC-04A - ART, CERAMICS, TECH ED
- **ALTERNATE BID** GC-05 - WEIGHT TRAINING
- **ALTERNATE BID** GC-06 - LGI
- **ALTERNATE BID** GC-07 - AUDITORIUM



KEY PLAN

DRAW COLLECTIVE
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REVISIONS
1 02/29/2024 ADDENDUM 1

BID SET 02/19/2024

HIGH SCHOOL RENOVATIONS

511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

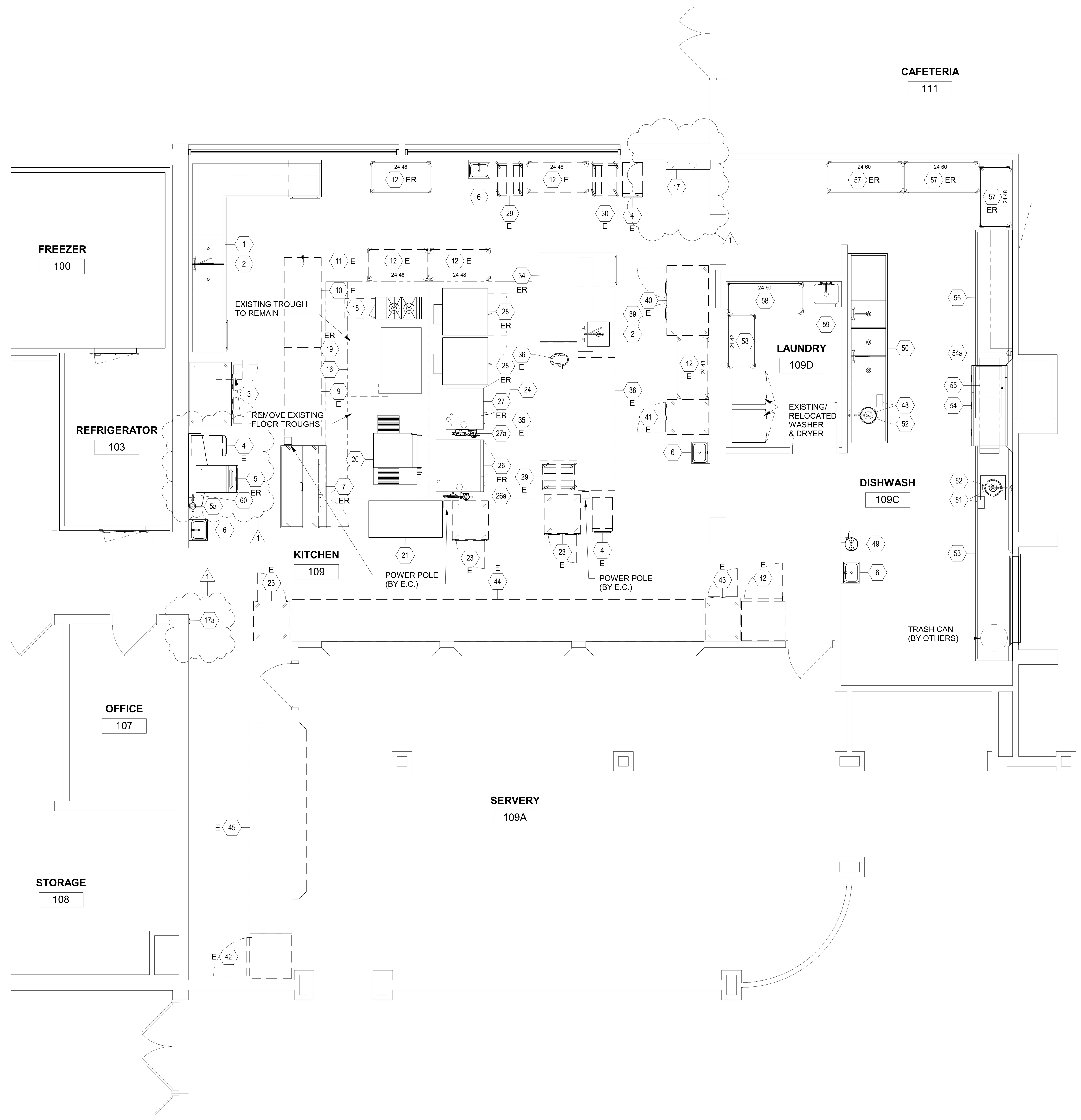
FIRST FLOOR PLAN - AREA 'D'

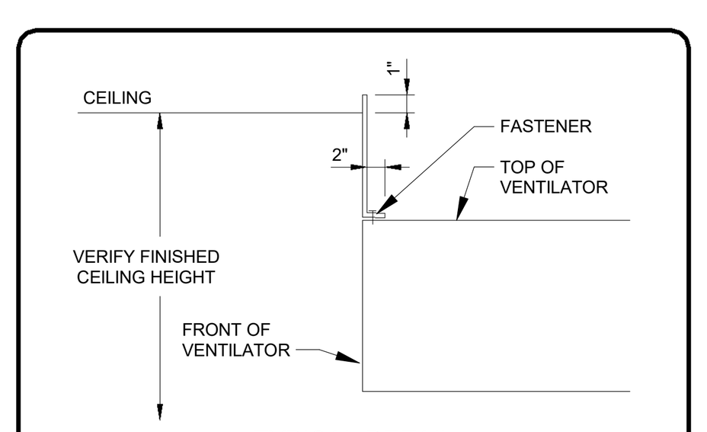
Proj No. 23-S43-01
Issue Date 02/19/2024

A104

FOODSERVICE EQUIPMENT SCHEDULE

MK.	QTY	DESCRIPTION	ELECTRICAL FL AMPS	KW	HP	VOLTS	PHASE	DIRECT	PLUG	WATER COLD	HOT	WASTE DIRECT	INDIRECT	GAS SIZE	MBTUH	STEAM LB/HR	PSIG	INLET	RETURN	REMARKS	MK.
1	1	2-BOWL PREP SINK W/ OVERSHELF											2@2"*							* DO NOT MAINFOLD DRAINS	1
2	2	PRE-RINSE SPRAY ASSEMBLY								1/2"	1/2"										2
3	1	2-SECTION REACH-IN REFRIGERATOR	8.1		1/3	120	1		X												3
4	3	UTILITY CART																		EXISTING (TO REMAIN)	4
5	1	ICEMAKER W/ BIN	15.0			120	1		X	1/4"*			2@3/4"							* INTERPIPE THROUGH WATER FILTER, EXISTING/RELOCATED	5
5a	1	WATER FILTER								1/2"*										* INTERPIPE TO SUPPLY ON ITEM 5	5a
6	4	HAND SINK										1-1/2"									6
	4	FAUCET								1/2"	1/2"										
7	1	PREP TOP REFRIGERATOR	4.5			120	1		X											VERIFY ALL REQUIMENTS OF EXISTING UNIT	7
8	-	- SPARE NUMBER -																			8
9	1	WORK TABLE																		EXISTING (TO REMAIN)	9
10	1	WORK TABLE																		EXISTING (TO REMAIN)	10
11	1	CAN OPENER																		EXISTING (TO REMAIN)	11
12	5	SHELVING																		EXISTING (TO REMAIN)	12
13	-	- SPARE NUMBER -																			13
14	-	- SPARE NUMBER -																			14
15	-	- SPARE NUMBER -																			15
16	1	TYPE 1 HOOD	15.0*			120	1	X												* INTERWIRED FROM ITEM 60	16
																				EXHAUST 4,107 CFM @ 1.0" S.P.	
17	1	FIRE SUPPRESSION SYSTEM	6.0			120	1	X													17
17a	1	RECESSED PULL STATION																			17a
18	1	2-BURNER RANGE W/ OVEN	0.1			120	1		X					3/4"*	60					* VIA QUICK GAS DISCONNECT	18
19	1	40 GAL. TILT SKILLET	125.0	34.0		208	3		X	1/2"	1/2"		2"							VERIFY ALL REQUIMENTS OF EXISTING UNIT	19
20	1	DOUBLE DECK CONVEYOR OVEN	7.0			120	1	X						3/4"	40					* VIA QUICK GAS DISCONNECT	20
			7.0			120	1	X						3/4"	40					* VIA QUICK GAS DISCONNECT	
21	1	WORK TABLE																			21
22	-	- SPARE NUMBER -																			22
23	3	1-SECTION REACH-IN HEATED CABINET	11.7	1.4		120	1		X											EXISTING (TO REMAIN)	23
24	1	TYPE 1 HOOD	15.0*			120	1	X												* INTERWIRED FROM ITEM 60	24
																				EXHAUST 4,107 CFM @ 1.0" S.P.	
25	-	- SPARE NUMBER -																			25
26	1	FULL-SIZE COMBI OVEN	15.0	1.5		208	1		X*	2@3/4"			2"	3/4"	152					* E.C. TO PROVIDE CORD/PLUG OR TWISTLOCK, VERIFY ALL REQUIMENTS OF EXISTING UNIT	26
26a	1	WATER FILTER								3/4"*										* P.C. TO INTERPIPE TO FILTERED WATER SUPPLY ON ITEM 26	26a
27	1	HALF-SIZE COMBI OVEN	15.0	0.9		120	1		X*	2@3/4"			2"	3/4"	83.5					* E.C. TO PROVIDE CORD/PLUG OR TWISTLOCK, VERIFY ALL REQUIMENTS OF EXISTING UNIT	27
27a	1	WATER FILTER								3/4"*										* P.C. TO INTERPIPE TO FILTERED WATER SUPPLY ON ITEM 27	27a
28	2	DOUBLE DECK CONVECTION OVEN - TOP DECK	6.0			120	1		X					3/4"	55					* VIA GAS QUICK DISCONNECT	28
		DOUBLE DECK CONVECTION OVEN - BOTTOM DECK	6.0			120	1		X					3/4"	55					VERIFY ALL REQUIMENTS OF EXISTING UNIT	
29	2	ROLL-IN PAN RACK																		EXISTING (TO REMAIN)	29
30	1	MOBILE RACK																		EXISTING (TO REMAIN)	30
31	-	- SPARE NUMBER -																			31
32	-	- SPARE NUMBER -																			32
33	-	- SPARE NUMBER -																			33
34	1	WORK TABLE																		EXISTING/RELOCATED	34
35	1	WORK TABLE																		EXISTING (TO REMAIN)	35
36	1	5 QT. MIXER	10.0			120	1		X											EXISTING (TO REMAIN)	36
37	-	- SPARE NUMBER -																			37
38	1	WORK TABLE																		EXISTING (TO REMAIN)	38
39	1	WORK TABLE W/ SINK											2"								39
	1	FAUCET								1/2"	1/2"										39
	1	CONVENIENCE OUTLET	20.0*			120	1		X											* 20.0 AMP CIRCUIT, NOT FL AMPS	
40	1	2-SECTION REACH-IN REFRIGERATOR	15.0			120	1		X											EXISTING (TO REMAIN)	40
41	1	1-SECTION REACH-IN REFRIGERATOR	5.0			120	1		X											EXISTING (TO REMAIN)	41
42	2	1-SECTION ROLL-IN REFRIGERATOR	15.0			120	1		X											EXISTING (TO REMAIN)	42
43	1	1-SECTION REACH-IN REFRIGERATOR	10.0			120	1		X											EXISTING (TO REMAIN)	43
44	1	SERVING COUNTER																		EXISTING (TO REMAIN)	44
45	1	SERVING COUNTER																		EXISTING (TO REMAIN)	45
46	-	- SPARE NUMBER -																			46
47	-	- SPARE NUMBER -																			47
48	1	3-HP DISPOSER W/ CONTROL	6.0		3	208	3	X		1/2"		2"									48
49	1	EYE WASH STATION								1/2"	1/2"	1-1/2"									49
50	1	3-BOWL POT & PAN SINK W/ OVERSHELF & POT HOOKS											3@2"*							* P.C. TO INTERPIPE THRU GREASE INCEPTOR IF REQUIRED - DO NOT MONIFOLD DRAINS	50
	2	FAUCET								1/2"	1/2"										
51	1	3-HP DISPOSER W/ CONTROL	6.0		3	208	3	X		1/2"		2"									51
52	2	PRE-RINSE SPRAY ASSEMBLY								1/2"	1/2"										52
53	1	SOILED DISHTABLE W/ PRE-RINSE SINK																			53
54	1	66" CONVEYOR DISHMACHINE	144.5		1/6,2,2	208	3	X					2"*							* INTERPLUMB THRU WATER TEMP. KIT/GREASE INCEPTOR	54
	1	BOOSTER HEATER - POWER FROM DISHMACHINE									3/4"		3/4"							* 110° MIN., INTERPIPE THRU ITEM 54a	
	1	DETERGENT DISPENSER	20.0*			120	1		X											BY OWNER, * 20.0 AMP CIRCUIT REQUIRED, NOT FL AMPS	
	1	DRAIN WATER TEMPERING KIT	20.0*			120	1		X	3/4"**										* 20.0 AMP CIRCUIT, ** INTERPLUMB TO WASTE ON DISHMACHINE	
54a	1	WATER FILTER									3/4"*									* INTERPIPE TO BOOSTER HEATER	54a
55	1	PANT LEG DUCT																		600 CFM EXHAUST	55
56	1	CLEAN DISHTABLE W/ OVERSHELF																			56
57	3	CLEAN POT & PAN SHELVING																		EXISTING/RELOCATED	57
58	2	CHEMICAL SHELVING																			58
59	1	MOP SINK										2"									59
60	1	VARIABLE VOLUME HOOD CONTROLS	20.0*			120	1	X												* 20.0 AMP CIRCUIT TO SYSTEM PROCESSOR	60
	1	HOOD LIGHTS AND FAN/LIGHT CONTROLS	20.0*			120	1	X												* 20.0 AMP CIRCUIT FOR HOOD LIGHTS AND CONTROLS	
	1	EXHAUST FAN VFD	*		5	208	3	X													
	1	MAKE-UP AIR UNIT VFD CONTROL	*			*														LOW VOLTAGE SPEED REFERENCE SIGNAL TO VFD	





TYPICAL DETAIL

ENCLOSURE PANEL @ HOODS
ITEM -
SCALE: NTS

IT IS THE RESPONSIBILITY OF THE FOOD SERVICE EQUIPMENT CONTRACTOR TO RELOCATE ALL EXISTING REUSED ITEMS. THE FOOD SERVICE EQUIPMENT CONTRACTOR MUST MARK ALL ITEMS (EXISTING/RELOCATED AND EXISTING/REMAIN) THAT WILL REQUIRE DISCONNECTION FROM THE UTILITIES. ELECTRICAL, PLUMBING, AND HVAC CONTRACTORS WILL DISCONNECT THE FOOD SERVICE EQUIPMENT FROM THE UTILITIES. THE FOOD SERVICE EQUIPMENT CONTRACTOR SHALL THEN MOVE THE EXISTING/REUSED AND EXISTING REMAIN EQUIPMENT TO A LOCATION IN THE SCHOOL AS DIRECTED BY THE SCHOOL DISTRICT AS WELL AS PROTECT THE EQUIPMENT UNTIL TIME OF INSTALLATION. THE FOOD SERVICE EQUIPMENT CONTRACTOR IS TO THEN RELOCATE THESE ITEMS TO THEIR FINAL POSITION AND MAKE THEM READY FOR CONNECTION TO THE UTILITIES BY THE VARIOUS TRADES.

Kitchen Hoods
Type 1 and Type 2 hoods as indentified on the food service equipment drawigns. The FSEC will furnish and install the hoods. The General/Mechanical contractor will be responsible for furnishing and installing all duct work and fans related to these Type 1 and Type 2 Hood.

Hood Control Systems
Type 1 and Type 2 Hoods indentified on the food service equipment drawings will be furnished with either constant volume or variable controls. The General/Mechanical/Electrical Contractors must interwire between the control system components, hoods, and any required remote wall switches. Hoods with constant volume controls and remote wall mounted fan/light switches will not be furnished with switches (switches furnished and installed by Electrical Contractor). General/Mechanical/Electrical Contractors must interwire between the hood controls and the fan(s). Refer to the food service mechanical and electrical connection plans and schedules for additional details.

Kitchen Hood Fire Suppression System
Kitchen Hood Fire Suppressions as indicated on the food service equipment drawings will be furnished and installed by the food service equipment contractor. The General/Electrical Contractor must interwire between the system and any building alarm systems. The food service equipment contractor will provide a mechanical gas valve for each fire suppression system. General/Plumbing Contractor must install the valve. The Ansul system pull stations are to be recessed in the walls. The General/Electrical Contractor will need to provide concealed conduit in the walls terminated in octagon boxes for the Ansul pull stations. Refer to food service drawings for additional details and inforamtion.

Kitchen Fire Extinguishers
Any fire extinguishers required in the kitchens and surrounding areas are not included as part of the food service equipment contractor's scope of work. Fire extinguishers required for these areas, including those listed for commercial kitchens, are to be located and specified by the architect and provided by the General Contractor.

Kitchen Equipment Installation and Rough-In Connections
Kitchen equipment that is identified on the food service drawings is to be furnished and installed by the food service equipment contractor. The food service equipment contractor will provide, deliver, assemble and set the foodservice equipment in the locations as shown on the drawings. All piping, interpiping, wiring, interwiring, and final connections required to make equipment operational is to be completed by the General, Electrical, Mechanical, and Plumbing contractors.

Slab Depressions
It is the responsibility of the food service equipment contractor to coordinate all slab depressions required for the food service equipment. The General Contractor will be responsible for furnishing properly sized and leveled depressions as well as an any in-filling and grouting that may be required after the food service equipment is installed.

Ceiling-Mounted Cord Reels
Any ceiling-mounted cord reels shown on the food service equipment drawings are to be provided by the General/Electrical Contractor.

Plumbing Components
The General/Plumbing Contractor is responsible for furnishing and installing all required valves, tail pieces, drain fixtures/assemblies, regulators, back flow preventors, vacuum breakers required, etc. to make the food service equipment operational. Gas pressure regulators will be furnished by the food service equipment contractor for gas fired appliances for installation by the General/Plumbing contractor. Faucets specified under Division 11 and as indicated on the food service equipment drawings will be furnished by the food service equipment contractor for installation by the General/Plumbing contractor. Water filters specified under Division 11 and as indicated on the food service equipment drawings will be mounted by the food service equipment contractor with plumbing connections completed by the General/Plumbing contractor.

Walk-in Cooler/Freezer
The food service equipment contractor will be responsible for furnishing and installing the walk-in coolers and freezers as identified on the food service drawings. Light fixtures for these units will be provided by the food service equipment contractor and installed by the General/Electrical contractor. Each walk-in compartment will be provided with a factory mounted light switch, door heater, and heated vent port. The General/Electrical contractor will be responsible for wiring and interwiring of the light switches, lights, heated vent port, and door heaters as well as the sealing of all penetrations made for these connections.

Refrigeration Systems for Walk-in
The food service equipment contractor will provide and install the walk-in refrigeration systems as identified on the food service drawings. The General Contractor will will be responsible for furnishing and installing curb for the refrigeration system and make all required penetrations into the building and within the building for refrigerant piping. The curb is to be compatible with the building roofing system or an elevated concrete pad should the unit be mounted on grade. The General/Electrical Contractor will need to furnish and install required electrical connections to the refrigeration components and any interwiring required between the refrigeration rack and the freezer coil, which is located in the walk-in freezer. Refer to food service equipment drawings of this project for specific details on wiring and location of systems. The food service equipment contractor will be responsible for furnishing and installing the required refrigeration line piping, coordinating routing through the building with all trades, and furnishing and installing the refrigeration coil drain lines.

Gas and Water Quick Disconnects
Gas and Water quick disconnects will be furnished by the food service contractor where specified in the Division 11 specifications for specific pieces of food service equipment. The kits will need assembled by the General/Plumbing Contractor. The General/Plumbing Contractor will be responsible for furnishing/installing any necessary adapters to make the final connection to the building rough-in and food service equipment connections.

Floor Troughs
Floor troughs indicated on the food service equipment drawings and Division 11 Specifications will be furnished by the food service equipment contractor. Troughs will be delivered directly to the General/Plumbing contractor for installation.

Permitting
The food service equipment contractor will be responsible for obtaining all required permits for installation of the specified equipment. This may include but not be limited to permits associated with hood fire suppression systems, installation of hoods, refrigeration system installation, and department of health. All fees associated with obtaining these permits is the responsibility of the food service equipment contractor.

Site Access
The food service equipment contractor will be responsible for developing a site access plan determining the access route for installing equipment and the maximum sizes of custom fabricated equipment, hoods, and walk-ins.

Supplemental Documents
Refer to the Division 11 Food Service Equipment Specifications and the Food Service Equipment Product Data Book for additional information regarding equipment and scope of work.

Rough-in and Utility Connections
The General/Plumbing/Electrical/Mechanical contractors will be responsible for all rough-in utilities and final connection to the food service equipment in order to make the equipment operational. The food service equipment contractor is not responsible for any rough-in or final utility connection work.

SCOPE OF WORK MATRIX FOR KITCHEN EQUIPMENT
(GENERAL NOTES - SOME ITEMS MAY NOT BE APPLICABLE TO THIS SPECIFIC PROJECT)

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CHOOSE FAMILY TYPE THAT CORRESPONDS TO ARCHITECT OR ENGINEER FOR APPROPRIATE SEAL DELETE ALL OTHER SEALS

REVISIONS
1 2/29/2024 ADDENDUM 1

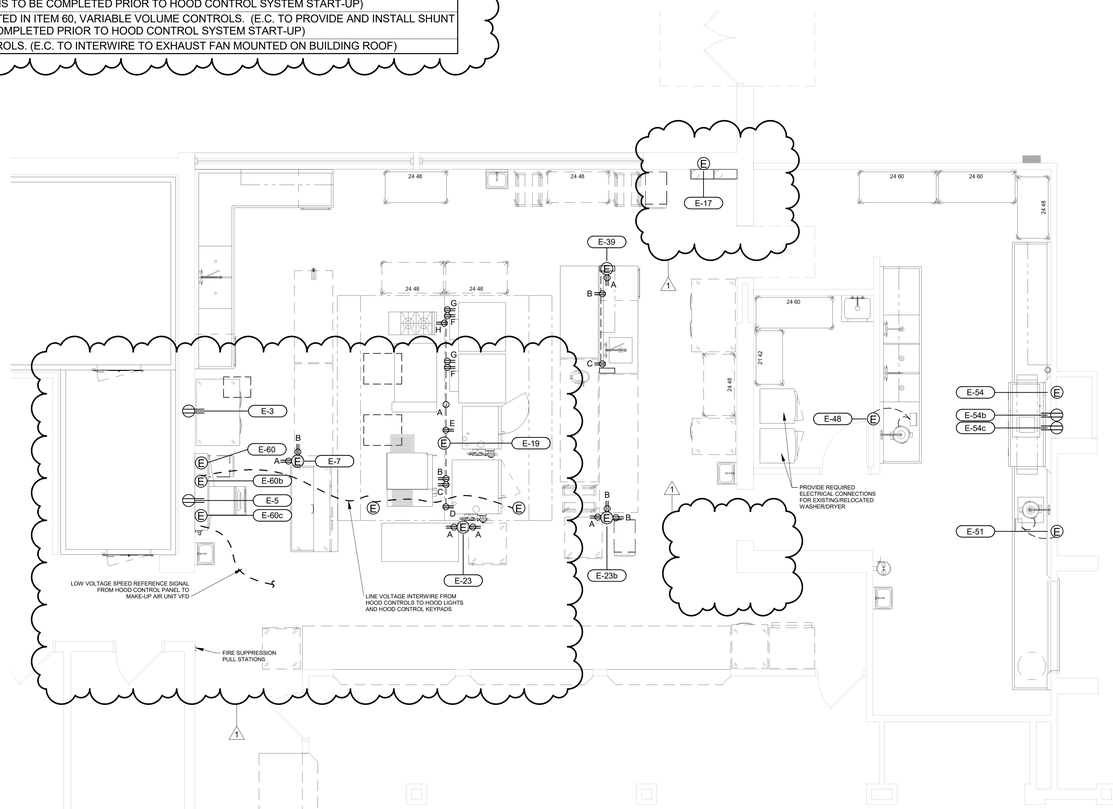
HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT
FOOD SERVICE EQUIPMENT SCHEDULE AND PLAN

Proj No. 23-S43-01
Issue Date 02/19/2024

FS100

ELECTRICAL CONNECTION SCHEDULE

E-3	120-V, 1-PH SERVICE, 1/3-HP, 8.1 FL AMPS, ELECTRICAL OUTLET AT 7'-6"-AFF FOR SERVICE TO ITEM 3, 2-SECTION REACH-IN REFRIGERATOR, AT 7'-2"-AFF.
E-5	120-V, 1-PH SERVICE, 15.0 FL AMPS, ELECTRICAL OUTLET AT 6'-10"-AFF AND CONNECT AT ITEM 5, ICE MAKER W/BIN, AT 6'-6"-AFF. (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT)
E-7	120-V, 1-PH SERVICE, 4.5 FL AMPS, ELECTRICAL OUTLET AT 1'-6"-AFF FOR SERVICE TO ITEM 7, PREP TOP REFRIGERATOR, AT 1'-0"-AFF. (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT)
E-17	120-V, 1-PH SERVICE, 6.0 FL AMPS, STUB ABOVE CEILING AND CONNECT AT ITEM 17, FIRE SUPPRESSION SYSTEM. (VERIFY SERVICE REQUIREMENTS WITH FIRE SUPPRESSION SYSTEM SUPPLIER) (E.C. TO PROVIDE AND INSTALL CONCEALED CONDUIT (WITH NO BENDS) BETWEEN FIRE SUPPRESSION SYSTEM AND REMOTE RECESSED PULL STATION.)
E-19	ELECTRICAL SERVICE TO STUB UP FROM FLOOR. ELECTRICAL ENGINEER TO COORDINATE THE PROPER VOLTAGE, PHASE & AMPS THAT IS REQUIRED FOR THE FOLLOWING: A. 208-V, 3-PH SERVICE, 34.0-KW, 125.0 FL AMPS, JUNCTION BOX FOR CONNECTION TO ITEM 19, 40 GAL. TILT SKILLET. (E.C. TO PROVIDE AND INSTALL SHUNT TRIP BREAKER) (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT) B. 120-V, 1-PH SERVICE, 7.0 FL AMPS, ELECTRICAL OUTLET FOR SERVICE TO BOTTOM DECK ITEM 20, DOUBLE DECK CONVEYOR OVEN. (E.C. TO PROVIDE AND INSTALL SHUNT TRIP BREAKER) C. 120-V, 1-PH SERVICE, 7.0 FL AMPS, ELECTRICAL OUTLET FOR SERVICE TO TOP DECK ITEM 20, DOUBLE DECK CONVEYOR OVEN. (E.C. TO PROVIDE AND INSTALL SHUNT TRIP BREAKER) D. 208-V, 1-PH SERVICE, 1.5-KW, 15.0 FL AMPS, ELECTRICAL OUTLET FOR SERVICE TO ITEM 26, FULL-SIZE COMBI OVEN. (E.C. TO PROVIDE AND INSTALL CORD/PLUG OR TWISTLOCK AND SHUNT TRIP BREAKER) (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT) E. 120-V, 1-PH SERVICE, 0.9-KW, 15.0 FL AMPS, ELECTRICAL OUTLET FOR SERVICE TO ITEM 27, HALF-SIZE COMBI OVEN. (E.C. TO PROVIDE AND INSTALL CORD/PLUG OR TWISTLOCK AND SHUNT TRIP BREAKER) (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT) F. 120-V, 1-PH SERVICE, 6.0 FL AMPS, ELECTRICAL OUTLET FOR SERVICE TO BOTTOM DECK ITEM 28, DOUBLE DECK CONVECTION OVEN. (E.C. TO PROVIDE AND INSTALL SHUNT TRIP BREAKER) (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT) G. 120-V, 1-PH SERVICE, 6.0 FL AMPS, ELECTRICAL OUTLET FOR SERVICE TO TOP DECK ITEM 28, DOUBLE DECK CONVECTION OVEN. (E.C. TO PROVIDE AND INSTALL SHUNT TRIP BREAKER) (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT) H. 120-V, 1-PH SERVICE, 0.1 FL AMPS, ELECTRICAL OUTLET FOR SERVICE TO TOP DECK ITEM 18, 2-BURNER RANGE W/ OVEN. (E.C. TO PROVIDE AND INSTALL SHUNT TRIP BREAKER)
E-23	120-V, 1-PH SERVICE, STUB DOWN FROM CEILING THRU POWER POLE, FOR SERVICE TO THE FOLLOWING: (POWER POLE PROVIDED WITH EMPTY ELECTRICAL BOXES. ELECTRICAL CONTRACTOR TO PROVIDE ALL NECESSARY ELECTRICAL OUTLETS/COMPONENTS AND INTERWIRING FOR CONNECTION IN FIELD.) A. 120-V, 1-PH SERVICE, 1.4-KW, 11.7 FL AMPS, ELECTRICAL OUTLET MOUNTED ON POWER POLE AT 4'-0"-AFF FOR SERVICE TO ITEM 23, 1-SECTION REACH-IN HEATED CABINET. (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT) B. 120-V, 1-PH SERVICE, 20.0 AMP CIRCUIT, NOT FL AMPS, ELECTRICAL OUTLET MOUNTED ON POWER POLE AT 4'-0"-AFF FOR GENERAL PURPOSE USE.
E-23b	120-V, 1-PH SERVICE, STUB DOWN FROM CEILING THRU POWER POLE, FOR SERVICE TO THE FOLLOWING: (POWER POLE PROVIDED WITH EMPTY ELECTRICAL BOXES. ELECTRICAL CONTRACTOR TO PROVIDE ALL NECESSARY ELECTRICAL OUTLETS/COMPONENTS AND INTERWIRING FOR CONNECTION IN FIELD.) A. 120-V, 1-PH SERVICE, 1.4-KW, 11.7 FL AMPS, ELECTRICAL OUTLET MOUNTED ON POWER POLE AT 4'-0"-AFF FOR SERVICE TO ITEM 23, 1-SECTION REACH-IN HEATED CABINET. (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT) B. 2 @ 120-V, 1-PH SERVICE, 20.0 AMP CIRCUIT, NOT FL AMPS, ELECTRICAL OUTLET MOUNTED ON POWER POLE AT 4'-0"-AFF FOR GENERAL PURPOSE USE.
E-39	120-V, 1-PH SERVICE, STUB DOWN FROM CEILING THRU S/S CHASE MOUNTED ON ITEM 39, WORK TABLE W/SINK, FOR SERVICE TO THE FOLLOWING: (COUNTER PROVIDED WITH EMPTY ELECTRICAL BOXES. ELECTRICAL CONTRACTOR TO PROVIDE ALL NECESSARY ELECTRICAL OUTLETS/COMPONENTS AND INTERWIRING FOR CONNECTION IN FIELD.) A. 120-V, 1-PH SERVICE, 20.0 AMP CIRCUIT, NOT FL AMPS, ELECTRICAL OUTLET MOUNTED ON UTILITY CHASE AT 4'-0"-AFF FOR GENERAL PURPOSE USE. B. 120-V, 1-PH SERVICE, 20.0 AMP CIRCUIT, NOT FL AMPS, ELECTRICAL OUTLET MOUNTED ON ITEM 34, WORK TABLE FOR GENERAL PURPOSE USE. C. 120-V, 1-PH SERVICE, 10.0 AMP CIRCUIT, NOT FL AMPS, ELECTRICAL OUTLET MOUNTED ON ITEM 35, WORK TABLE FOR ITEM 36, 5 QT. MIXER. (E.C. TO VERIFY REQUIREMENTS OF EXISTING EQUIPMENT)
E-48	208-V, 3-PH SERVICE, 3-HP, 6.0 FL AMPS, STUB OUT WALL AT 1'-6"-AFF AND CONNECT TO CONTROL PANEL FOR ITEM 48, 3-HP DISPOSER, AT 1'-7"-AFF. (E.C. TO INTERWIRE BETWEEN DISPOSER & SOLENOID VALVE)
E-51	208-V, 3-PH SERVICE, 3-HP, 6.0 FL AMPS, STUB OUT WALL AT 1'-6"-AFF AND CONNECT TO CONTROL PANEL FOR ITEM 51, 3-HP DISPOSER, AT 1'-7"-AFF. (E.C. TO INTERWIRE BETWEEN DISPOSER & SOLENOID VALVE)
E-54	208-V, 3-PH SERVICE, 144.5 FL AMPS, STUB OUT WALL AT 5'-9"-AFF AND CONNECT TO INTERNAL BOOSTER HEATER ON ITEM 54, DISHMACHINE, AT 5'-4"-AFF.
E-54b	120-V, 1-PH SERVICE, 20.0 AMP CIRCUIT, NOT FL AMPS, STUB OUT WALL AT 1'-6"-AFF AND CONNECT TO DRAIN WATER TEMPERING KIT FOR ITEM 54, DISHMACHINE, AT 10"-AFF.
E-54c	120-V, 1-PH SERVICE, 20.0 AMP CIRCUIT, ELECTRICAL OUTLET AT 5'-0"-AFF FOR SERVICE TO DETERGENT DISPENSER FOR ITEM 54, DISHMACHINE, AT 5'-4"-AFF. (VERIFY REQUIREMENTS W/VENDOR)
E-60	120-V, 1-PH SERVICE, 20.0 AMP CIRCUIT, NOT FL AMPS, ELECTRICAL CONDUIT, STUB FROM CEILING AND CONNECT TO SYSTEM PROCESSOR LOCATED IN ITEM 60, VARIABLE VOLUME CONTROLS. (E.C. TO PROVIDE AND INSTALL SHUNT TRIP BREAKER) (E.C. TO INTERWIRE THE LOW VOLTAGE SPEED REFERENCE SIGNALS FROM THE SYSTEM PROCESSOR TO THE MAKE-UP AIR UNIT VFD'S) (ALL LINE VOLTAGE AND LOW VOLTAGE CONNECTIONS TO BE COMPLETED PRIOR TO HOOD CONTROL SYSTEM START-UP)
E-60b	120-V, 1-PH SERVICE, 20.0 AMP CIRCUIT, NOT FL AMPS, ELECTRICAL CONDUIT, STUB FROM CEILING AND CONNECT TO SYSTEM PROCESSOR LIGHT CONTROLLER CONNECTION LOCATED IN ITEM 60, VARIABLE VOLUME CONTROLS. (E.C. TO PROVIDE AND INSTALL SHUNT TRIP BREAKER) (E.C. TO INTERWIRE TO LINE VOLTAGE LIGHT SUPPLY CONNECTION ON ITEMS 16 & 24, TYPE 1 HOOD) (ALL LINE VOLTAGE AND LOW VOLTAGE CONNECTIONS TO BE COMPLETED PRIOR TO HOOD CONTROL SYSTEM START-UP)
E-60c	208-V, 3-PH SERVICE, ELECTRICAL SERVICE STUB FROM CEILING AND CONNECT TO EXHAUST FAN VFD LOCATED IN CONTROLS CABINET OF ITEM 60, VARIABLE VOLUME HOOD CONTROLS. (E.C. TO INTERWIRE TO EXHAUST FAN MOUNTED ON BUILDING ROOF)



LEGEND - ELECTRICAL CONNECTIONS

- DUPLEX RECEPT., 20-AMP, 120-VOLT, GROUND TYPE
- SIMPLEX RECEPT., 20-AMP, 120-VOLT, GROUND TYPE
- SPECIAL PURPOSE OUTLET, 120-VOLT, GROUND TYPE
- SPECIAL PURPOSE OUTLET, 208/240-VOLT AS INDICATED, GROUND TYPE
- JUNCTION BOX
- ELECTRICAL CONDUIT, STUB AS INDICATED FOR DIRECT CONNECTION
- FLOOR/CEILING RECEPTACLE AS INDICATED
- FIELD WIRING, EXPOSED RIGID WATERTIGHT CONDUIT
- FIELD WIRING, CONCEALED IN WALL, FLOOR, OR CEILING

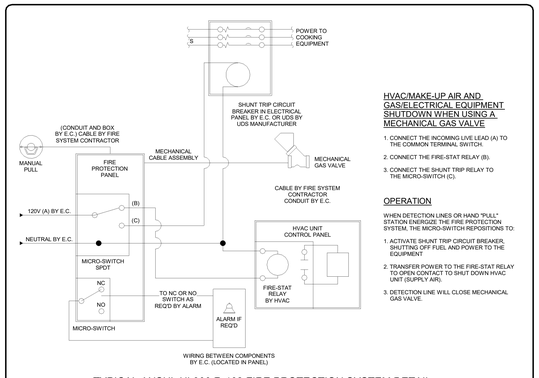
NOTES - ELECTRICAL CONNECTIONS

- ALL CONNECTION HEIGHTS ARE APPROXIMATE
- ALL CONNECTIONS SHOWN ARE FOR SPECIFIC PIECES OF FOOD SERVICE EQUIPMENT
- PROVIDE ADDITIONAL OUTLETS FOR EQUIPMENT SUPPLIED BY OTHER TRADES
- PROVIDE ADDITIONAL OUTLETS FOR GENERAL PURPOSES AND CLEAN UP
- PROVIDE SHUNT TRIP BREAKERS ON ELECTRICALLY POWERED EQUIPMENT LOCATED UNDER VENTILATOR
- E.C. = ABBREVIATION FOR ELECTRICAL CONTRACTOR

FIELD WIRING TERMINAL BLOCK LOCATED IN FAN CONTROL PANEL

L1	N	L1	5	F1	F2	11	12	F3	F4	V1	N	L1	72	L1	70
120 VOLT SUPPLY			TYPICAL 1 EXH SET TO 115°	C	120V TO EXHAUST FAN MOTOR STARTER COIL		FIRE PROTECTION SYSTEM SWITCH	C	120V TO SUPPLY FAN MOTOR STARTER COIL	120V TO VENT LIGHTS		120V TO REMOTE LIGHT SWITCH		120V TO REMOTE FAN SWITCH	

HOOD CONTROL DETAIL
SCALE: NTS



HVAC/MAKE-UP AIR AND GAS/ELECTRICAL EQUIPMENT SHUTDOWN WHEN USING A MECHANICAL GAS VALVE

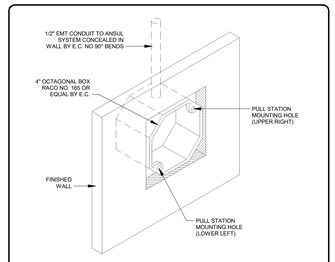
1. CONNECT THE INCOMING LIVE LEAD (A) TO THE COMMON TERMINAL SWITCH.
2. CONNECT THE FIRE-STAT RELAY (B).
3. CONNECT THE SHUNT TRIP RELAY TO THE MICRO-SWITCH (C).

OPERATION

WHEN DETECTION LINES OR HAND "PULL" STATION ENERGIZE THE FIRE PROTECTION SYSTEM, THE MICRO-SWITCH REPOSITIONS TO:

1. ACTIVATE SHUNT TRIP CIRCUIT BREAKER, SHUTTING OFF FUEL AND POWER TO THE EQUIPMENT
2. TRANSFER POWER TO THE FIRE-STAT RELAY TO OPEN CONTACT TO SHUT DOWN HVAC UNIT (SUPPLY AIR).
3. DETECTION LINE WILL CLOSE MECHANICAL GAS VALVE.

TYPICAL ANSUL UL300 R-102 FIRE PROTECTION SYSTEM DETAIL
SCALE: NTS



FIRE SUPPRESSION SYSTEM RECESSED PULL STATION
SCALE: NTS

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REVISIONS
1 2/29/2024 ADDENDUM 1

HIGH SCHOOL RENOVATIONS

511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

ELECTRICAL CONNECTION PLAN AND SCHEDULE

Proj No. 23-S43-01
Issue Date 02/19/2024

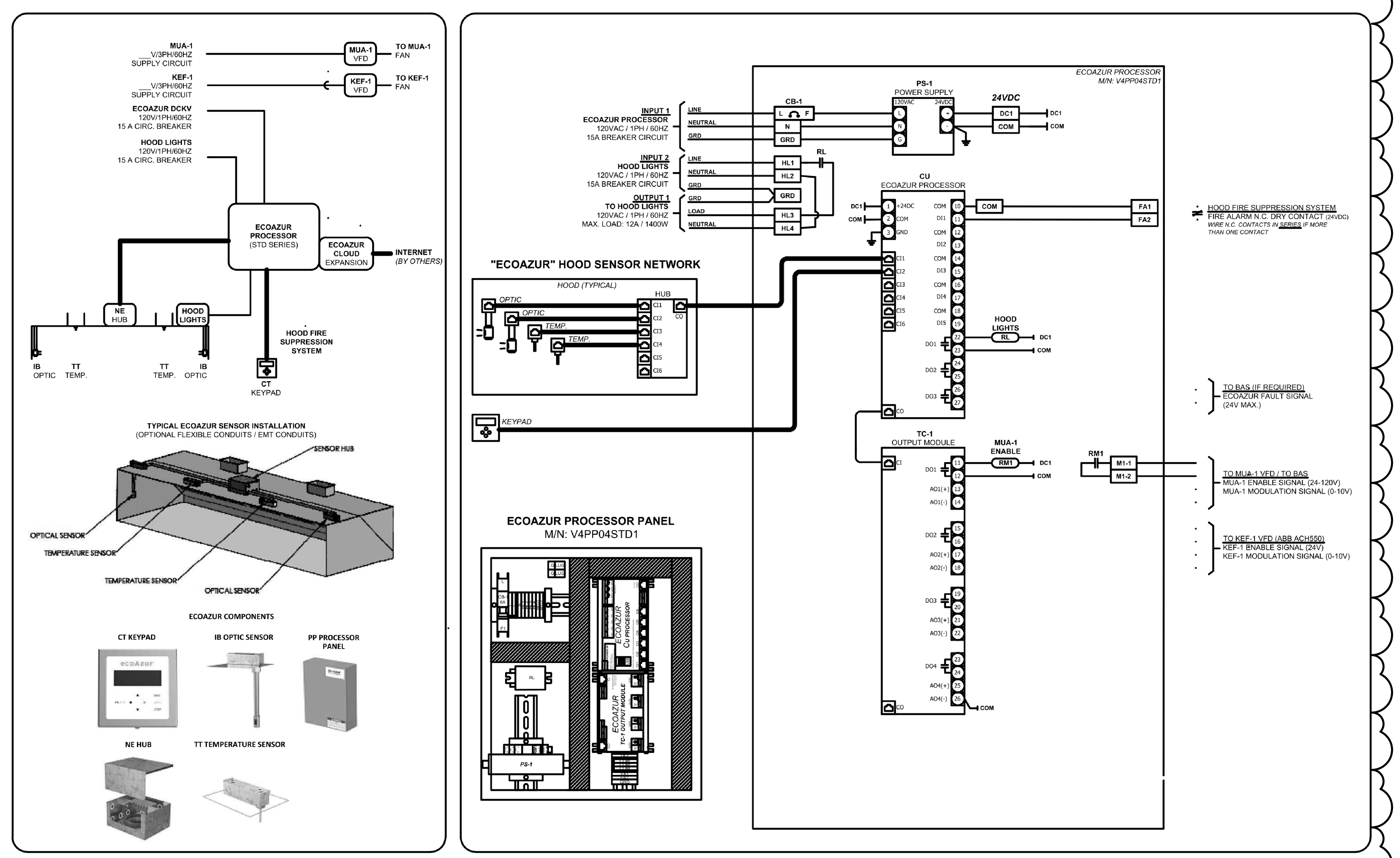
FS102

ECOAZUR STANDARD SERIES DCKV SYSTEM

TEMPERATURE - OPTICS - CLOUD ANALYTICS

SYSTEM OVERVIEW

ELECTRICAL DIAGRAM



MECHANICAL CONNECTION SCHEDULE

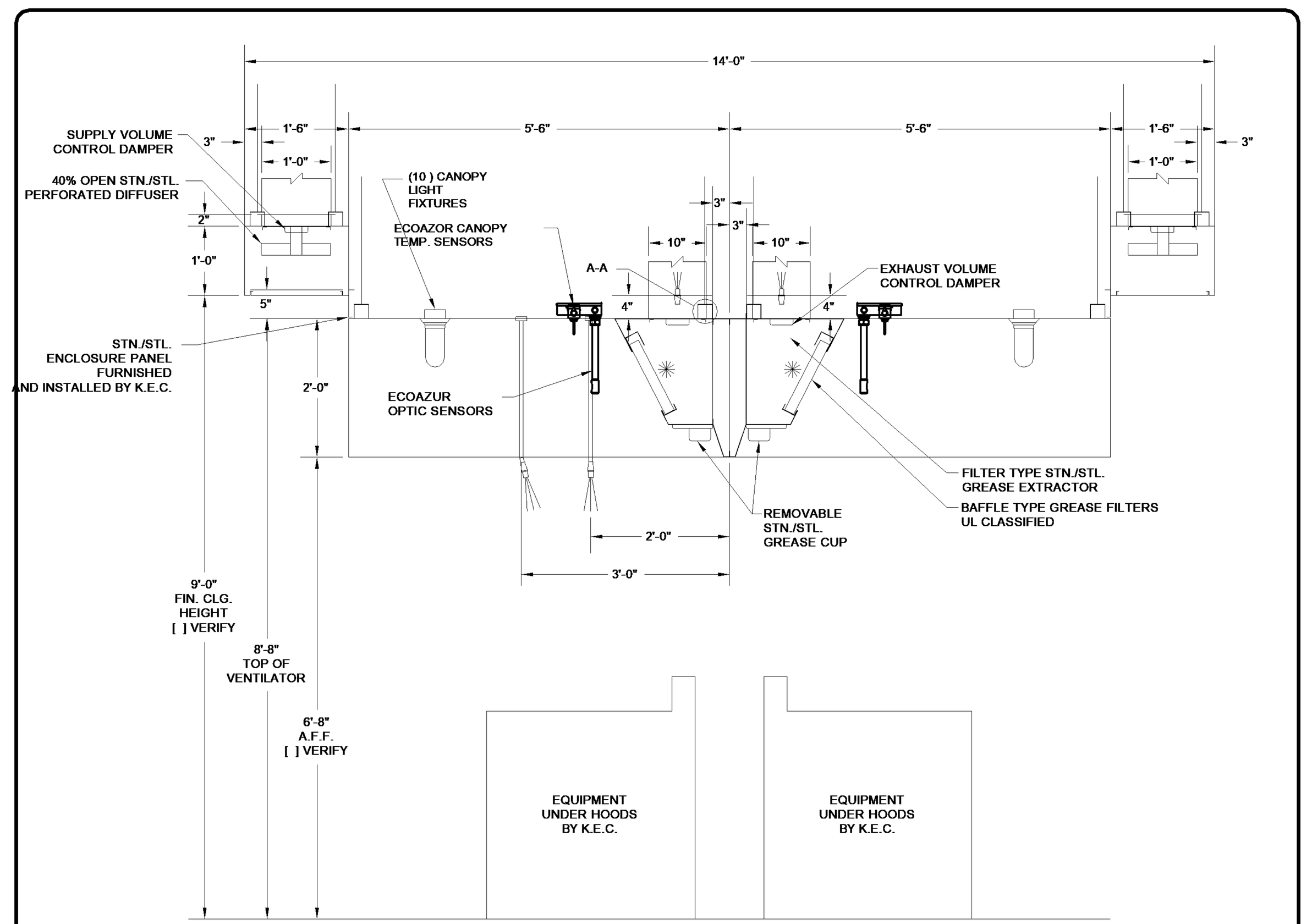
M-16	10" X 33" EXHAUST DUCT, 4,107 CFM @ 1.0" S.P., STUB FROM CEILING AND CONNECT AT DUCT OPENING ON ITEM 16, TYPE I HOOD, AT 9'-0"-AFF. (STATIC PRESSURE LISTED ABOVE IS THE STATIC PRESSURE AT THE DUCT ON THE TYPE I HOOD)
M-16b	2 @ 12" X 24" SUPPLY DUCTS, 1,643 CFM EACH @ 1.0" S.P., 3,286 CFM TOTAL STUB FROM CEILING AND CONNECT AT DUCT OPENING ON ITEM 24, TYPE I HOOD, AT 14" ABOVE FINISHED CEILING. (STATIC PRESSURE LISTED ABOVE IS THE STATIC PRESSURE AT THE DUCT ON THE TYPE I HOOD)
M-24	10" X 33" EXHAUST DUCT, 4,107 CFM @ 1.0" S.P., STUB FROM CEILING AND CONNECT AT DUCT OPENING ON ITEM 24, TYPE I HOOD, AT 9'-0"-AFF. (STATIC PRESSURE LISTED ABOVE IS THE STATIC PRESSURE AT THE DUCT ON THE TYPE I HOOD)
M-24b	2 @ 12" X 24" SUPPLY DUCTS, 1,643 CFM EACH @ 1.0" S.P., 3,286 CFM TOTAL STUB FROM CEILING AND CONNECT AT DUCT OPENING ON ITEM 24, TYPE I HOOD, AT 14" ABOVE FINISHED CEILING. (STATIC PRESSURE LISTED ABOVE IS THE STATIC PRESSURE AT THE DUCT ON THE TYPE I HOOD)
M-55	12" X 12" EXHAUST DUCT, 600 CFM, STUB FROM CEILING AND CONNECT AT DUCT OPENING ON ITEM 55, PANT LEG DUCT, CONNECT AT 3" ABOVE FINISHED CEILING. (CONDENSATE EXHAUST DUCT TO BE WATER TIGHT)

LEGEND - MECHANICAL CONNECTIONS

- EXHAUST DUCT CONNECTION
- MAKE-UP AIR DUCT CONNECTION

NOTES - MECHANICAL CONNECTIONS

- ALL CONNECTION HEIGHTS ARE APPROXIMATE
- ALL DUCT WORK TO BE PER NFPA-96



TYPICAL VENTILATOR SECTION VIEW

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

NATIONAL FIRE PROTECTION ASSOCIATION
IN ACCORDANCE WITH RECOMMENDATION OF NATIONAL FIRE PROTECTION ASSOCIATION'S NFPA NO. 96 "VAPOR REMOVAL FROM COOKING EQUIPMENT"

NATIONAL SANITATION FOUNDATION
STANDARD #2 - "FOOD SERVICE EQUIPMENT"

ETL, INTERTEK
TESTED UNDER STANDARD U.L. 710 "EXHAUST HOODS FOR COMMERCIAL COOKING EQUIPMENT". ETL LISTED UNDER CONTROL # 3177269

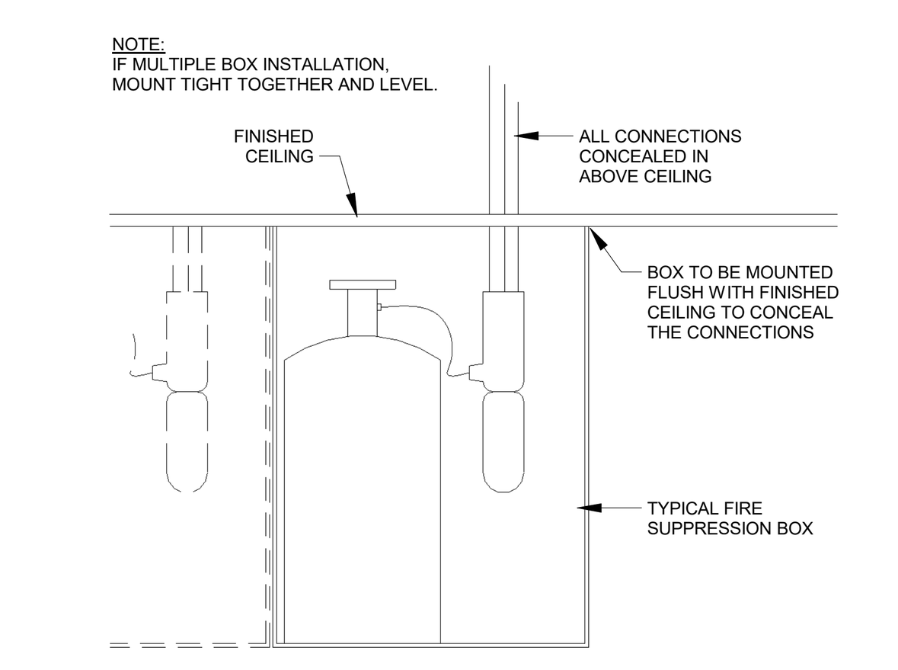
UNIFORM MECHANICAL CODE
SECTION 507 - COMMERCIAL KITCHEN HOODS AND KITCHEN VENTILATION SYSTEMS

THE BOCA NATIONAL MECHANICAL CODE
CHAPTER 5 - KITCHEN EXHAUST EQUIPMENT

STANDARD MECHANICAL CODE
(SBCCI) SECTION 504 - COMMERCIAL HOODS

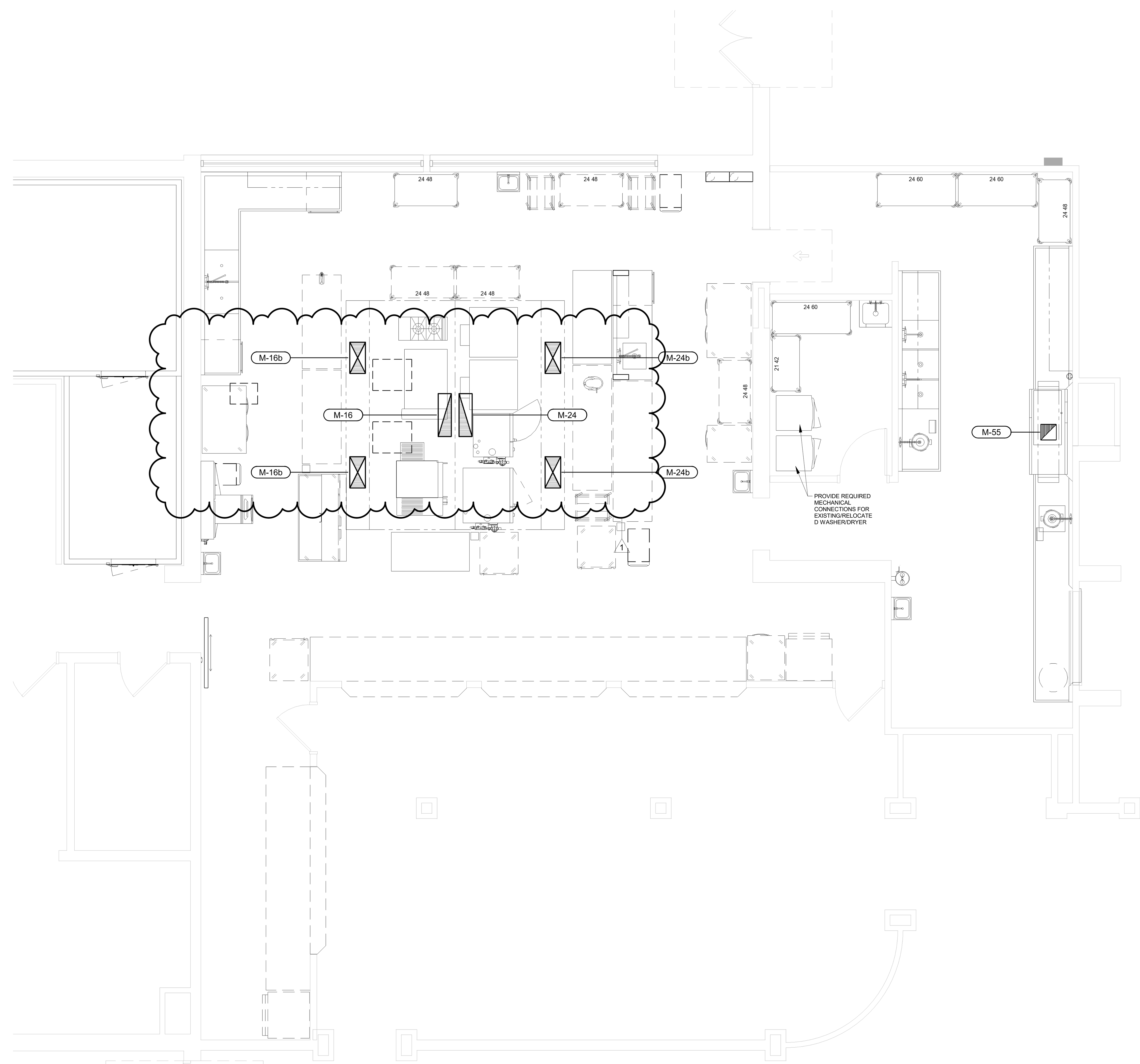
UNIFORM BUILDING CODE (ICBO)

INTERNATIONAL MECHANICAL CODE (IMC)
SECTION 507 - COMMERCIAL KITCHEN HOODS EXCLUDES CODE #507.2.1.1, CONSULT FACTORY FOR COMPLIANCE OPTIONS.



FIRE SUPPRESSION CABINET MOUNTING DETAIL

SCALE: NTS



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REVISIONS
1 2/29/2024 ADDENDUM 1

HIGH SCHOOL RENOVATIONS

511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

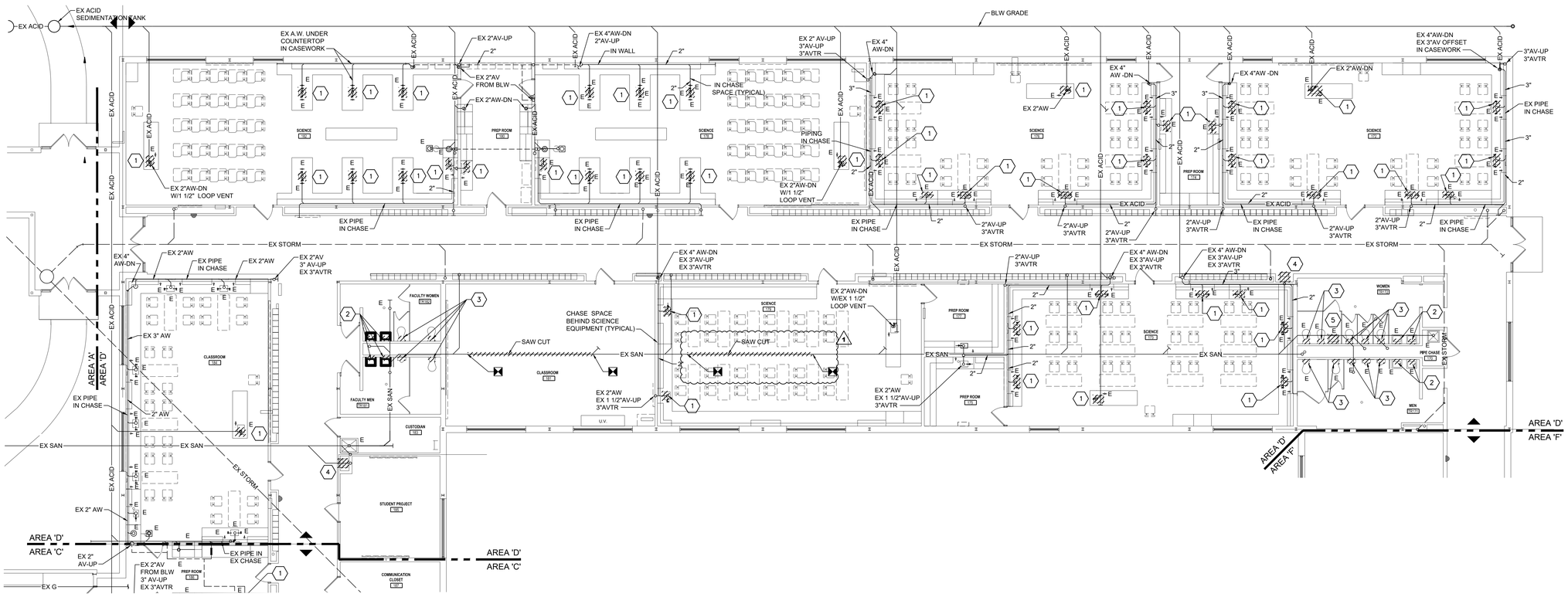
MECHANICAL CONNECTION PLAN AND SCHEDULE

Proj No. 23-S43-01
Issue Date 02/19/2024

FS103

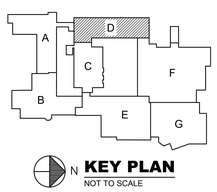
PLUMBING KEY NOTES

1. PLUMBING CONTRACTOR TO DISCONNECT AND REMOVE EXISTING TURRET, AND GAS LINE BACK TO AND INCLUDE GAS SHUT OFF VALVE.
2. PLUMBING CONTRACTOR TO DISCONNECT AND REMOVE EXISTING LAVATORY MANUAL FAUCET.
3. PLUMBING CONTRACTOR TO DISCONNECT AND REMOVE EXISTING FLUSH VALVE. EXISTING WATER CLOSET / URINAL TO REMAIN.
4. PLUMBING CONTRACTOR TO DISCONNECT AND REMOVE EXISTING DRINKING FOUNTAIN.
5. PLUMBING CONTRACTOR TO DISCONNECT AND REMOVE EXISTING WALL HUNG LAVATORY, MANUAL FAUCET AND CAP EXISTING SANITARY HOT AND COLD WATER IN WALL AND PATCH AND REPAIR WALL AS REQUIRED TO MATCH ARCHITECTURAL FINISH.



1 FIRST FLOOR PLAN - AREA 'D' - PLUMBING DEMOLITION

Scale: 1/8" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"



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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JOHN W. HEILAND
PE074361

REVISIONS
1 02/20/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

PD104

FIRST FLOOR PLAN
AREA - D PLUMBING DEMOLITION

Proj No. 23-543-01
Issue Date 02/19/2024

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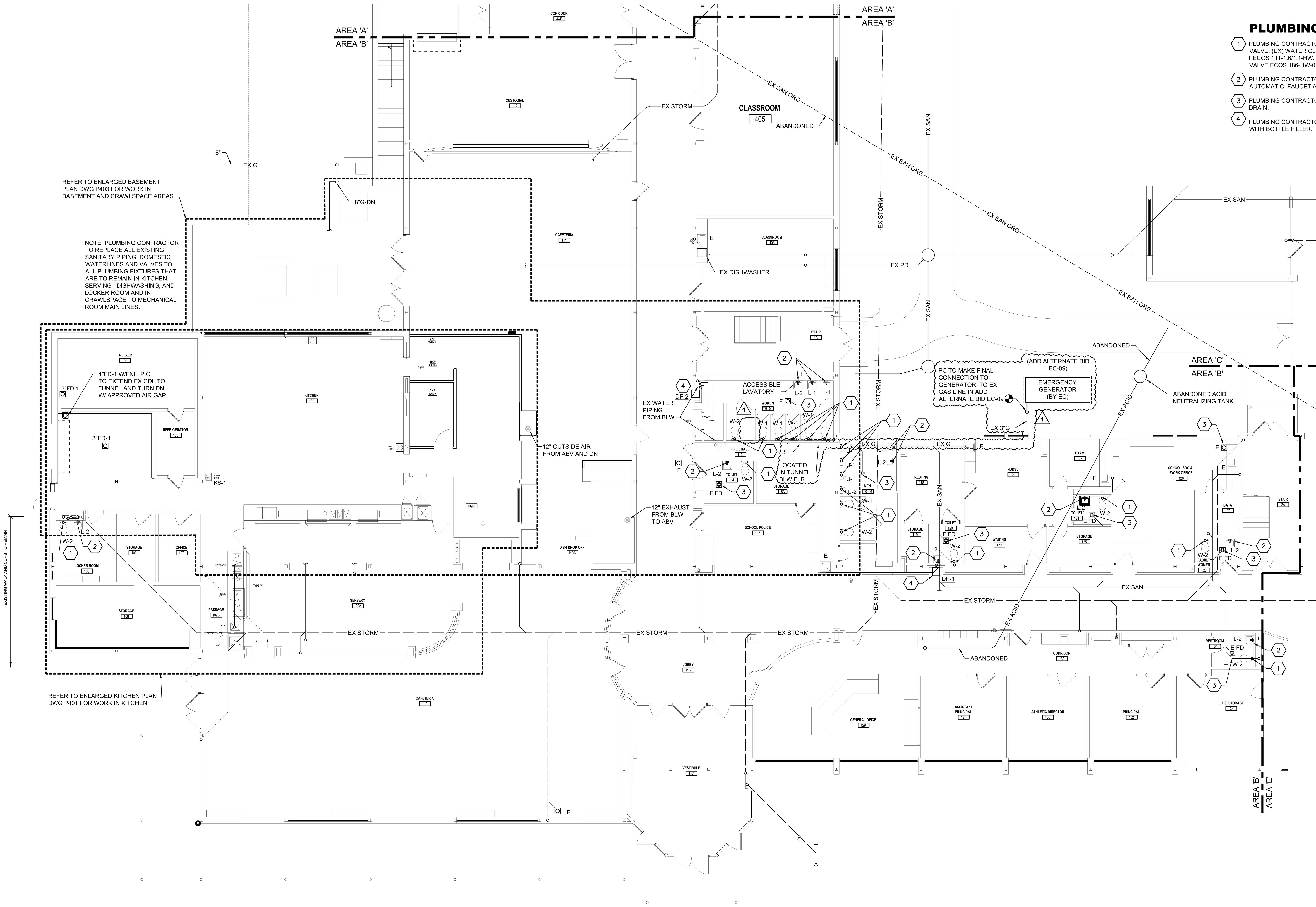


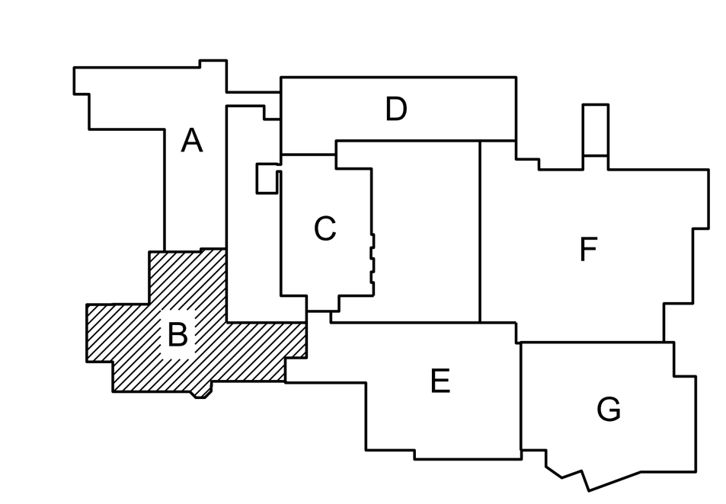
PLUMBING KEY NOTES

1. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL HARD WIRED FLUSH VALVE. (EX) WATER CLOSETS - SLOAN SENSOR OPERATED FLUSH VALVE PECOS 111-1.6/1.1-HW. (EX) URINALS - SLOAN SENSORED OPERATED FLUSH VALVE ECOS 186-HW-0.125.
2. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL LAVATORY ELECTRONIC AUTOMATIC FAUCET AND MIXING VALVE.
3. PLUMBING CONTRACTOR INSTALL A NEW TRAP GUARD IN EXISTING FLOOR DRAIN.
4. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL DRINKING FOUNTAIN WITH BOTTLE FILLER.

1 **FIRST FLOOR PLAN - AREA 'B' - PLUMBING NEW WORK**

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



KEY PLAN
NOT TO SCALE

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FIRST FLOOR PLAN - AREA - B
PLUMBING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

P102

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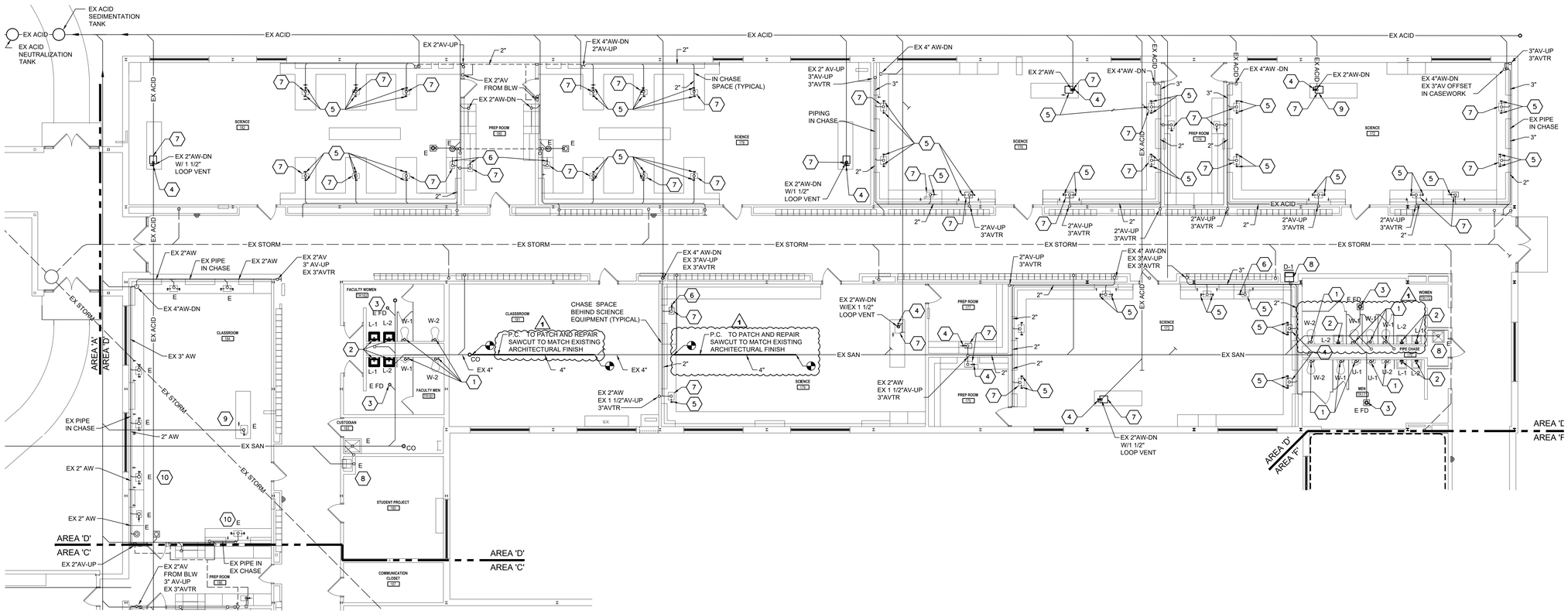
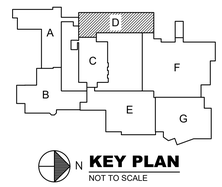
PLUMBING KEY NOTES

1. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL HARD WIRED FLUSH VALVE. (EX) WATER CLOSETS - SLOAN SENSOR OPERATED FLUSH VALVE PECOS 111-1.6/1.1-HW. (EX) URINALS - SLOAN SENSORED OPERATED FLUSH VALVE ECOS 186-HW-0.125.
2. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL LAVATORY ELECTRONIC AUTOMATIC FAUCET AND MIXING VALVE.
3. PLUMBING CONTRACTOR TO INSTALL A NEW 4" TRAP GUARD IN EXISTING 4" FLOOR DRAIN.
4. T&S BRASS, MODEL:BL-5704-05, LAB MIXING FAUCET, SWIVEL GOOSENECK, AERATOR, 4" HANDLES, QT ETERNAS.
5. T 7S BRASS, MODEL:BL-5705-01, SINGLE HOLE SINGLE TEMPERATURE DECK MOUNT FAUCET W/ POLISHED CHROME PLATED BRASS BODY, 5 7/8" SWIVEL/RIGID GOOSENECK, 4-ARM HANDLE W/ COLOR CODED INDEX (BLUE)
6. T 7S BRASS, MODEL:B-0305-VR4-WS, SINGLE HOLE SINGLE TEMPERATURE DECK MOUNT FAUCET W/ POLISHED CHROME PLATED BRASS BODY, 5 7/8" SWIVEL/RIGID GOOSENECK, 4" WRIST ACTION HANDLE W/ VANDAL RESISTANT SCREW & COLOR CODED INDEX (BLUE)
7. NEW DECK MOUNTED LABORATORY TURRET WITH TWO VALVES AT 90° CHICAGO FAUCETS MODEL:LGB1-31B-20.
8. PLUMBING CONTRACTOR PROVIDE AND INSTALL DRINKING FOUNTAIN WITH BOTTLE FILLER.
9. PLUMBING CONTRACTOR TO INSTALL NEW TURRET, AND GAS LINE BACK TO AND INCLUDE GAS SHUT OFF VALVE.
10. PLUMBING CONTRACTOR TO INSTALL NEW P-TRAP, FAUCET, AND TRIM.



1 FIRST FLOOR PLAN - AREA 'D' - PLUMBING NEW WORK

Scale: 1/8" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"



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FIRST FLOOR PLAN - AREA - D
PLUMBING NEW WORK

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P104

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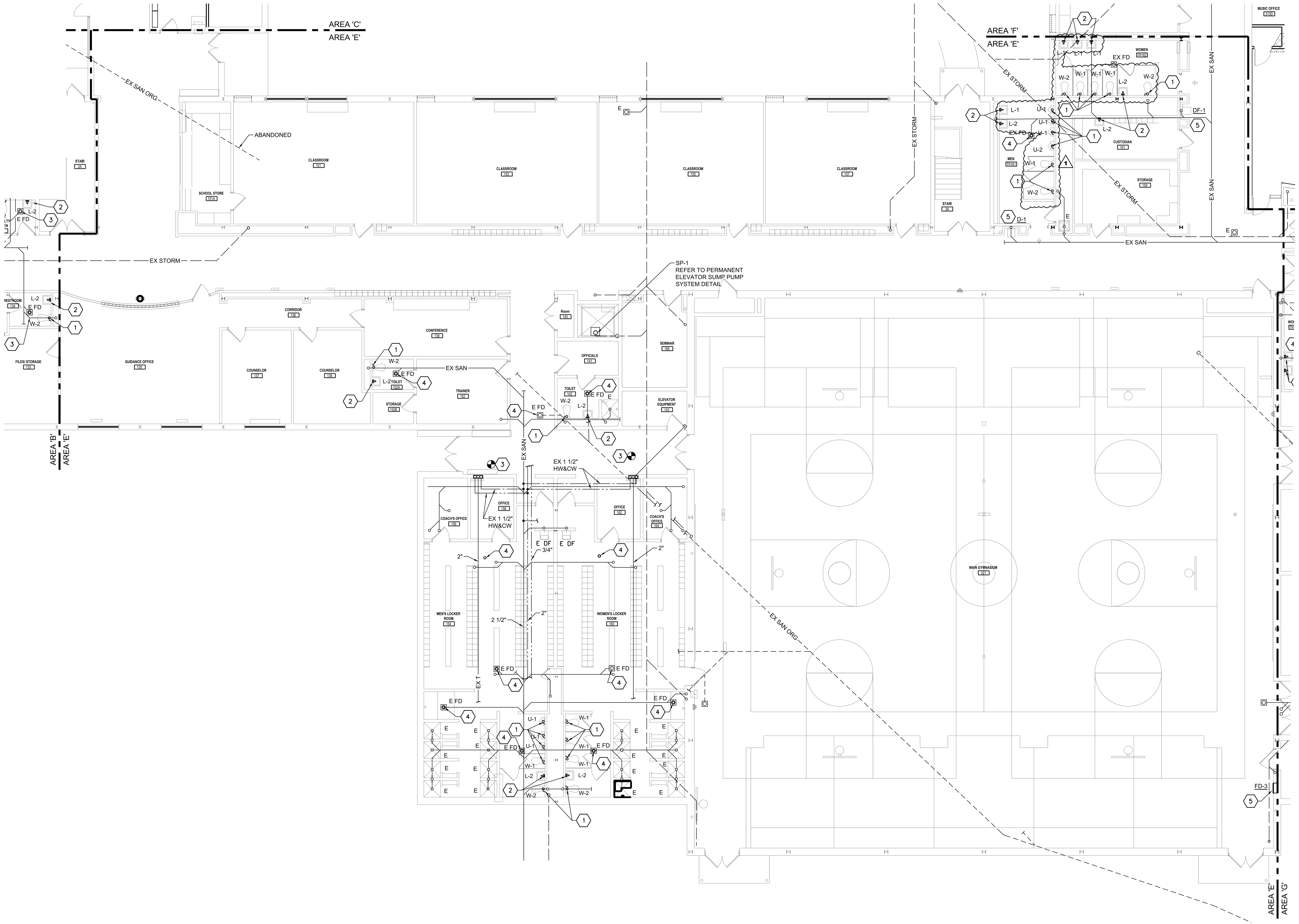
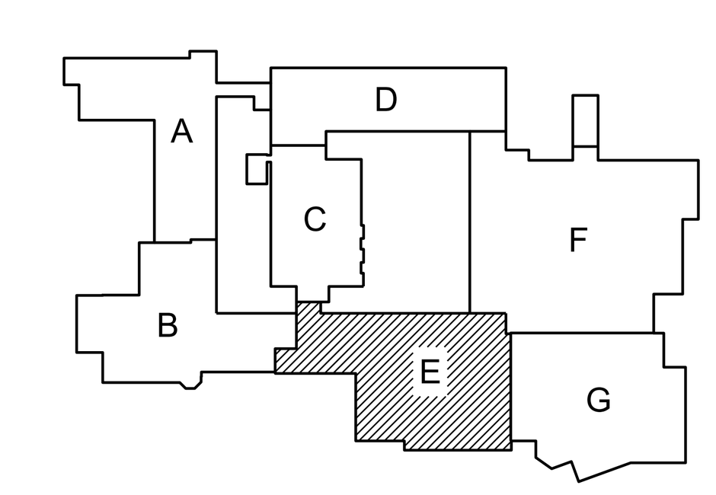


PLUMBING KEY NOTES

1. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL HARD WIRED FLUSH VALVE. (EX) WATER CLOSETS - SLOAN SENSOR OPERATED FLUSH VALVE PECOS 111-1.6/1.1-HW. (EX) URINALS - SLOAN SENSORED OPERATED FLUSH VALVE ECOS 186-HW-0.125.
2. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL LAVATORY ELECTRONIC AUTOMATIC FAUCET AND MIXING VALVE.
3. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL LOCK SHOWER MIXING VALVE.
4. PLUMBING CONTRACTOR TO INSTALL A NEW 4" TRAP GUARD IN EXISTING 4" FLOOR DRAIN.
5. PLUMBING CONTRACTOR PROVIDE AND INSTALL DRINKING FOUNTAIN WITH BOTTLE FILLER.

1 FIRST FLOOR PLAN - AREA 'E' - PLUMBING NEW WORK

Scale: 1/8" = 1'-0"   FIRST FLOOR ELEVATION 1252'-0"



KEY PLAN
NOT TO SCALE

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470 Washington Road, Pittsburgh, PA 15228
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Headquarters:
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Johnstown, PA 15904-3329
Phone: 814-269-9300
www.hflenz.com

REVISIONS
1 02/29/24 ADDENDUM NO. 1
BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - E
PLUMBING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

P105

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Feb 28, 2024 - 4:24pm
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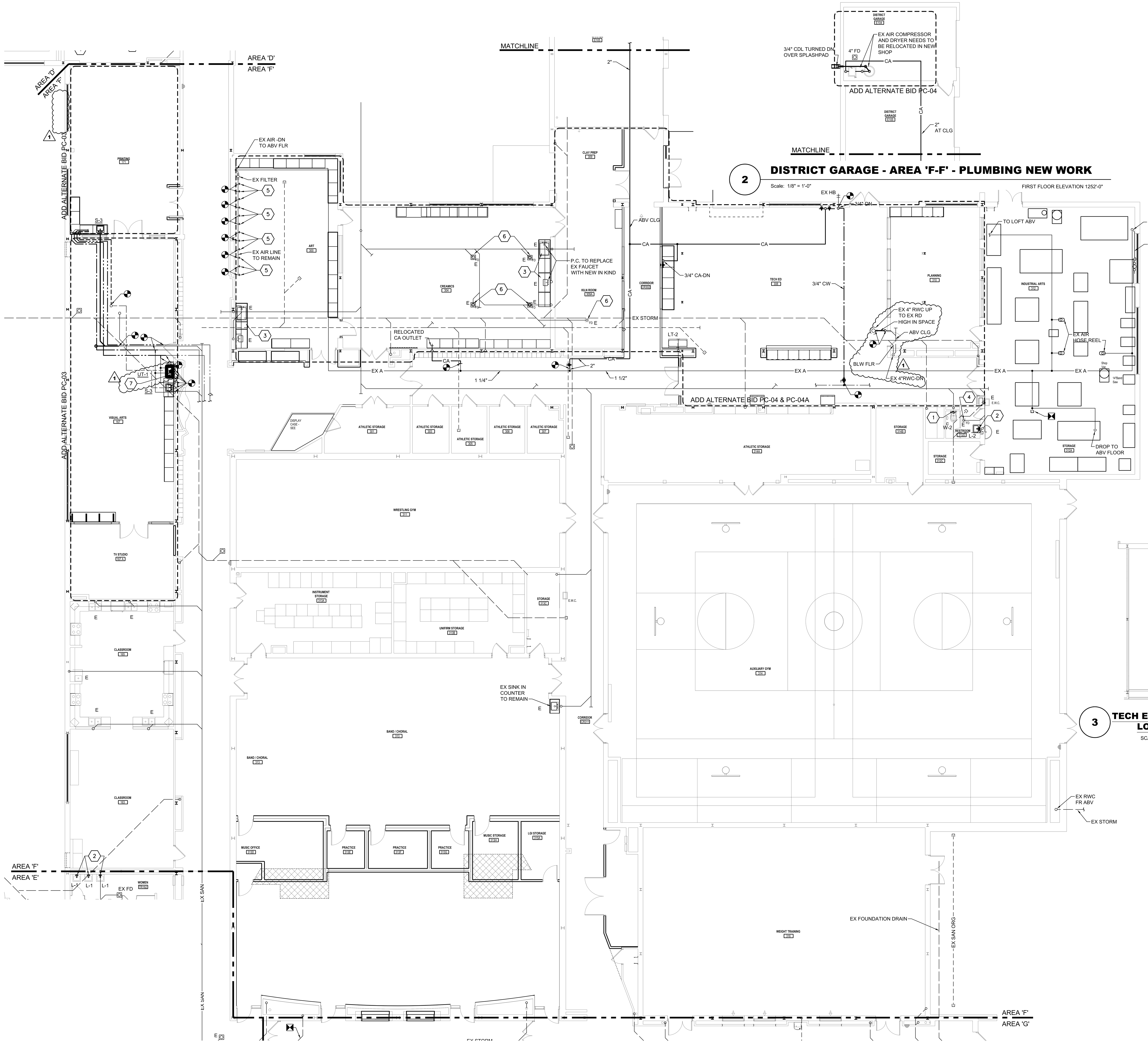


2 DISTRICT GARAGE - AREA 'F-F' - PLUMBING NEW WORK

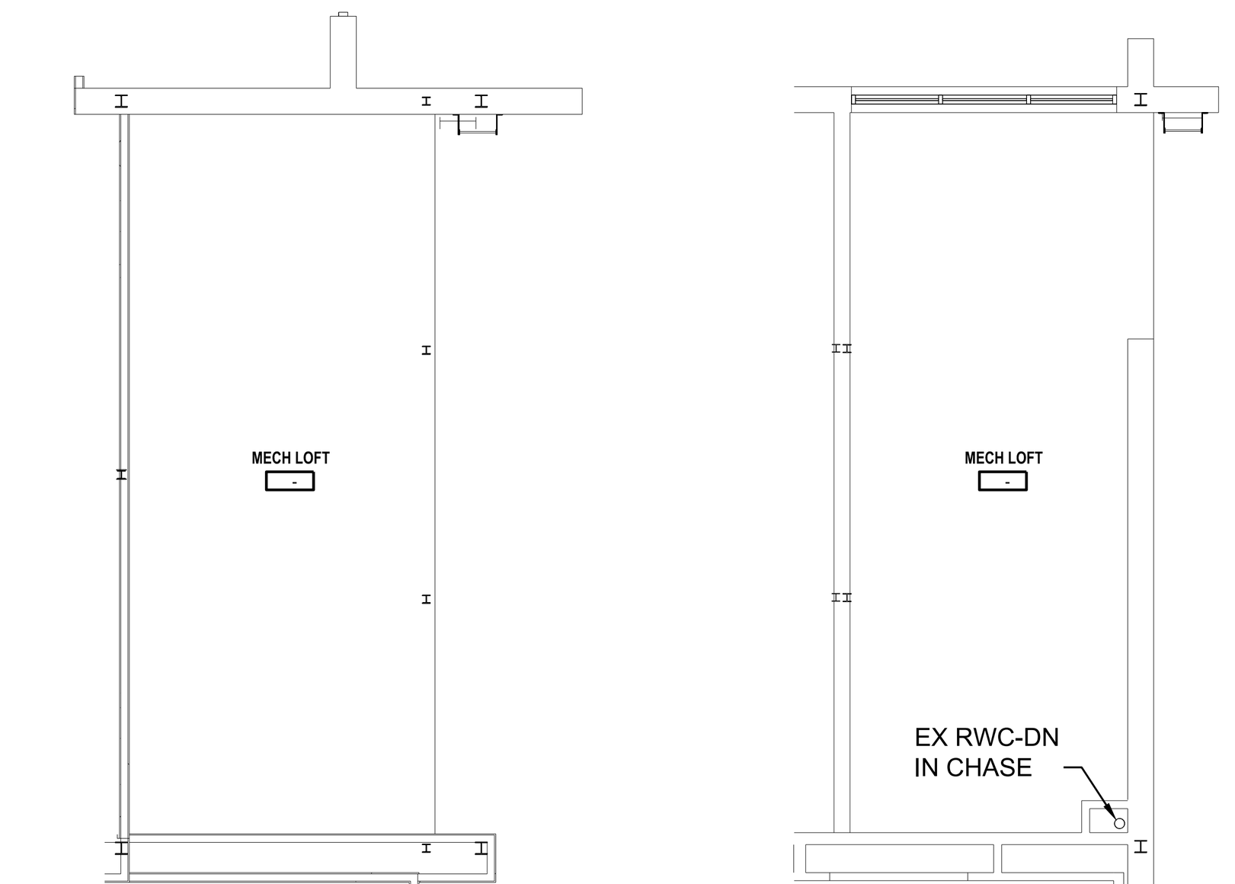
Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

1 FIRST FLOOR PLAN - AREA 'F' - PLUMBING NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

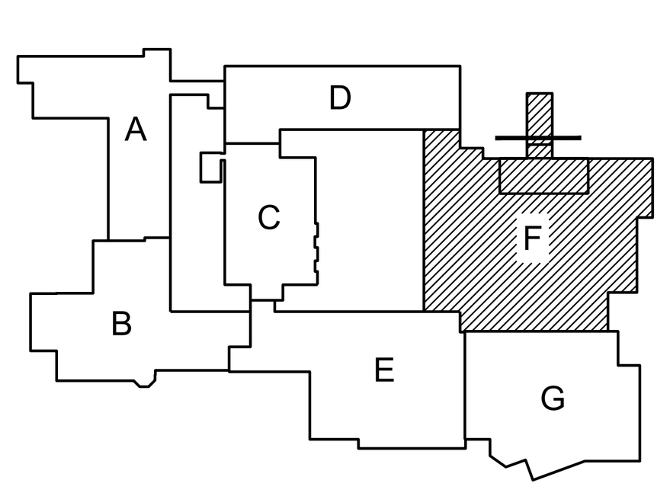


3 TECH ED EQUIPMENT LOFT PLAN

SCALE: 1/8" = 1'-0"

4 WOOD SHOP EQUIPMENT LOFT PLAN

SCALE: 1/8" = 1'-0"



KEY PLAN
NOT TO SCALE

PLUMBING KEY NOTES

1. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL HARD WIRED FLUSH VALVE. (EX) WATER CLOSETS - SLOAN SENSOR OPERATED FLUSH VALVE PECOS 111-1.6/1.1-HW. (EX) URINALS - SLOAN SENSORED OPERATED FLUSH VALVE ECOS 186-HW-0.125.
2. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL LAVATORY ELECTRONIC AUTOMATIC FAUCET AND MIXING VALVE.
3. NEW PLASTER TRAP INSTALLED UNDER SINK (BUFFALO DENTAL MANUFACTURER: 3 1/2 GAL. TRAP-EZE SS ODOR CONTROL TRAP COMPLETE KIT (11" HEIGHT SEALED BUCKET, HOSES) (BOTH EX SINK DRAINS ARE CONNECTED).
4. AT SAME LOCATION OF EX UTILITY SINK, RECONNECT TO EXISTING PIPING CONNECTIONS AS REQUIRED.
5. AIR QUICK RELEASE W/ PRESSURE REGULATOR AND SHUTOFF VALVE (TYPICAL FOR 12)
6. PLUMBING CONTRACTOR TO INSTALL TO INSTALL A TRAP GUARD IN EXISTING FLOOR DRAIN.
7. PLUMBING CONTRACTOR TO EXTEND AND CONNECT TO EXISTING PIPING IN CHASE WALL AND PATCH AND REPAIR WALL TO MATCH EXISTING ARCHITECTURAL FINISH AS REQUIRED.

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HIGH SCHOOL RENOVATIONS

511 HIGHLAND AVENUE, GROVE CITY, PA 16127

GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - F
PLUMBING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

P106

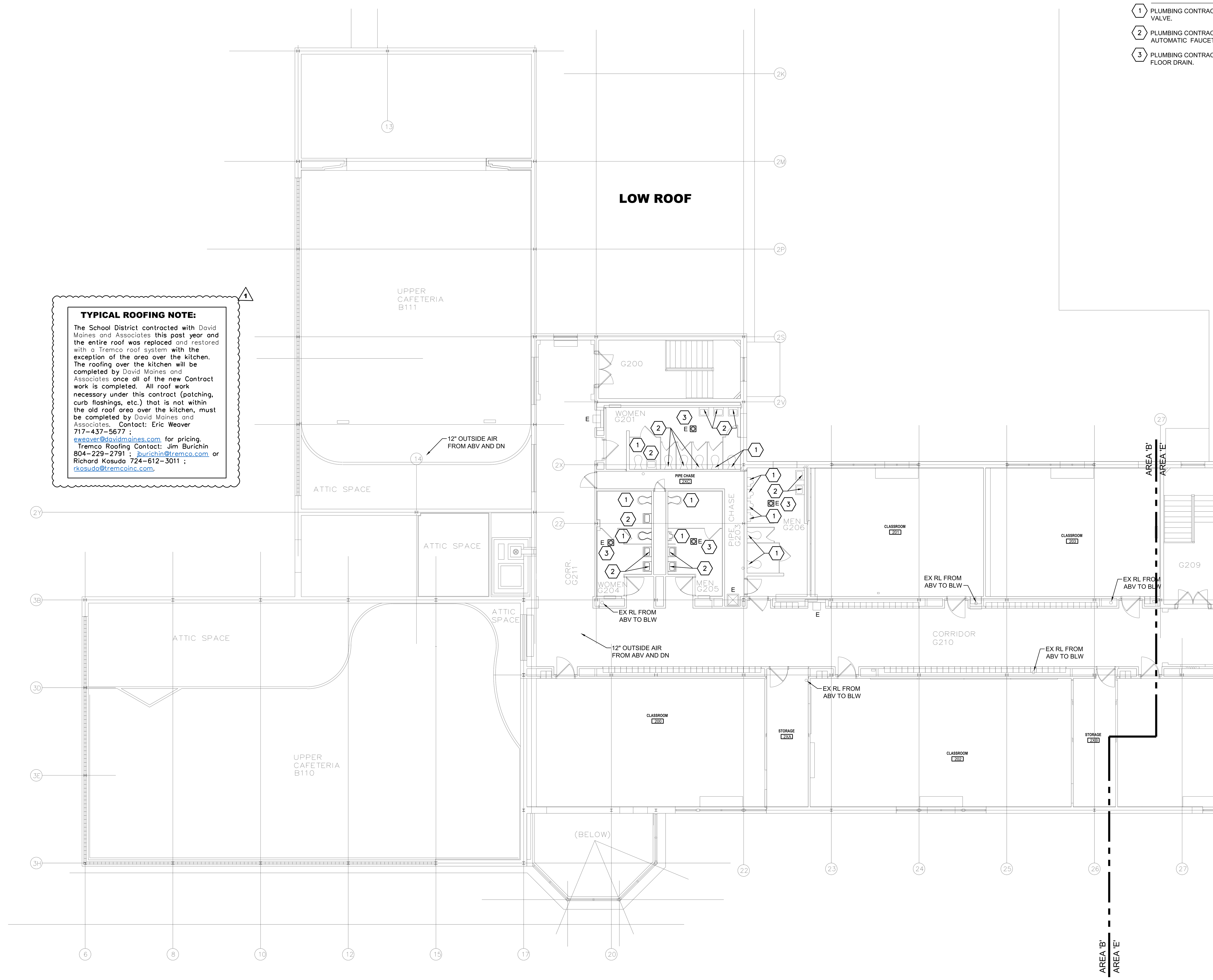
2/1/2023 6:54:50 AM
Feb 28, 2024 - 4:24pm

PLUMBING KEY NOTES

1. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL HARD WIRED FLUSH VALVE.
2. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL LAVATORY ELECTRONIC AUTOMATIC FAUCET AND MIXING VALVE.
3. PLUMBING CONTRACTOR TO INSTALL A NEW TRAP GUARD IN EXISTING FLOOR DRAIN.

TYPICAL ROOFING NOTE:

The School District contracted with David Maines and Associates this past year and the entire roof was replaced and restored with a Tremco roof system with the exception of the area over the kitchen. The roofing over the kitchen will be completed by David Maines and Associates once all of the new Contract work is completed. All roof work necessary under this contract (patching, curb flashings, etc.) that is not within the old roof area over the kitchen, must be completed by David Maines and Associates. Contact: Eric Weaver 717-437-5677 ; eweaver@davidmaines.com for pricing. Tremco Roofing Contact: Jim Burichin 804-229-2791 ; jburichin@tremco.com or Richard Kosuda 724-612-3011 ; rkosuda@tremcoinc.com.



1 SECOND FLOOR PLAN - AREA 'B' - PLUMBING NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

REVISIONS
1 02/29/24 ADDENDUM NO. 1

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN
AREA - B PLUMBING NEW WORK

Proj No. 23-543-01
Issue Date 02/19/2024

P108

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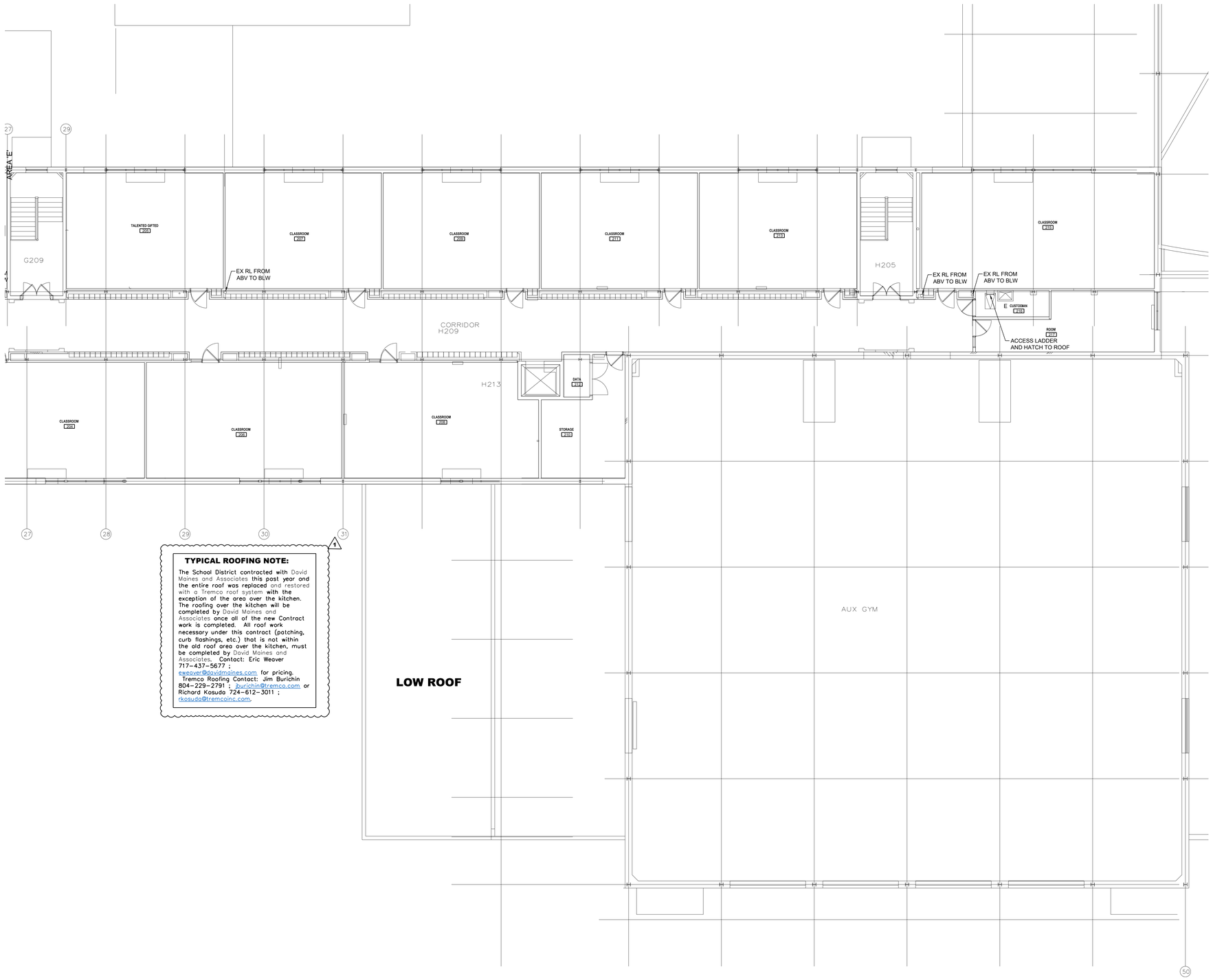

1 SECOND FLOOR PLAN - AREA 'E' - PLUMBING NEW WORK

Scale: 1/8" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"

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1 02/23/24 ADDENDUM NO. 1

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HIGH SCHOOL RENOVATIONS
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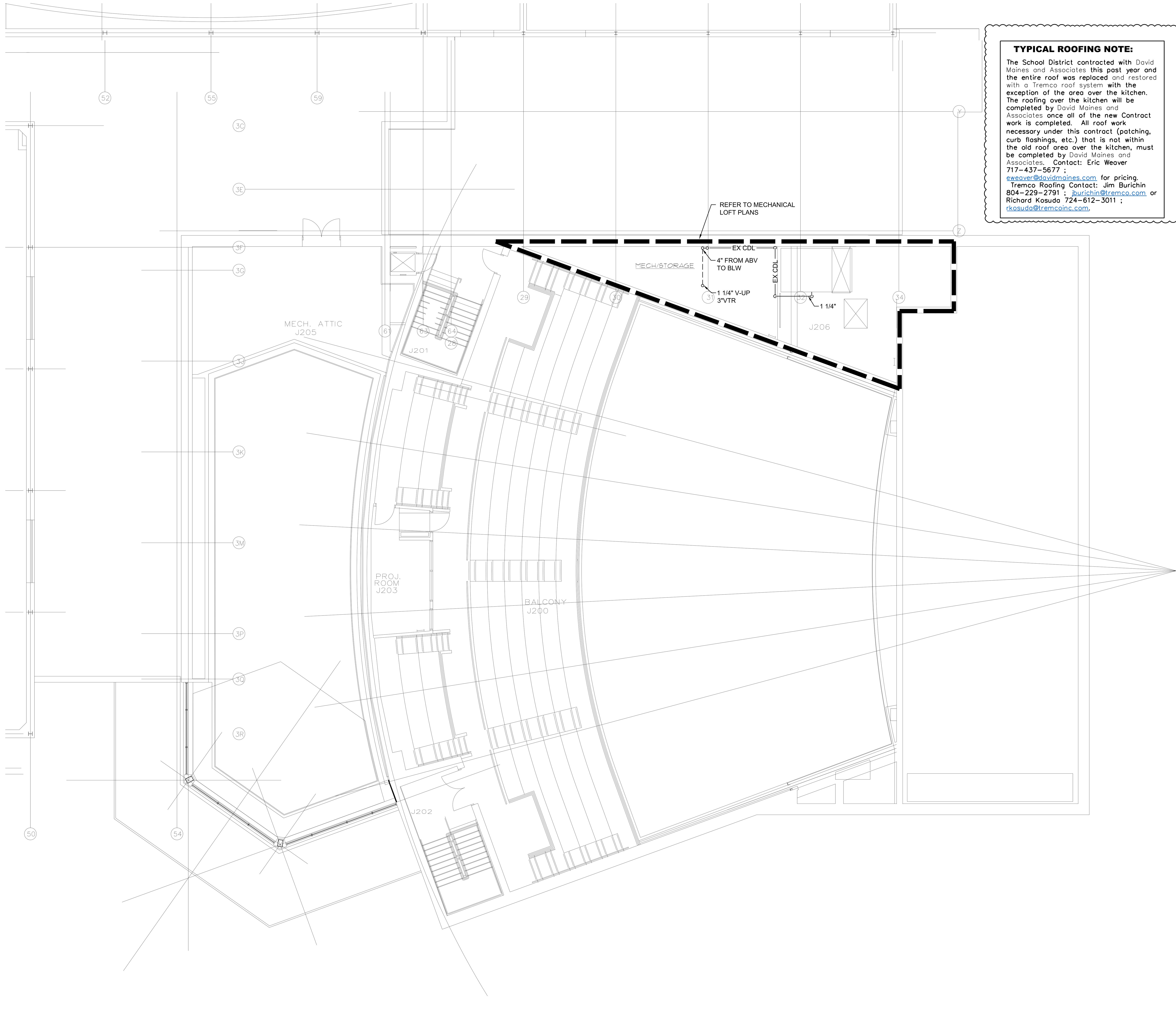
GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN
AREA - E PLUMBING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

P110



SECOND FLOOR PLAN - AREA 'G' - PLUMBING NEW WORK

1 Scale: 1/8" = 1'-0"

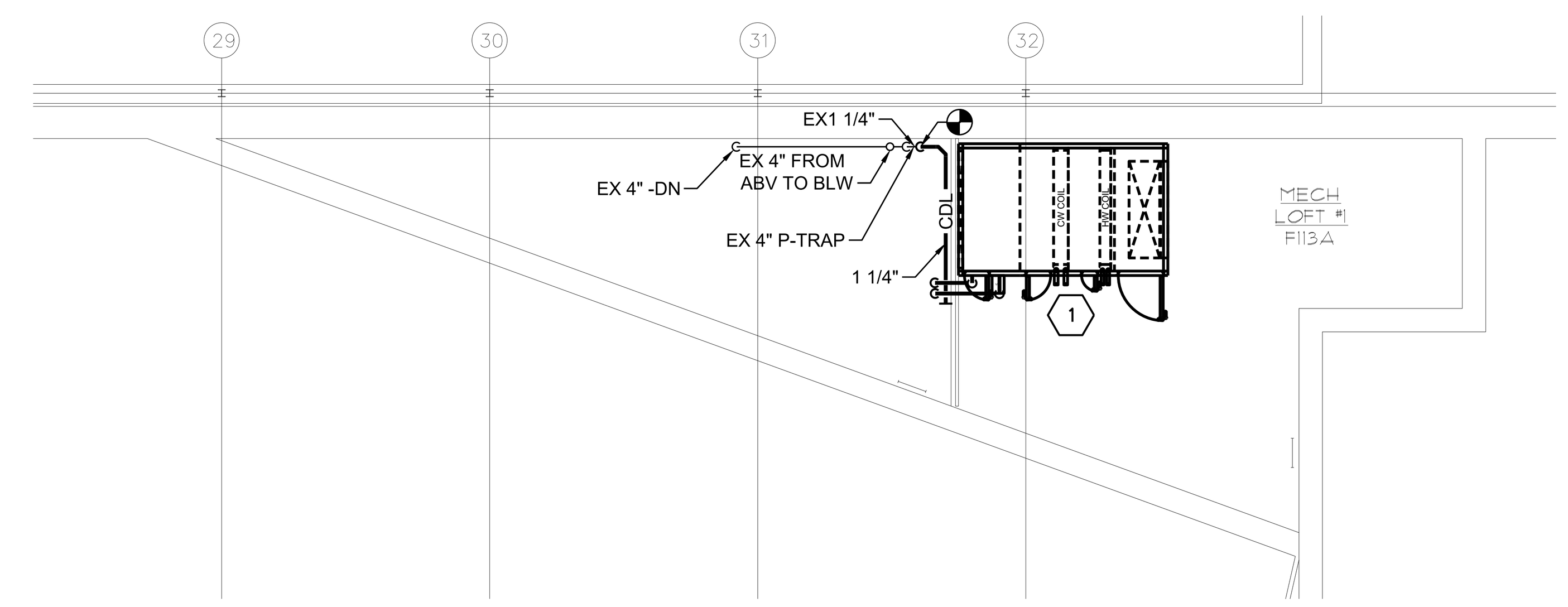
FIRST FLOOR ELEVATION 1252'-0"

TYPICAL ROOFING NOTE:

The School District contracted with David Maines and Associates this past year and the entire roof was replaced and restored with a Tremco roof system with the exception of the area over the kitchen. The roofing over the kitchen will be completed by David Maines and Associates once all of the new Contract work is completed. All roof work necessary under this contract (patching, curb flashings, etc.) that is not within the old roof area over the kitchen, must be completed by David Maines and Associates. Contact: Eric Weaver 717-437-5677 ; eweaver@davidmaines.com for pricing. Tremco Roofing Contact: Jim Burichin 804-229-2791 ; jburichin@tremco.com or Richard Kosuda 724-612-3011 ; rkosuda@tremcoinc.com.

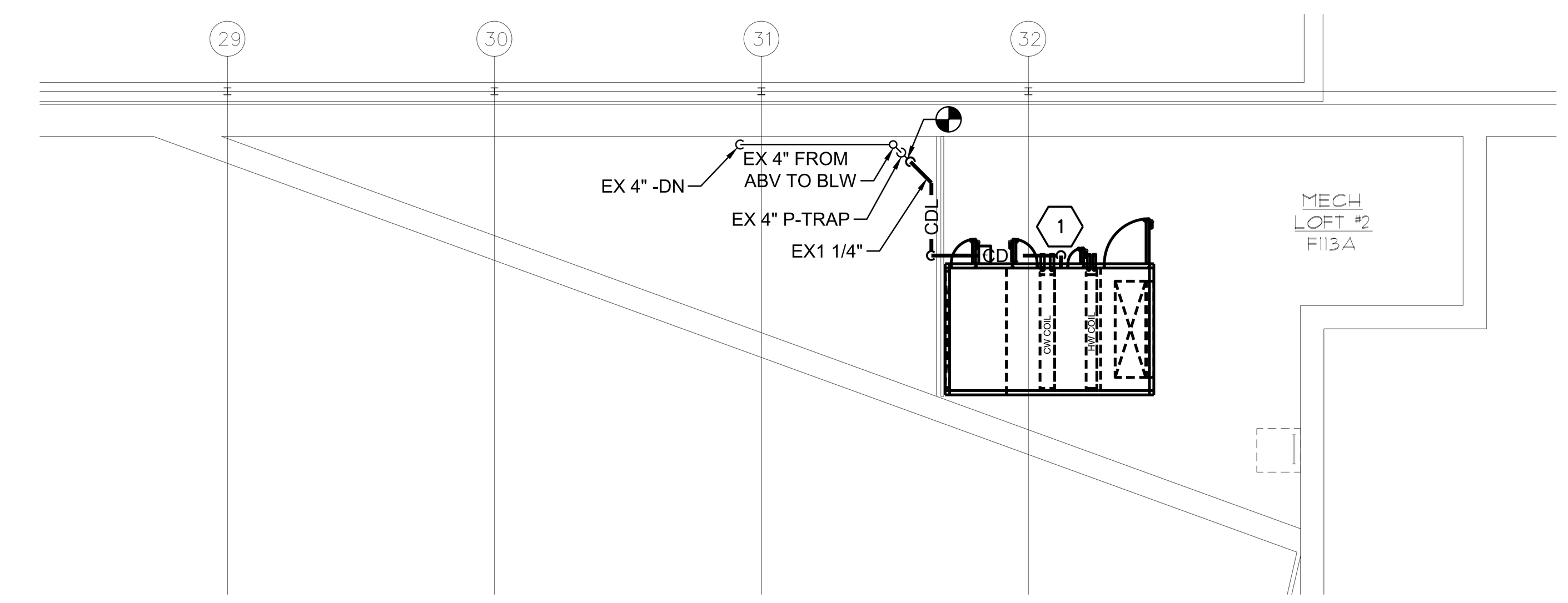
PLUMBING KEY NOTES

1. PLUMBING CONTRACTOR TO CONNECT AND COORDINATE W/ HC AND RECONNECT CONDENSATE DRAIN LINE AND TIE INTO EX DRAIN STACK AS REQUIRED.



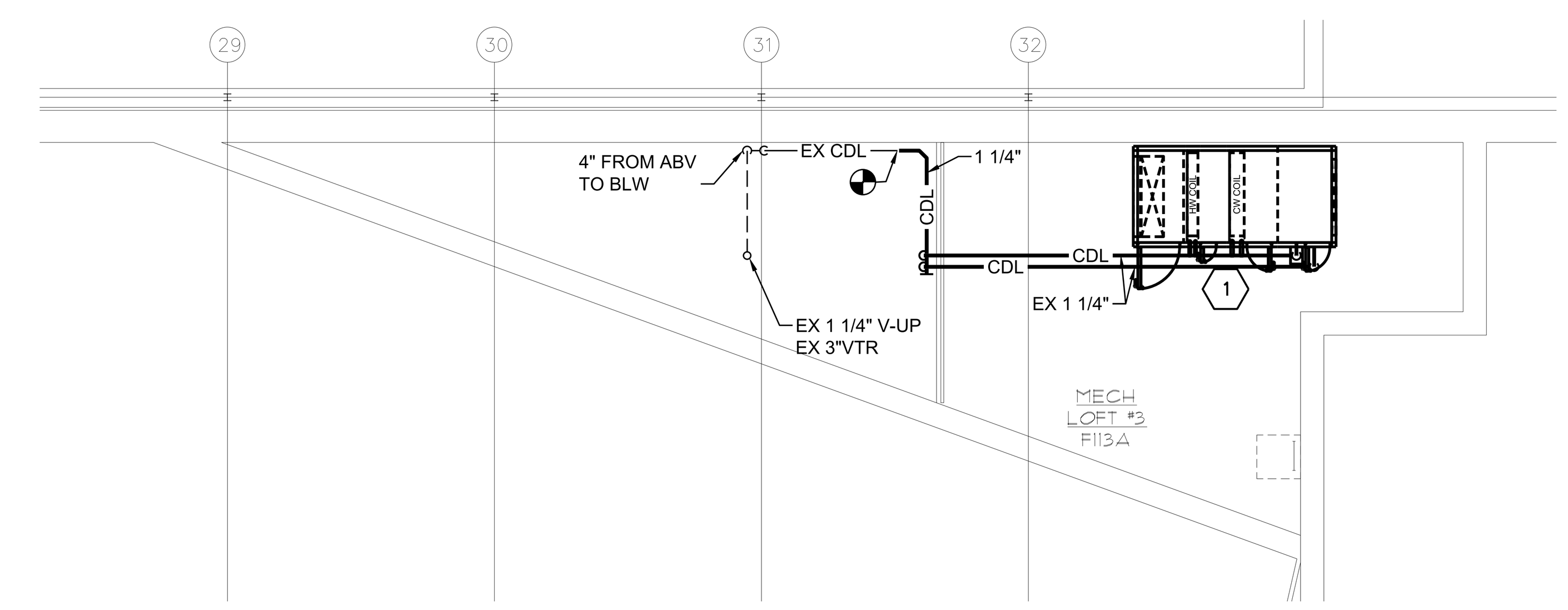
MECHANICAL ROOM LOFT - DECK No 1

SCALE: 1/8" = 1'-0"



MECHANICAL ROOM LOFT - DECK No 2

SCALE: 1/8" = 1'-0"



MECHANICAL ROOM LOFT - DECK No 3

SCALE: 1/8" = 1'-0"

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1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN
AREA - G PLUMBING NEW WORK

Proj No. 23-543-01
Issue Date 02/19/2024

P112

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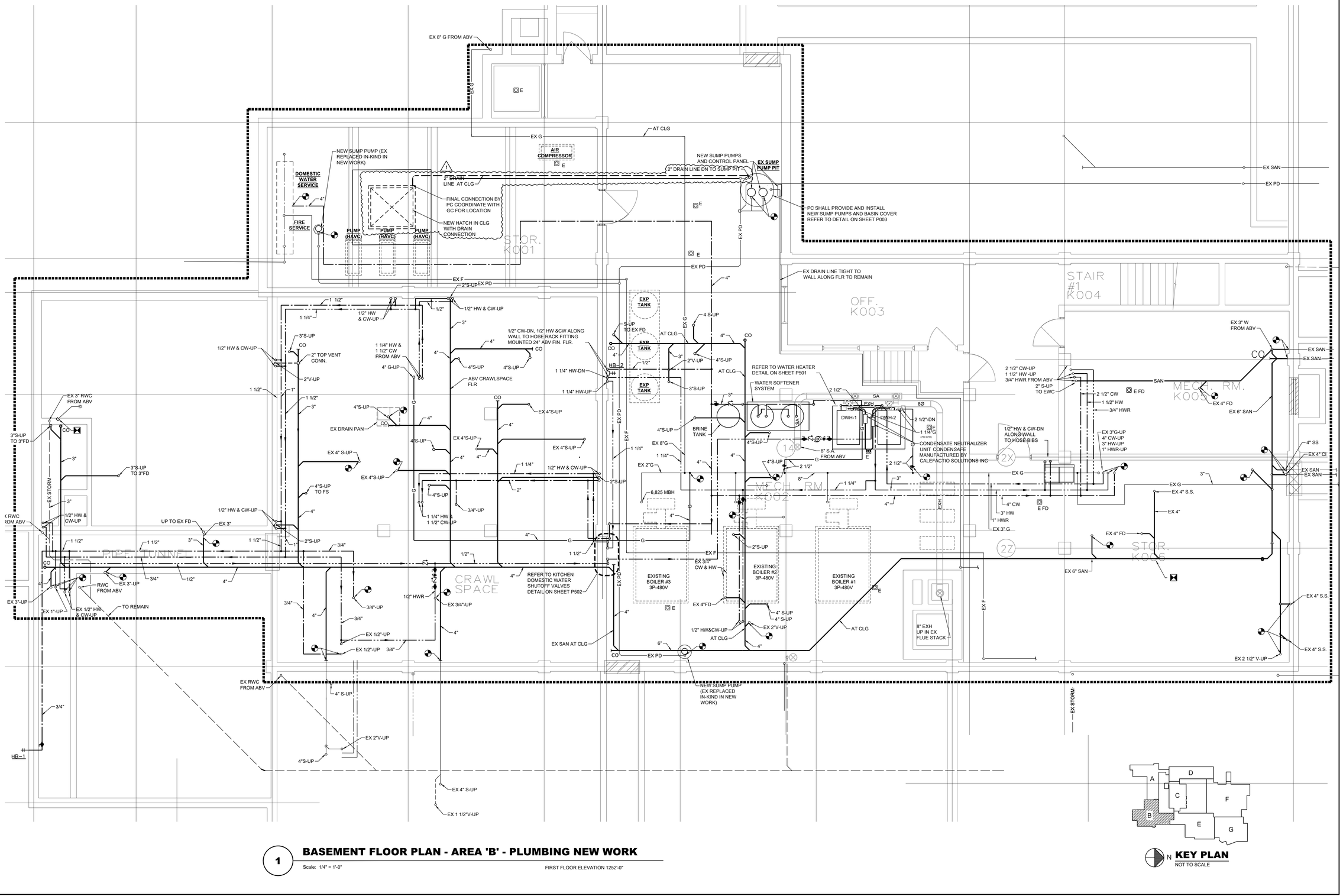
PLUMBING KEY NOTES

1. PLUMBING CONTRACTOR TO INSTALL A NEW 4" TRAP GUARD IN EXISTING 4" FLOOR DRAIN.



1 **BASEMENT FLOOR PLAN - AREA 'B' - PLUMBING NEW WORK**

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"

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1 02/28/24 ADDENDUM NO. 1

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

BASEMENT FLOOR PLAN - AREA - B
PLUMBING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

P402

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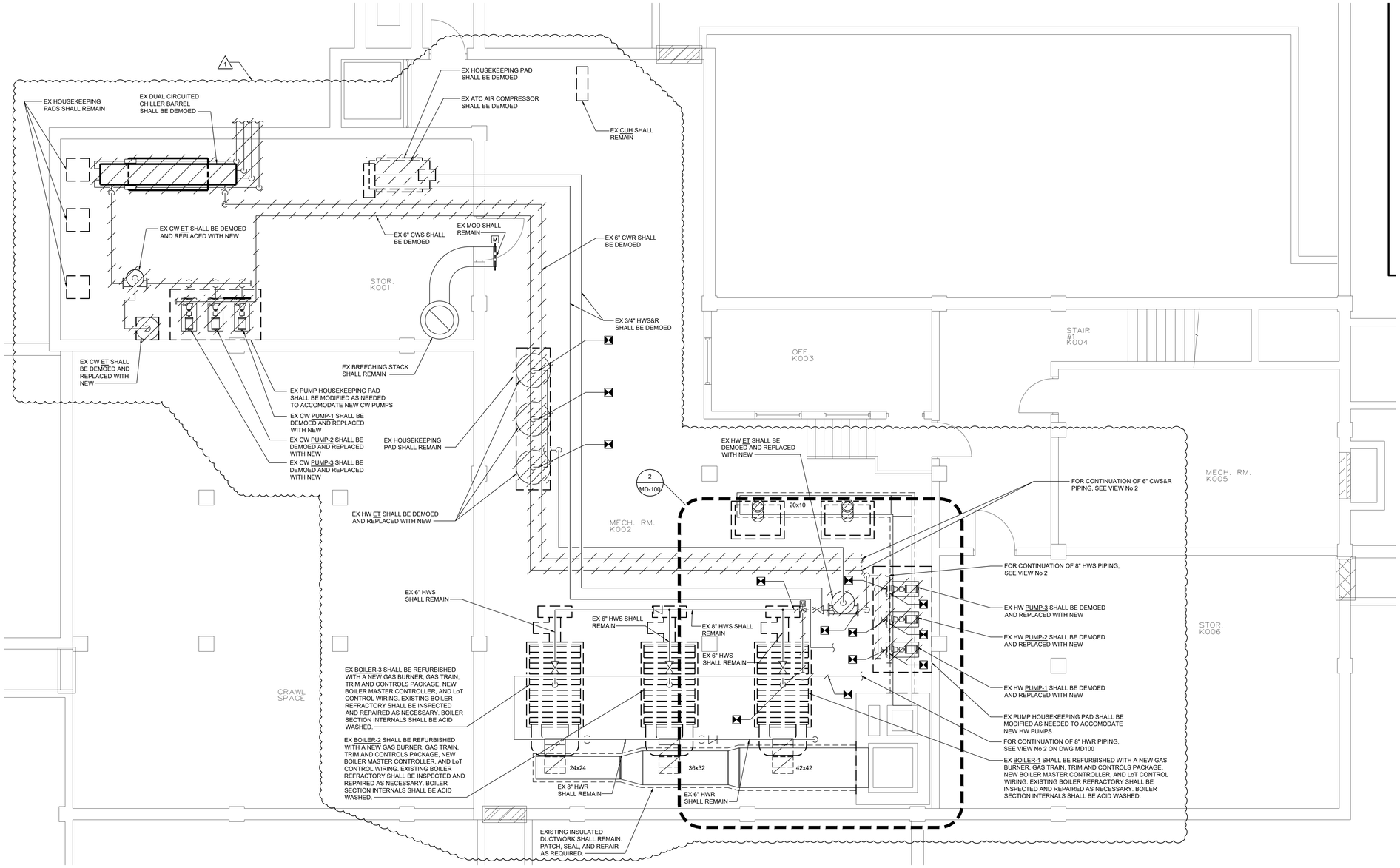
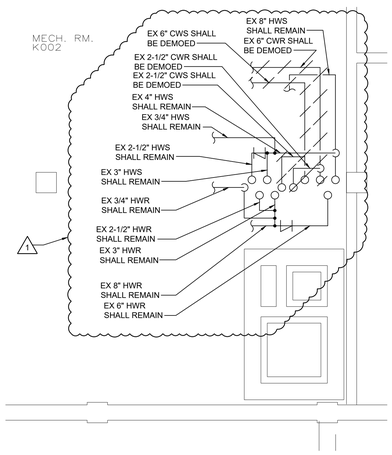
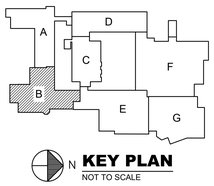


1 BASEMENT FLOOR PLAN - AREA 'B' - MECHANICAL DEMOLITION

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"





N **KEY PLAN**
NOT TO SCALE

2 BASEMENT PARTIAL FLOOR PLAN - MECHANICAL PIPING DEMOLITION

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"

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HIGH SCHOOL RENOVATIONS
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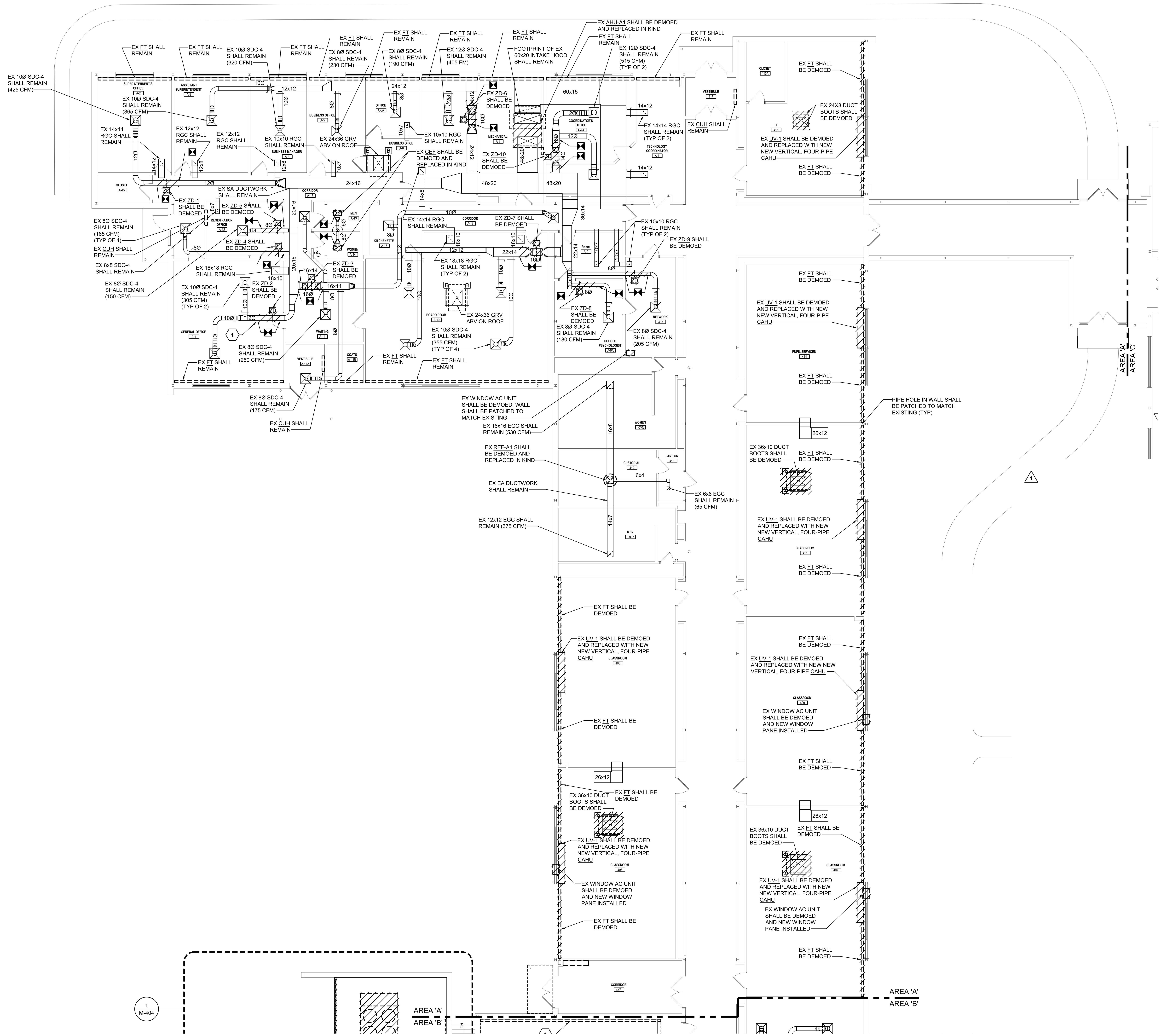
GROVE CITY AREA SCHOOL DISTRICT

BASEMENT FLOOR PLAN - AREA - B MECHANICAL DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD100



1 FIRST FLOOR PLAN - AREA 'A' - MECHANICAL DUCTWORK DEMOLITION

Scale: 1/8" = 1'-0"

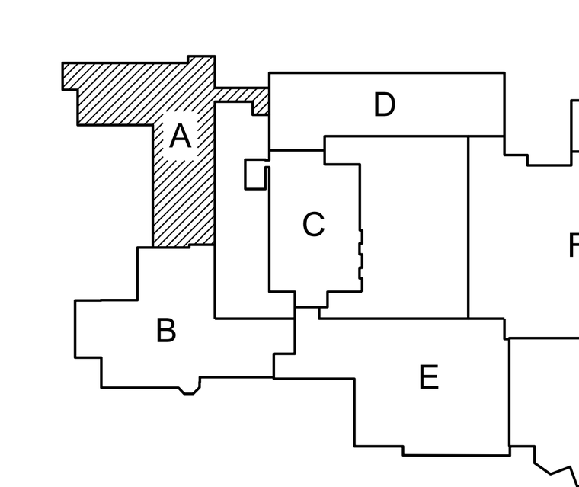
FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

1. CONTRACTOR TO COORDINATE EXISTING SECTION OF DUCT & INSULATION TO BE REMOVED WITH VVB TO BE INSTALLED.

GENERAL NOTES THIS DRAWING

1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.



KEY PLAN
NOT TO SCALE

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1 02/29/24 ADDENDUM NO. 1
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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - A
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD101

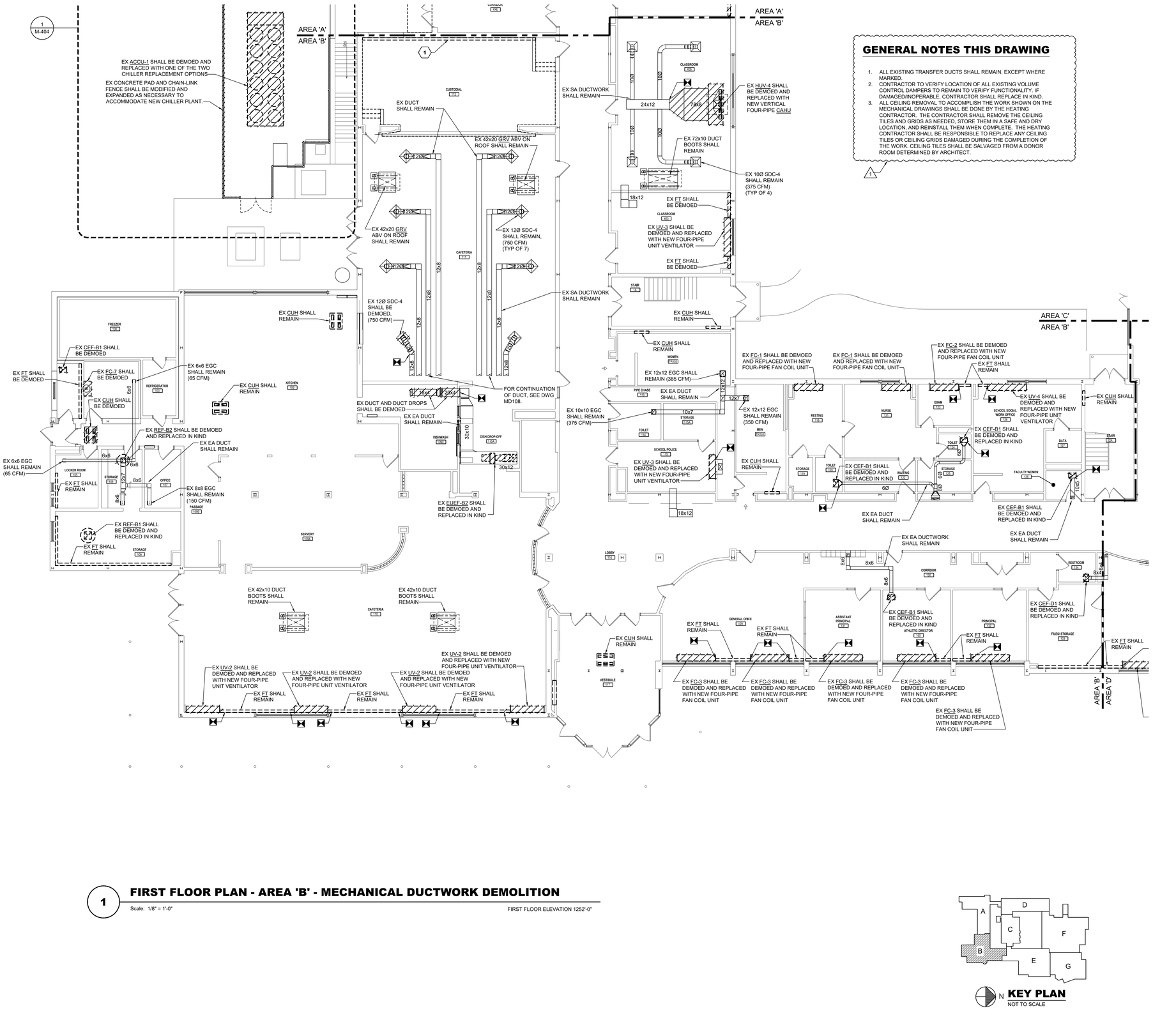
KEYNOTES THIS DRAWING

1. UNDER BASE BID, EX FT SHALL REMAIN. UNDER ALTERNATE BID, EX FT SHALL BE DEMOED. UNIT HEATER SHALL BE ADDED.

GENERAL NOTES THIS DRAWING

1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

1



1 FIRST FLOOR PLAN - AREA 'B' - MECHANICAL DUCTWORK DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

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PE074381

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1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - B
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

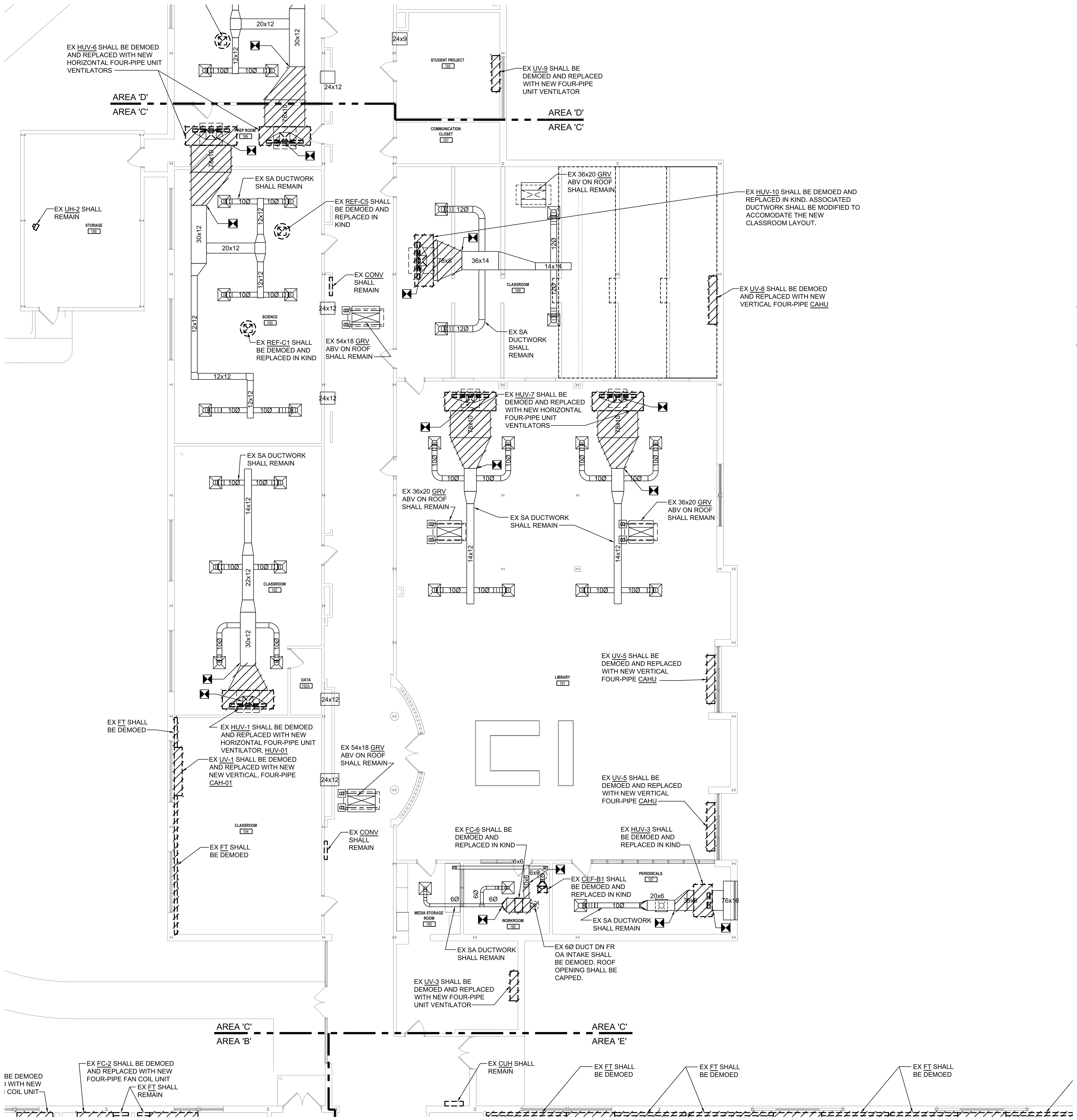
MD102

KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

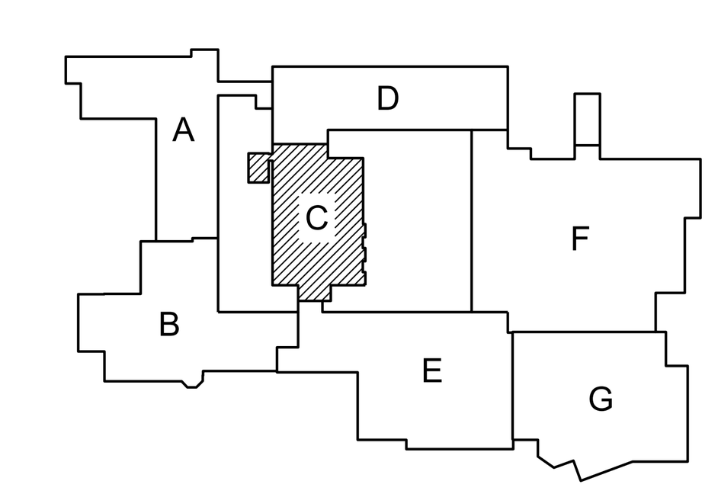
1



1 FIRST FLOOR PLAN - AREA 'C' - MECHANICAL DUCTWORK DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



N KEY PLAN
NOT TO SCALE

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1 02/29/24 ADDENDUM NO. 1

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - C
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

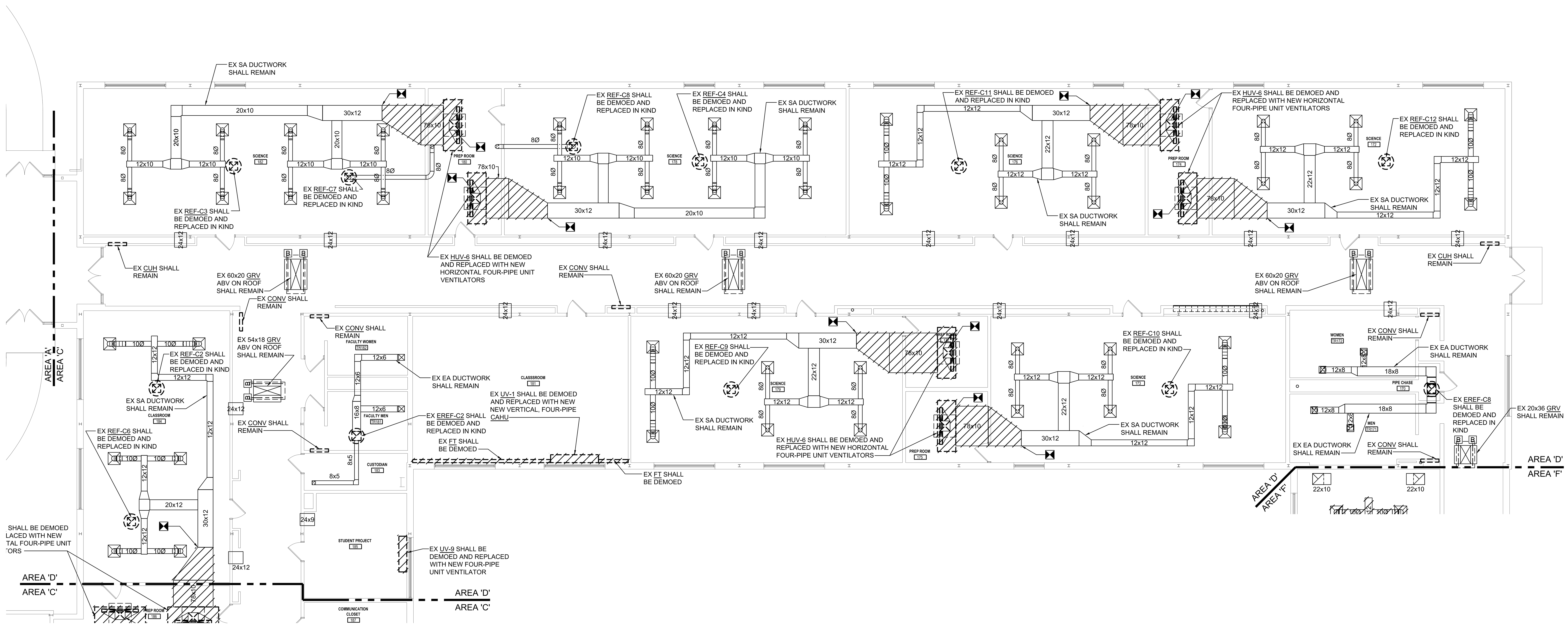
MD103

KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

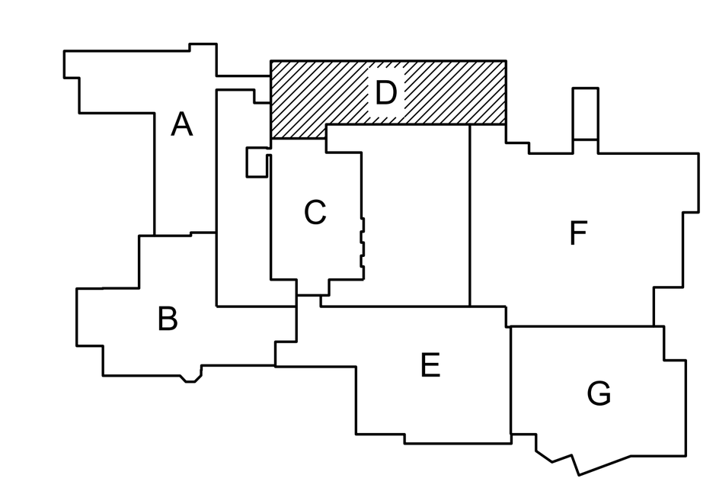
1



1 **FIRST FLOOR PLAN - AREA 'D' - MECHANICAL DUCTWORK DEMOLITION**

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



KEY PLAN
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1 02/29/24 ADDENDUM NO. 1

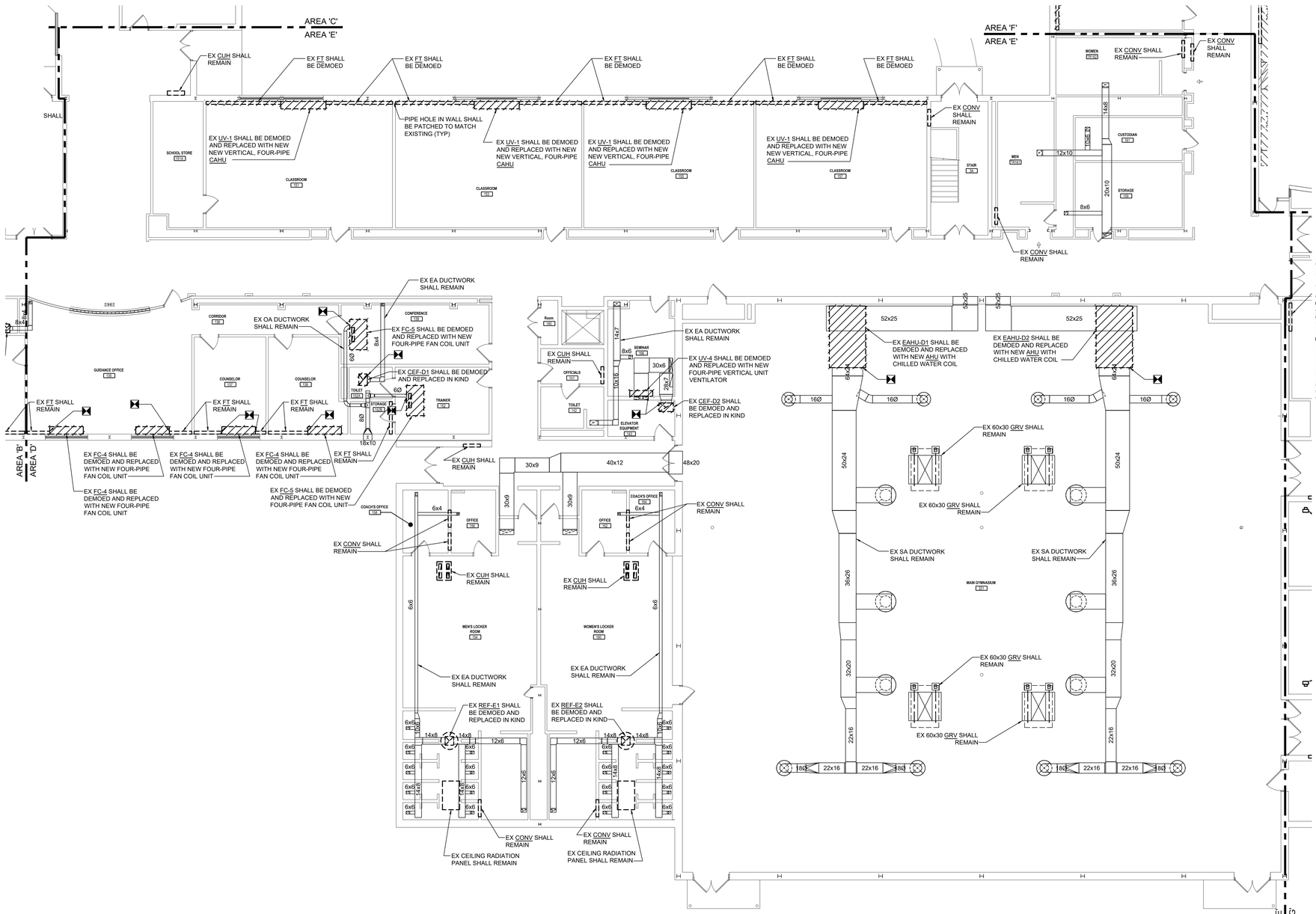
BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - D
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD104



KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

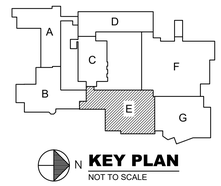
1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

1

FIRST FLOOR PLAN - AREA 'E' - MECHANICAL DUCTWORK DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - E
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD105

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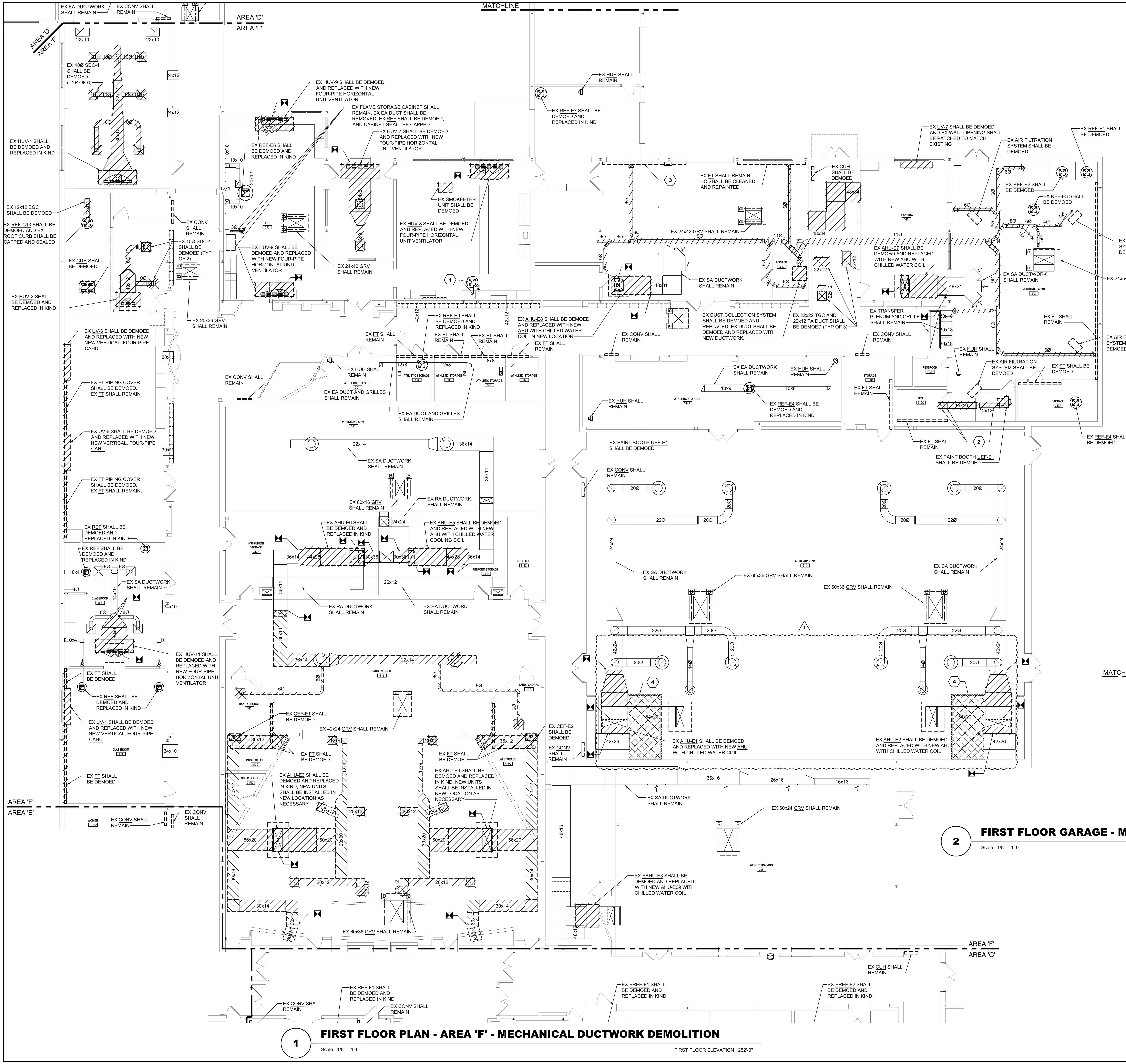
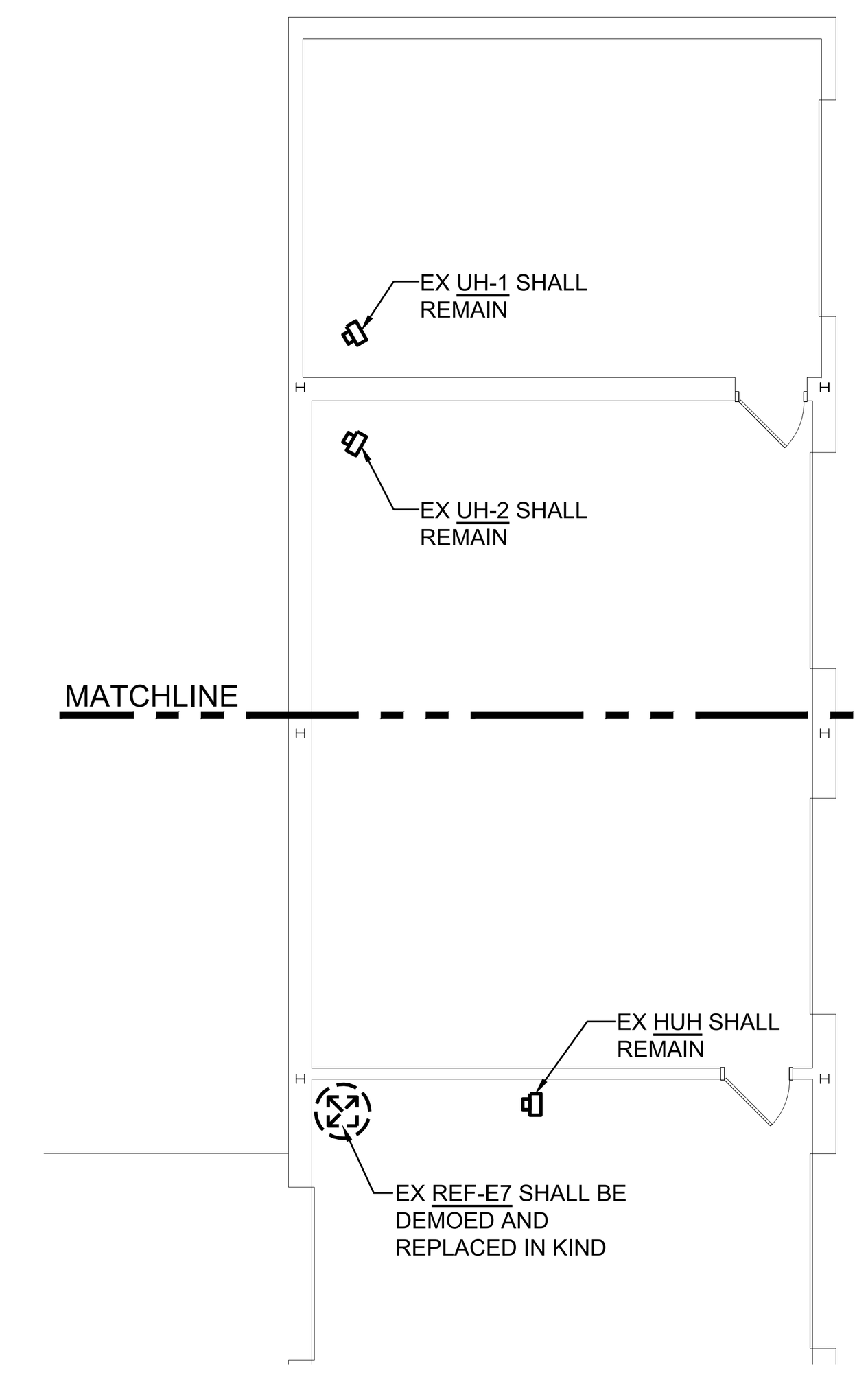
JMMunn



1 FIRST FLOOR PLAN - AREA 'F' - MECHANICAL DUCTWORK DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



2 FIRST FLOOR GARAGE - MECHANICAL DUCTWORK DEMOLITION

Scale: 1/8" = 1'-0"

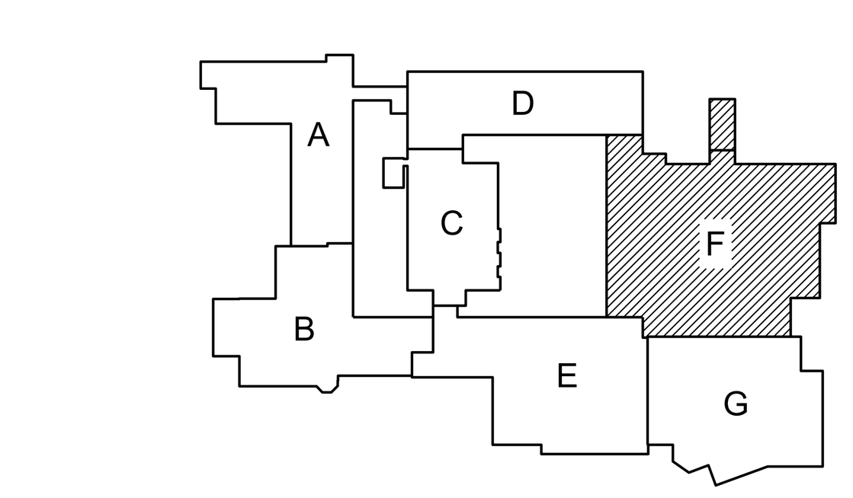
FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

1. UNDER BASE BID, EX REF-E8 AND ASSOCIATED DUCTWORK SHALL REMAIN. UNDER ALTERNATE BID HC-04, EX REF-E8 AND ASSOCIATED DUCTWORK SHALL BE DEMOED.
2. EX 16x16 GOOSENECK AND DUCTWORK SHALL BE DEMOED. HC SHALL PATCH WALL OPENING TO MATCH EXISTING UNDER BOTH BASE BID AND ALTERNATE BIDS HC-04AND HC-04A.
3. UNDER BASE BID, EX FT SHALL REMAIN; HC SHALL BE CLEANED AND REPAINTED. UNDER ALTERNATE BID, EX FT SHALL BE DEMOED.
4. MECHANICAL AIR HANDLER UNIT SERVICE CATWALK SHALL BE MODIFIED AND EXTENDED BY THE HC. APPROXIMATE SIZE AND LOCATION SHOWN ON PLAN. COORDINATE EXACT SIZE AND LOCATION WITH MECHANICAL DWGS AND MECHANICAL EQUIPMENT REQUIREMENTS. CATWALK SHALL BE DESIGNED FOR A UNIFORM LIVE LOAD OF 40 PSF. SUBMIT CALCULATIONS AND DRAWINGS STAMPED BY A REGISTERED PROFESSIONAL LICENSED IN PENNSYLVANIA FOR REVIEW. COORDINATE HANGER CONNECTION DETAIL WITH JOIST MANUFACTURER. MAXIMUM HANGER LOAD TO ROOF JOIST: 500 LB LIVE-LOAD, 250 LB DEAD-LOAD.

GENERAL NOTES THIS DRAWING

1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.



N KEY PLAN

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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - F
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD106

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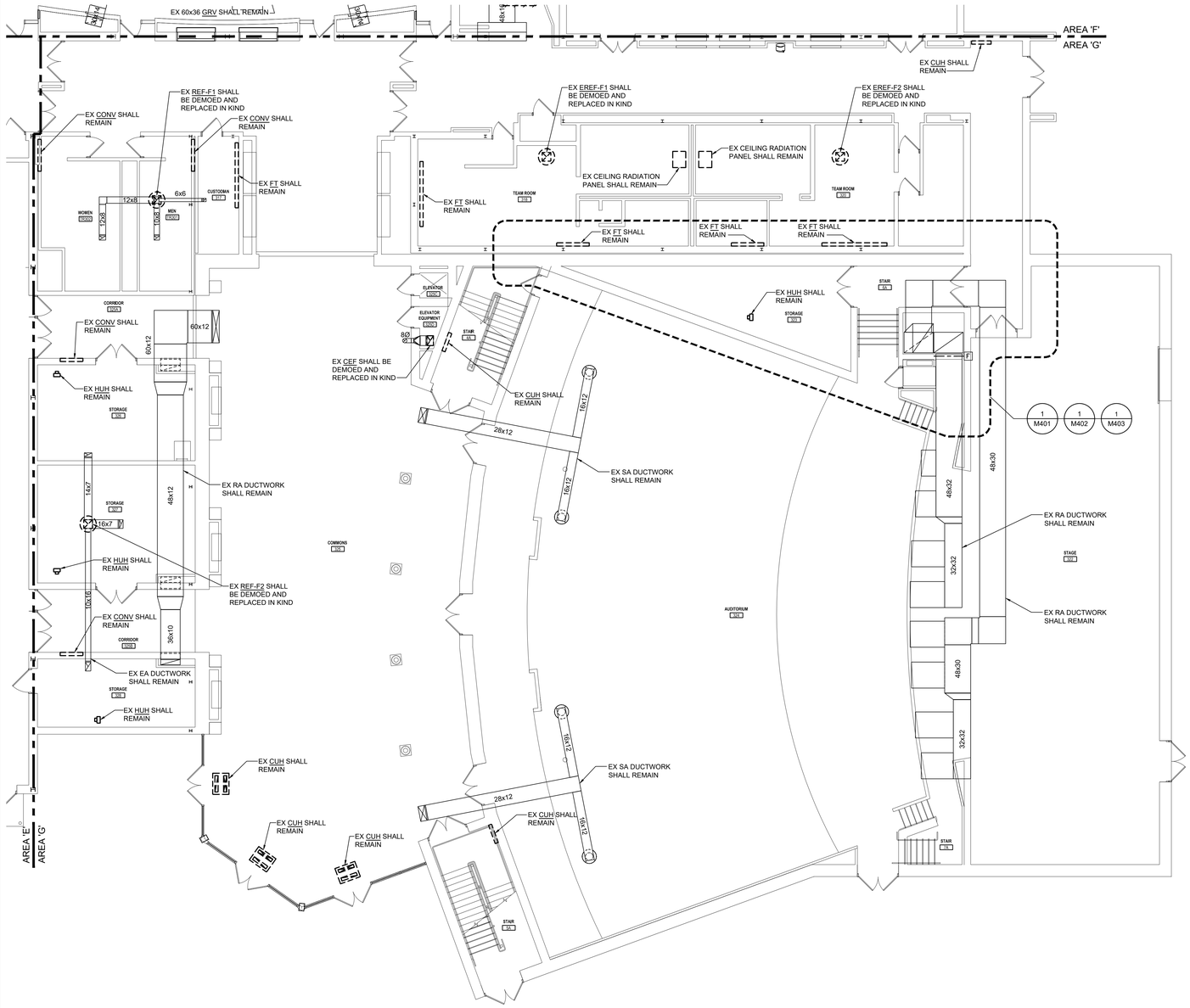


1 FIRST FLOOR PLAN - AREA 'G' - MECHANICAL DUCTWORK DEMOLITION

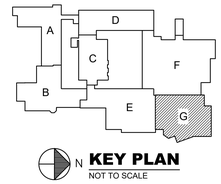
Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.



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1 02/29/24 ADDENDUM NO. 1

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - G
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-543-01
Issue Date 02/19/2024

MD107

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JMcMunn

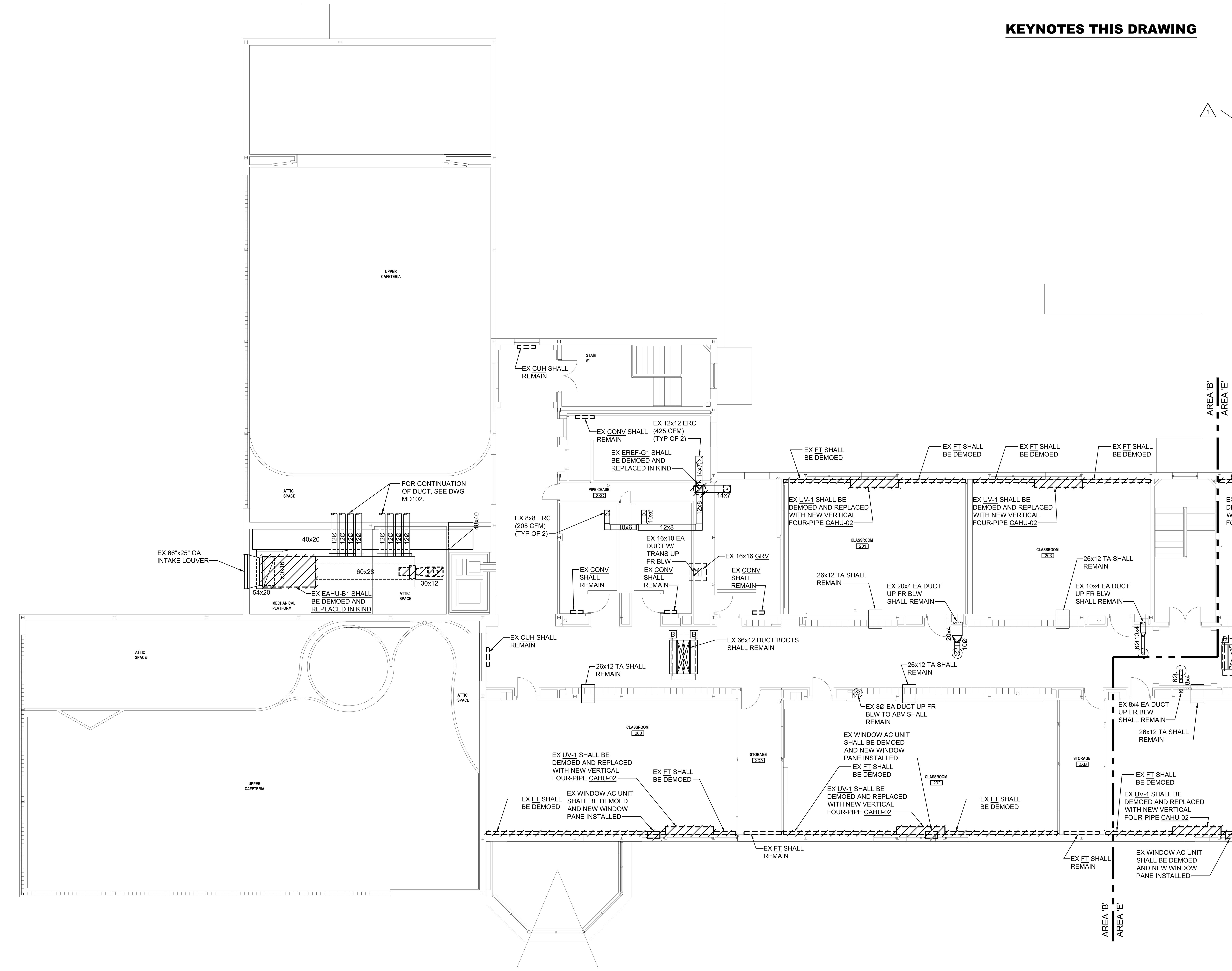
KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.

NOTE:

ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.



1 **SECOND FLOOR PLAN - AREA 'B' - MECHANICAL DEMOLITION**

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

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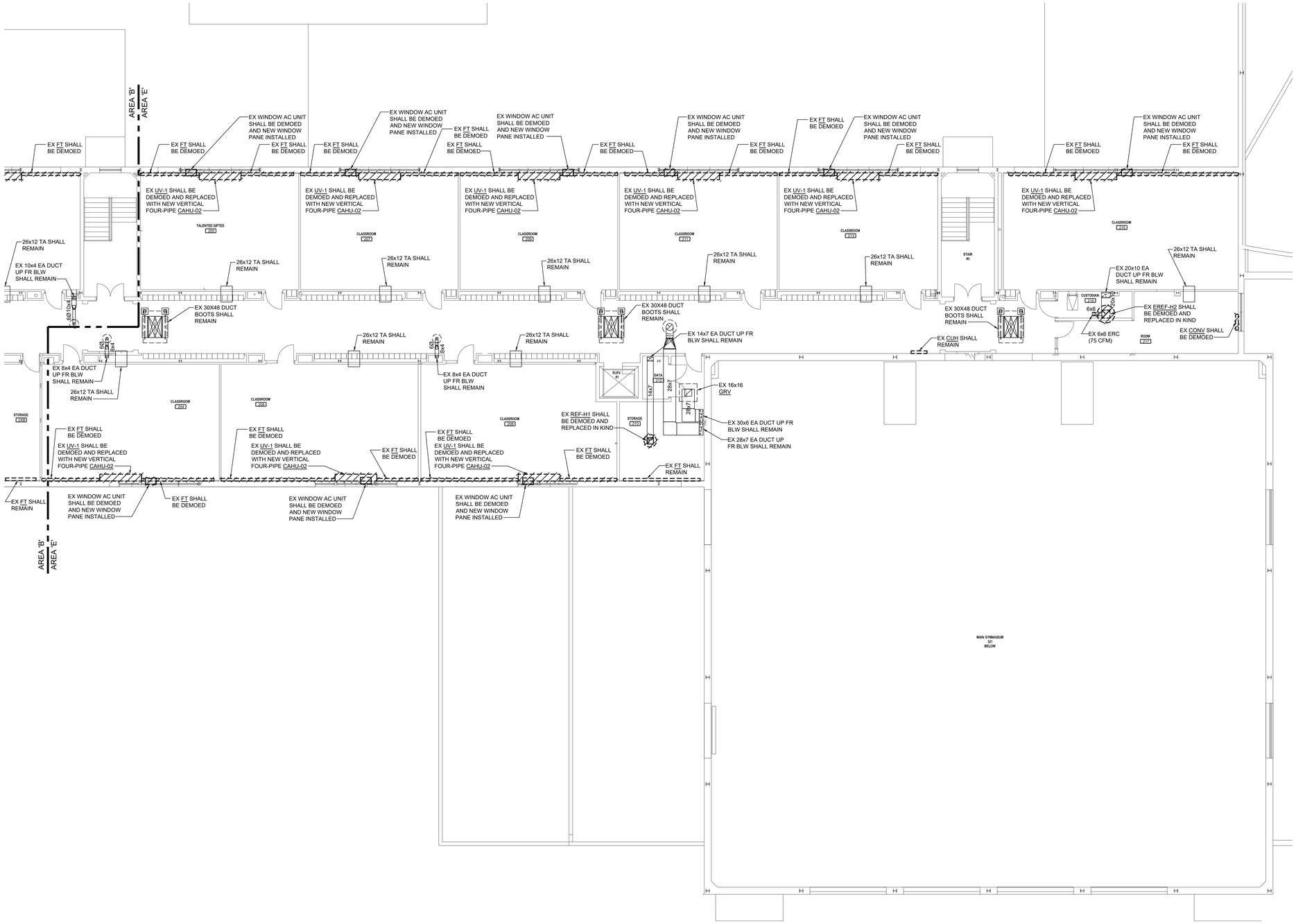
HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT
SECOND FLOOR PLAN - AREA - B
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD108



1 SECOND FLOOR PLAN - AREA 'E' - MECHANICAL DEMOLITION

Scale: 1/8" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

1. ALL EXISTING TRANSFER DUCTS SHALL REMAIN, EXCEPT WHERE MARKED.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING VOLUME CONTROL DAMPERS TO REMAIN TO VERIFY FUNCTIONALITY. IF DAMAGED/INOPERABLE, CONTRACTOR SHALL REPLACE IN KIND.

1

NOTE:

ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

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1 02/29/24 ADDENDUM NO. 1

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GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN - AREA - E
MECHANICAL DUCTWORK DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD109

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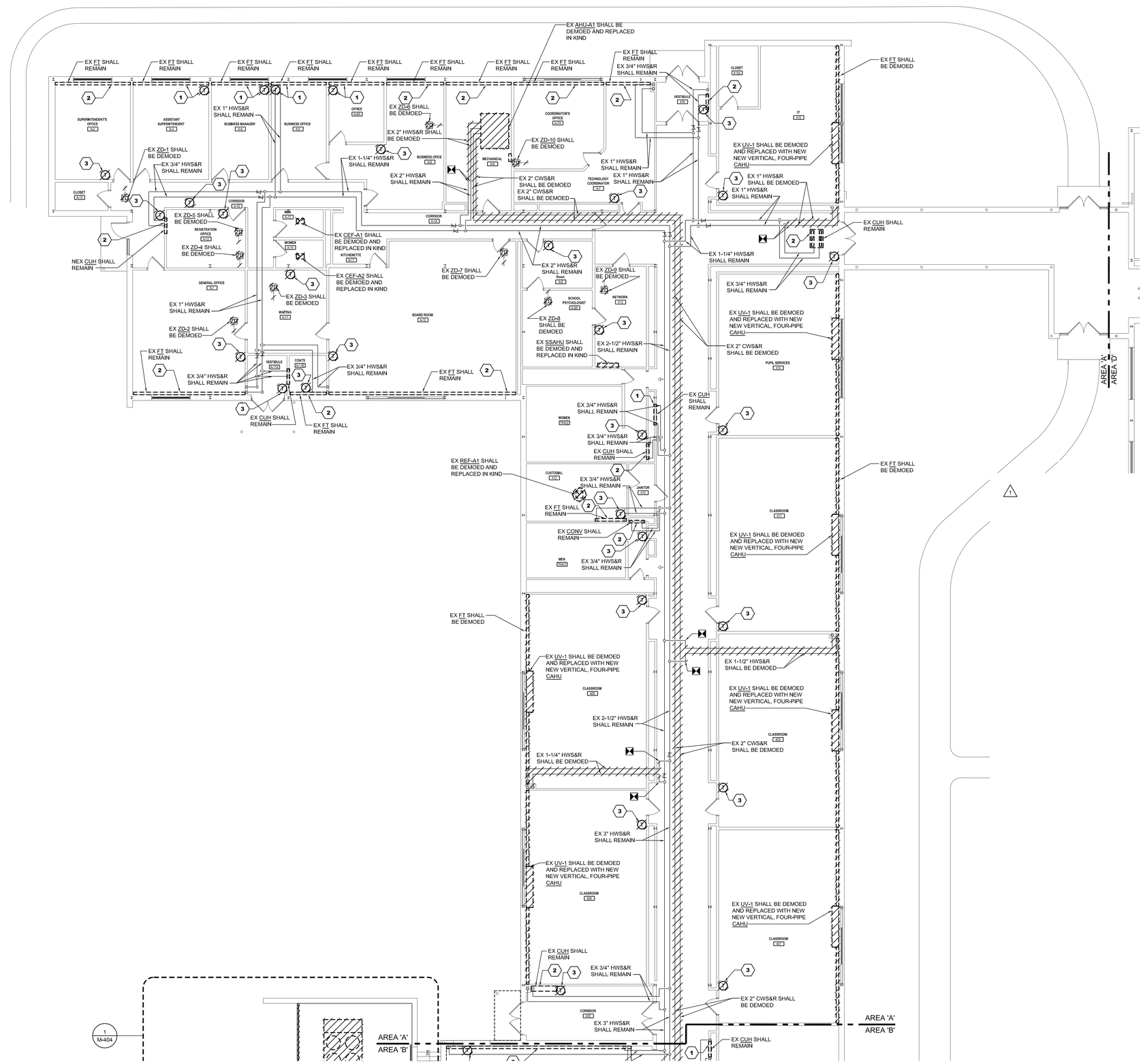
JMcMunn



KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC VALVE ACTUATORS, TUBING, PNUEMATIC TEMPERATURE CONTROLS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
2. EXISTING PNEUMATIC VALVE ACTUATORS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS.
3. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.

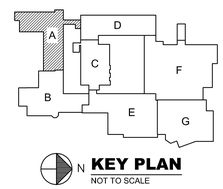
GENERAL NOTES THIS DRAWING

1. FOR ALL TWO PIPE UNITS BEING REMOVED WHERE BRANCH PIPING CANNOT EASILY BE ACCESSED OR REMOVED, CAP EXISTING HWS&R BRANCH PIPING.
2. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

1 **FIRST FLOOR PLAN - AREA 'A' - MECHANICAL PIPING DEMOLITION**

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



KEY PLAN
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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - A MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD111

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JMcMunn

KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC VALVE ACTUATORS, PNUEMATIC TEMPERATURE CONTROLS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
2. EXISTING PNEUMATIC VALVE ACTUATORS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS.
3. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
4. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
5. UNDER BASE BID, EX FT SHALL REMAIN. UNDER ALTERNATE BID, EX FT SHALL BE DEMOED. UNIT HEATER SHALL BE ADDED.

GENERAL NOTES THIS DRAWING

1. FOR ALL TWO PIPE UNITS BEING REMOVED WHERE BRANCH PIPING CANNOT EASILY BE ACCESSED OR REMOVED, CAP EXISTING HWS&R BRANCH PIPING.
2. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

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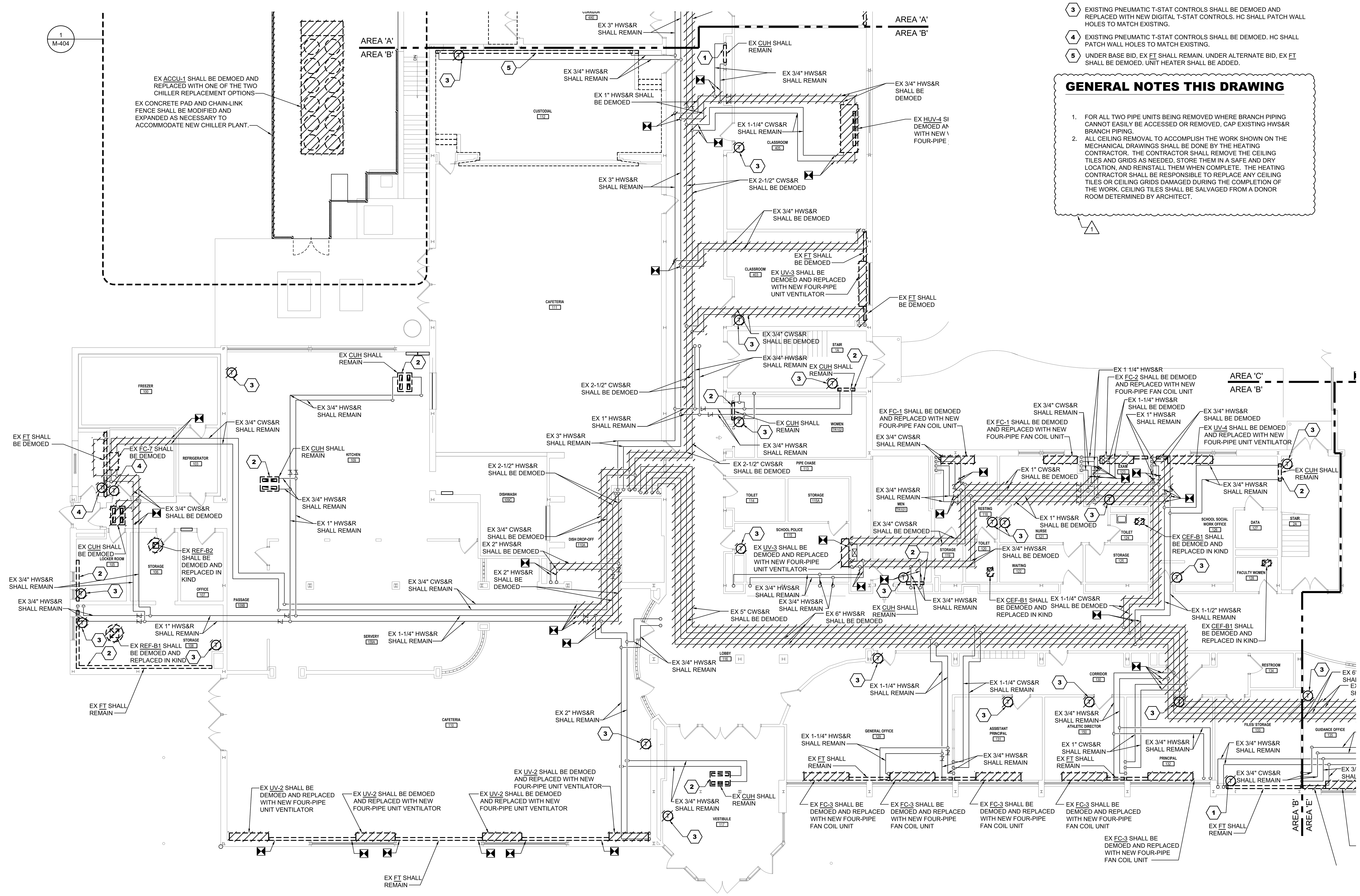
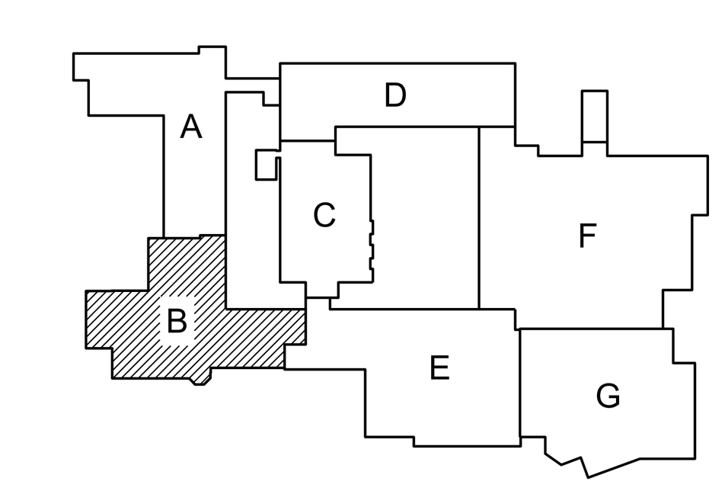


FIRST FLOOR PLAN - AREA 'B' - MECHANICAL PIPING DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



KEY PLAN
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REVISIONS
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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - B MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD112

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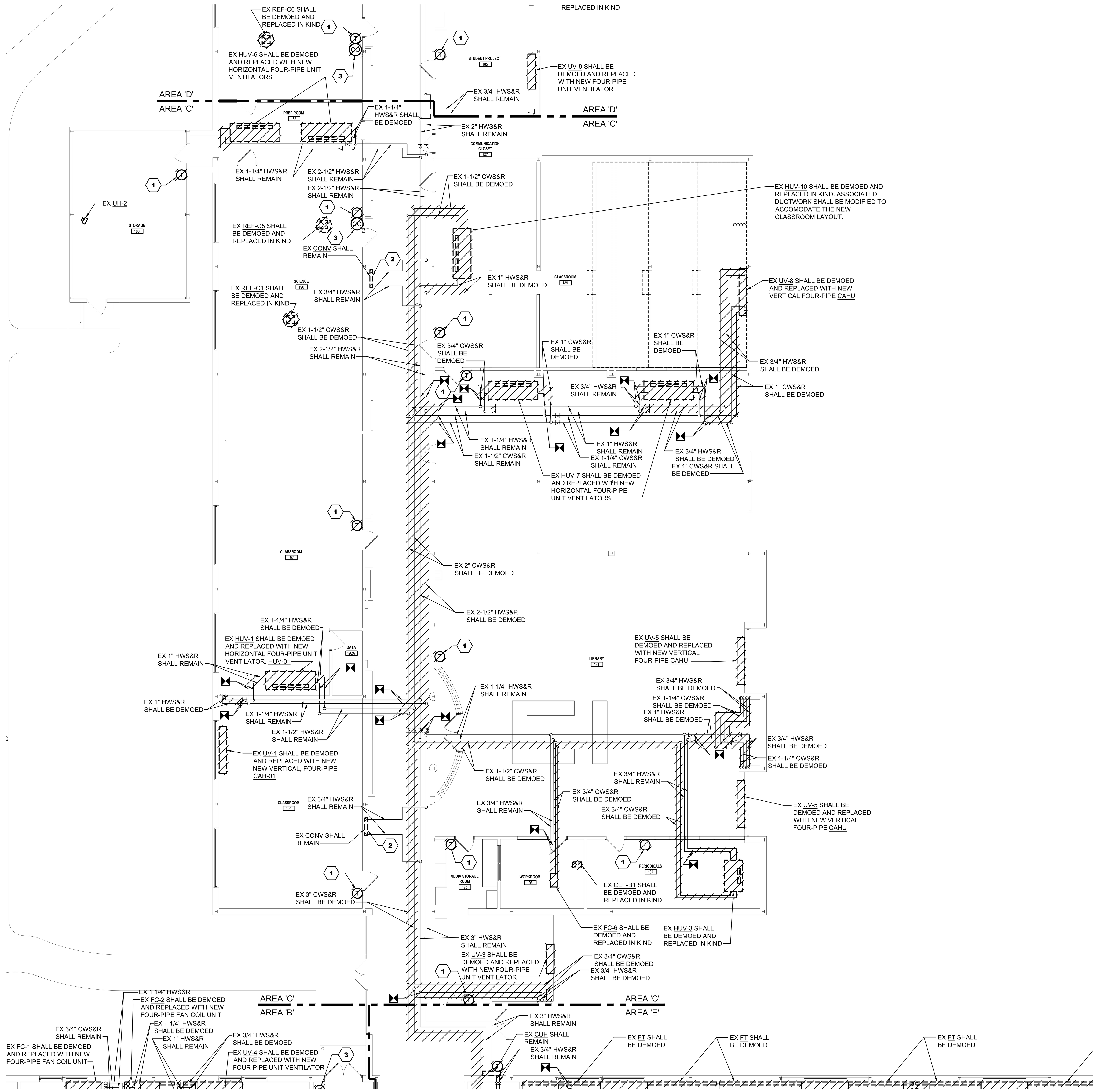

1 FIRST FLOOR PLAN - AREA 'C' - MECHANICAL PIPING DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
2. EXISTING PNEUMATIC VALVE ACTUATORS, PNUEMATIC TEMPERATURE CONTROLS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
3. EXISTING CARBON DIOXIDE DETECTOR SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CARBON DIOXIDE DETECTOR.

GENERAL NOTES THIS DRAWING

1. FOR ALL TWO PIPE UNITS BEING REMOVED WHERE BRANCH PIPING CANNOT EASILY BE ACCESSED OR REMOVED, CAP EXISTING HWS&R BRANCH PIPING.
2. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

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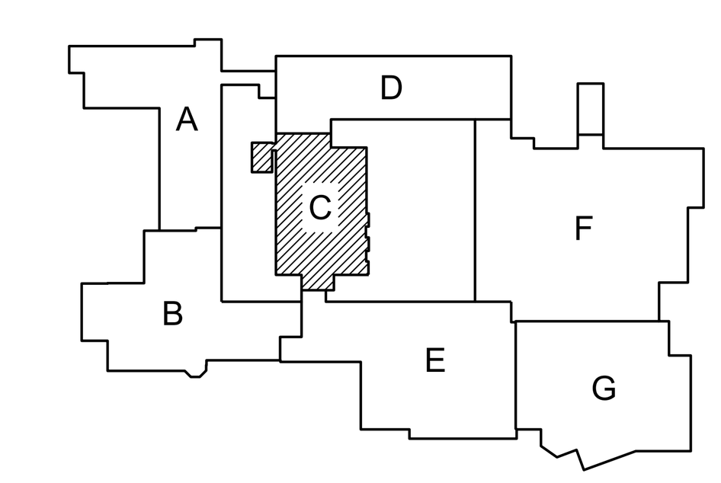

KEY PLAN
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REVISIONS
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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - C MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD113

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KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
2. EXISTING PNEUMATIC VALVE ACTUATORS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS.
3. EXISTING CARBON DIOXIDE DETECTOR SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CARBON DIOXIDE DETECTOR.
4. EXISTING PNEUMATIC VALVE ACTUATORS, PNUEMATIC TEMPERATURE CONTROLS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.

GENERAL NOTES THIS DRAWING

1. FOR ALL TWO PIPE UNITS BEING REMOVED WHERE BRANCH PIPING CANNOT EASILY BE ACCESSED OR REMOVED, CAP EXISTING HWS&R BRANCH PIPING.
2. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

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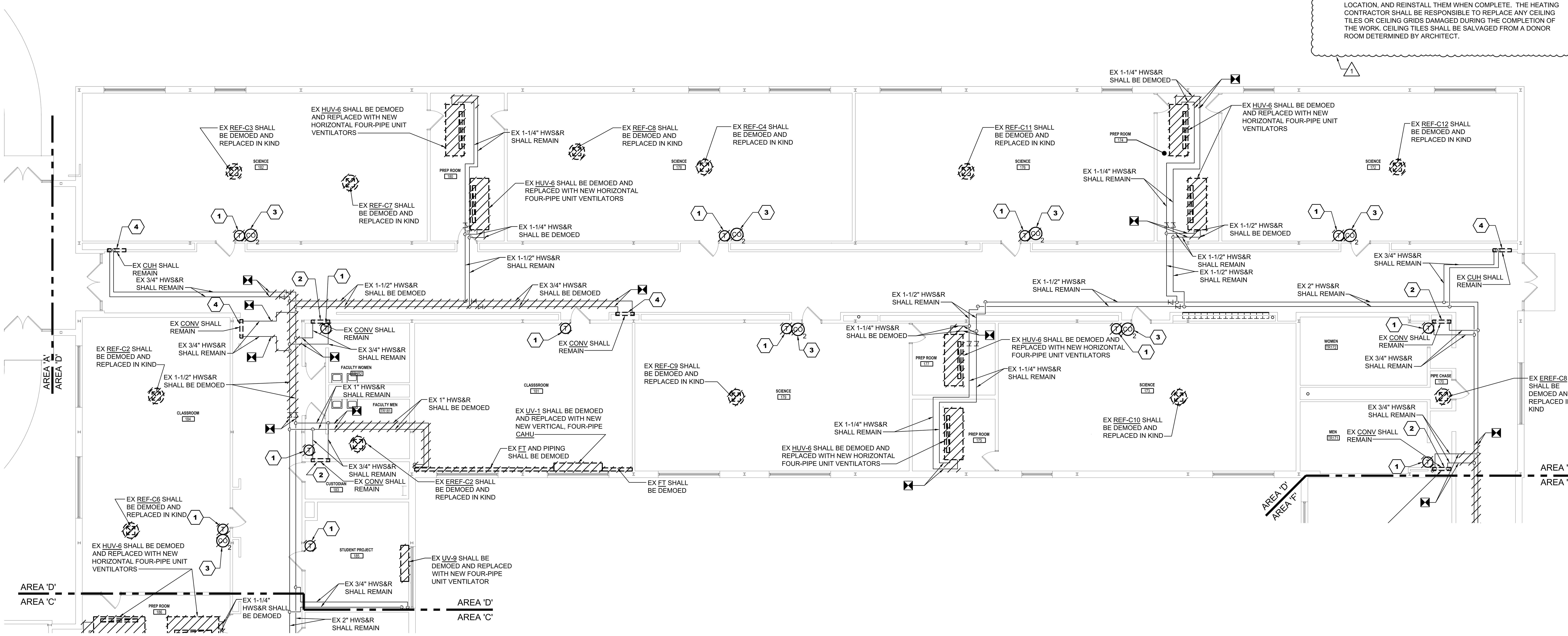
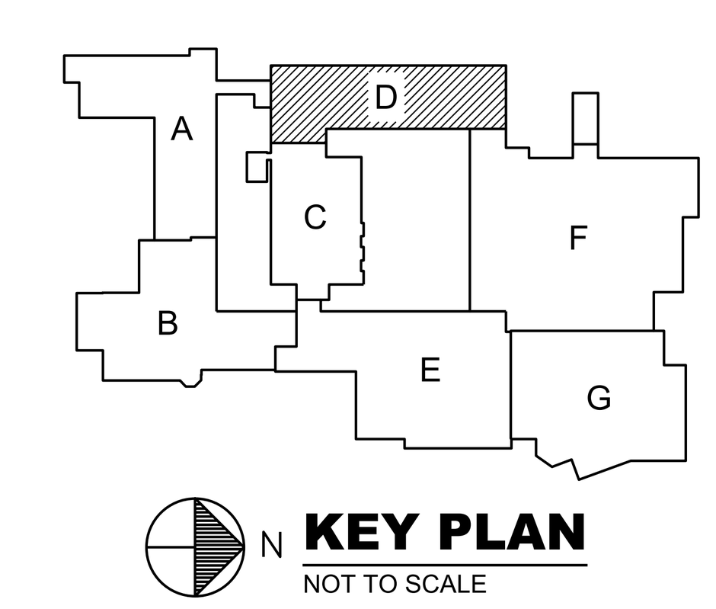


1 FIRST FLOOR PLAN - AREA 'D' - MECHANICAL PIPING DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



KEY PLAN
NOT TO SCALE

DRAW COLLECTIVE
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412.561.7117 www.DRAWcollective.com

COMMONWEALTH OF PENNSYLVANIA
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JOHN W. WEILAND
PE074367

H.F. LENZ
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1407 Scalp Avenue
Johnstown, PA 15904-3329
Phone: 814-269-9300
www.hflenz.com

REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - D MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD114

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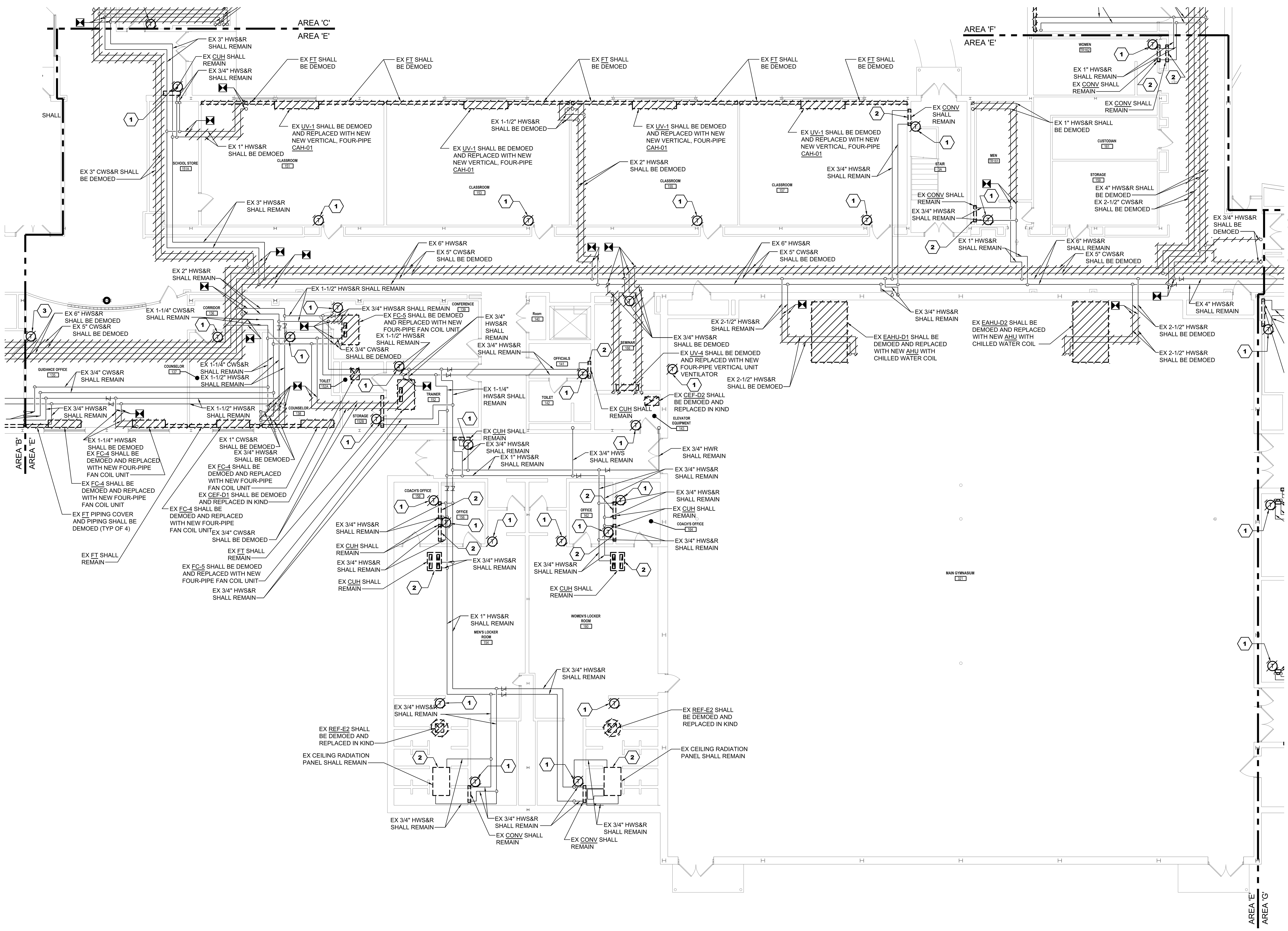


KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
2. EXISTING PNEUMATIC VALVE ACTUATORS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS.

GENERAL NOTES THIS DRAWING

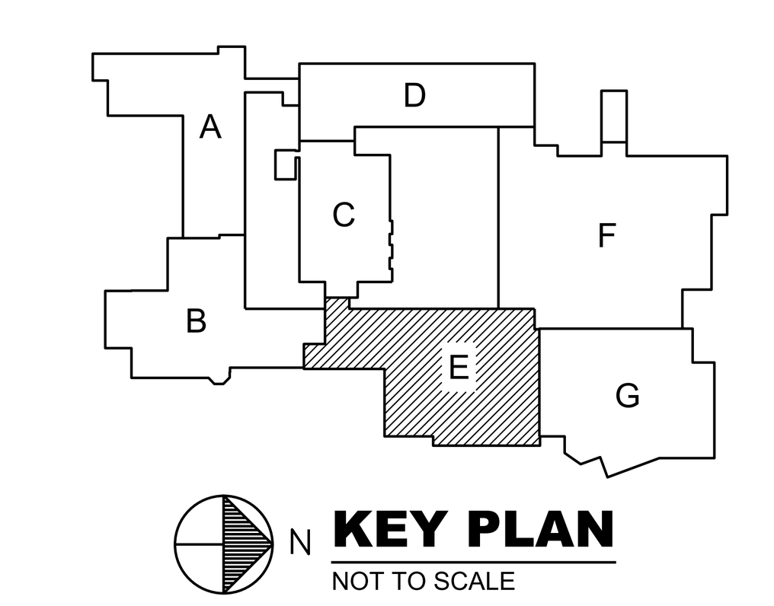
1. FOR ALL TWO PIPE UNITS BEING REMOVED WHERE BRANCH PIPING CANNOT EASILY BE ACCESSED OR REMOVED, CAP EXISTING HWS&R BRANCH PIPING.
2. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

(1 revision triangle)

1 FIRST FLOOR PLAN - AREA 'E' - MECHANICAL PIPING DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - E
MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD115

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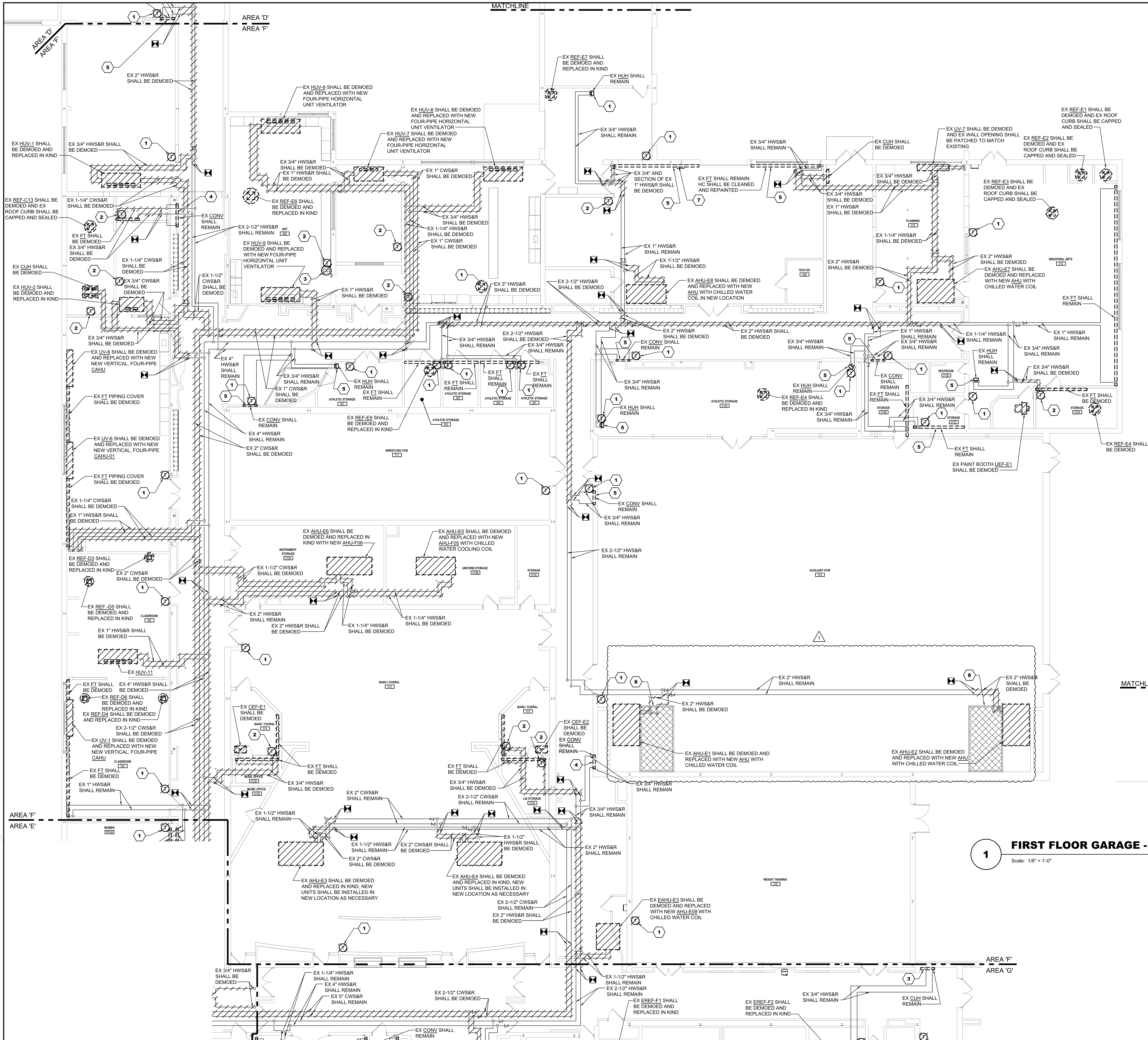
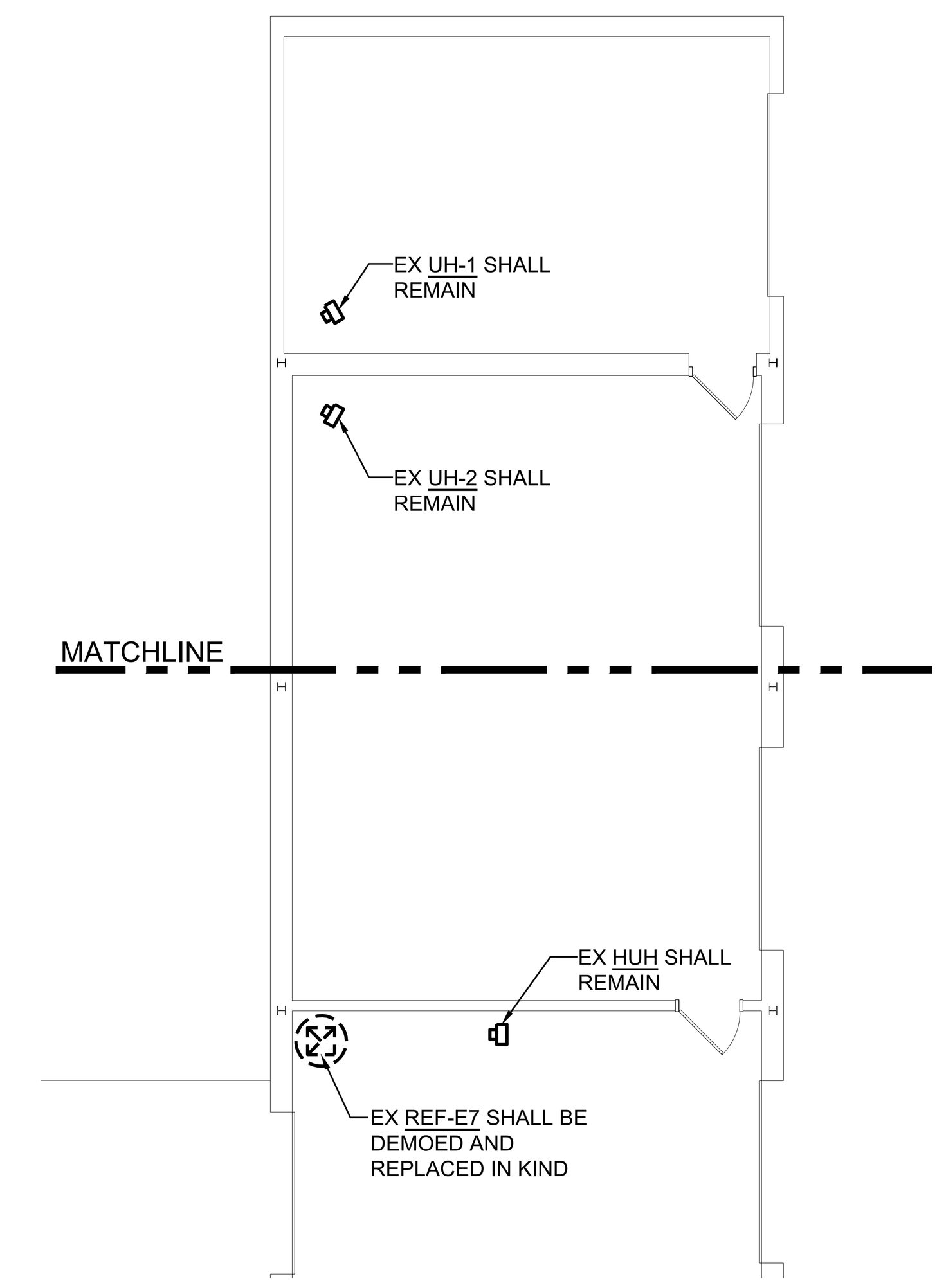
JMcMunn



FIRST FLOOR PLAN - AREA 'F' - MECHANICAL PIPING DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



FIRST FLOOR GARAGE - MECHANICAL PIPING DEMOLITION

Scale: 1/8" = 1'-0"

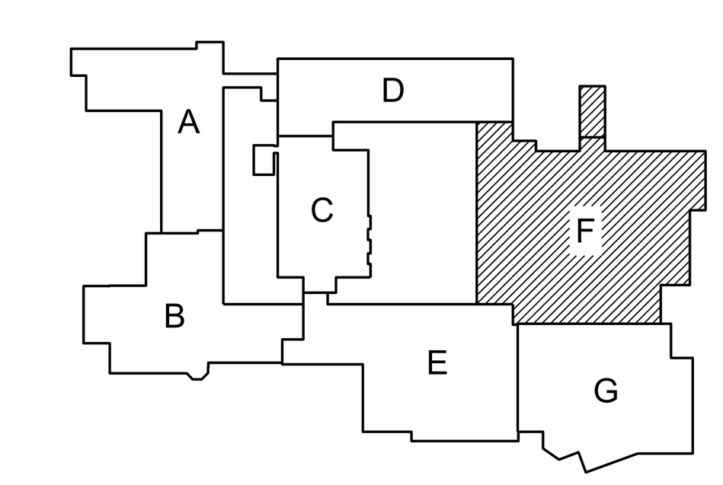
FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
2. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
3. EXISTING CARBON DIOXIDE DETECTOR SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CARBON DIOXIDE DETECTOR.
4. EXISTING PNEUMATIC VALVE ACTUATORS, PNUEMATIC TEMPERATURE CONTROLS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
5. EXISTING PNEUMATIC VALVE ACTUATORS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS.
6. UNDER BASE BID, EX REF-E8 AND ASSOCIATED DUCTWORK SHALL REMAIN. UNDER ALTERNATE BID HC-04, EX REF-E8 AND ASSOCIATED DUCTWORK SHALL BE DEMOED.
7. UNDER BASE BID, EX FT SHALL REMAIN; HC SHALL BE CLEANED AND REPAINTED. UNDER ALTERNATE BID, EX FT SHALL BE DEMOED.
8. (1) MECHANICAL AIR HANDLER UNIT SERVICE CATWALK SHALL BE MODIFIED AND EXTENDED BY THE HC. APPROXIMATE SIZE AND LOCATION SHOWN ON PLAN. COORDINATE EXACT SIZE AND LOCATION WITH MECHANICAL DWGS AND MECHANICAL EQUIPMENT REQUIREMENTS. CATWALK SHALL BE DESIGNED FOR A UNIFORM LIVE LOAD OF 40 PSF. SUBMIT CALCULATIONS AND DRAWINGS STAMPED BY A REGISTERED PROFESSIONAL LICENSED IN PENNSYLVANIA FOR REVIEW. COORDINATE HANGER CONNECTION DETAIL WITH JOIST MANUFACTURER. MAXIMUM HANGER LOAD TO ROOF JOIST: 500 LB LIVE-LOAD, 250 LB DEAD-LOAD.

GENERAL NOTES THIS DRAWING

1. FOR ALL TWO PIPE UNITS BEING REMOVED WHERE BRANCH PIPING CANNOT EASILY BE ACCESSED OR REMOVED, CAP EXISTING HWS&R BRANCH PIPING.
2. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.



KEY PLAN

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REVISIONS

1 02/29/24 ADDENDUM NO. 1

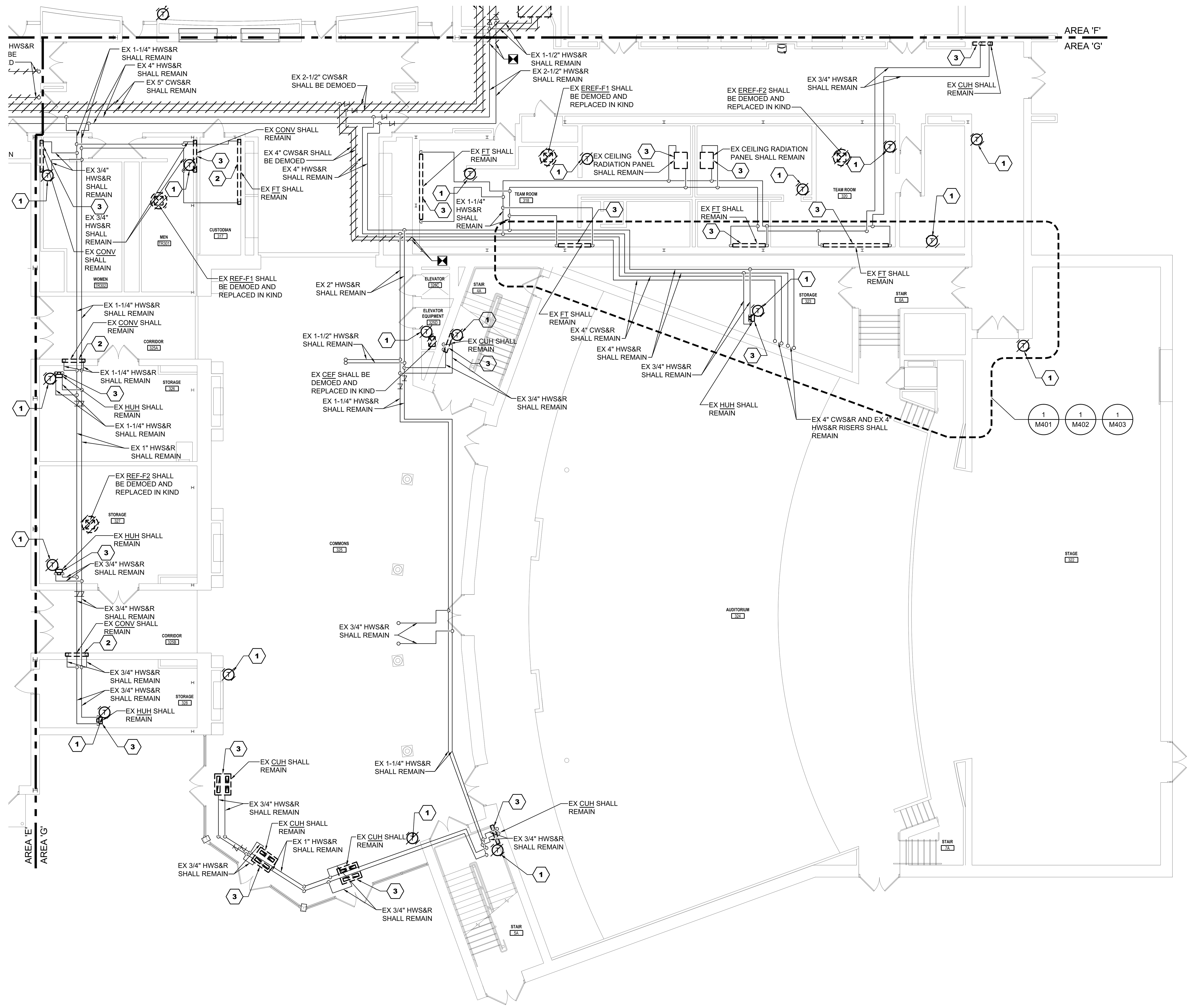
BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - F
MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD116



KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
2. EXISTING PNEUMATIC VALVE ACTUATORS, PNUEMATIC TEMPERATURE CONTROLS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS. HC SHALL PATCH WALL HOLES TO MATCH EXISTING.
3. EXISTING PNEUMATIC VALVE ACTUATORS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND ACTUATORS.

GENERAL NOTES THIS DRAWING

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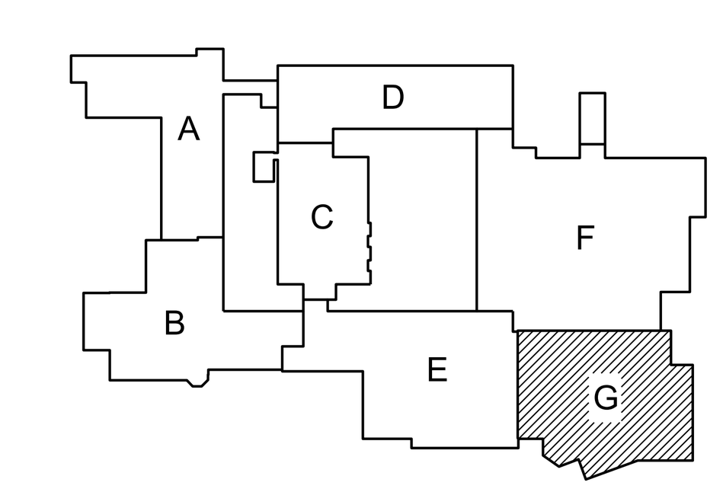
1

1 FIRST FLOOR PLAN - AREA 'G' - MECHANICAL PIPING DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



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REVISIONS
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BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - G
MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD117

KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS.
2. EXISTING PNEUMATIC VALVE ACTUATORS, PNUEMATIC TEMPERATURE CONTROLS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND CONTROL VALVES.

GENERAL NOTES THIS DRAWING

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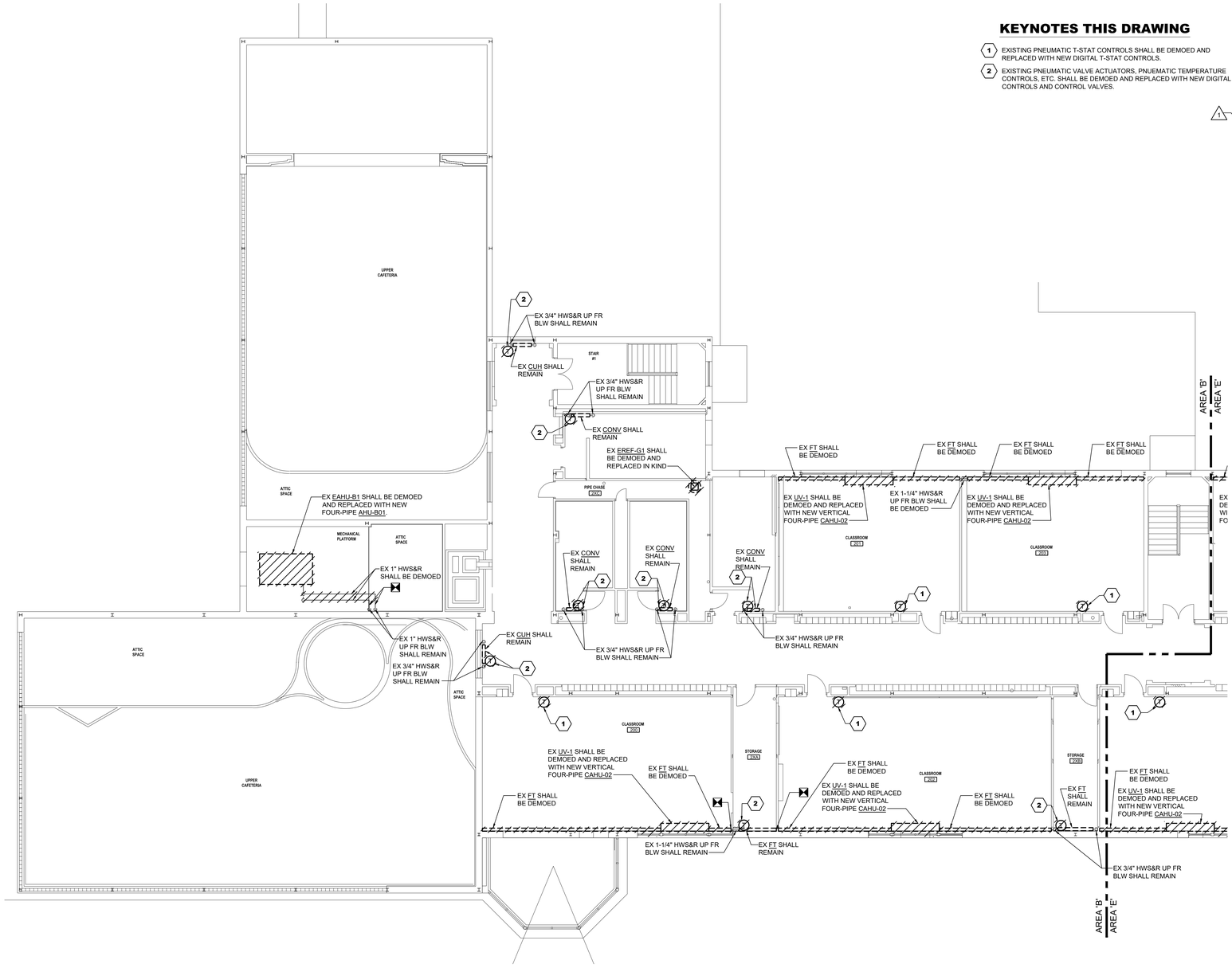

1 SECOND FLOOR PLAN - AREA 'B' - MECHANICAL DEMOLITION

Scale: 1/8" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"

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REVISIONS
1 02/29/24 ADDENDUM NO. 1

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN - AREA - B
MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD118

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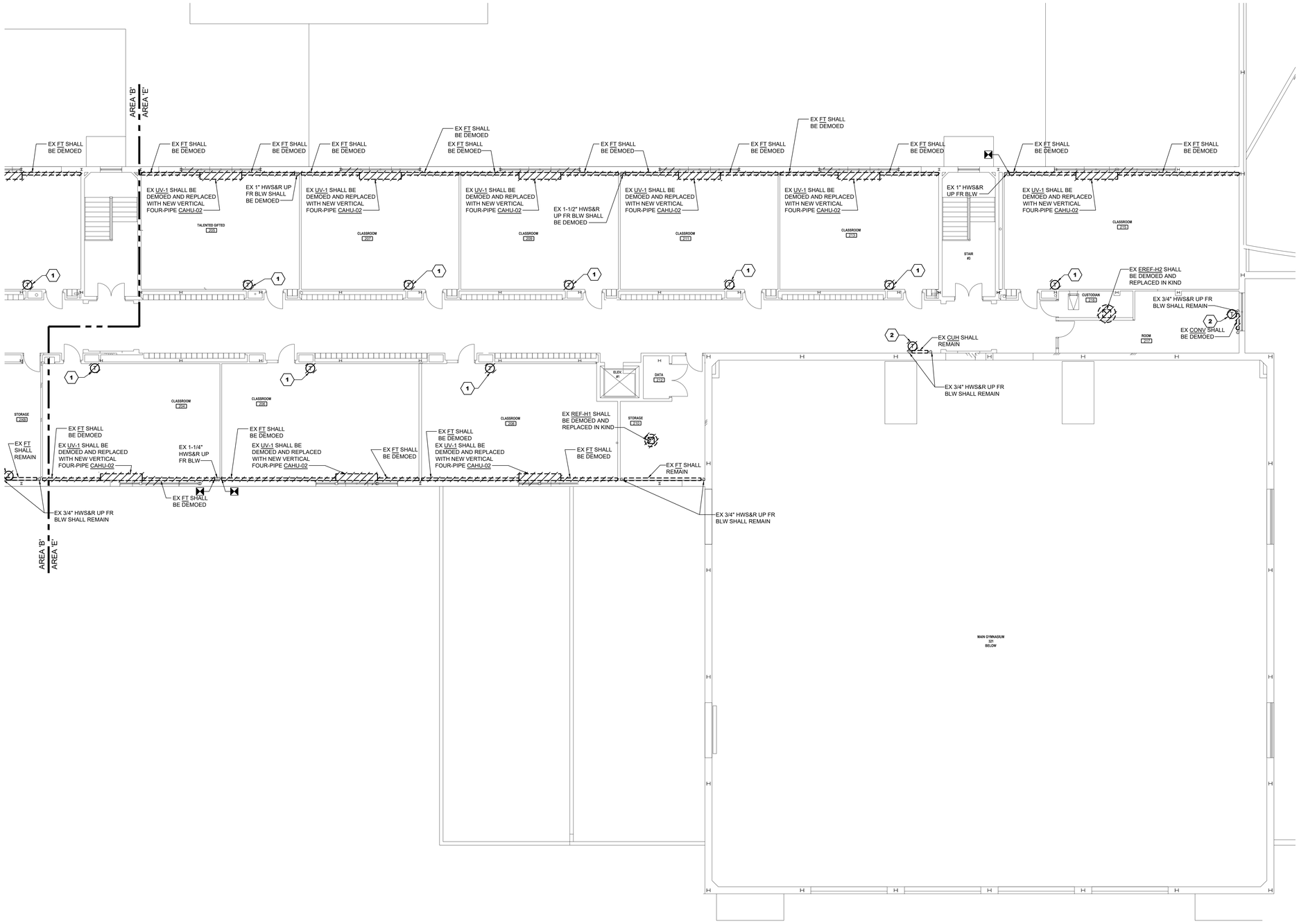
JMcMunn



KEYNOTES THIS DRAWING

1. EXISTING PNEUMATIC T-STAT CONTROLS SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL T-STAT CONTROLS.
2. EXISTING PNEUMATIC VALVE ACTUATORS, PNUEMATIC TEMPERATURE CONTROLS, ETC. SHALL BE DEMOED AND REPLACED WITH NEW DIGITAL CONTROLS AND CONTROL VALVES.

GENERAL NOTES THIS DRAWING

1. FOR ALL TWO PIPE UNITS BEING REMOVED WHERE BRANCH PIPING CANNOT EASILY BE ACCESSED OR REMOVED, CAP EXISTING HWS&R BRANCH PIPING.
2. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

1 SECOND FLOOR PLAN - AREA 'E' - MECHANICAL DEMOLITION

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN - AREA - E
MECHANICAL PIPING DEMOLITION

Proj No. 23-S43-01
Issue Date 02/19/2024

MD119

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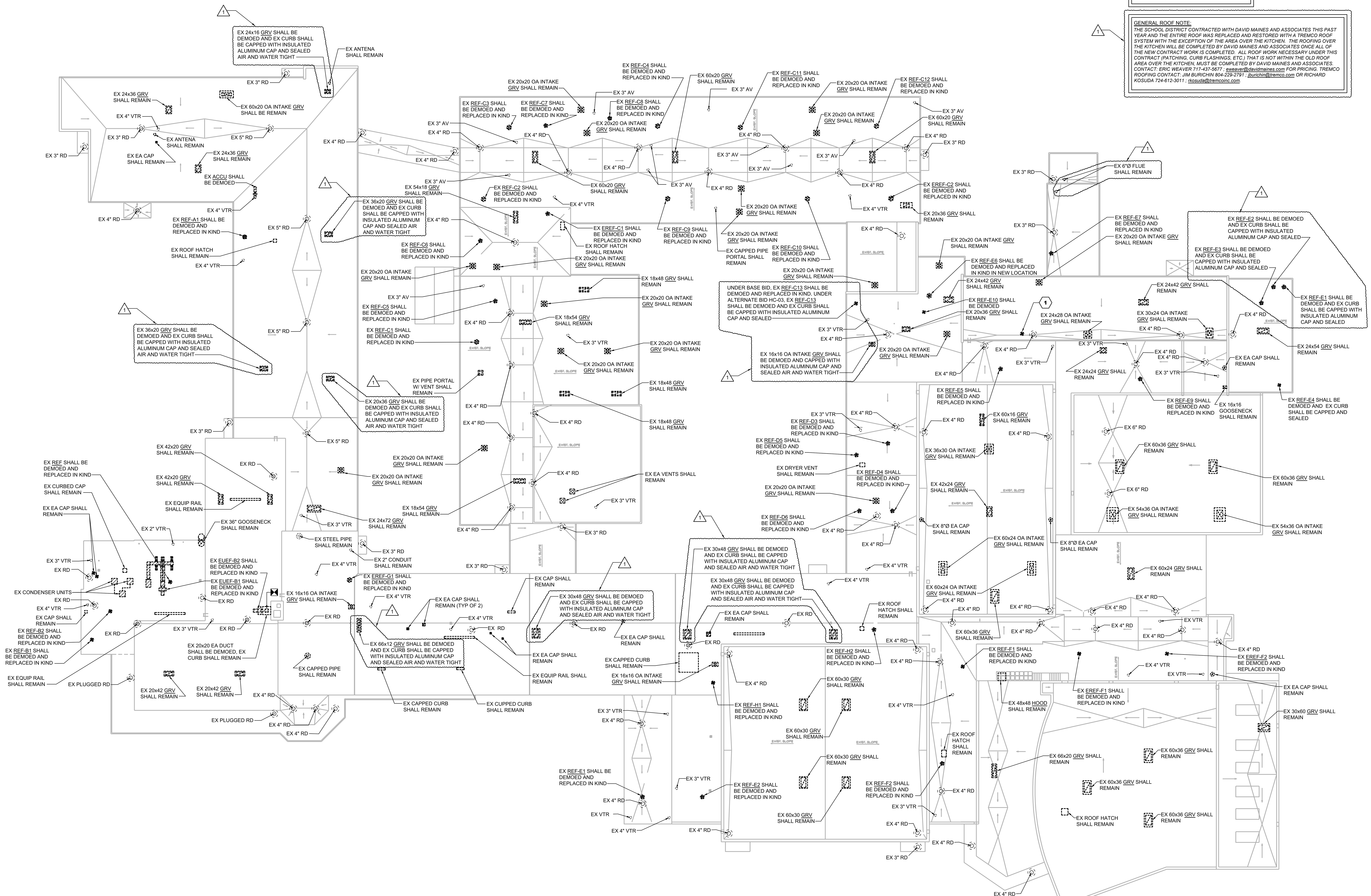
JMcMunn

KEYNOTES THIS DRAWING

(1) UNDER BASE BID, EX REF-E8 AND ASSOCIATED DUCTWORK SHALL REMAIN. UNDER ALTERNATE BID HC-04, EX REF-E8 AND ASSOCIATED DUCTWORK SHALL BE DEMOED.

ROOF WARRANTY NOTE:
ANY CUTTING, PATCHING OR MODIFICATIONS TO EXISTING ROOFING SYSTEM MEMBRANE SHALL MATCH EXISTING AND BE DONE BY THE MANUFACTURER APPROVED ROOFING CONTRACTOR SO NOT TO VOID REMAINING ROOF WARRANTY.

GENERAL ROOF NOTE:
THE SCHOOL DISTRICT CONTRACTED WITH DAVID MAINES AND ASSOCIATES THIS PAST YEAR AND THE ENTIRE ROOF WAS REPLACED AND RESTORED WITH A TREMCO ROOF SYSTEM WITH THE EXCEPTION OF THE AREA OVER THE KITCHEN. THE ROOFING OVER THE KITCHEN WILL BE COMPLETED BY DAVID MAINES AND ASSOCIATES ONCE ALL OF THE NEW CONTRACT WORK IS COMPLETED. ALL ROOF WORK NECESSARY UNDER THIS CONTRACT (PATCHING, CURB FLASHINGS, ETC.) THAT IS NOT WITHIN THE OLD ROOF AREA OVER THE KITCHEN, MUST BE COMPLETED BY DAVID MAINES AND ASSOCIATES. CONTACT: ERIC WEAVER 717-437-5677 ; eweaver@davidmaines.com FOR PRICING. TREMCO ROOFING CONTACT: JIM BURICHIN 804-229-2791 ; jburichin@tremco.com OR RICHARD KOSUDA 724-612-3011 ; rkosuda@tremcoinc.com.



1 ROOF PLAN - MECHANICAL DEMOLITION

Scale: 1" = 20'-0"

FIRST FLOOR ELEVATION 1252'-0"

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REVISIONS
1 02/29/24 ADDENDUM NO. 1

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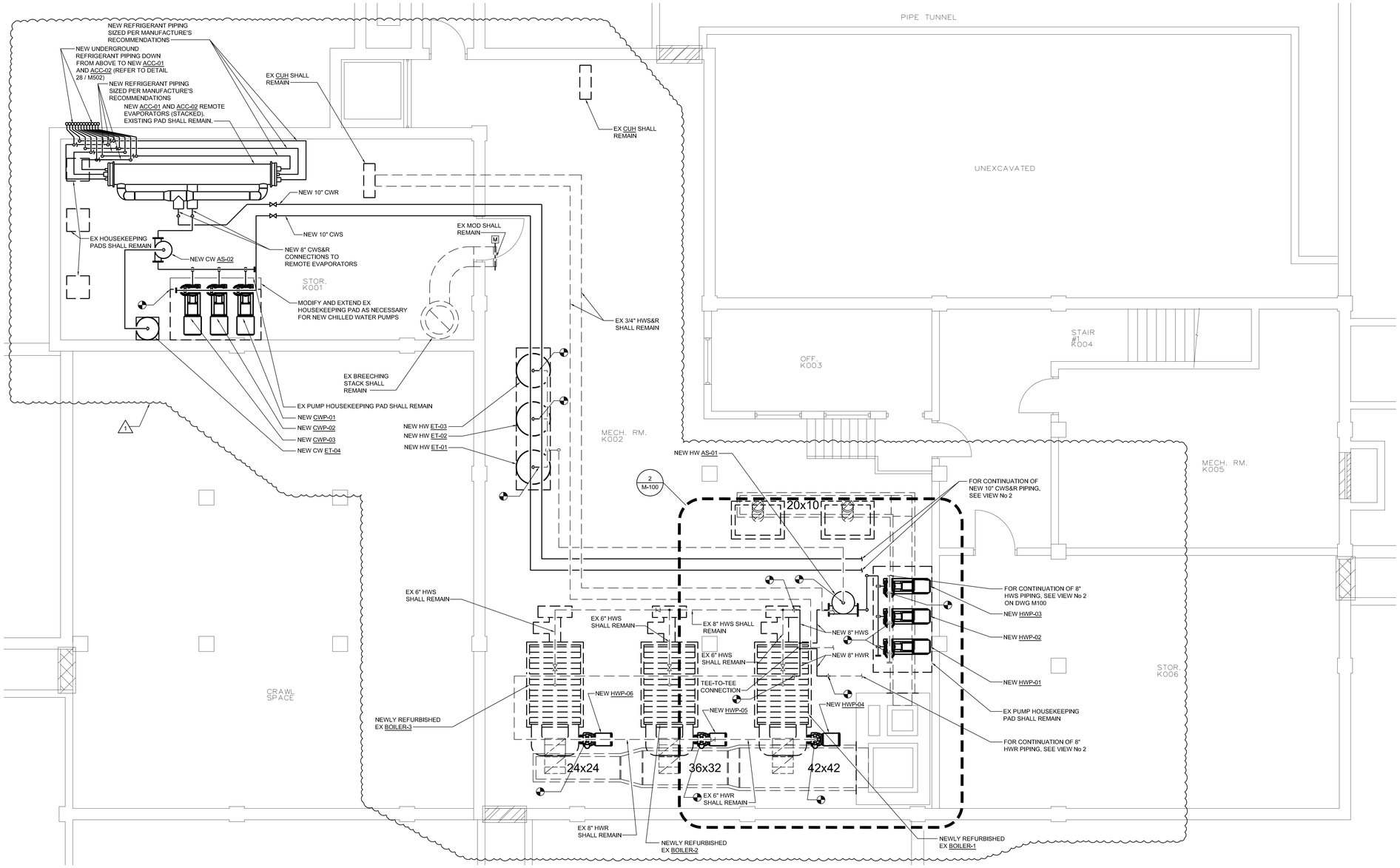
HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL ROOF PLAN - DEMOLITION

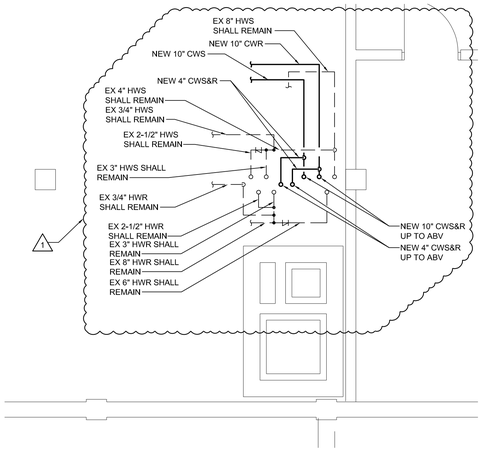
Proj No. 23-S43-01
Issue Date 02/19/2024

MD301



1 BASEMENT FLOOR PLAN - AREA 'B' - MECHANICAL NEW WORK

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"



2 BASEMENT PARTIAL FLOOR PLAN - MECHANICAL PIPING NEW WORK

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"

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REVISIONS
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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

BASEMENT FLOOR PLAN - AREA - B MECHANICAL NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

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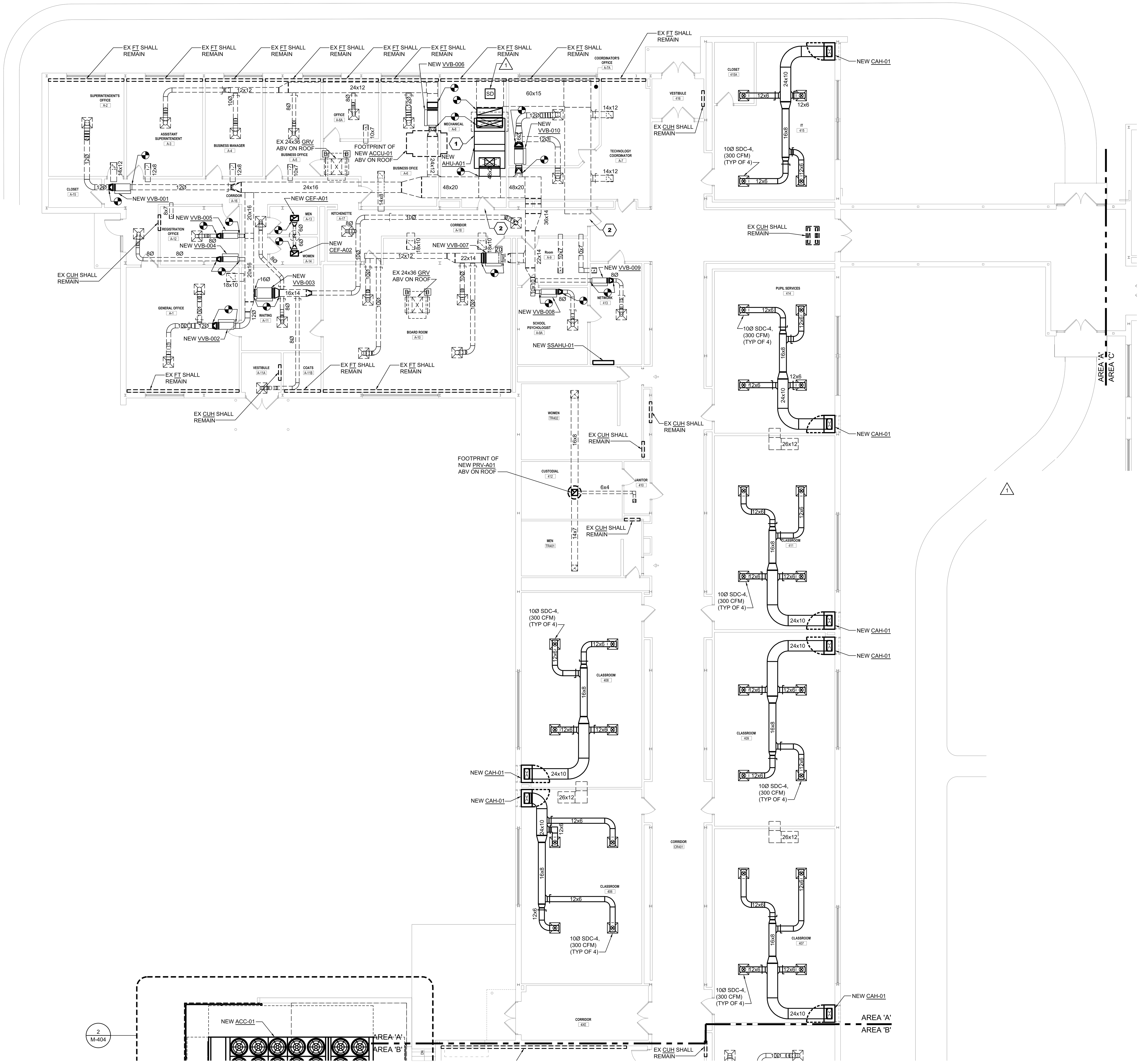
JMcMunn



1 FIRST FLOOR PLAN - AREA 'A' - MECHANICAL EQUIPMENT & DUCTWORK NEW WORK

Scale: 1/8" = 1'-0"

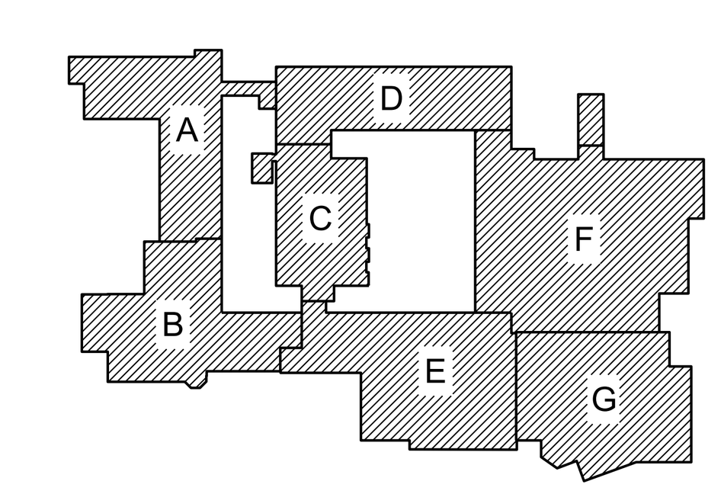
FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

1. HC SHALL BREAK DOWN AHU-A01 ALONG SPLIT SECTIONS AND ASSEMBLE AHU IN FINAL LOCATION.
2. HC SHALL BREAK DOWN FAN SECTION OF AHU-A01 INTO BASE COMPONENTS TO FIT THROUGH DOORWAYS, AND REASSEMBLE PRIOR FINAL UNIT ASSEMBLY.

GENERAL NOTES THIS DRAWING

1. AT AREAS WHERE NEW VVBs ARE INSTALLED IN EXISTING DUCTWORK, CONTRACTOR SHALL PATCH/ REPAIR EXISTING DUCTWORK AND PATCH, REPAIR, REPLACE EXISTING INSULATION.
2. CONTRACTOR TO INSPECT AND CLEAN ALL EXISTING TRANSFER DUCTS.
3. ALL EXISTING FINTUBES AND CABINET HEATERS SHALL BE CLEANED. EXISTING VALVES SHALL BE VERIFIED. CONTRACTOR SHALL REPORT ANY ISSUES TO ARCHITECT PRIOR TO PROCEEDING WITH WORK.
4. CONTRACTOR SHALL VERIFY CONDITION OF EXISTING DUCT INSULATION TO REMAIN. CONTRACTOR SHALL PATCH, REPAIR, AND REPLACE AS NECESSARY.
5. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.



KEY PLAN
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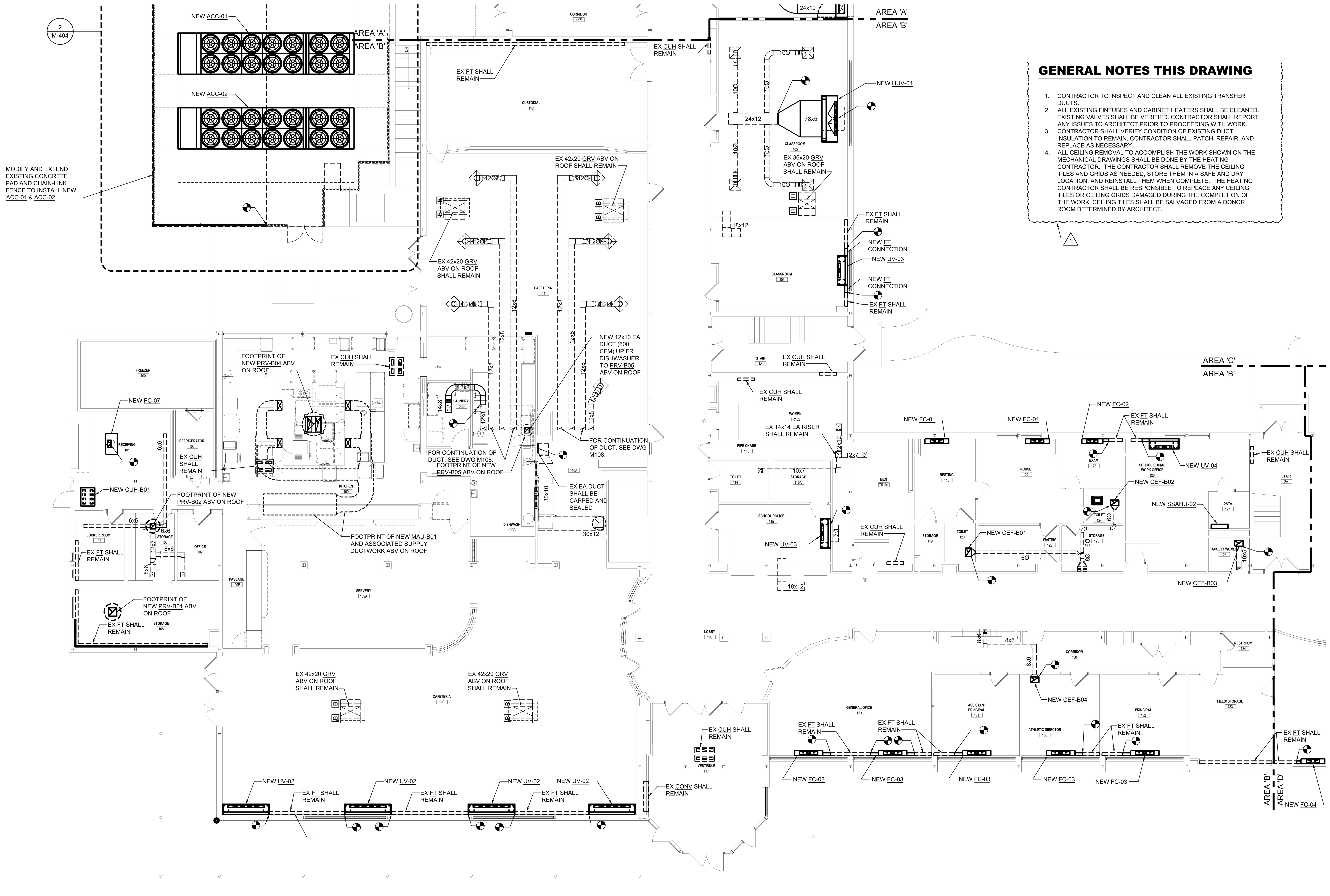
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - A
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M101



1 FIRST FLOOR PLAN - AREA 'B' - MECHANICAL EQUIPMENT & DUCTWORK NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO INSPECT AND CLEAN ALL EXISTING TRANSFER DUCTS.
2. ALL EXISTING FINTUBES AND CABINET HEATERS SHALL BE CLEANED. EXISTING VALVES SHALL BE VERIFIED. CONTRACTOR SHALL REPORT ANY ISSUES TO ARCHITECT PRIOR TO PROCEEDING WITH WORK.
3. CONTRACTOR SHALL VERIFY CONDITION OF EXISTING DUCT INSULATION TO REMAIN. CONTRACTOR SHALL PATCH, REPAIR, AND REPLACE AS NECESSARY.
4. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

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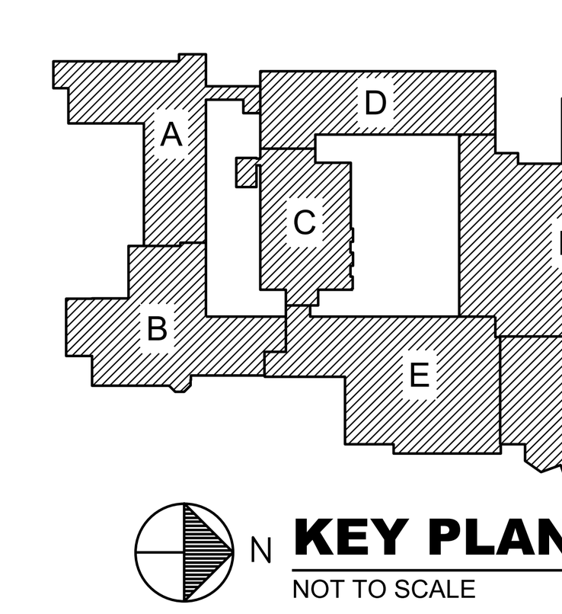


KEY PLAN
NOT TO SCALE

DRAW COLLECTIVE
470 Washington Road, Pittsburgh, PA 15228
412.561.7117 www.DRAWcollective.com

H.F. LENZ
ENGINEERING
Headquarters:
1407 Scalp Avenue
Johnstown, PA 15904-3329
Phone: 814-269-9300
www.hflenz.com

REVISIONS
1 02/29/24 ADDENDUM NO. 1

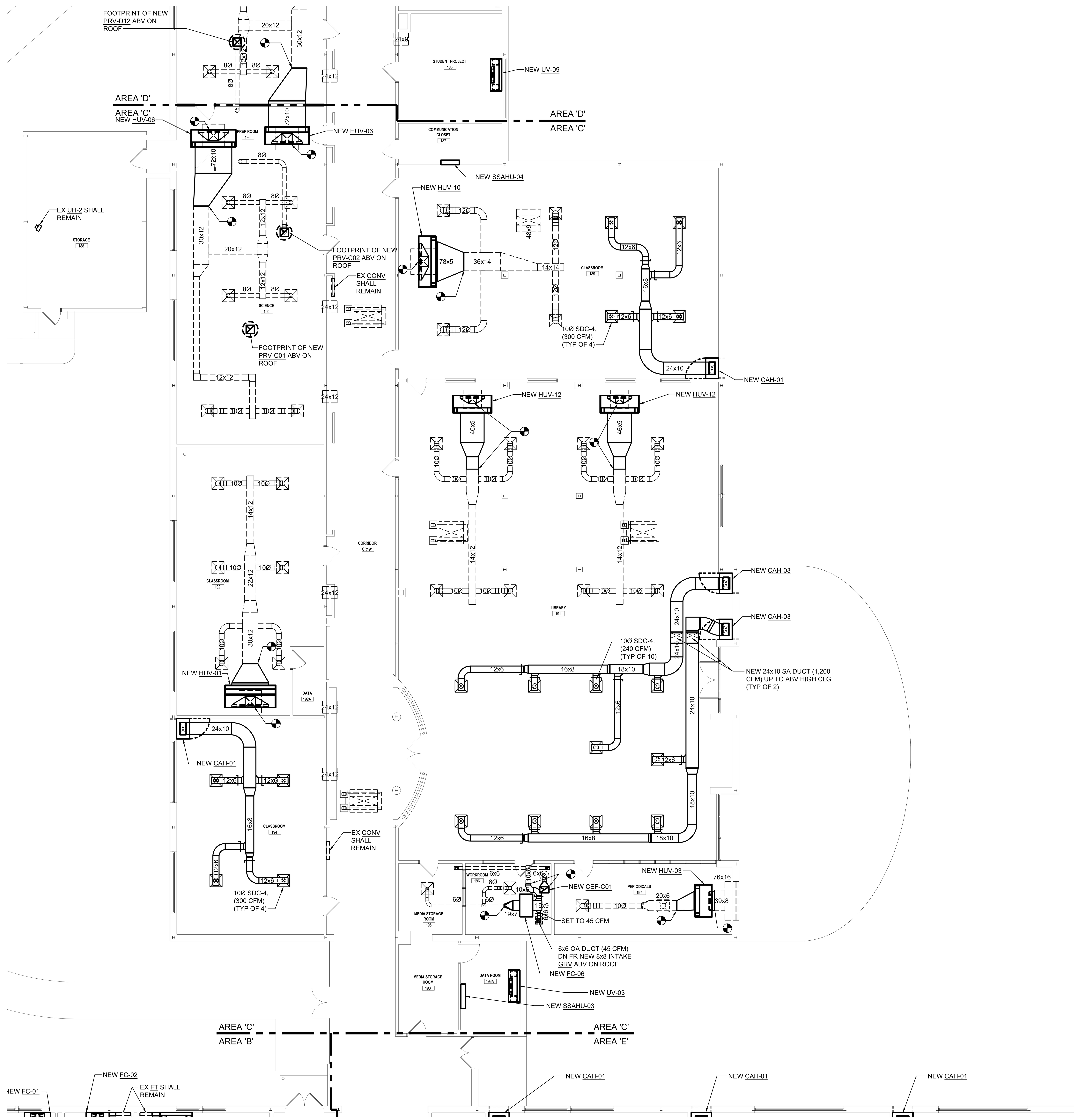
BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - B
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M102



GENERAL NOTES THIS DRAWING

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2. ALL EXISTING FINTUBES AND CABINET HEATERS SHALL BE CLEANED. EXISTING VALVES SHALL BE VERIFIED. CONTRACTOR SHALL REPORT ANY ISSUES TO ARCHITECT PRIOR TO PROCEEDING WITH WORK.
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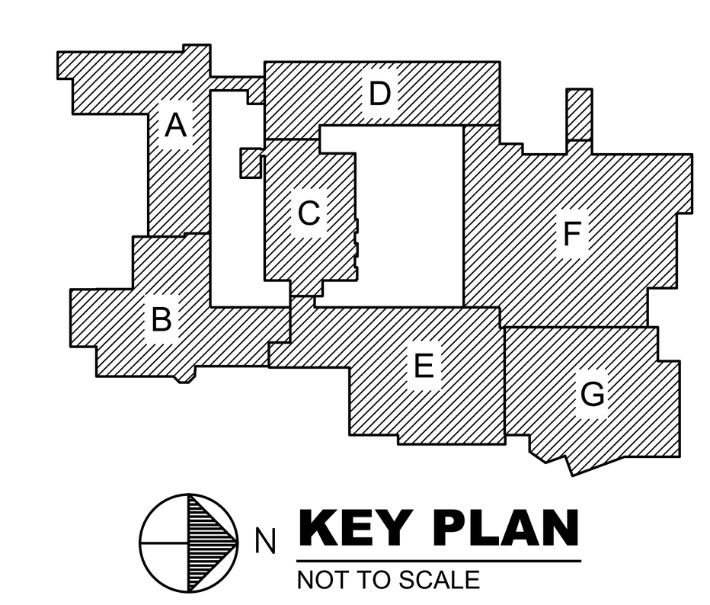
1

FIRST FLOOR PLAN - AREA 'C' - MECHANICAL EQUIPMENT & DUCTWORK NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



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1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - C
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M103

GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO INSPECT AND CLEAN ALL EXISTING TRANSFER DUCTS.
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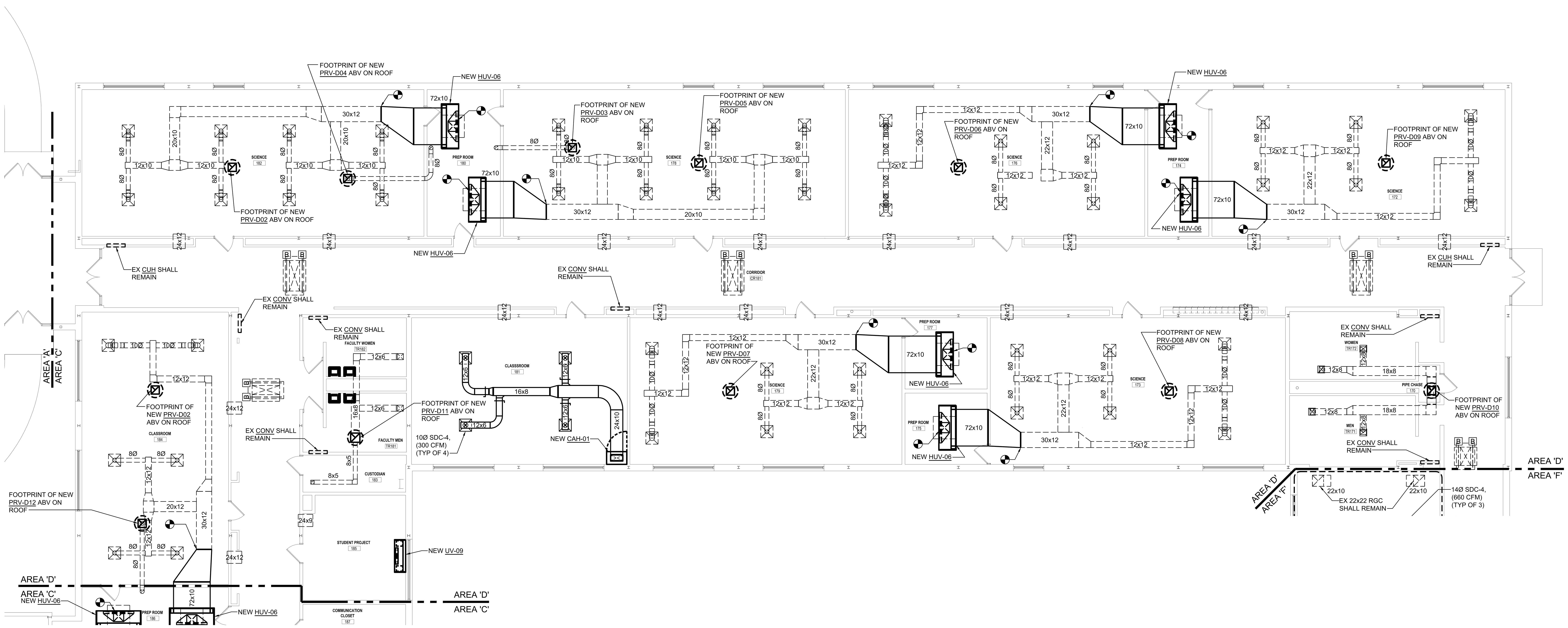
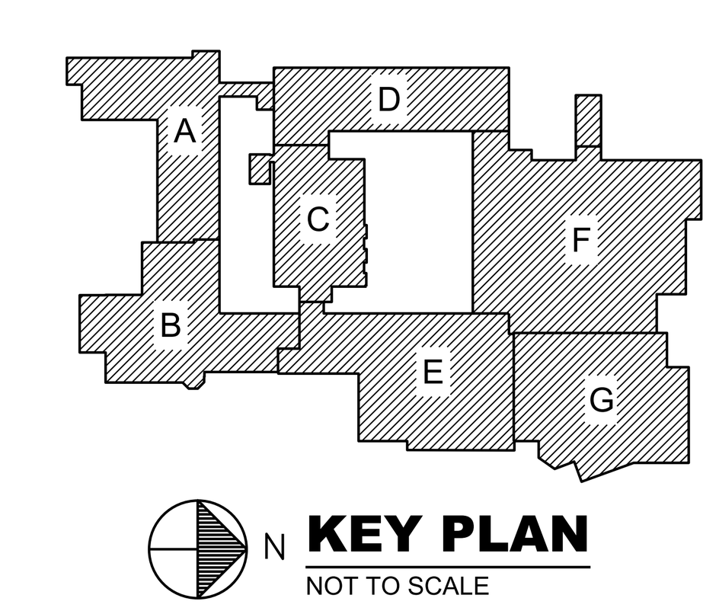


1 FIRST FLOOR PLAN - AREA 'D' - MECHANICAL EQUIPMENT & DUCTWORK NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



KEY PLAN
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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - D
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M104

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GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO INSPECT AND CLEAN ALL EXISTING TRANSFER DUCTS.
2. ALL EXISTING FINTUBES AND CABINET HEATERS SHALL BE CLEANED. EXISTING VALVES SHALL BE VERIFIED. CONTRACTOR SHALL REPORT ANY ISSUES TO ARCHITECT PRIOR TO PROCEEDING WITH WORK.
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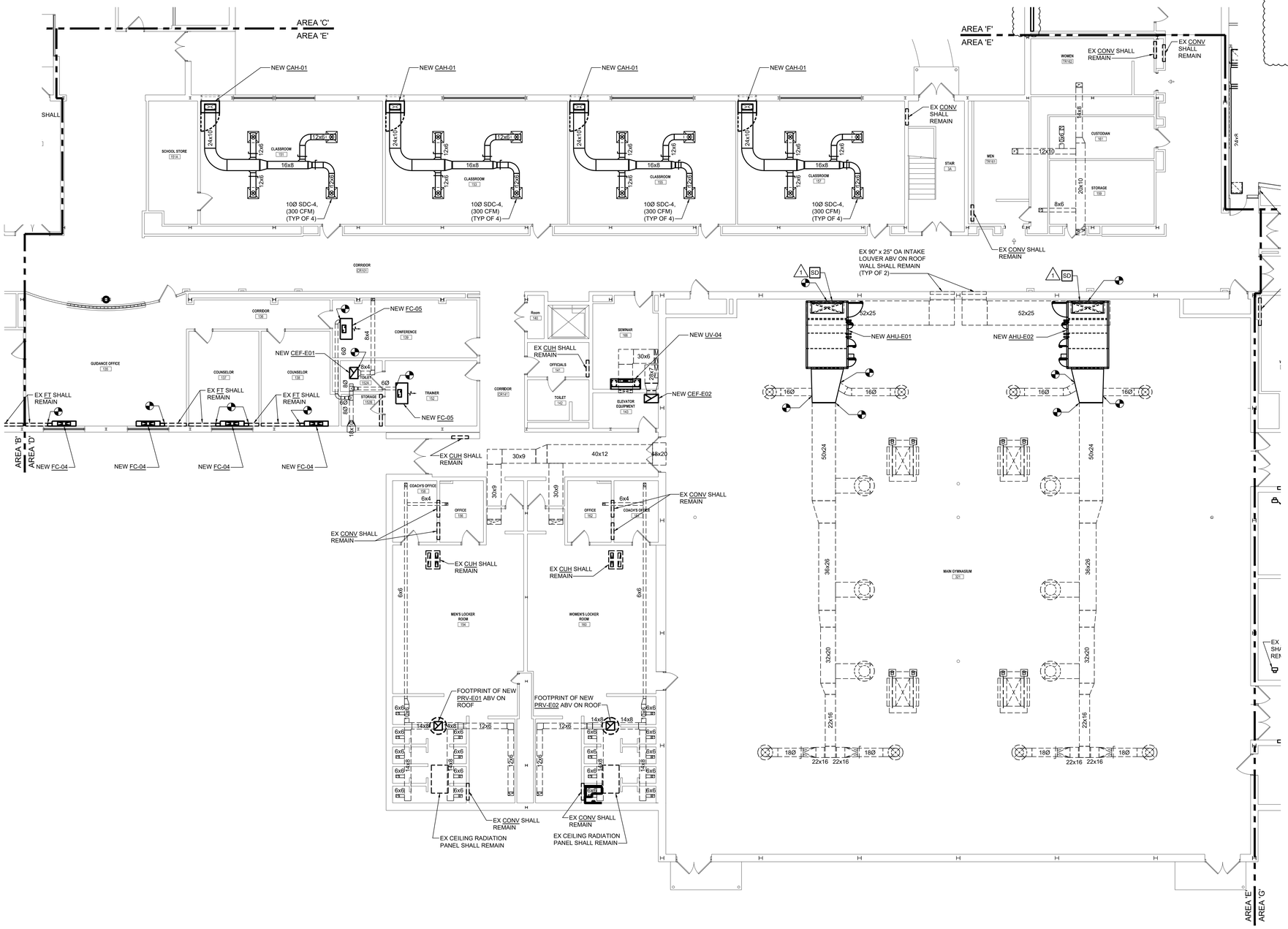
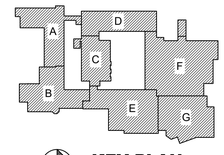


1 FIRST FLOOR PLAN - AREA 'E' - MECHANICAL EQUIPMENT & DUCTWORK NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



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JOHN M. WEILAND
PE074381

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REVISIONS
02/23/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - E
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M105

KEYNOTES THIS DRAWING

1. FOOTPRINT OF EX 24x60 OA INTAKE HOOD ABV ON ROOF
2. EX FLAME STORAGE CABINET SHALL REMAIN, EX EA DUCT SHALL BE REMOVED, EX REF SHALL BE DEMOED, AND CABINET SHALL BE CAPPED.
3. HC SHALL TIGHTLY SEAL AROUND DUCT PENETRATION TO PREVENT SOUND TRANSMISSION BETWEEN ROOMS.
4. HC SHALL TEMPORARILY REMOVE MEZZANINE RAILING TO INSTALL NEW AHU-F07. HC SHALL BREAK DOWN NEW AHU INTO SECTIONS ALONG SPLIT SECTIONS AND ASSEMBLE AHU IN FINAL LOCATION. HC SHALL REINSTALL MEZZANINE RAILING ONCE AHU-F07 HAS BEEN INSTALLED.
5. HC SHALL TEMPORARILY REMOVE ACOUSTICAL DROP CEILING IN RM 313A INSTRUMENT STORAGE. HC SHALL BREAK DOWN NEW AHU-E05 AND AHU-E06 INTO SECTIONS ALONG SPLIT SECTIONS, BRING THROUGH DOUBLE DOORS INTO ROOM 313A INSTRUMENT STORAGE, RAISED THROUGH CEILING AND INTO PLACE, AND ASSEMBLE AHUS IN FINAL LOCATIONS. HC SHALL REINSTALL ACOUSTICAL DROP CEILING.
6. MECHANICAL AIR HANDLER UNIT SERVICE CATWALK MODIFICATIONS BY HC. APPROXIMATE SIZE AND LOCATION SHOWN ON PLAN. COORDINATE EXACT SIZE AND LOCATION WITH MECHANICAL DWGS AND MECHANICAL EQUIPMENT REQUIREMENTS. CATWALK SHALL BE DESIGNED FOR A UNIFORM LIVE LOAD OF 40 PSF. SUBMIT CALCULATIONS AND DRAWINGS STAMPED BY A REGISTERED PROFESSIONAL LICENSED IN PENNSYLVANIA FOR REVIEW. COORDINATE HANGER CONNECTION DETAIL WITH JOIST MANUFACTURER. MAXIMUM HANGER LOAD TO ROOF JOIST: 500 LB LIVE-LOAD, 250 LB DEAD-LOAD.

GENERAL NOTES THIS DRAWING

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1 FIRST FLOOR PLAN - AREA 'F' - MECHANICAL EQUIPMENT & DUCTWORK NEW WORK

Scale: 1/8" = 1'-0" — FIRST FLOOR ELEVATION 1252'-0"

FIRST FLOOR GARAGE - MECHANICAL DUCTWORK NEW WORK

SLOPE 2% — Scale: 1/8" = 1'-0" — FIRST FLOOR ELEVATION 1252'-0"

KEY PLAN

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN D. WEILAND — ENGINEER — PE074381

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REVISIONS
1 02/29/24 ADDENDUM NO. 1

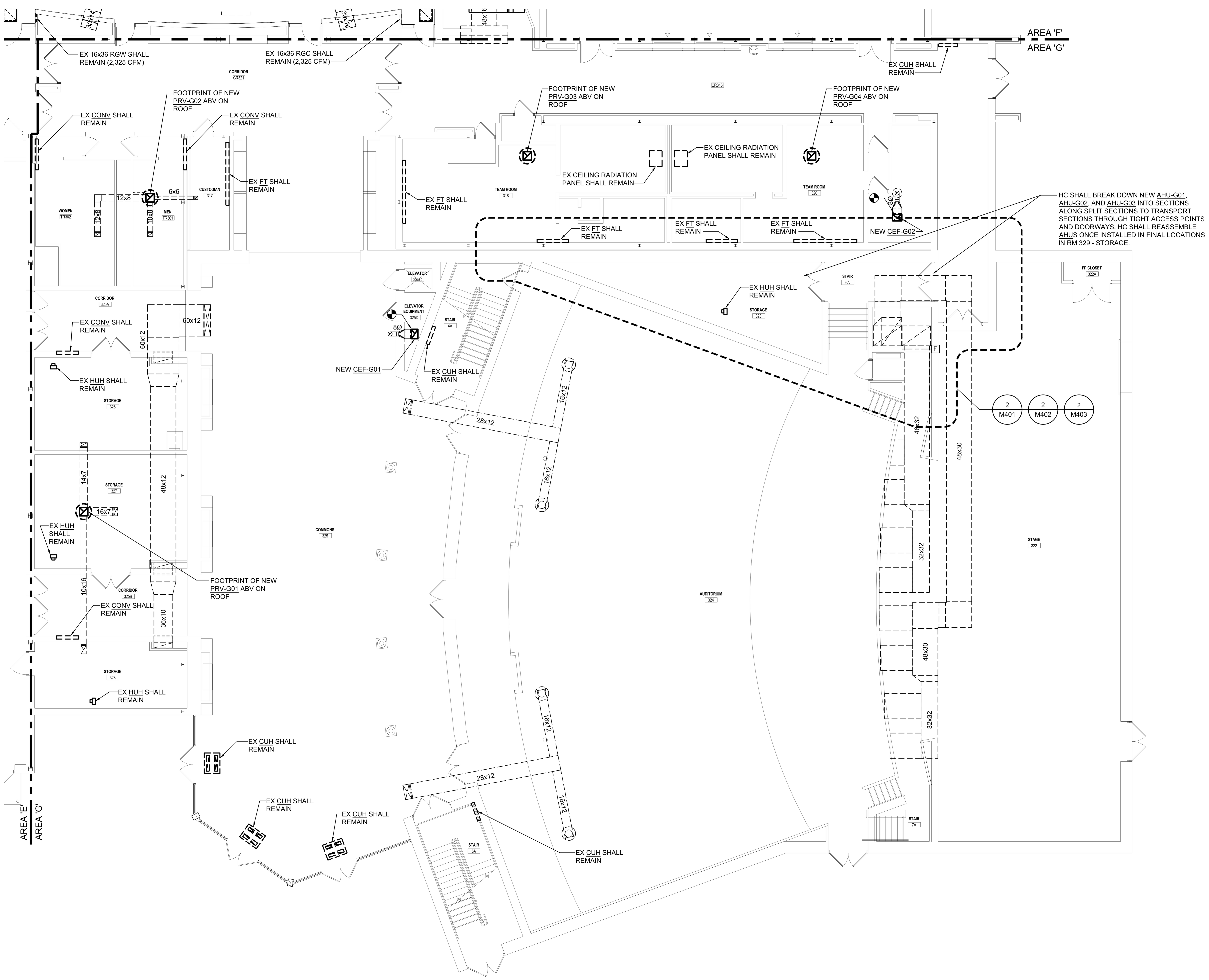
BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - F
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-543-01
Issue Date 02/19/2024

M106



1 **FIRST FLOOR PLAN - AREA 'G' - MECHANICAL EQUIPMENT & DUCTWORK NEW WORK**

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

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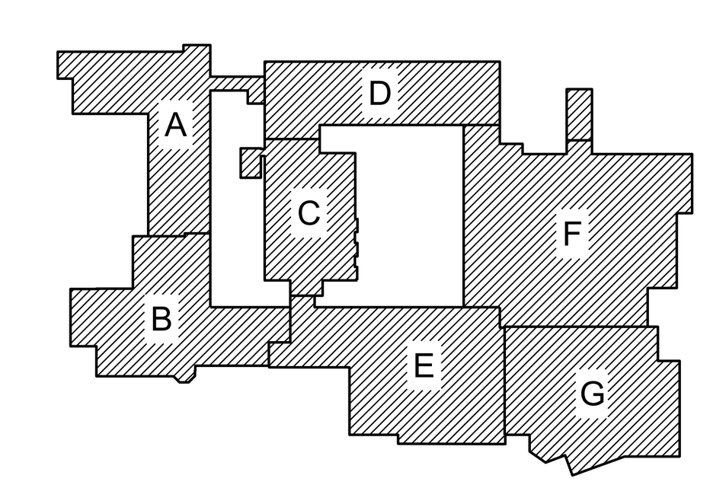
REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24



KEY PLAN
NOT TO SCALE

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - G
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M107

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KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

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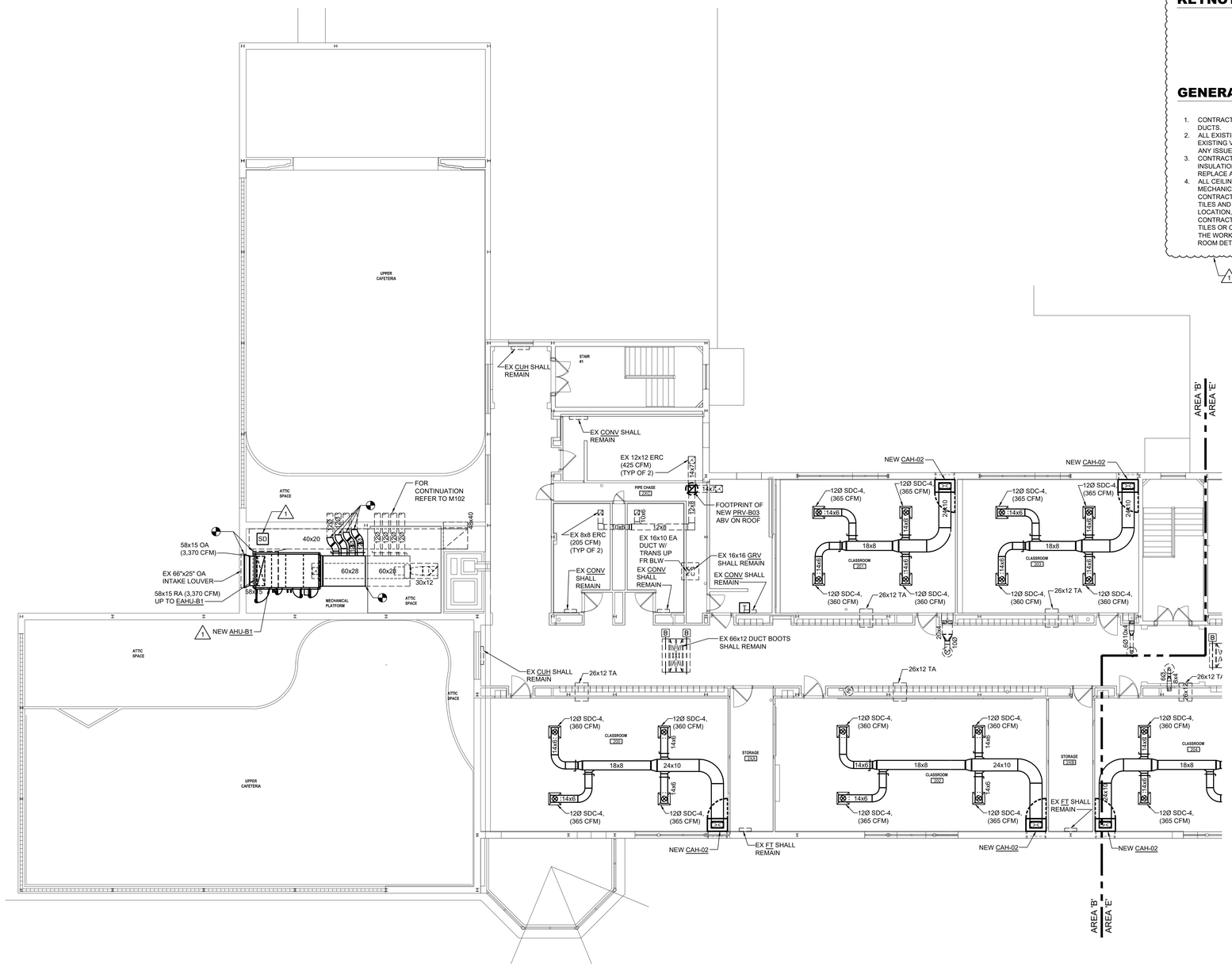

1 SECOND FLOOR PLAN - AREA 'B' - MECHANICAL NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JOHN C. HEILAND
PE074387

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1 02/29/24 ADDENDUM NO. 1

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN - AREA - B
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M108

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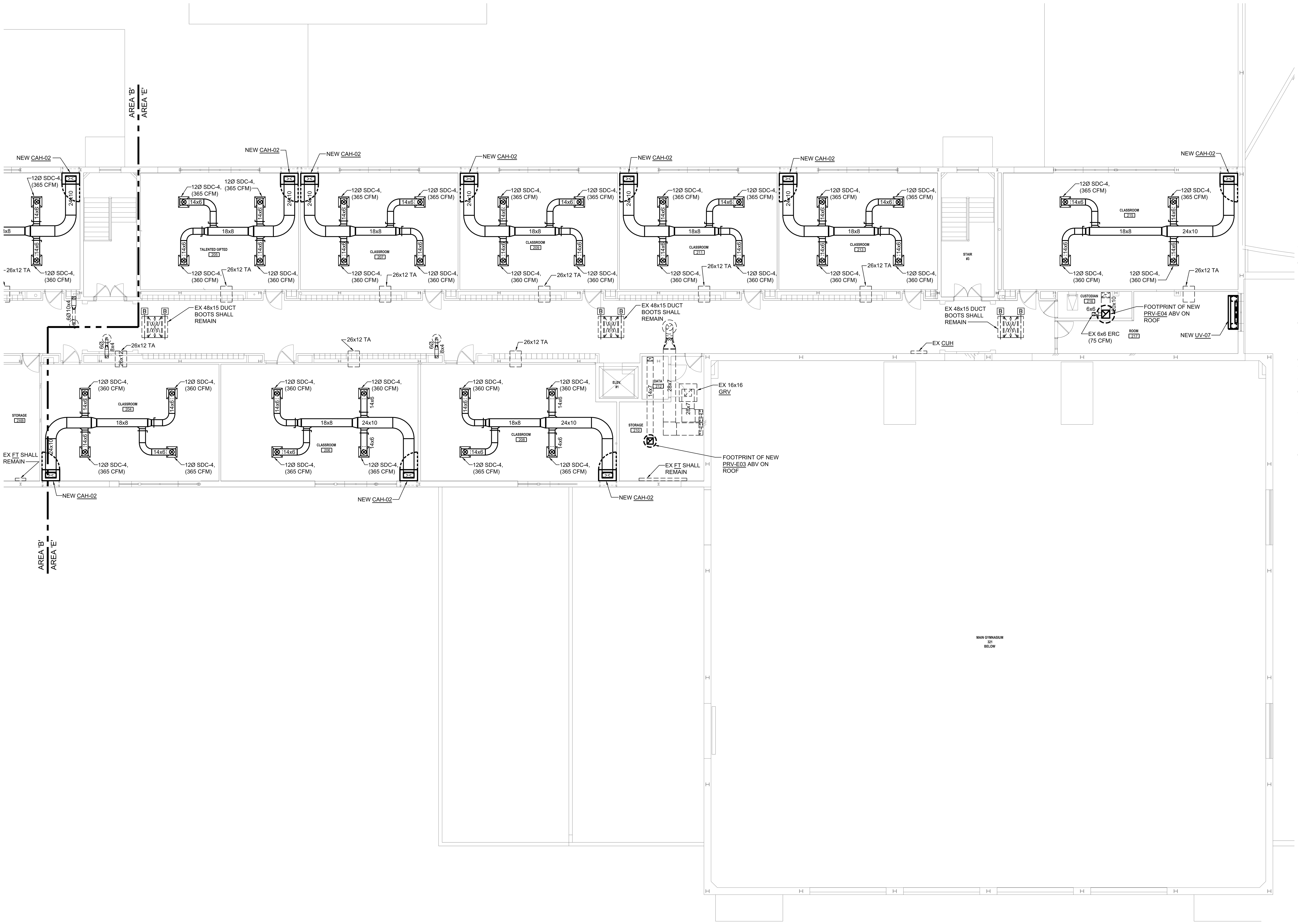
JMcMunn



1 **SECOND FLOOR PLAN - AREA 'E' - MECHANICAL NEW WORK**

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

GENERAL NOTES THIS DRAWING

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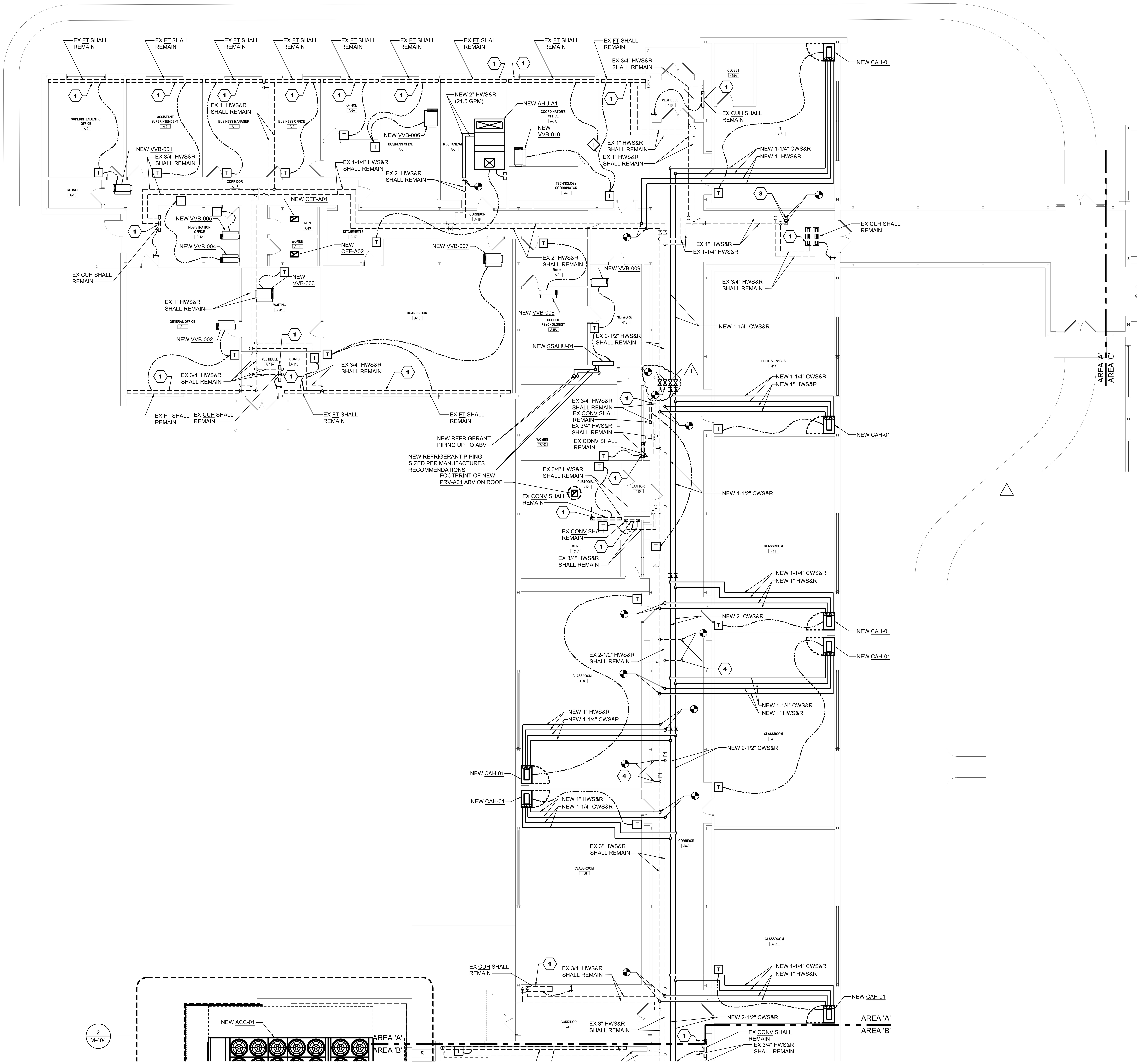
HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT
SECOND FLOOR PLAN - AREA - E
MECHANICAL DUCTWORK NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M109



1 **FIRST FLOOR PLAN - AREA 'A' - MECHANICAL PIPING NEW WORK**

Scale: 1/8" = 1'-0"

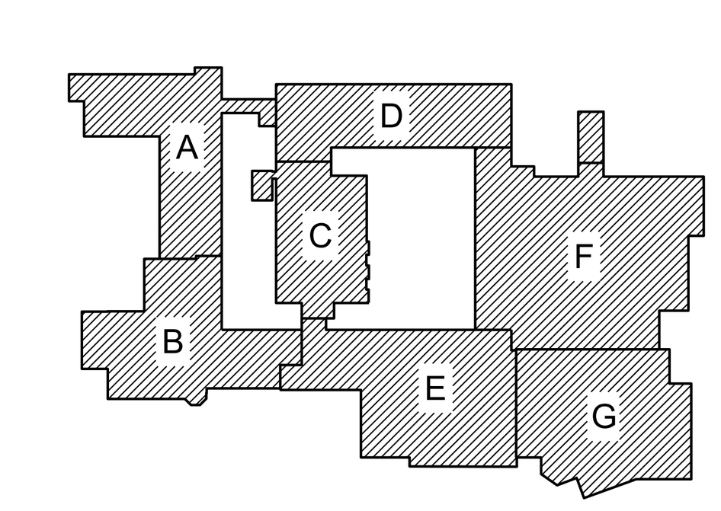
FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.
3. CAP EX 1" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.
4. CAP EX 1-1/2" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.

GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO PATCH, REPAIR, REPLACE EXISTING PIPE INSULATION AT EACH NEW PIPE CONNECTIONS.
2. ISOLATION VALVES SHALL BE INSTALLED AT EACH PIPE BRANCH.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.



KEY PLAN
NOT TO SCALE

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GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - A MECHANICAL PIPING NEW WORK

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M111

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KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.
3. CAP EX 1-1/4" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.

GENERAL NOTES THIS DRAWING

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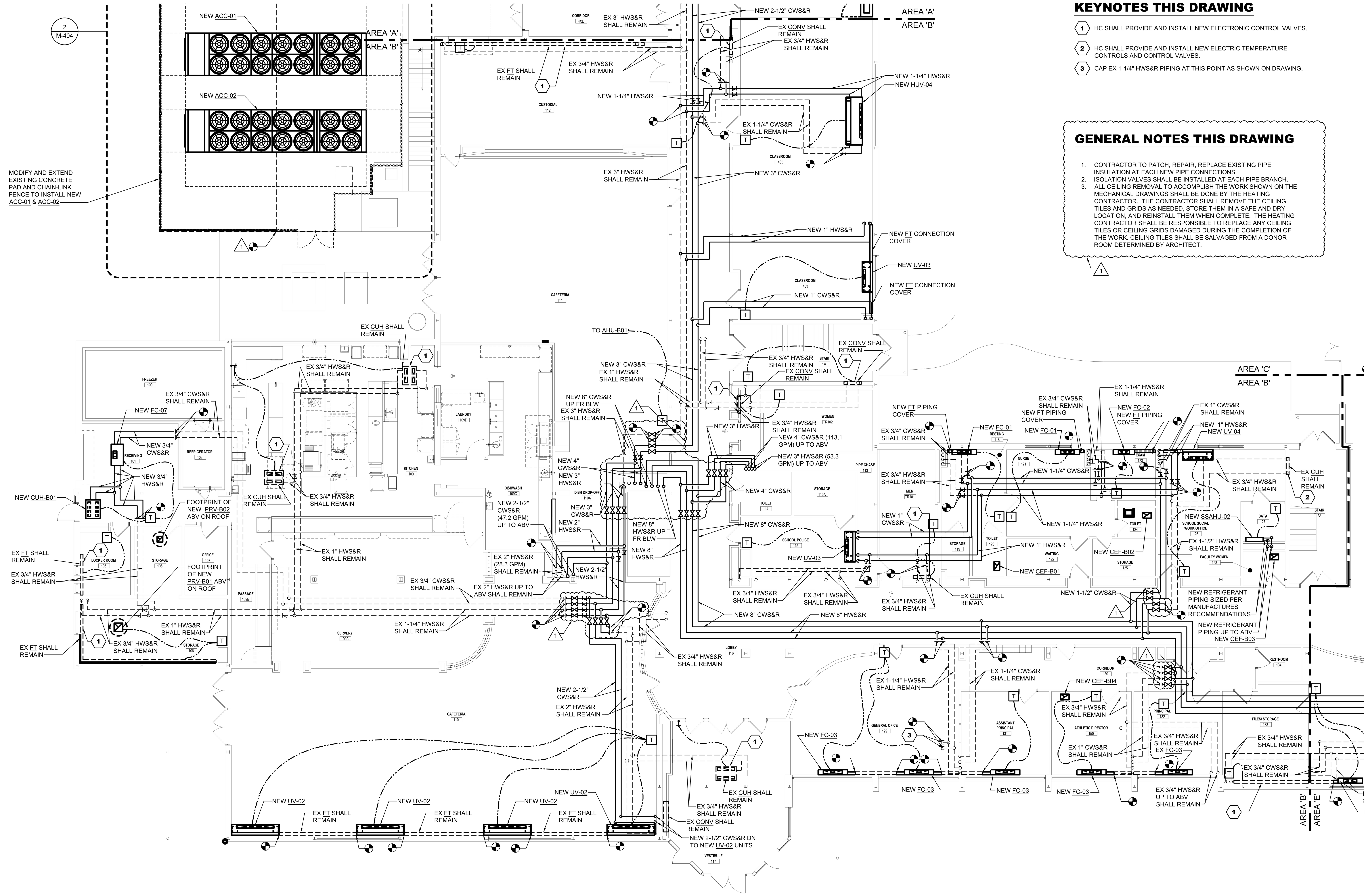
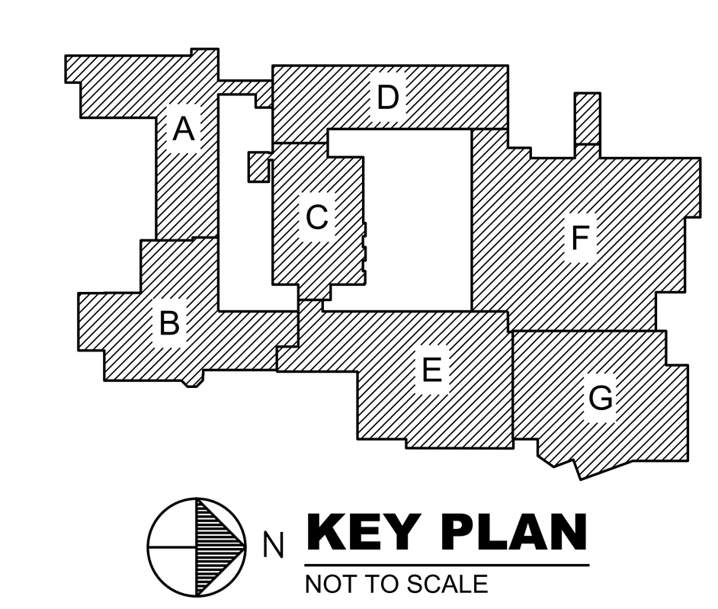


FIRST FLOOR PLAN - AREA 'B' - MECHANICAL PIPING NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



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REVISIONS
1 02/29/24 ADDENDUM NO. 1

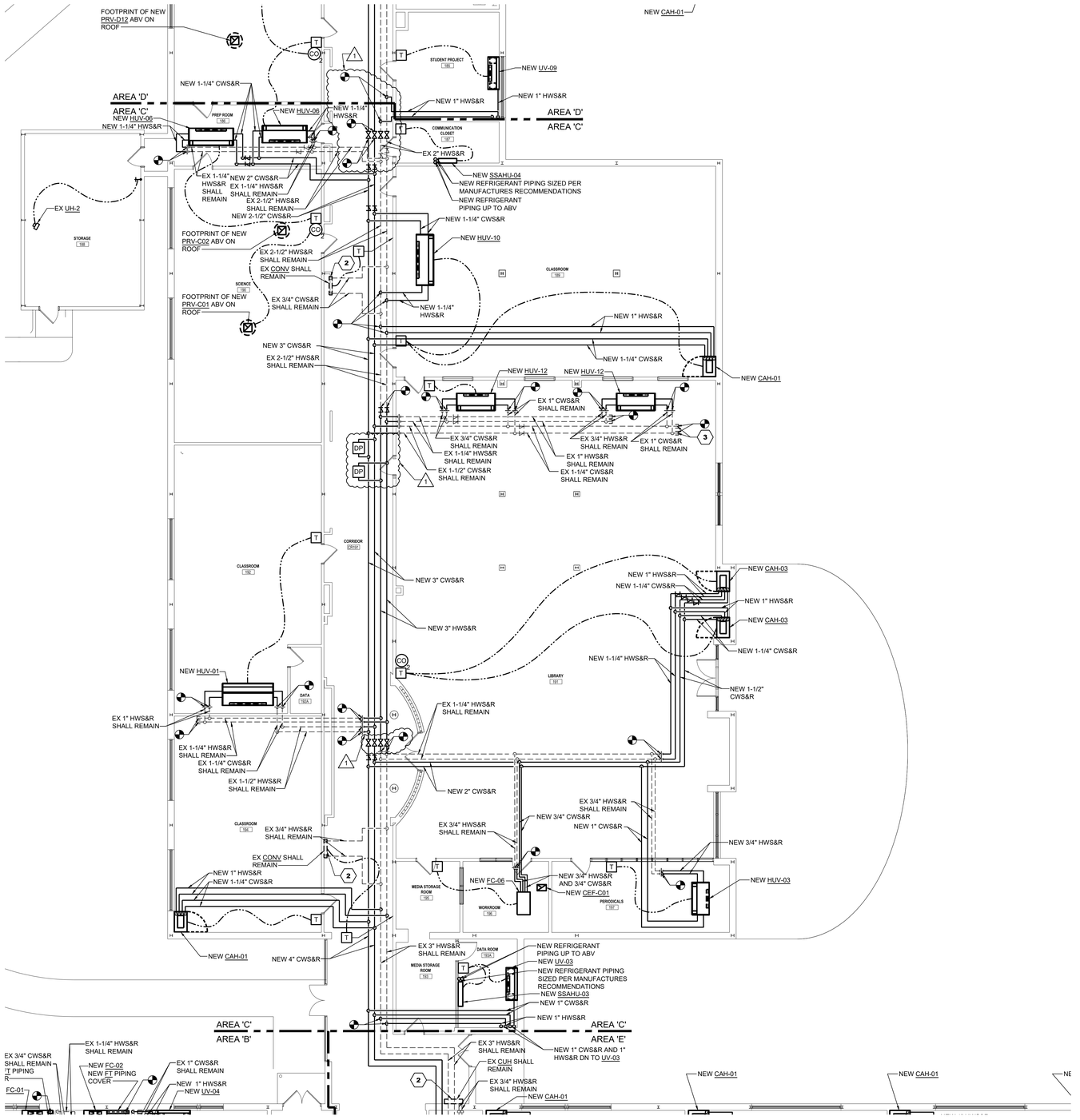
BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - B
MECHANICAL PIPING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M112



KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.
3. DISCONNECT AND REMOVE EX 1" CWS&R PIPING TO THIS POINT AND CAP AS SHOWN ON DRAWING.

GENERAL NOTES THIS DRAWING

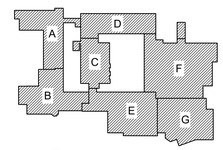
1. CONTRACTOR TO PATCH, REPAIR, REPLACE EXISTING PIPE INSULATION AT EACH NEW PIPE CONNECTIONS.
2. ISOLATION VALVES SHALL BE INSTALLED AT EACH PIPE BRANCH.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

1

1 FIRST FLOOR PLAN - AREA 'C' - MECHANICAL PIPING NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



N **KEY PLAN**
NOT TO SCALE

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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - C
MECHANICAL PIPING NEW WORK

Proj No. 23-543-01
Issue Date 02/19/2024

M113

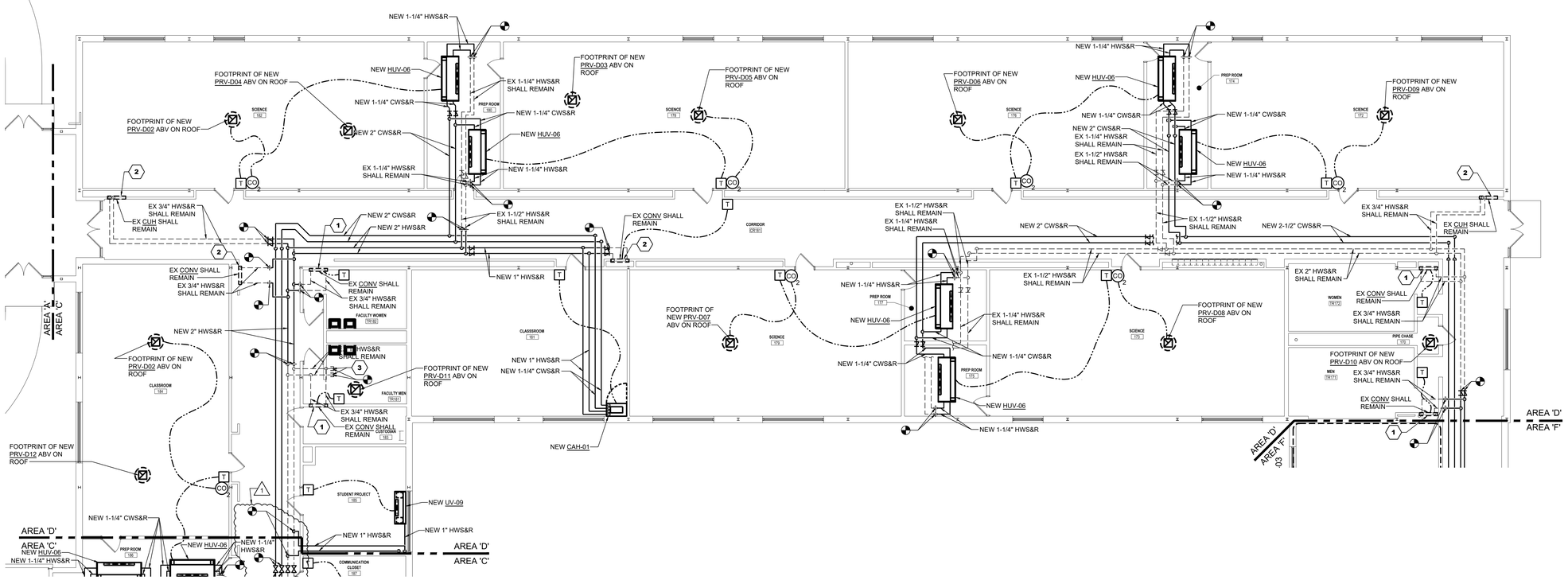
KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.
3. CAP EX 1" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.

GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO PATCH, REPAIR, REPLACE EXISTING PIPE INSULATION AT EACH NEW PIPE CONNECTIONS.
2. ISOLATION VALVES SHALL BE INSTALLED AT EACH PIPE BRANCH.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

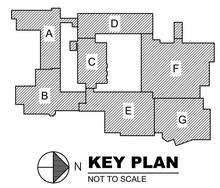
1



1 FIRST FLOOR PLAN - AREA 'D' - MECHANICAL PIPING NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



N **KEY PLAN**
NOT TO SCALE

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BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - D
MECHANICAL PIPING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M114

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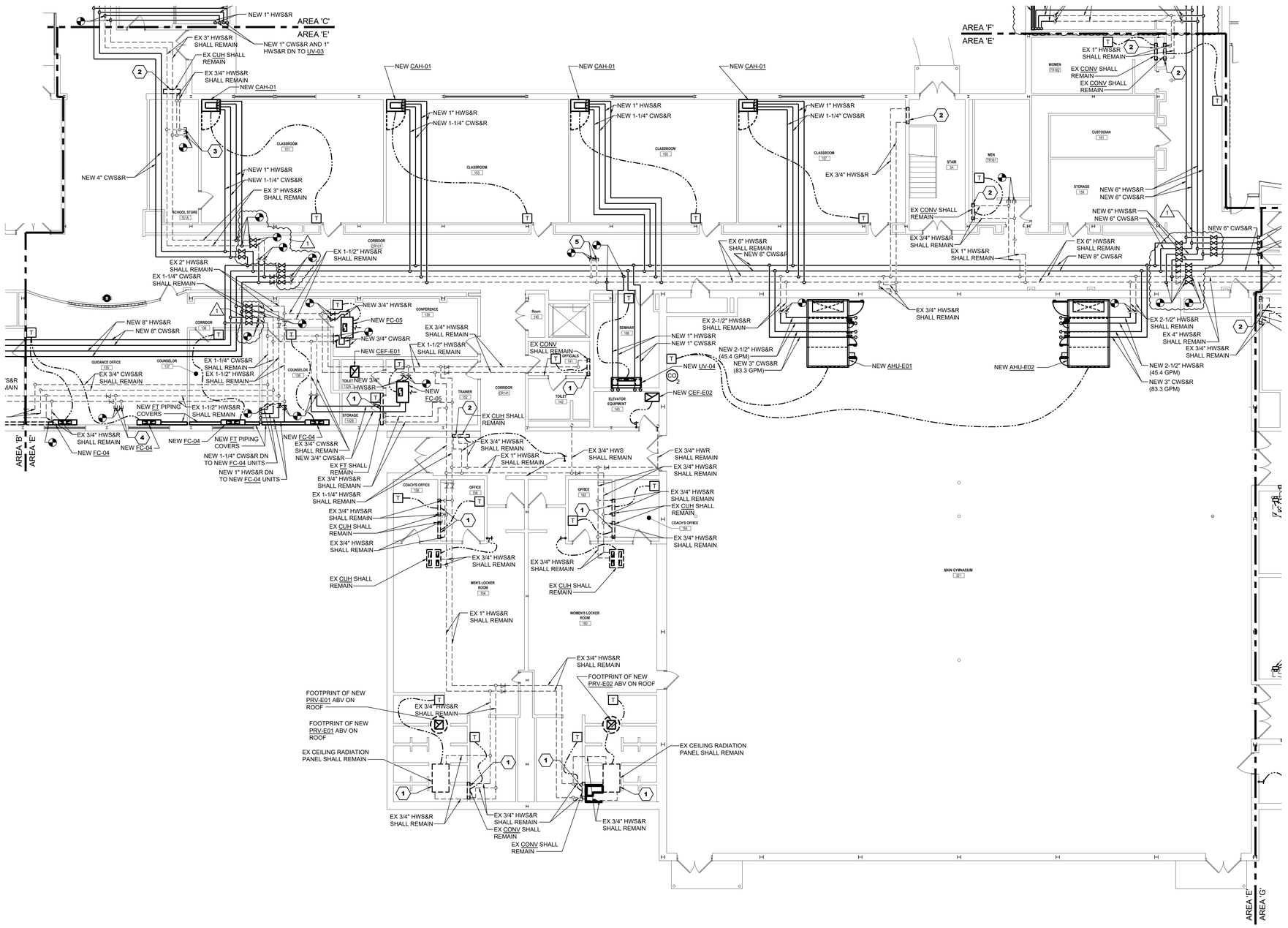


KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.
3. CAP EX 1" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.
4. CAP EX 1-1/4" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.
5. CAP EX 2" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.

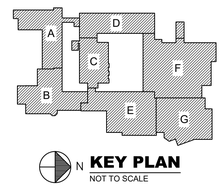
GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO PATCH, REPAIR, REPLACE EXISTING PIPE INSULATION AT EACH NEW PIPE CONNECTIONS.
2. ISOLATION VALVES SHALL BE INSTALLED AT EACH PIPE BRANCH.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

1

FIRST FLOOR PLAN - AREA 'E' - MECHANICAL PIPING NEW WORK

Scale: 1/8" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"



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1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - E
MECHANICAL PIPING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M115

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JMCMunn

KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.
3. CAP EX 1" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.
4. CAP EX 3/4" HWS&R PIPING AT THIS POINT AS SHOWN ON DRAWING.
5. MECHANICAL AIR HANDLER UNIT SERVICE CATWALK MODIFICATIONS BY HC. APPROXIMATE SIZE AND LOCATION SHOWN ON PLAN. COORDINATE EXACT SIZE AND LOCATION WITH MECHANICAL DWGS AND MECHANICAL EQUIPMENT REQUIREMENTS. CATWALK SHALL BE DESIGNED FOR A UNIFORM LIVE LOAD OF 40 PSF. SUBMIT CALCULATIONS AND DRAWINGS STAMPED BY A REGISTERED PROFESSIONAL LICENSED IN PENNSYLVANIA FOR REVIEW. COORDINATE HANGER CONNECTION DETAIL WITH JOIST MANUFACTURER. MAXIMUM HANGER LOAD TO ROOF JOIST: 500 LB LIVE-LOAD, 250 LB DEAD-LOAD.

GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO PATCH, REPAIR, REPLACE PIPE INSULATION AT CONNECTION TO EXISTING PIPE.
2. ISOLATION VALVES SHALL BE INSTALLED AT EACH PIPE BRANCH.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

1 FIRST FLOOR PLAN - AREA 'F' - MECHANICAL PIPING NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

KEY PLAN
NOT TO SCALE

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1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - F
MECHANICAL PIPING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

M116

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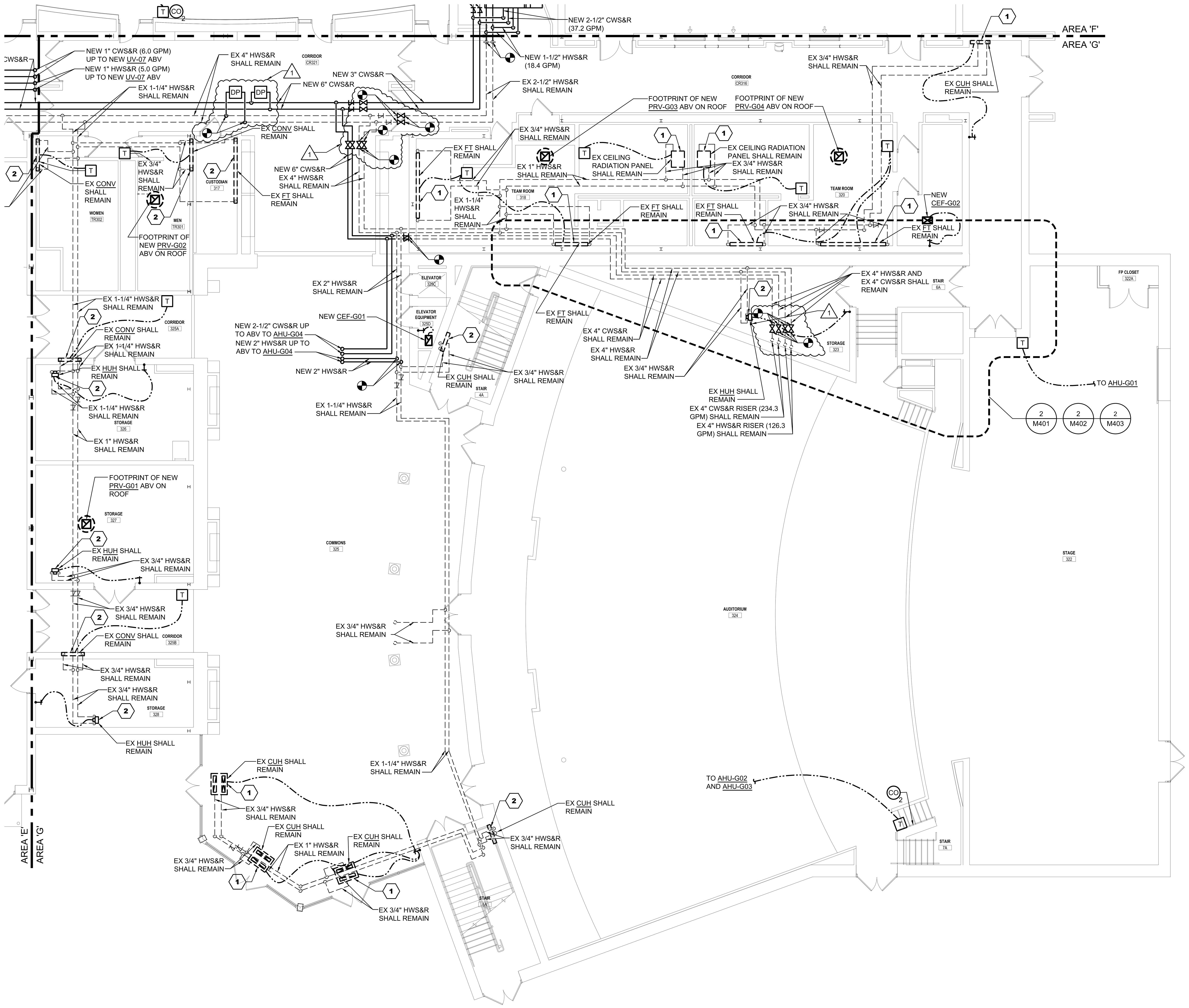

1 FIRST FLOOR PLAN - AREA 'G' - MECHANICAL PIPING NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.

GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO PATCH, REPAIR, REPLACE EXISTING PIPE INSULATION AT EACH NEW PIPE CONNECTIONS.
2. ISOLATION VALVES SHALL BE INSTALLED AT EACH PIPE BRANCH.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

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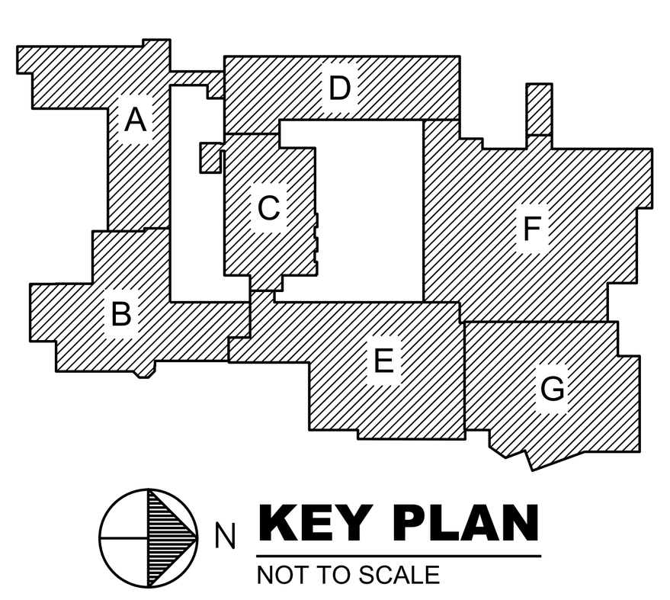
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24



KEY PLAN
NOT TO SCALE

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

FIRST FLOOR PLAN - AREA - G
MECHANICAL PIPING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

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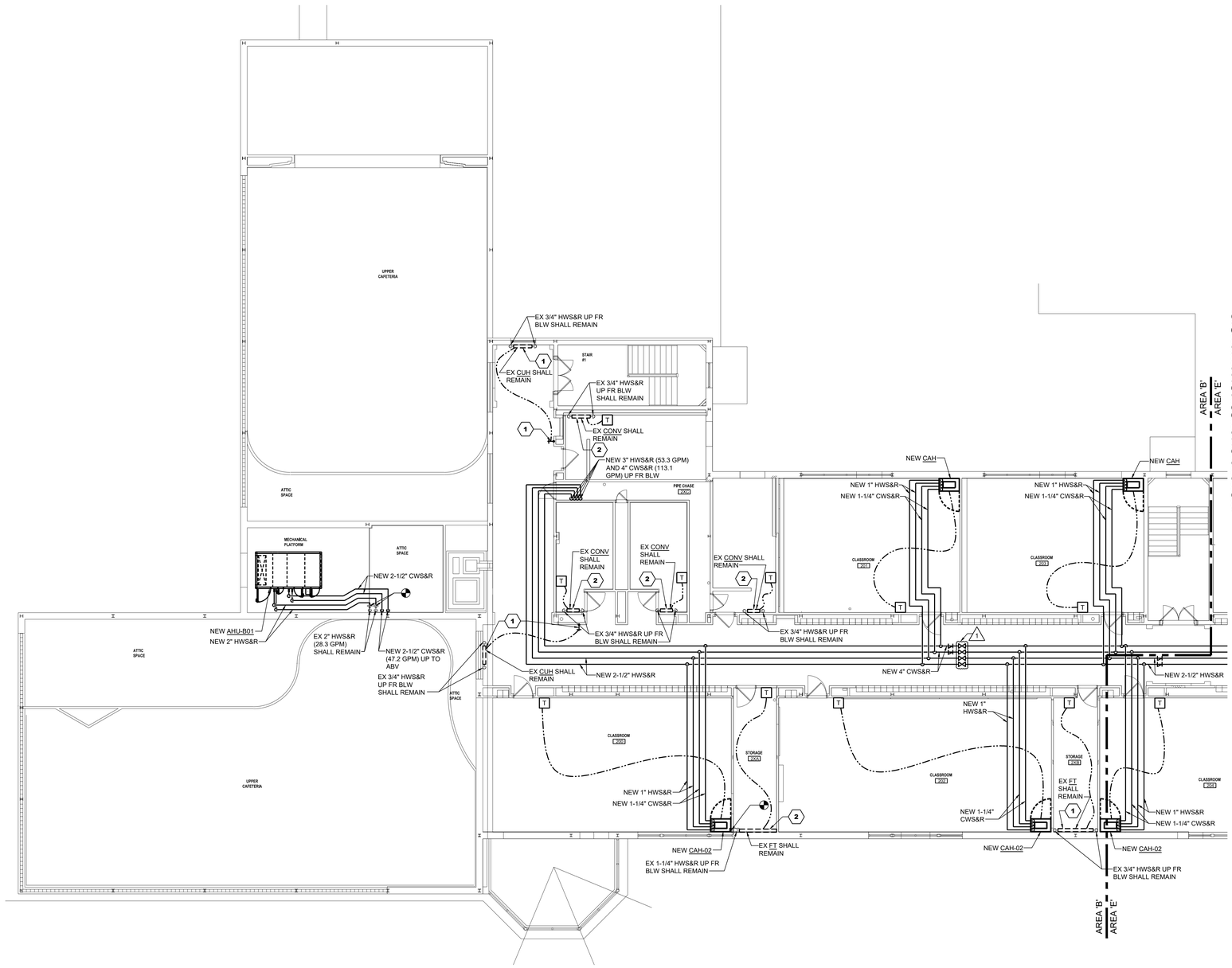
JMcMunn



KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.

GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO PATCH, REPAIR, REPLACE PIPE INSULATION AT CONNECTION TO EXISTING PIPE.
2. ISOLATION VALVES SHALL BE INSTALLED AT EACH PIPE BRANCH.
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1 **SECOND FLOOR PLAN - AREA 'B' - MECHANICAL PIPING NEW WORK**

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

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HIGH SCHOOL RENOVATIONS
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GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN - AREA - B
MECHANICAL PIPING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

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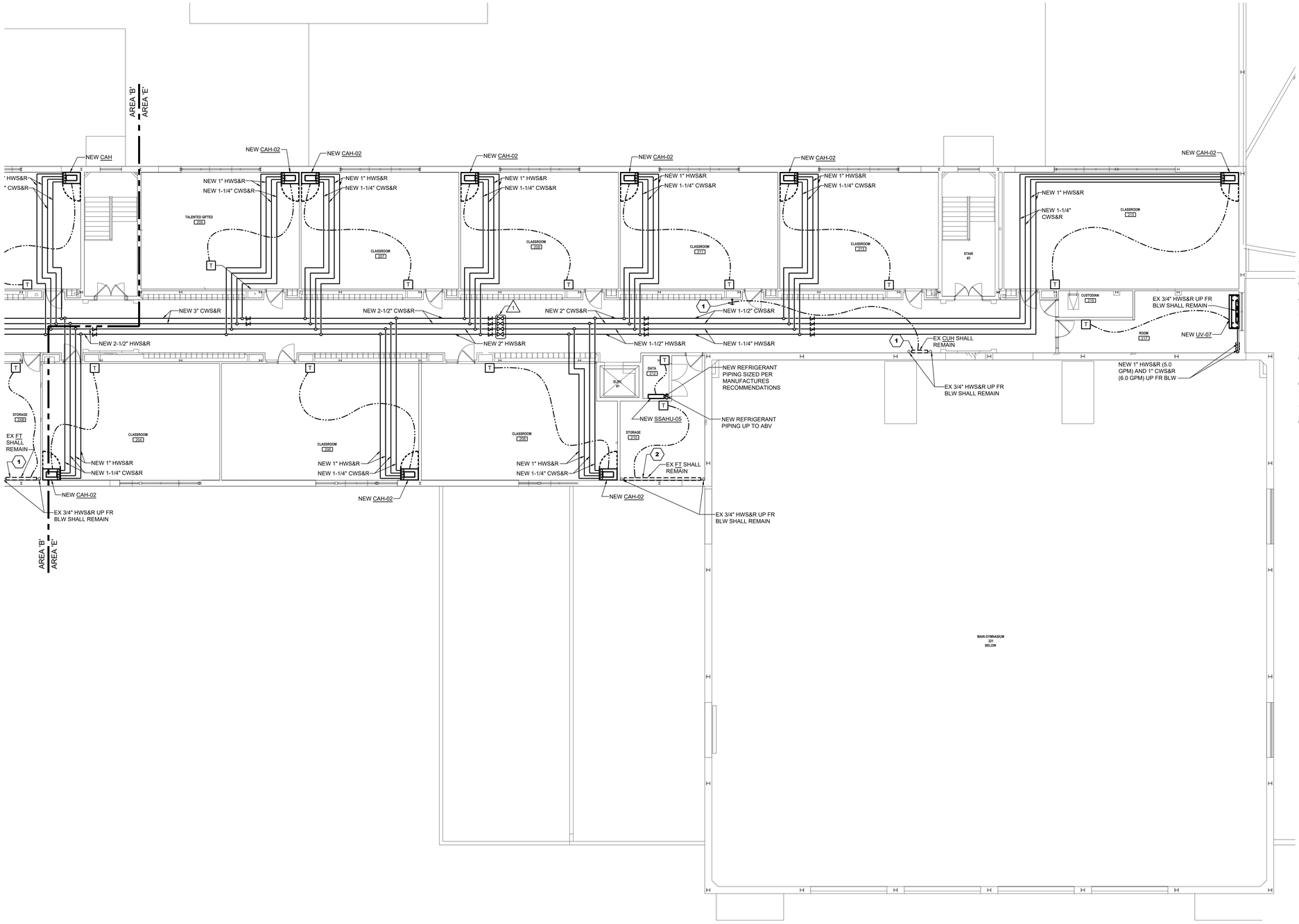

KEYNOTES THIS DRAWING

1. HC SHALL PROVIDE AND INSTALL NEW ELECTRIC TEMPERATURE CONTROLS AND CONTROL VALVES.
2. HC SHALL PROVIDE AND INSTALL NEW ELECTRONIC CONTROL VALVES.

GENERAL NOTES THIS DRAWING

1. CONTRACTOR TO PATCH, REPAIR, REPLACE PIPE INSULATION AT CONNECTION TO EXISTING PIPE.
2. ISOLATION VALVES SHALL BE INSTALLED AT EACH PIPE BRANCH.
3. ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE MECHANICAL DRAWINGS SHALL BE DONE BY THE HEATING CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE HEATING CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT.

1

1 SECOND FLOOR PLAN - AREA 'E' - MECHANICAL PIPING NEW WORK

Scale: 1/8" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

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GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN - AREA - E
MECHANICAL PIPING NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

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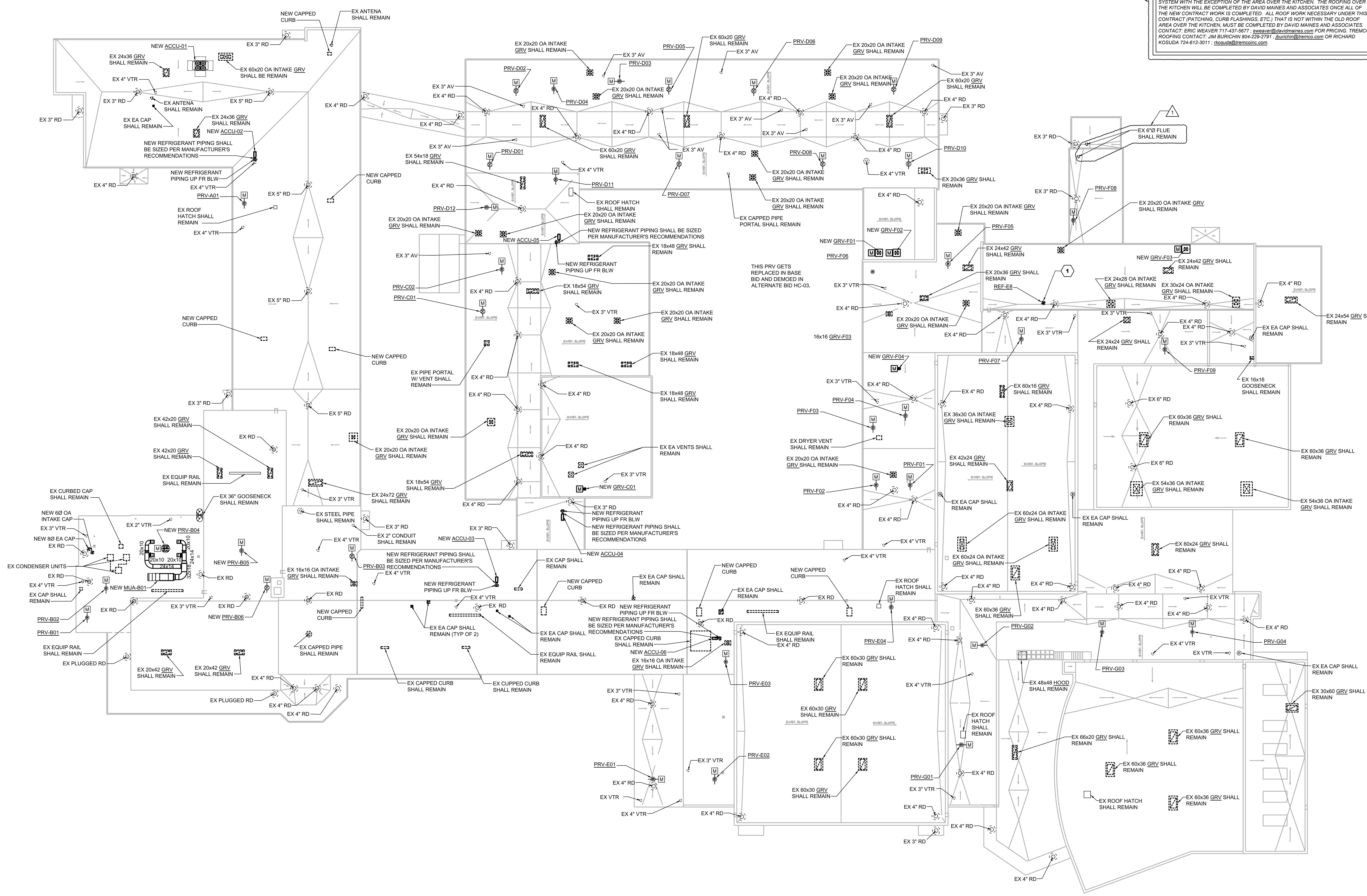
JMcMunn

KEYNOTES THIS DRAWING

1. UNDER BASE BID, EX REF-E8 AND ASSOCIATED DUCTWORK SHALL REMAIN. UNDER ALTERNATE BID HC-04, EX REF-E8 AND ASSOCIATED DUCTWORK SHALL BE DEMOED.

ROOF WARRANTY NOTE:
ANY CUTTING, PATCHING OR MODIFICATIONS TO EXISTING ROOFING SYSTEM MEMBRANE SHALL MATCH EXISTING AND BE DONE BY THE MANUFACTURER APPROVED ROOFING CONTRACTOR SO NOT TO VOID REMAINING ROOF WARRANTY.

△1 GENERAL ROOF NOTE:
THE SCHOOL DISTRICT CONTRACTED WITH DAVID MAINES AND ASSOCIATES THIS PAST YEAR AND THE ENTIRE ROOF WAS REPLACED AND RESTORED WITH A TREMCO ROOF SYSTEM WITH THE EXCEPTION OF THE AREA OVER THE KITCHEN. THE ROOFING OVER THE KITCHEN WILL BE COMPLETED BY DAVID MAINES AND ASSOCIATES ONCE ALL OF THE NEW CONTRACT WORK IS COMPLETED. ALL ROOF WORK NECESSARY UNDER THIS CONTRACT (PATCHING, CURB FLASHINGS, ETC.) THAT IS NOT WITHIN THE OLD ROOF AREA OVER THE KITCHEN, MUST BE COMPLETED BY DAVID MAINES AND ASSOCIATES. CONTACT: ERIC WEAVER 717-437-5677 ; eweaver@davidmaines.com FOR PRICING. TREMCO ROOFING CONTACT: JIM BURICHIN 804-229-2791 ; jburichin@tremco.com OR RICHARD KOSUDA 724-612-3011 ; rkosuda@tremcoinc.com.



1 ROOF PLAN - MECHANICAL NEW WORK

Scale: 1" = 20'-0"

FIRST FLOOR ELEVATION 1252'-0"

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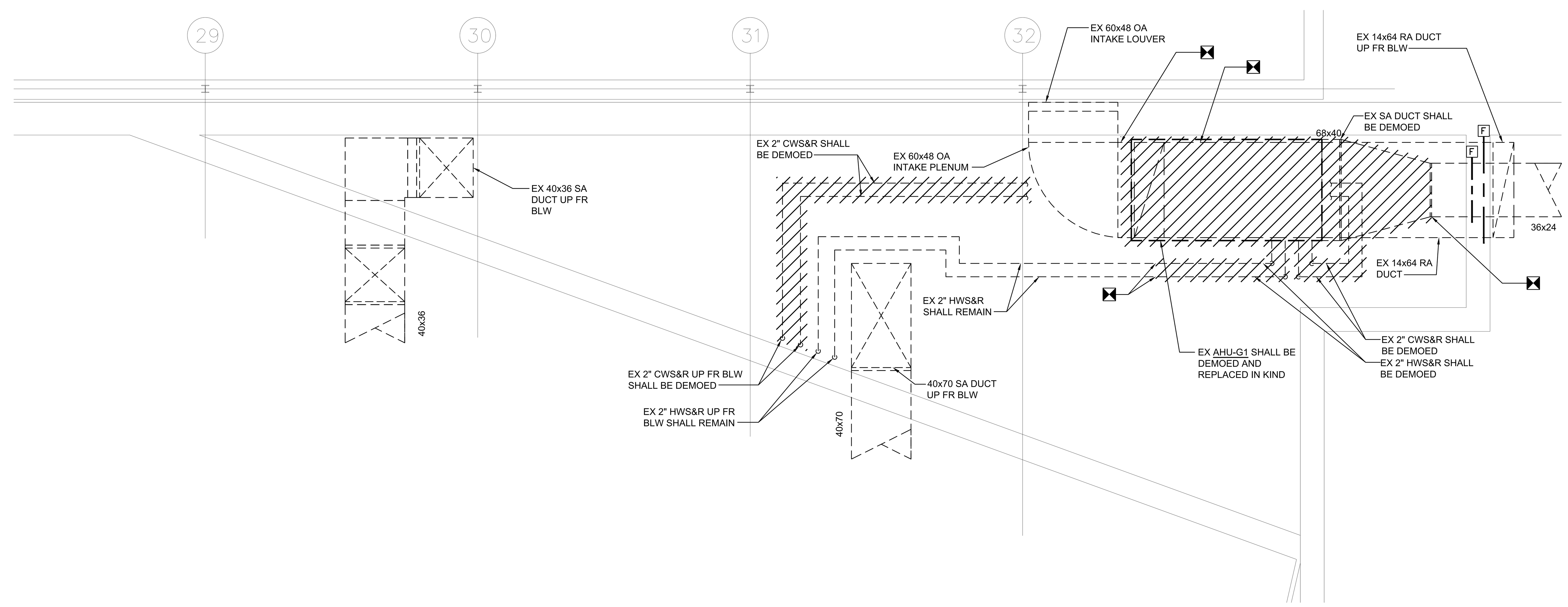
MECHANICAL ROOF PLAN - NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

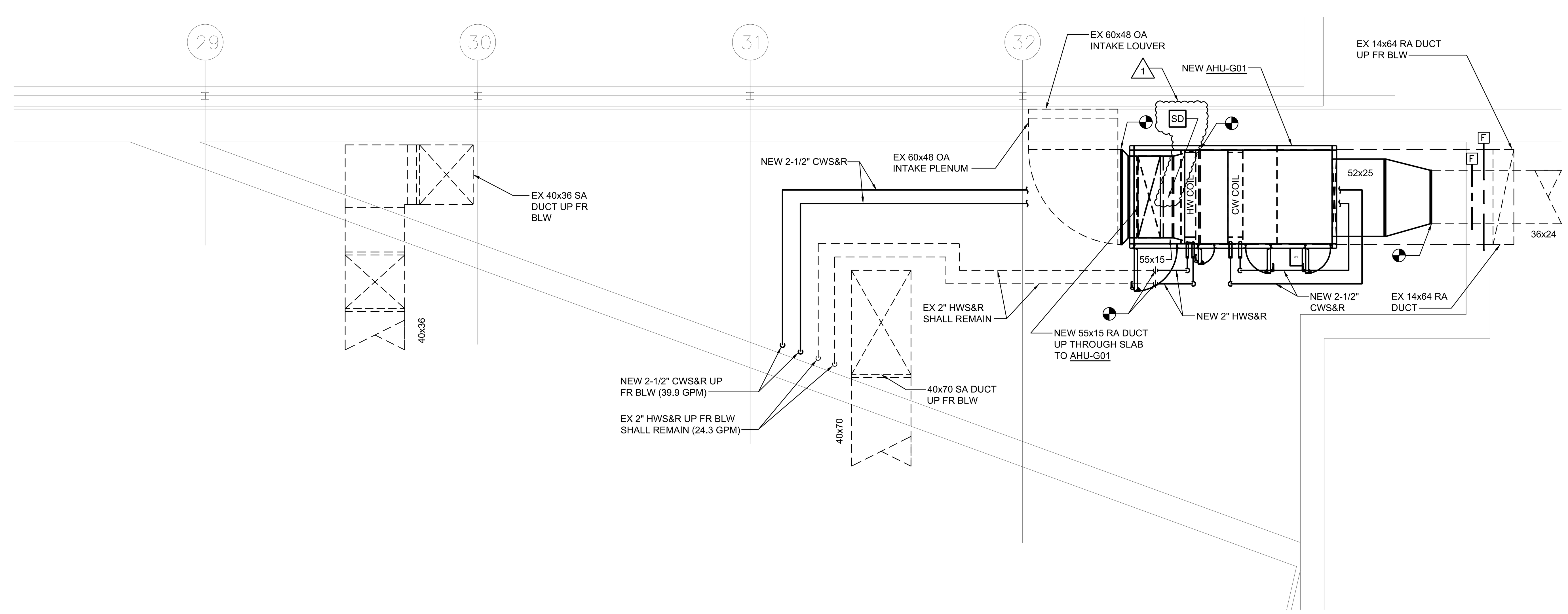
M301



1 MECHANICAL ROOM LOFT - DECK 3 - AHU-G1 DEMOLITION

Scale: 1/4" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



2 MECHANICAL ROOM LOFT - DECK 3 - AHU-G01 NEW WORK

Scale: 1/4" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

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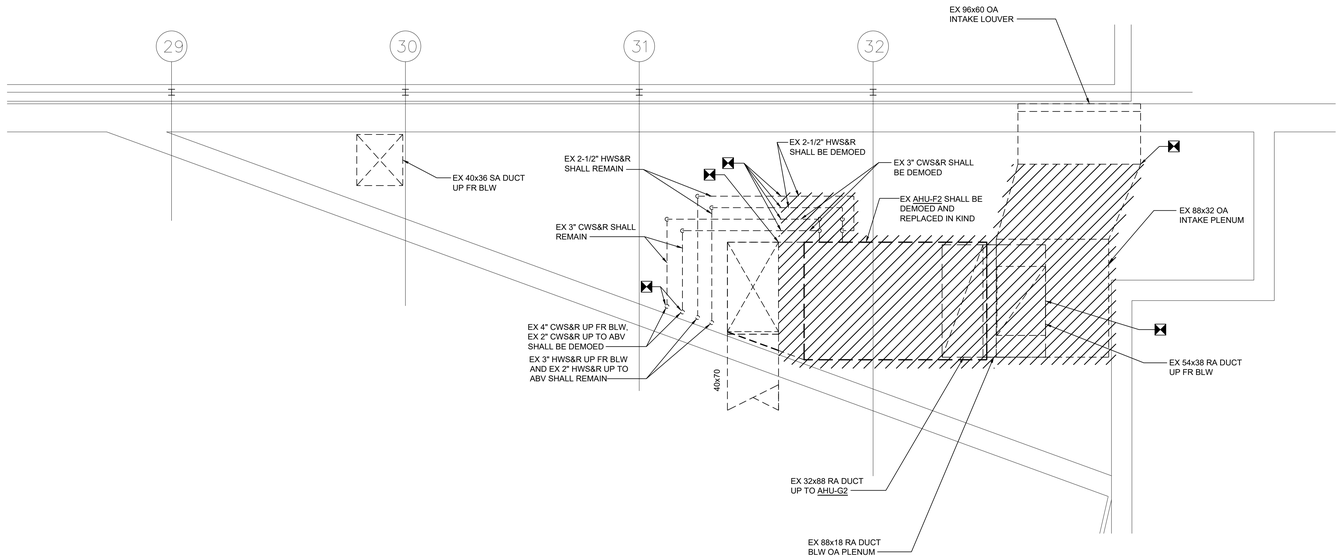
HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL ENLARGED PLANS

Proj No. 23-S43-01
Issue Date 02/19/2024

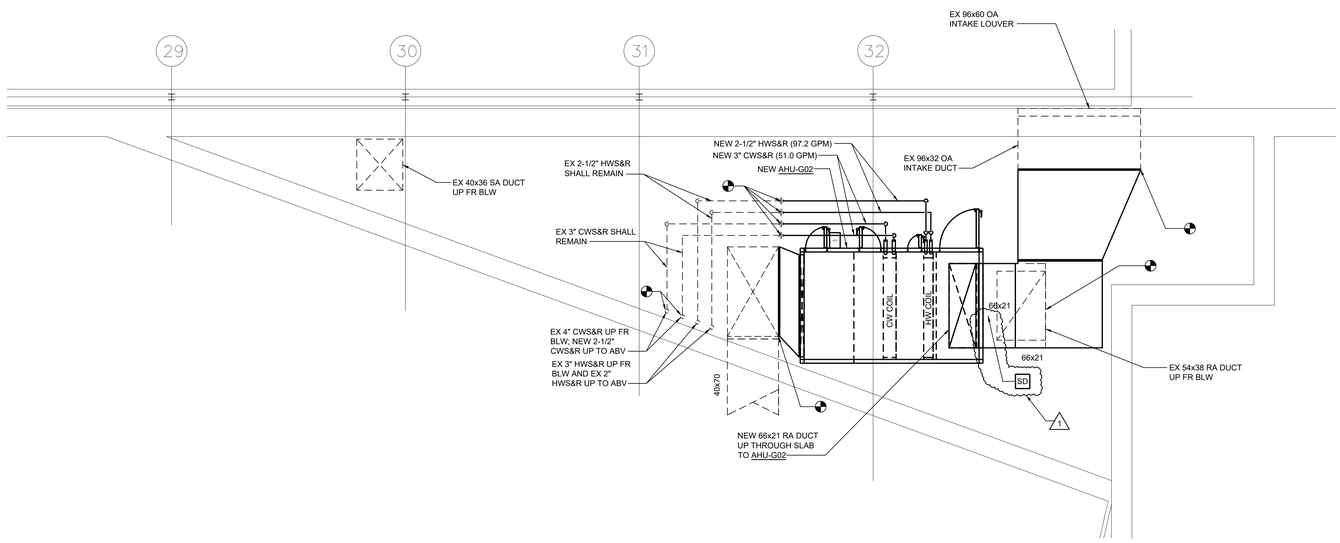
M401



1 MECHANICAL ROOM LOFT - DECK 2 - AHU-G2 DEMOLITION

Scale: 1/4" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"



2 MECHANICAL ROOM LOFT - DECK 2 - AHU-G02 NEW WORK

Scale: 1/4" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

DRAW COLLECTIVE
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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JOHN E. WEILAND
PE074381

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www.hflenz.com

REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL ENLARGED PLANS

Proj No. 23-543-01
Issue Date 02/19/2024

M402

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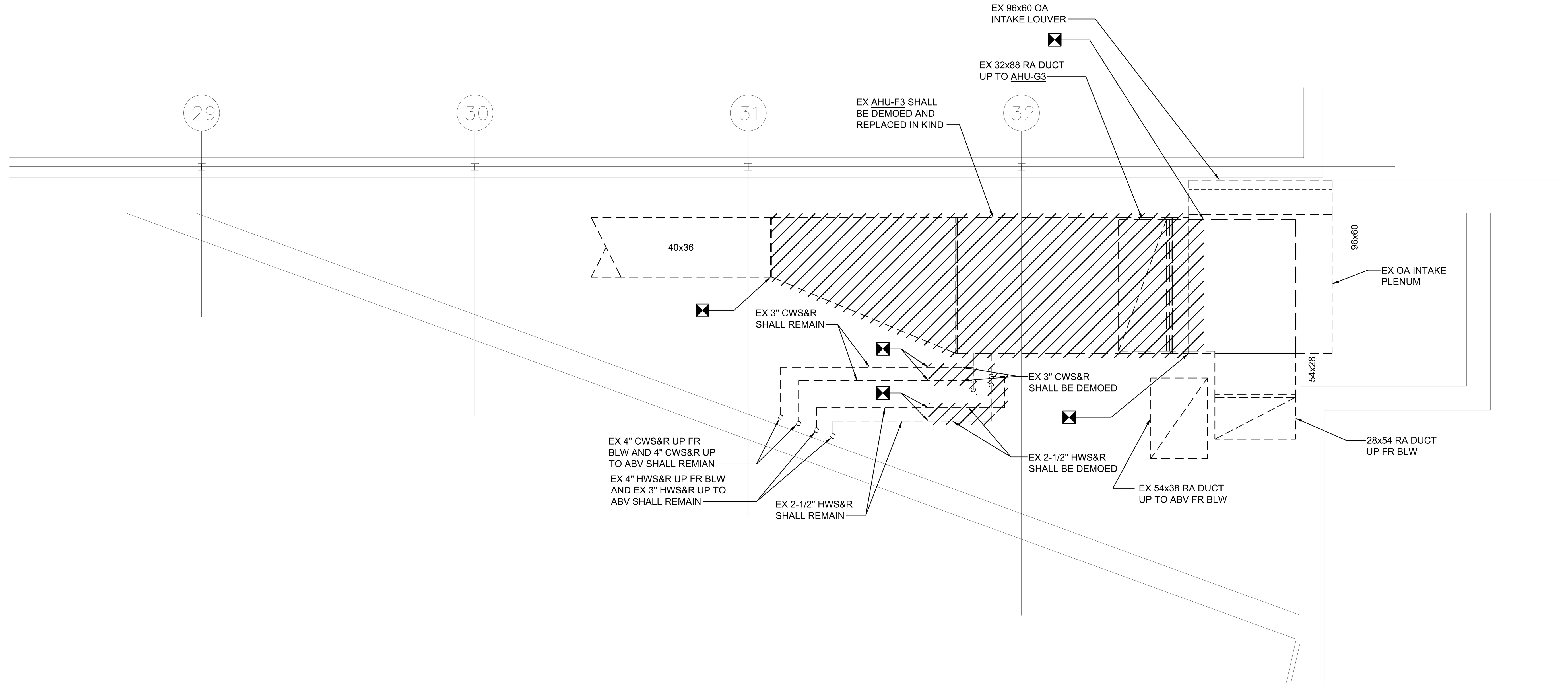
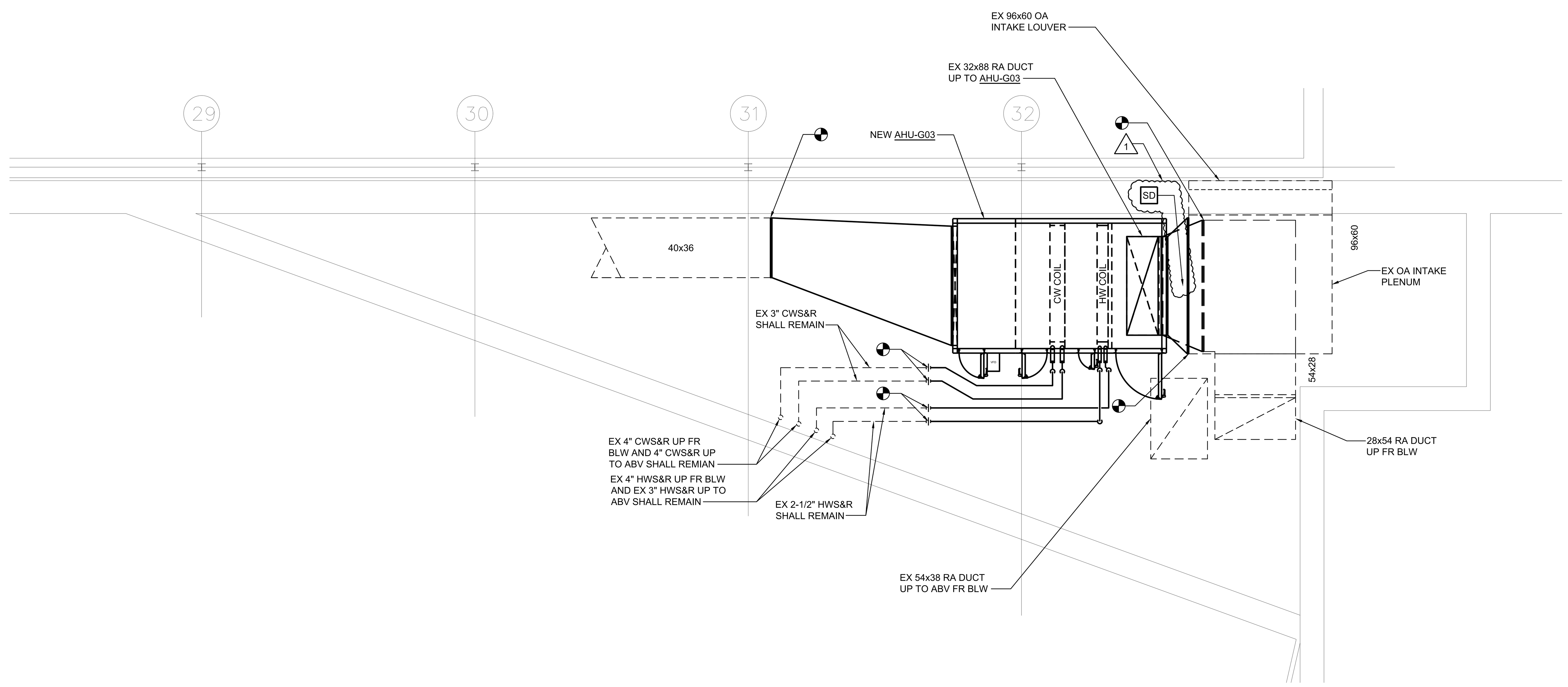
Feb 28, 2024 - 4:10pm \\hflco.local\mainshare\Projects\2023\230000\230027x01\BIM\MEP\CAD\Mechanical\Quarter Scale Drawings\M027-MFP-05.dwg
JMMunn



1 **MECHANICAL ROOM LOFT - DECK 1 - AHU-G3 DEMOLITION**

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"



1 **MECHANICAL ROOM LOFT - DECK 1 - AHU-G03 NEW WORK**

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"

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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL ENLARGED PLANS

Proj No. 23-S43-01
Issue Date 02/19/2024

M403

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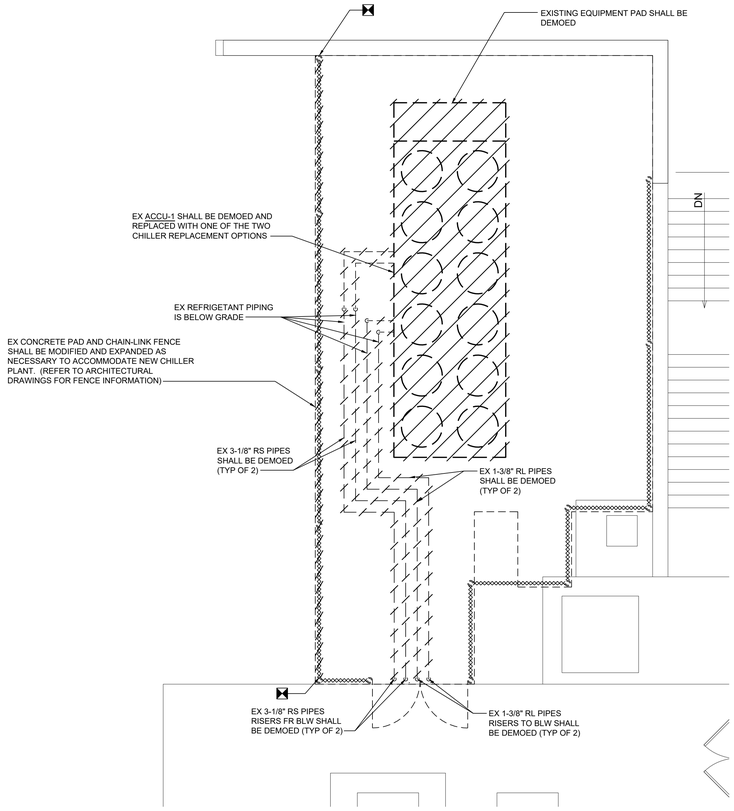
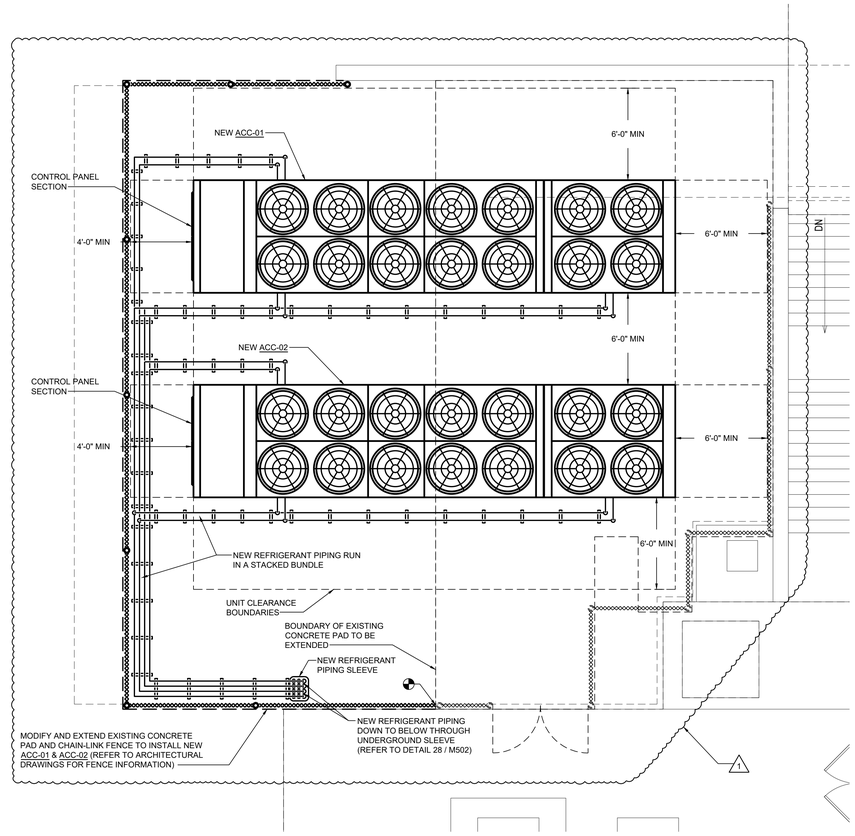


1 MECHANICAL CHILLER PAD - DEMOLITION

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"



1 MECHANICAL CHILLER PAD - NEW WORK

Scale: 1/4" = 1'-0" FIRST FLOOR ELEVATION 1252'-0"

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REVISIONS
1 02/28/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL ENLARGED PLANS

Proj No. 23-S43-01
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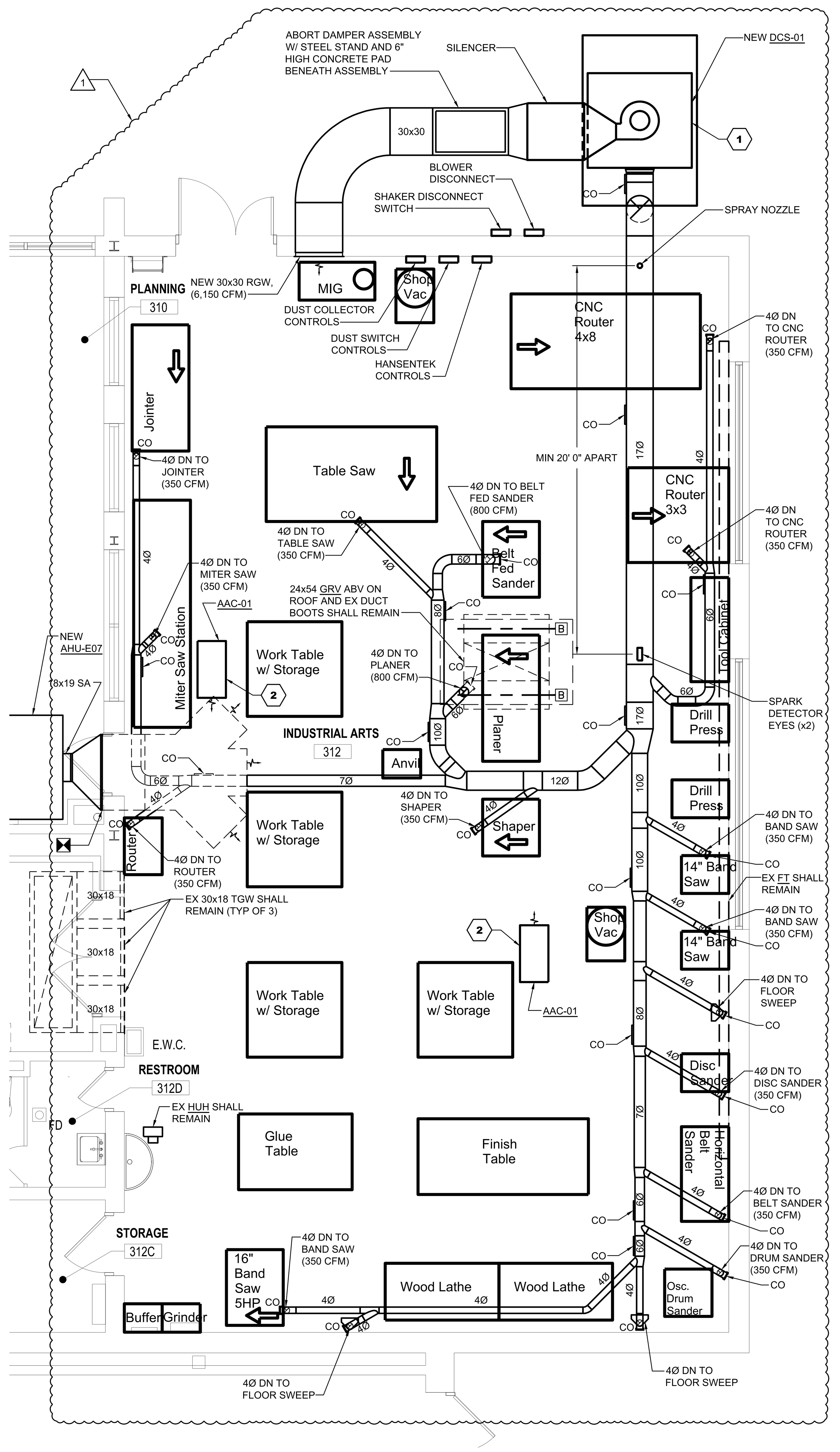
M404



1 INDUSTRIAL ARTS CLASSROOM - MECHANICAL NEW WORK

Scale: 1/4" = 1'-0"

FIRST FLOOR ELEVATION 1252'-0"

KEYNOTES THIS DRAWING

1. DCS-01 RECIRCULATING DUST COLLECTOR 24x36x36 LG SUPPLY SILENCER, BLOWER MOTOR 20HP, 3/60/480V TEFC, 3,450 RPM, SHAKER MOTOR 1/2HP, 3/60/480V TEFC, 850 RPM, BLOWER: NON-SPARKING AMCA "C", AUTOMATIC SHAKER, MULTI-POCKET FILTER MODULES, 8-OUNCE COTTON SATEEN FABRIC, 6,150 CFM @ 12.0 EXT SP, COMPLETE W/ CONTROL PANEL, VFD FOR BLOWER MOTOR, STARTER FOR SHAKER MOTOR, ETC. BASIS OF DESIGN STERNVENT MODEL DKPL72020 (W/ DUSTSWITCH AND SPARK DETECTOR)

2. AAC-01 AMBIENT AIR CLEANER (HANG FROM CEILING PER MANUFACTURER'S RECOMMENDATIONS), 2,500 CFM NOMINAL AIRFLOW, 0.75 HP, 1/60/115V, BASIS OF DESIGN: AIRFLOW SYSTEMS INC. MODEL F70R

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOHN M WEILAND ENGINEER No. PE074367

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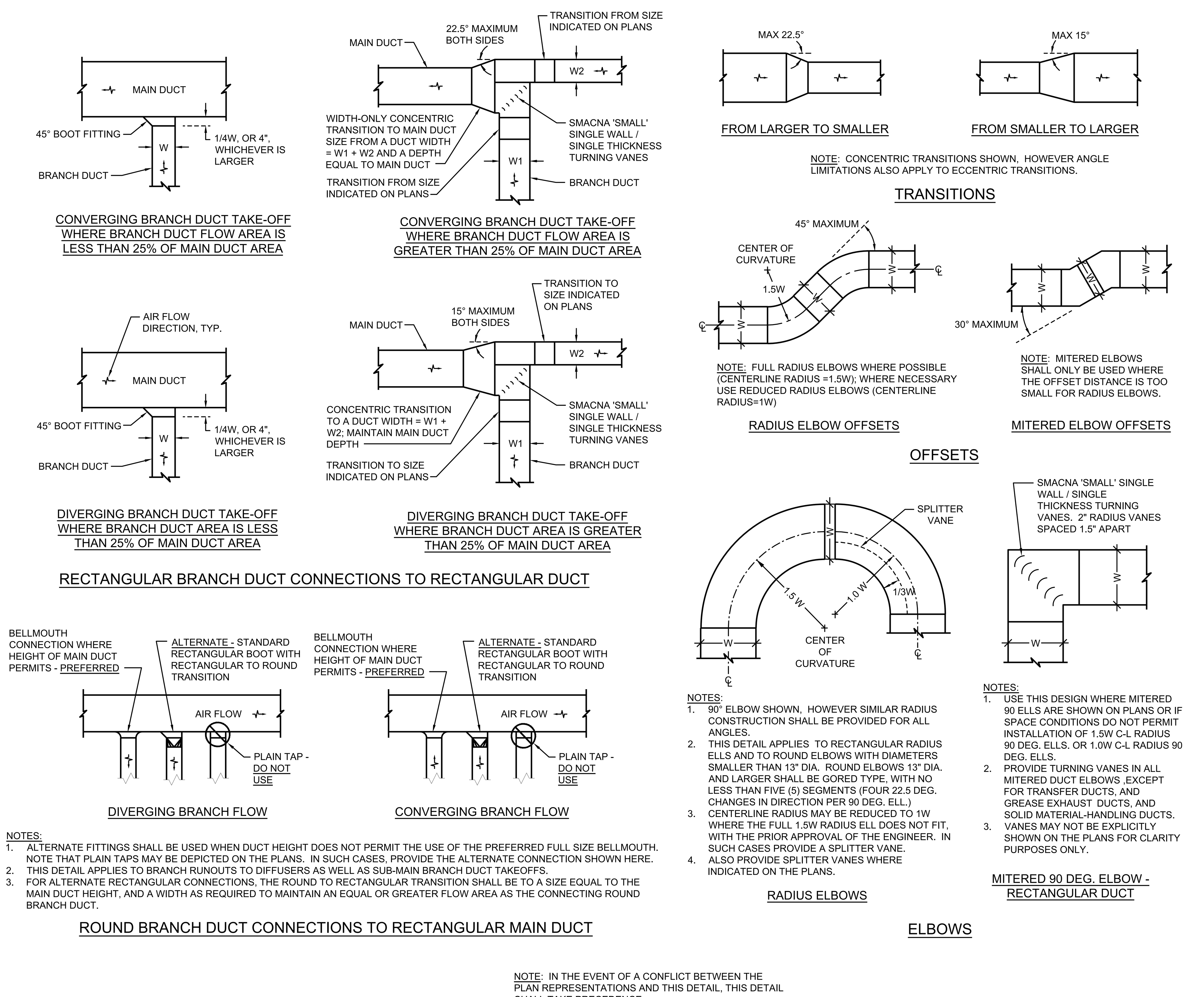
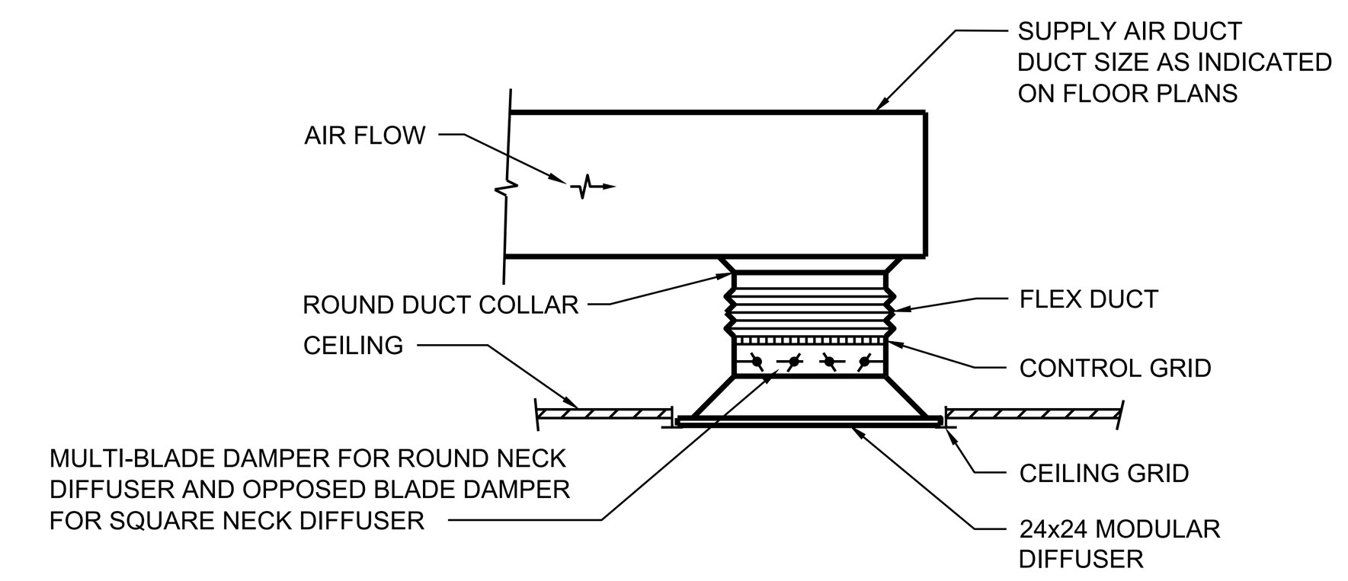
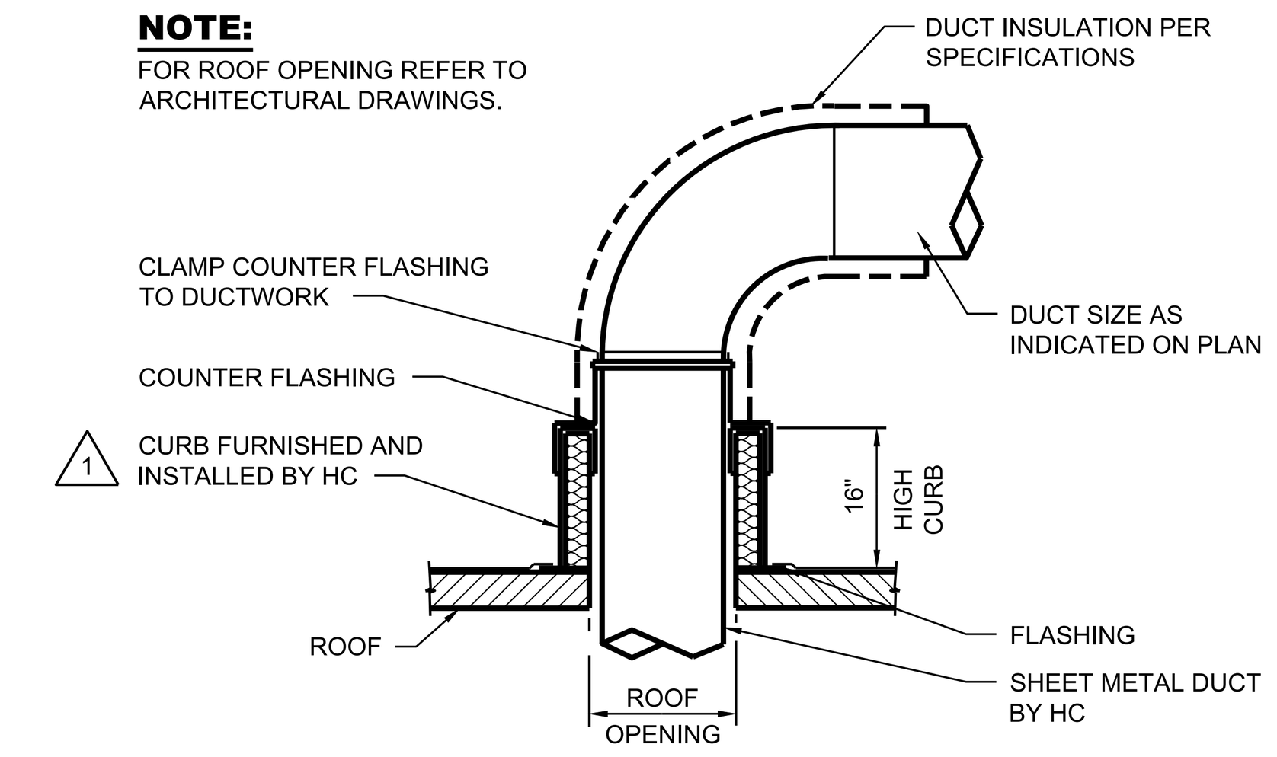

MAIN DUCT
45° BOOT FITTING
W
1/4W, OR 4", WHICHEVER IS LARGER
BRANCH DUCT
CONVERGING BRANCH DUCT TAKE-OFF WHERE BRANCH DUCT FLOW AREA IS LESS THAN 25% OF MAIN DUCT AREA
22.5° MAXIMUM BOTH SIDES
TRANSITION FROM SIZE INDICATED ON PLANS
WIDTH-ONLY CONCENTRIC TRANSITION TO MAIN DUCT SIZE FROM A DUCT WIDTH = W1 + W2 AND A DEPTH EQUAL TO MAIN DUCT
TRANSITION FROM SIZE INDICATED ON PLANS
SMACNA 'SMALL' SINGLE WALL / SINGLE THICKNESS TURNING VANES
CONVERGING BRANCH DUCT TAKE-OFF WHERE BRANCH DUCT FLOW AREA IS GREATER THAN 25% OF MAIN DUCT AREA
AIR FLOW DIRECTION, TYP.
DIVERGING BRANCH DUCT TAKE-OFF WHERE BRANCH DUCT AREA IS LESS THAN 25% OF MAIN DUCT AREA
15° MAXIMUM BOTH SIDES
TRANSITION TO SIZE INDICATED ON PLANS
CONCENTRIC TRANSITION TO A DUCT WIDTH = W1 + W2; MAINTAIN MAIN DUCT DEPTH
TRANSITION TO SIZE INDICATED ON PLANS
DIVERGING BRANCH DUCT TAKE-OFF WHERE BRANCH DUCT AREA IS GREATER THAN 25% OF MAIN DUCT AREA
RECTANGULAR BRANCH DUCT CONNECTIONS TO RECTANGULAR DUCT
BELLMOUTH CONNECTION WHERE HEIGHT OF MAIN DUCT PERMITS - PREFERRED
ALTERNATE - STANDARD RECTANGULAR BOOT WITH RECTANGULAR TO ROUND TRANSITION
AIR FLOW
PLAIN TAP - DO NOT USE
DIVERGING BRANCH FLOW
CONVERGING BRANCH FLOW
NOTES:
1. ALTERNATE FITTINGS SHALL BE USED WHEN DUCT HEIGHT DOES NOT PERMIT THE USE OF THE PREFERRED FULL SIZE BELLMOUTH. NOTE THAT PLAIN TAPS MAY BE DEPICTED ON THE PLANS. IN SUCH CASES, PROVIDE THE ALTERNATE CONNECTION SHOWN HERE.
2. THIS DETAIL APPLIES TO BRANCH RUNOUTS TO DIFFUSERS AS WELL AS SUB-MAIN BRANCH DUCT TAKEOFFS.
3. FOR ALTERNATE RECTANGULAR CONNECTIONS, THE ROUND TO RECTANGULAR TRANSITION SHALL BE TO A SIZE EQUAL TO THE MAIN DUCT HEIGHT, AND A WIDTH AS REQUIRED TO MAINTAIN AN EQUAL OR GREATER FLOW AREA AS THE CONNECTING ROUND BRANCH DUCT.
ROUND BRANCH DUCT CONNECTIONS TO RECTANGULAR MAIN DUCT
MAX 22.5°
MAX 15°
FROM LARGER TO SMALLER
FROM SMALLER TO LARGER
NOTE: CONCENTRIC TRANSITIONS SHOWN, HOWEVER ANGLE LIMITATIONS ALSO APPLY TO ECCENTRIC TRANSITIONS.
TRANSITIONS
45° MAXIMUM
CENTER OF CURVATURE
1.5W
30° MAXIMUM
NOTE: FULL RADIUS ELBOWS WHERE POSSIBLE (CENTERLINE RADIUS =1.5W); WHERE NECESSARY USE REDUCED RADIUS ELBOWS (CENTERLINE RADIUS=1W)
NOTE: MITERED ELBOWS SHALL ONLY BE USED WHERE THE OFFSET DISTANCE IS TOO SMALL FOR RADIUS ELBOWS.
RADIUS ELBOW OFFSETS
MITERED ELBOW OFFSETS
OFFSETS
SPLITTER VANE
1.5W
1.0W
1/3W
CENTER OF CURVATURE
SMACNA 'SMALL' SINGLE WALL / SINGLE THICKNESS TURNING VANES. 2" RADIUS VANES SPACED 1.5" APART
NOTES:
1. 90° ELBOW SHOWN, HOWEVER SIMILAR RADIUS CONSTRUCTION SHALL BE PROVIDED FOR ALL ANGLES.
2. THIS DETAIL APPLIES TO RECTANGULAR RADIUS ELLS AND TO ROUND ELBOWS WITH DIAMETERS SMALLER THAN 13" DIA. ROUND ELBOWS 13" DIA. AND LARGER SHALL BE GORED TYPE, WITH NO LESS THAN FIVE (5) SEGMENTS (FOUR 22.5 DEG. CHANGES IN DIRECTION PER 90 DEG. ELL.)
3. CENTERLINE RADIUS MAY BE REDUCED TO 1W WHERE THE FULL 1.5W RADIUS ELL DOES NOT FIT, WITH THE PRIOR APPROVAL OF THE ENGINEER. IN SUCH CASES PROVIDE A SPLITTER VANE.
4. ALSO PROVIDE SPLITTER VANES WHERE INDICATED ON THE PLANS.
RADIUS ELBOWS
NOTES:
1. USE THIS DESIGN WHERE MITERED 90 ELLS ARE SHOWN ON PLANS OR IF SPACE CONDITIONS DO NOT PERMIT INSTALLATION OF 1.5W C-L RADIUS 90 DEG. ELLS. OR 1.0W C-L RADIUS 90 DEG. ELLS.
2. PROVIDE TURNING VANES IN ALL MITERED DUCT ELBOWS ,EXCEPT FOR TRANSFER DUCTS, AND GREASE EXHAUST DUCTS, AND SOLID MATERIAL-HANDLING DUCTS.
3. VANES MAY NOT BE EXPLICITLY SHOWN ON THE PLANS FOR CLARITY PURPOSES ONLY.
MITERED 90 DEG. ELBOW - RECTANGULAR DUCT
ELBOWS
NOTE: IN THE EVENT OF A CONFLICT BETWEEN THE PLAN REPRESENTATIONS AND THIS DETAIL, THIS DETAIL SHALL TAKE PRECEDENCE.

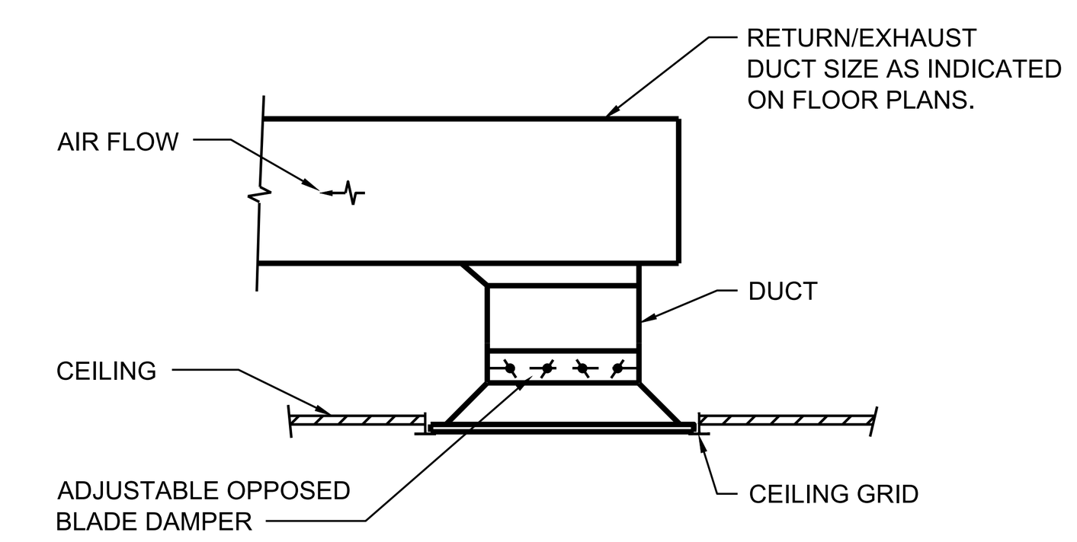
1 **DUCTWORK FITTING DETAILS**
NOT TO SCALE


AIR FLOW
SUPPLY AIR DUCT DUCT SIZE AS INDICATED ON FLOOR PLANS
ROUND DUCT COLLAR
CEILING
FLEX DUCT
CONTROL GRID
CEILING GRID
MULTI-BLADE DAMPER FOR ROUND NECK DIFFUSER AND OPPOSED BLADE DAMPER FOR SQUARE NECK DIFFUSER
24x24 MODULAR DIFFUSER

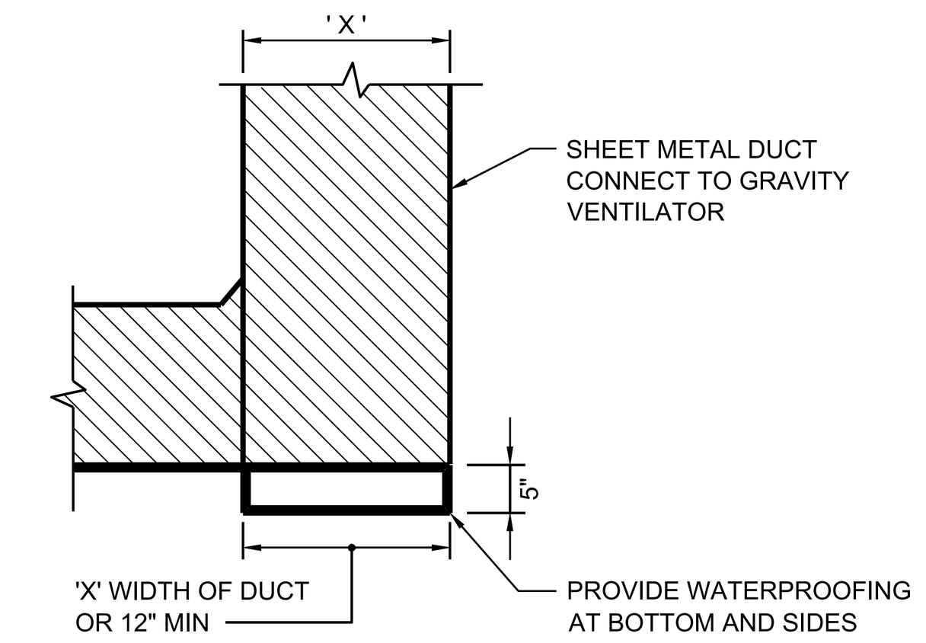
2 **SUPPLY AIR DIFFUSER SQUARE TYPICAL CONNECTION**
NOT TO SCALE


NOTE:
FOR ROOF OPENING REFER TO ARCHITECTURAL DRAWINGS.
DUCT INSULATION PER SPECIFICATIONS
CLAMP COUNTER FLASHING TO DUCTWORK
DUCT SIZE AS INDICATED ON PLAN
COUNTER FLASHING
CURB FURNISHED AND INSTALLED BY HC
1
16" HIGH CURB
ROOF
FLASHING
SHEET METAL DUCT BY HC
ROOF OPENING

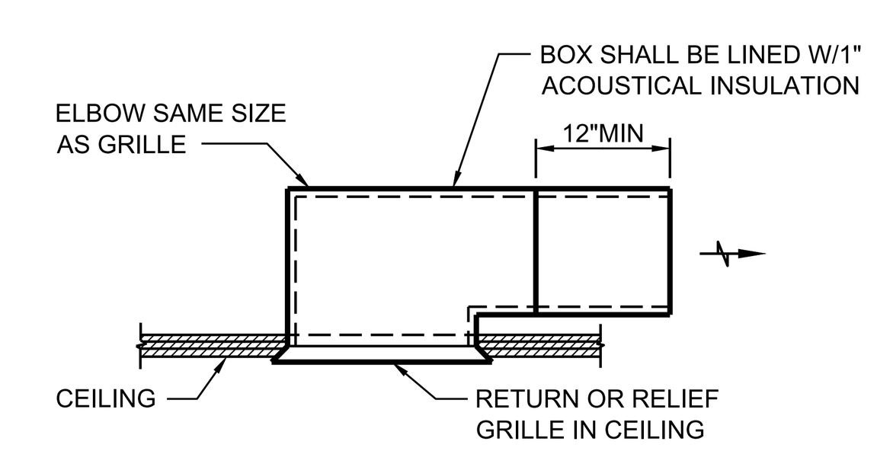
3 **DUCT THRU ROOF (RECTANGULAR)**
NOT TO SCALE



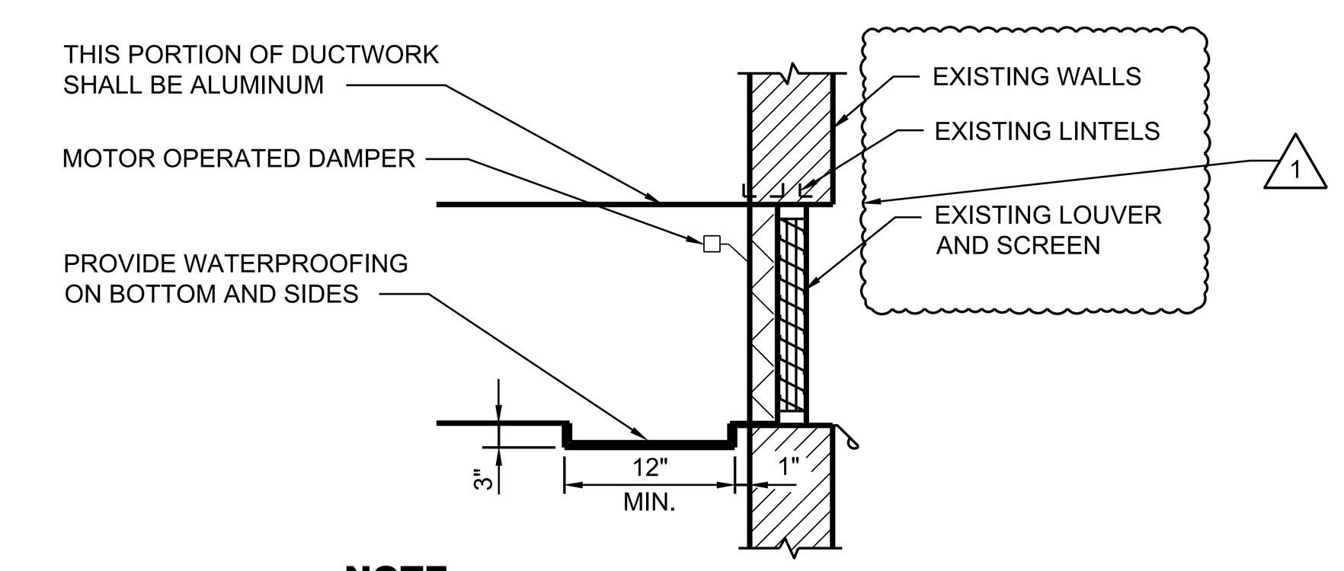
4 **RETURN/EXHAUST REGISTER TYPICAL CONNECTION**
NOT TO SCALE



5 **WATERTIGHT DEPRESSION DETAIL**
NOT TO SCALE

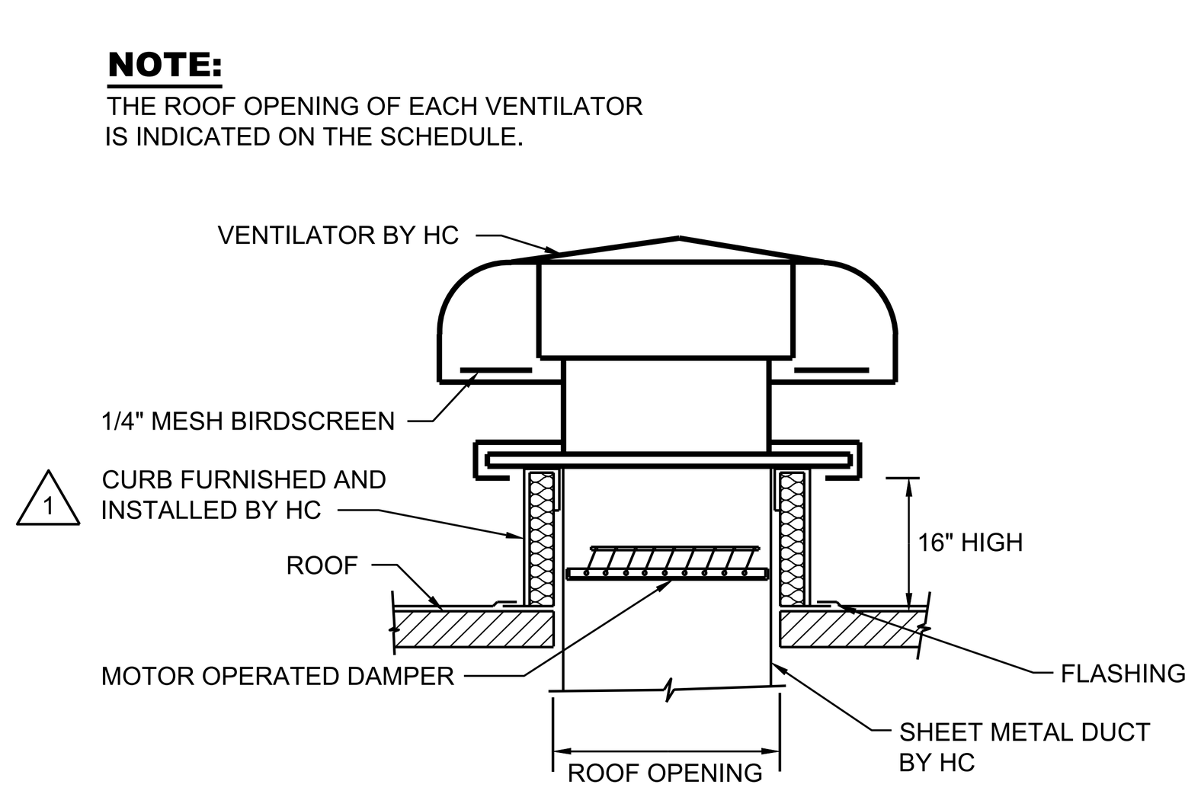


6 **RELIEF/TRANSFER AIR GRILLE BOX DETAIL**
NOT TO SCALE

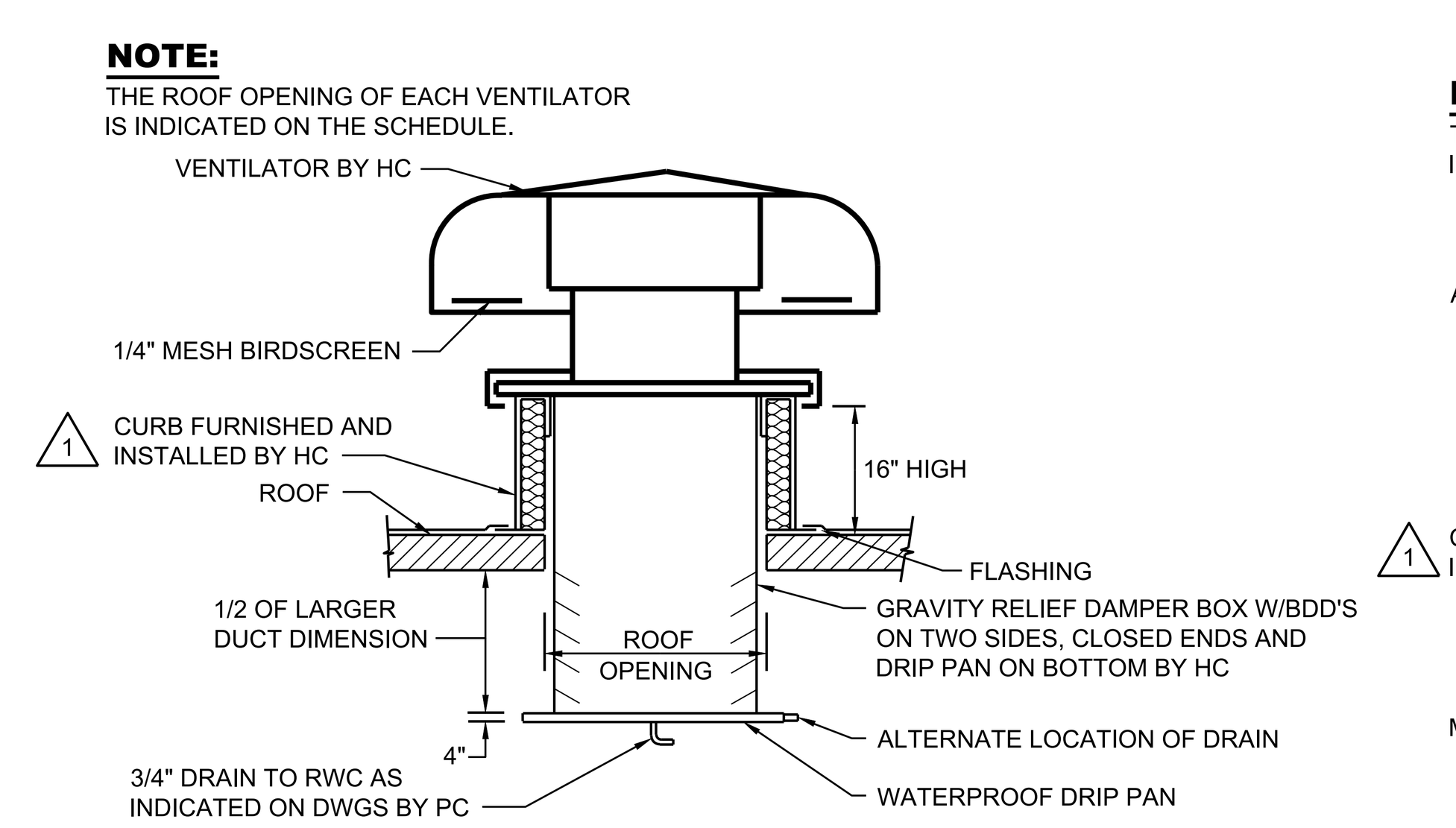


NOTE:
REFER TO ARCHITECTURAL DRAWINGS AND MANUFACTURER'S INSTRUCTIONS FOR MOUNTING DETAILS.

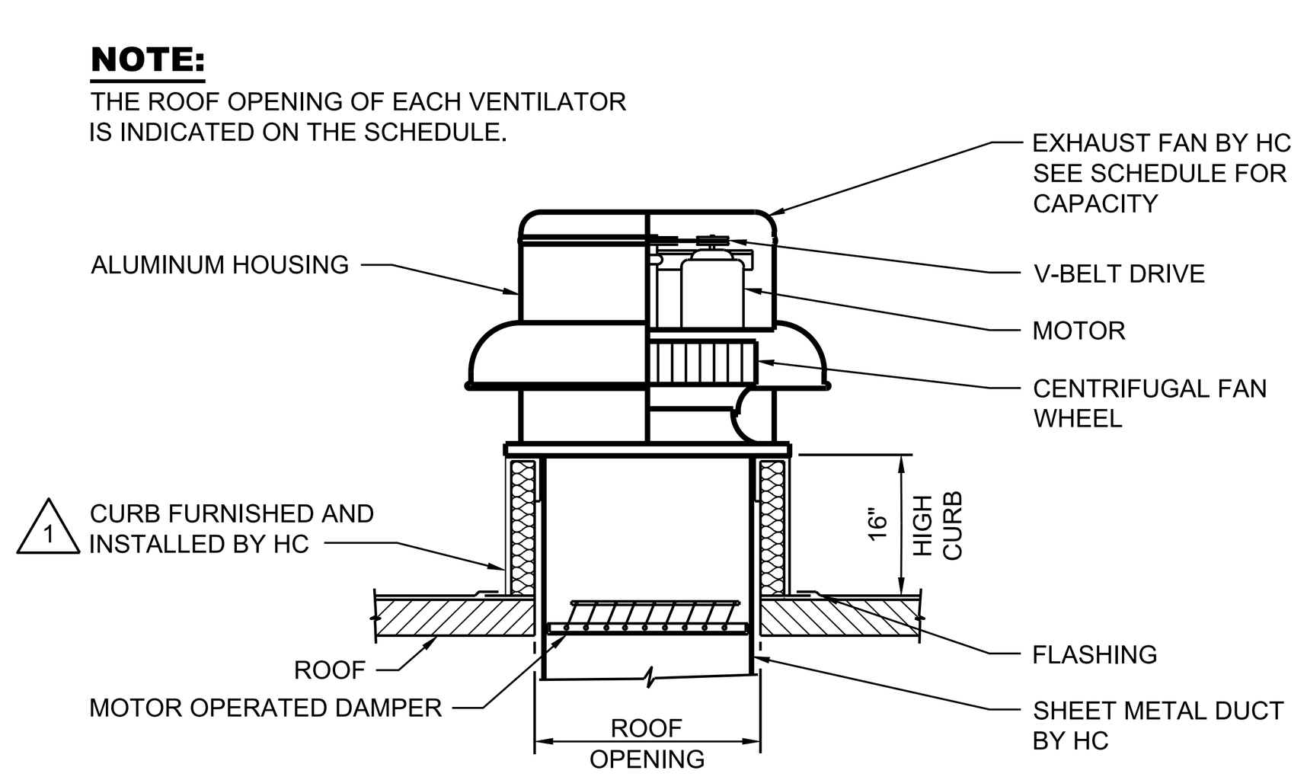
7 **WATERTIGHT INTAKE DUCT CONNECTION**
NOT TO SCALE



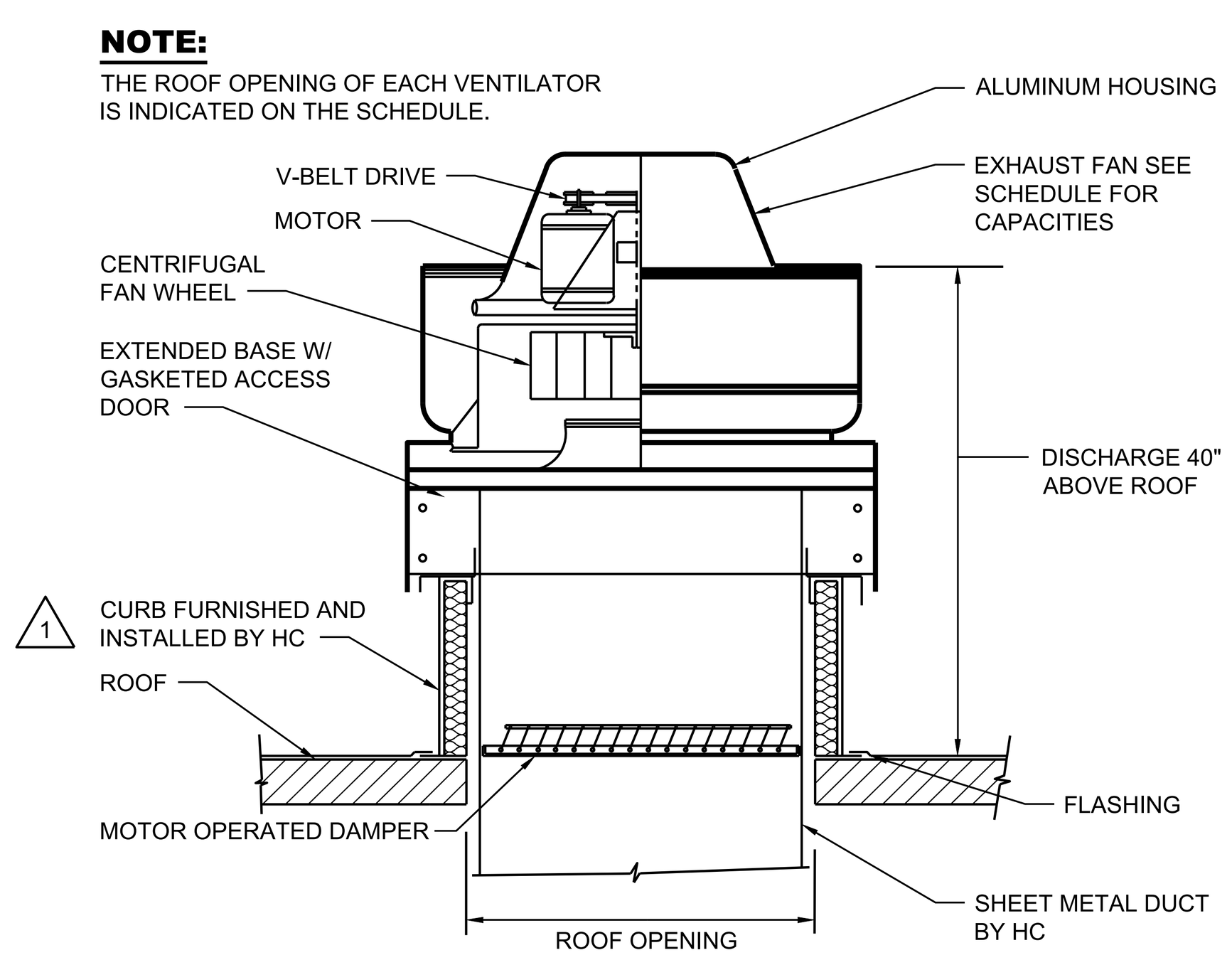
8 **TYPE B-1 GRAVITY ROOF VENTILATOR**
NOT TO SCALE


NOTE:
THE ROOF OPENING OF EACH VENTILATOR IS INDICATED ON THE SCHEDULE.
VENTILATOR BY HC
1/4" MESH BIRDSCREEN
CURB FURNISHED AND INSTALLED BY HC
1
ROOF
16" HIGH
FLASHING
1/2 OF LARGER DUCT DIMENSION
ROOF OPENING
GRAVITY RELIEF DAMPER BOX W/BDD'S ON TWO SIDES, CLOSED ENDS AND DRIP PAN ON BOTTOM BY HC
4"
ALTERNATE LOCATION OF DRAIN
3/4" DRAIN TO RWC AS INDICATED ON DWGS BY PC
WATERPROOF DRIP PAN

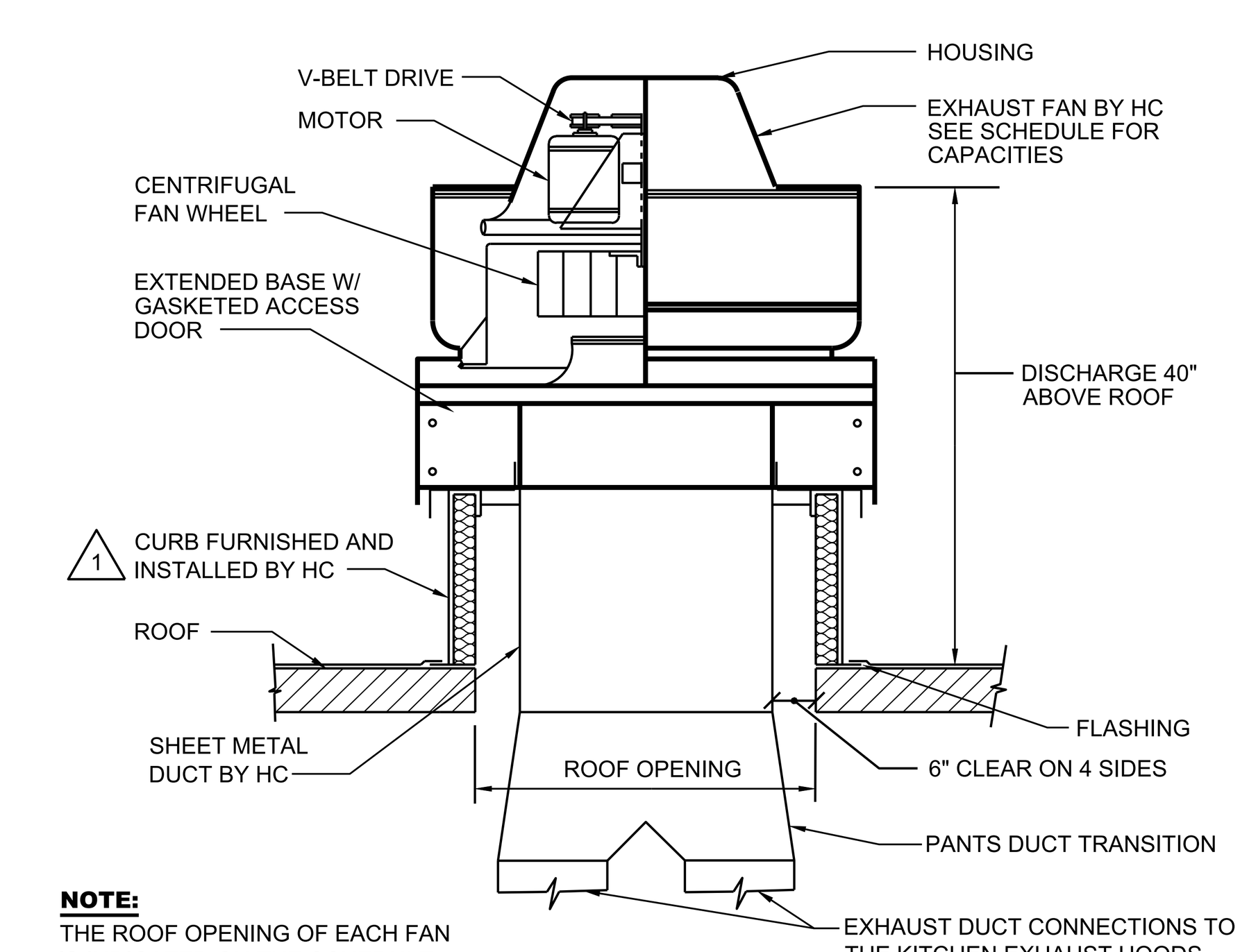
9 **TYPE B-2 GRAVITY ROOF VENTILATOR**
NOT TO SCALE


NOTE:
THE ROOF OPENING OF EACH VENTILATOR IS INDICATED ON THE SCHEDULE.
ALUMINUM HOUSING
EXHAUST FAN BY HC SEE SCHEDULE FOR CAPACITY
V-BELT DRIVE
MOTOR
CENTRIFUGAL FAN WHEEL
CURB FURNISHED AND INSTALLED BY HC
1
18" HIGH CURB
ROOF
MOTOR OPERATED DAMPER
FLASHING
SHEET METAL DUCT BY HC
ROOF OPENING

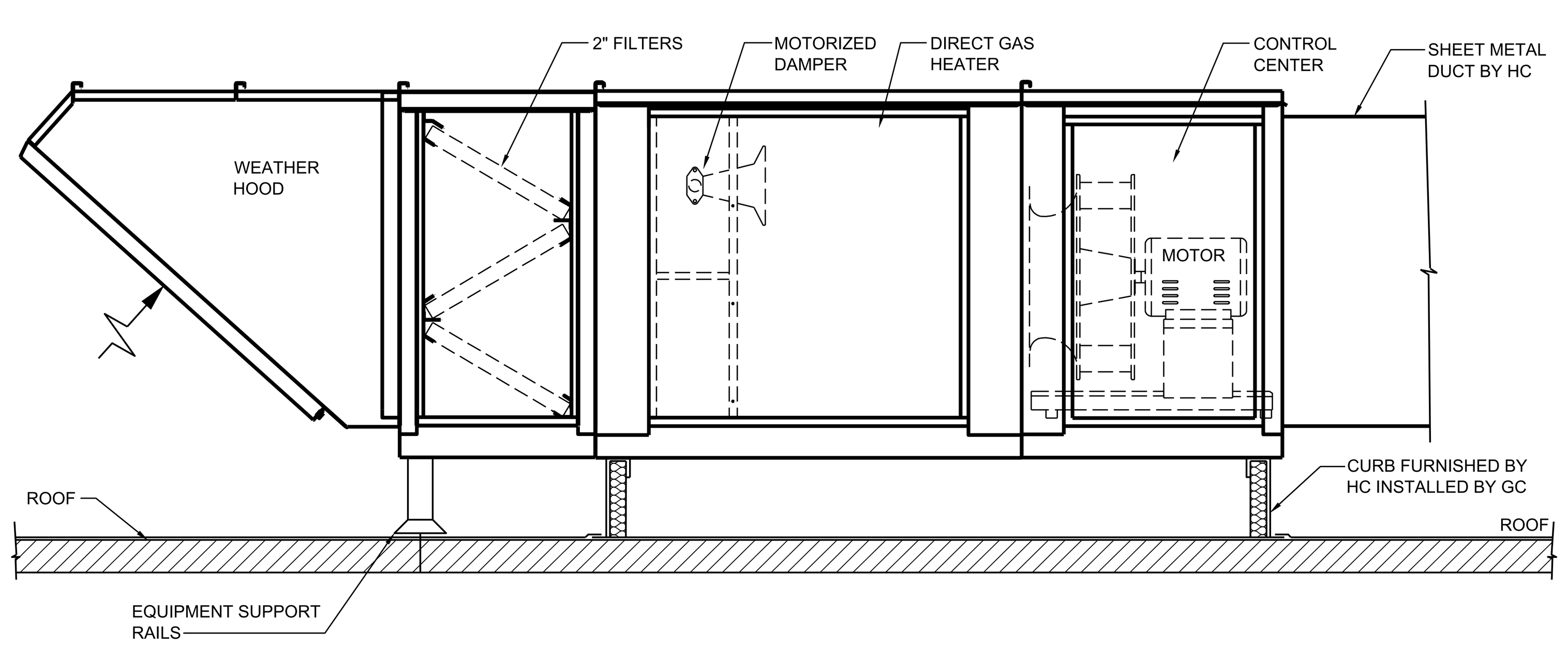
10 **TYPE - RE POWER ROOF VENTILATOR**
NOT TO SCALE


NOTE:
THE ROOF OPENING OF EACH VENTILATOR IS INDICATED ON THE SCHEDULE.
ALUMINUM HOUSING
V-BELT DRIVE
MOTOR
EXHAUST FAN SEE SCHEDULE FOR CAPACITIES
CENTRIFUGAL FAN WHEEL
EXTENDED BASE W/ GASKETED ACCESS DOOR
DISCHARGE 40" ABOVE ROOF
CURB FURNISHED AND INSTALLED BY HC
1
ROOF
MOTOR OPERATED DAMPER
FLASHING
ROOF OPENING
SHEET METAL DUCT BY HC

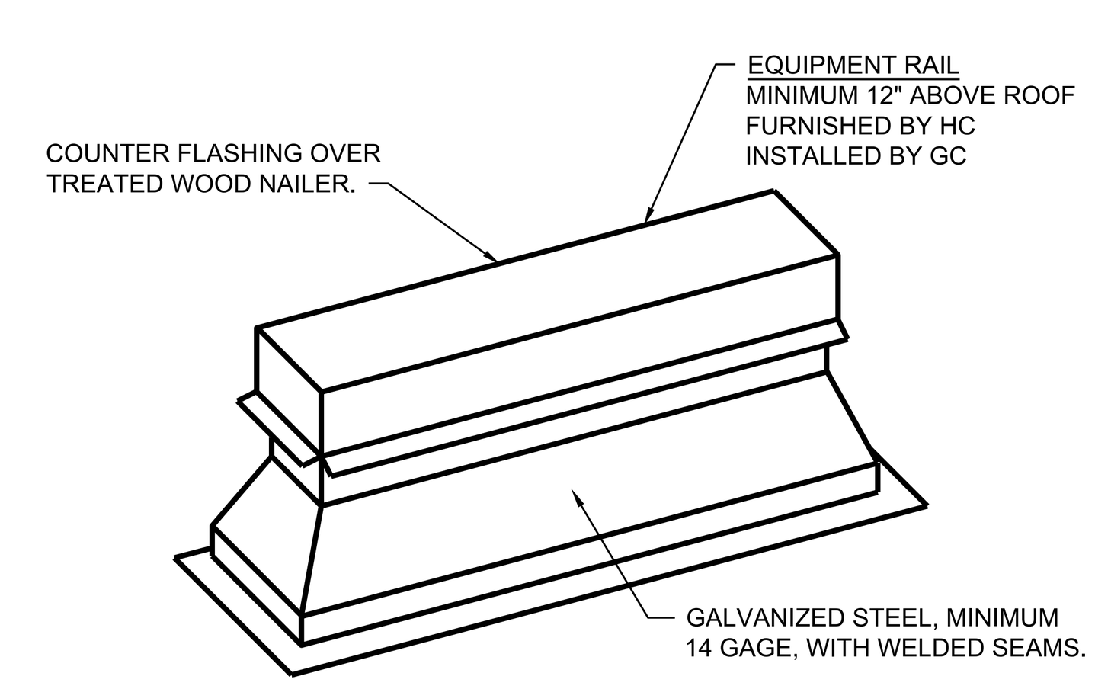
11 **TYPE - HE EXHAUST FAN**
NOT TO SCALE


V-BELT DRIVE
MOTOR
HOUSING
EXHAUST FAN BY HC SEE SCHEDULE FOR CAPACITIES
CENTRIFUGAL FAN WHEEL
EXTENDED BASE W/ GASKETED ACCESS DOOR
DISCHARGE 40" ABOVE ROOF
CURB FURNISHED AND INSTALLED BY HC
1
ROOF
FLASHING
SHEET METAL DUCT BY HC
ROOF OPENING
6" CLEAR ON 4 SIDES
PANTS DUCT TRANSITION
NOTE:
THE ROOF OPENING OF EACH FAN IS INDICATED ON THE SCHEDULE.
EXHAUST DUCT CONNECTIONS TO THE KITCHEN EXHAUST HOODS

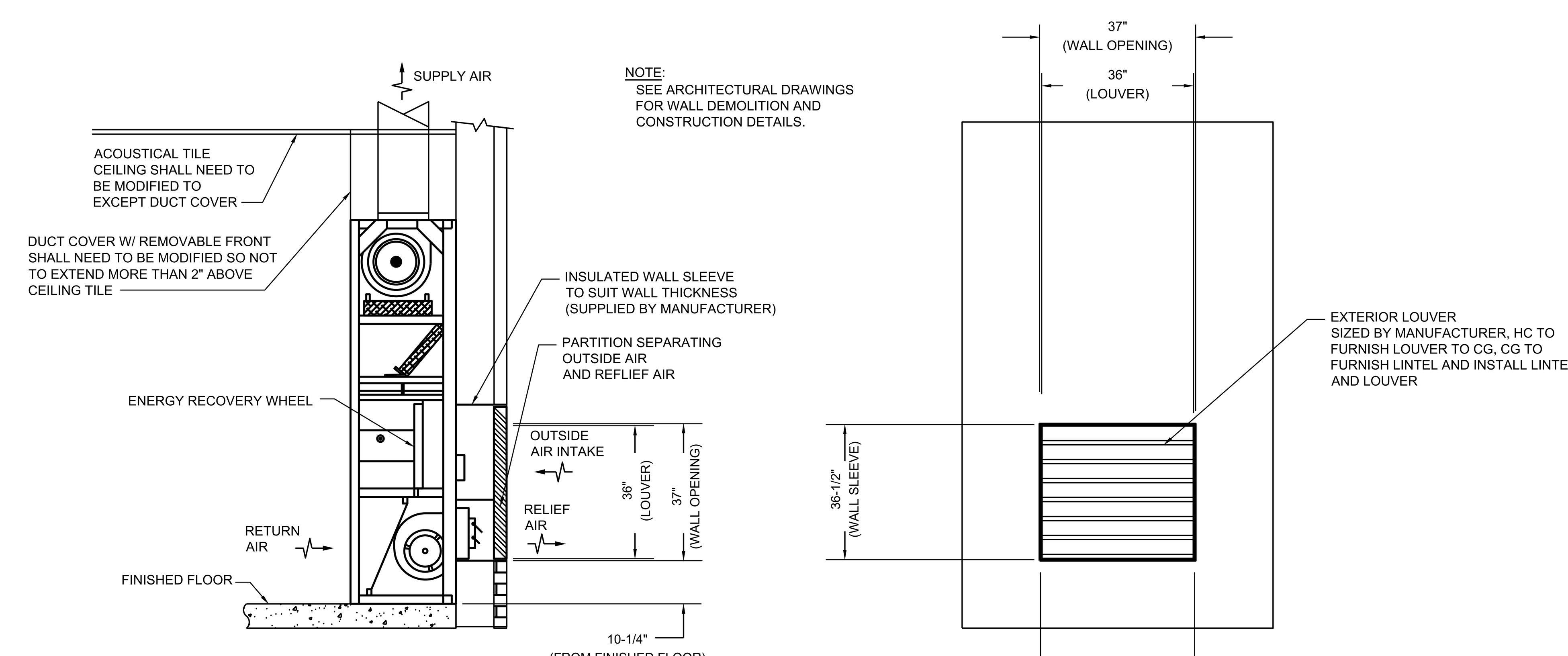
12 **TYPE KHE KITCHEN HOOD EXHAUST FAN - PRV-B04**
NOT TO SCALE



13 **MAKE-UP AIR UNIT (DIRECT GAS FIRED)**
NOT TO SCALE



14 **EQUIPMENT RAIL FOR ROOF MOUNTING**
NOT TO SCALE


SUPPLY AIR
NOTE:
SEE ARCHITECTURAL DRAWINGS FOR WALL DEMOLITION AND CONSTRUCTION DETAILS.
ACOUSTICAL TILE CEILING SHALL NEED TO BE MODIFIED TO EXCEPT DUCT COVER
DUCT COVER W/ REMOVABLE FRONT SHALL NEED TO BE MODIFIED SO NOT TO EXTEND MORE THAN 2" ABOVE CEILING TILE
INSULATED WALL SLEEVE TO SUIT WALL THICKNESS (SUPPLIED BY MANUFACTURER)
PARTITION SEPARATING OUTSIDE AIR AND RELIEF AIR
ENERGY RECOVERY WHEEL
OUTSIDE AIR INTAKE
RELIEF AIR
36" (LOUVER)
37" (WALL OPENING)
RETURN AIR
FINISHED FLOOR
10-1/4" (FROM FINISHED FLOOR)
37" (WALL OPENING)
36" (LOUVER)
36-1/2" (WALL SLEEVE)
36-1/2" (WALL SLEEVE)
EXTERIOR LOUVER SIZED BY MANUFACTURER, HC TO FURNISH LOUVER TO CG, CG TO FURNISH LINTEL AND INSTALL LINTEL AND LOUVER

15 **TYPICAL CLASSROOM (CAH) VENTING DETAIL FOR WALL WITHOUT WINDOW**
NOT TO SCALE

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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL DETAILS

Proj No. 23-S43-01
Issue Date 02/19/2024

M501

2/1/2023 6:54:50 AM
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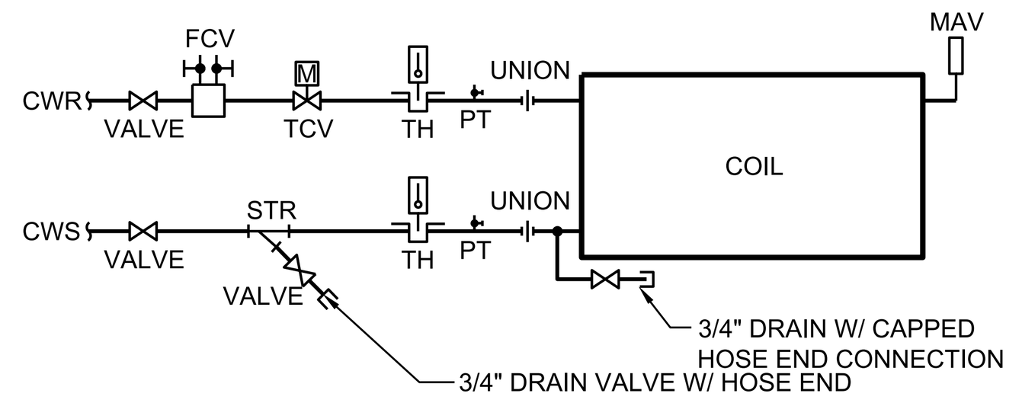
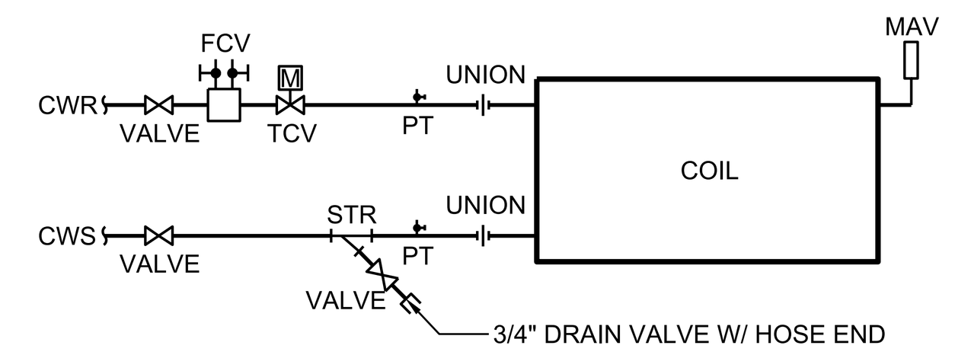
Feb. 28, 2024 -- 4:10pm

NOTES:
1. THE AHU COIL SHALL BE PIPED IN A MANNER IN WHICH ONLY THE UNIONS MUST BE DISCONNECTED TO PULL/SERVICE THE COIL
2. CONTROL VALVE SHALL BE PROVIDED WITH FLANGED ENDS OR SHALL BE PROVIDED WITH ADJACENT UNIONS TO FACILITATE REMOVAL
3. IF THE AHU HAS MULTIPLE COILS, THEN ALL COMPONENTS SHOWN SHALL BE FOR EACH INDIVIDUAL COIL, EXCEPT THAT ONLY (1) ONE TCV AND STRAINER ARE REQUIRED FOR THE ENTIRE COIL BANK



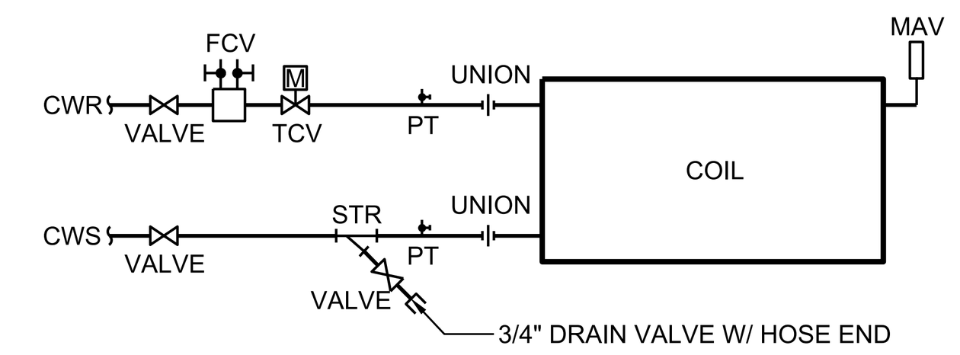
14 INDOOR AIR HANDLING UNIT PIPING SCHEMATIC CHILLED WATER - 2-WAY
NOT TO SCALE

NOTES:
1. INSTALL DRAIN PAN BELOW ALL VALVES AND UNINSULATED PIPING
2. CONTROL VALVE SHALL BE PROVIDED WITH ADJACENT UNIONS TO FACILITATE REMOVAL

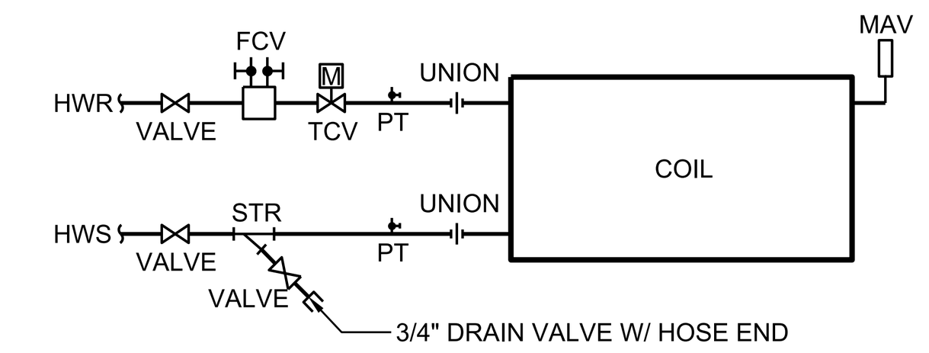


15 UNIT VENTILATOR PIPING SCHEMATIC CHILLED WATER - 2-WAY
NOT TO SCALE

NOTE TO CONTRACTOR
CONTROL VALVE SHALL BE PROVIDED WITH ADJACENT UNIONS TO FACILITATE REMOVAL

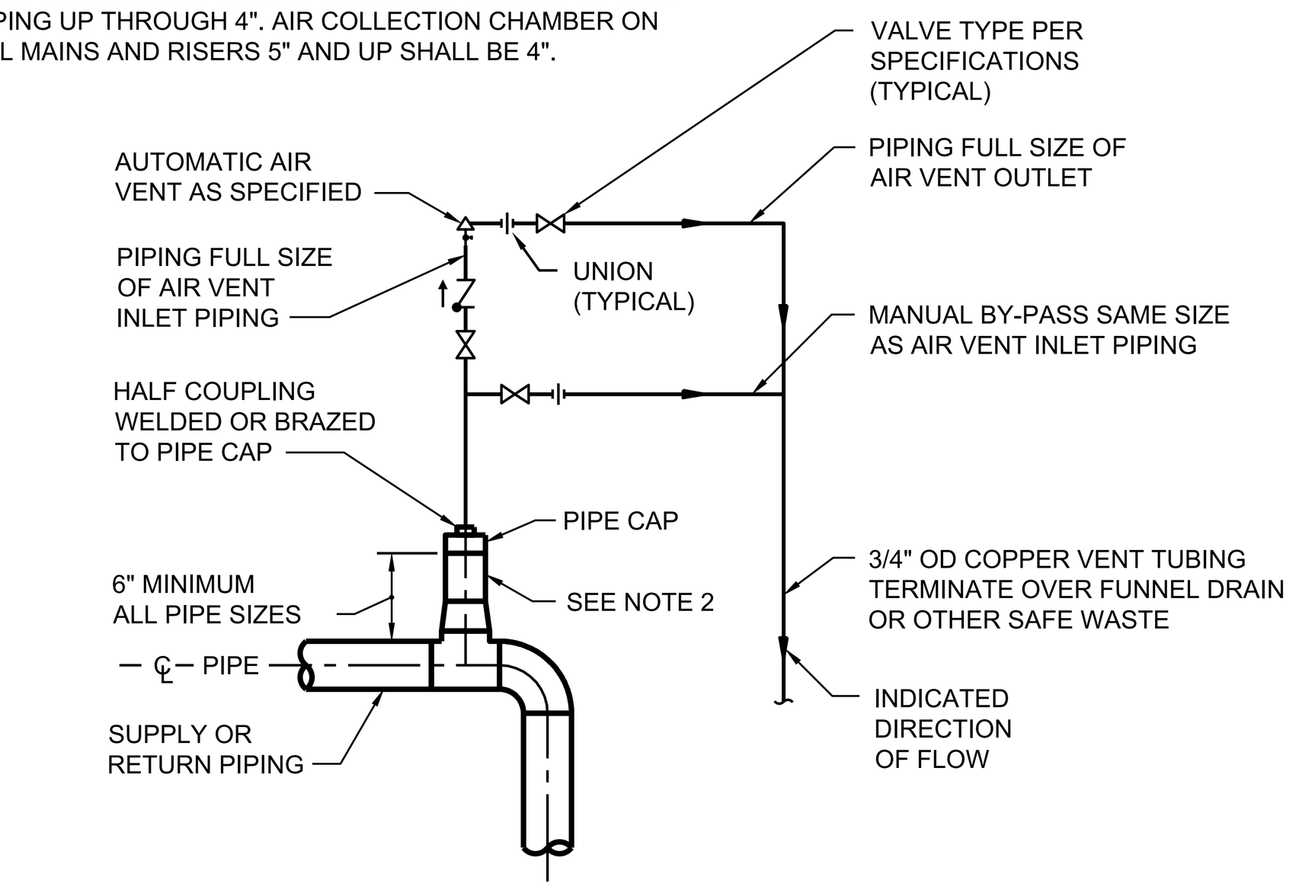


16 FAN COIL PIPING SCHEMATIC CHILLED WATER - 2-WAY
NOT TO SCALE



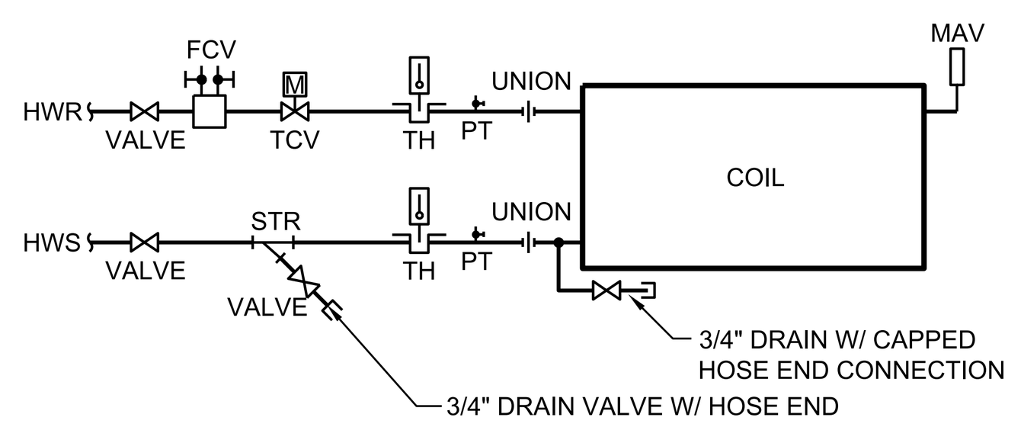
17 CABINET UNIT HEATER PIPING SCHEMATIC - HOT WATER
NOT TO SCALE

NOTES:
1. AUTOMATIC AIR VENTS ARE TO BE PROVIDED IN THE FOLLOWING LOCATIONS:
   A. WHERE INDICATED ON DRAWINGS
   B. WHERE ACCESS TO THE VENT IS RESTRICTED
2. AIR COLLECTION CHAMBER SHALL BE FULL SIZE OF MAIN PIPING UP THROUGH 4". AIR COLLECTION CHAMBER ON ALL MAINS AND RISERS 5" AND UP SHALL BE 4".



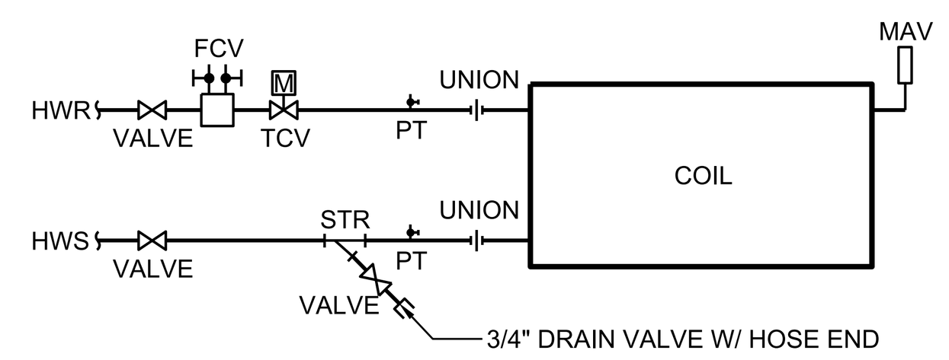
18 AUTOMATIC AIR VENT SCHEMATIC
NOT TO SCALE

NOTES:
1. THE AHU COIL SHALL BE PIPED IN A MANNER IN WHICH ONLY THE UNIONS MUST BE DISCONNECTED TO PULL/SERVICE THE COIL
2. CONTROL VALVE SHALL BE PROVIDED WITH FLANGED ENDS OR SHALL BE PROVIDED WITH ADJACENT UNIONS TO FACILITATE REMOVAL
3. IF THE AHU HAS MULTIPLE COILS, THEN ALL COMPONENTS SHOWN SHALL BE FOR EACH INDIVIDUAL COIL, EXCEPT THAT ONLY (1) ONE TCV AND STRAINER ARE REQUIRED FOR THE ENTIRE COIL BANK



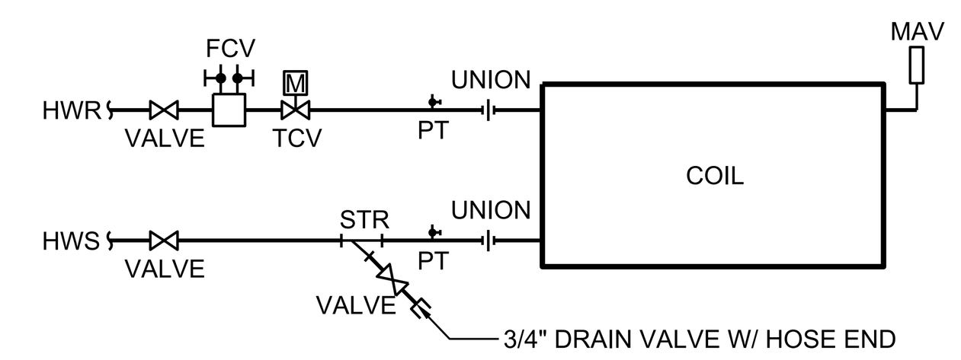
19 INDOOR AIR HANDLING UNIT PIPING SCHEMATIC - HOT WATER - 2-WAY
NOT TO SCALE

NOTE TO CONTRACTOR
CONTROL VALVE SHALL BE PROVIDED WITH ADJACENT UNIONS TO FACILITATE REMOVAL

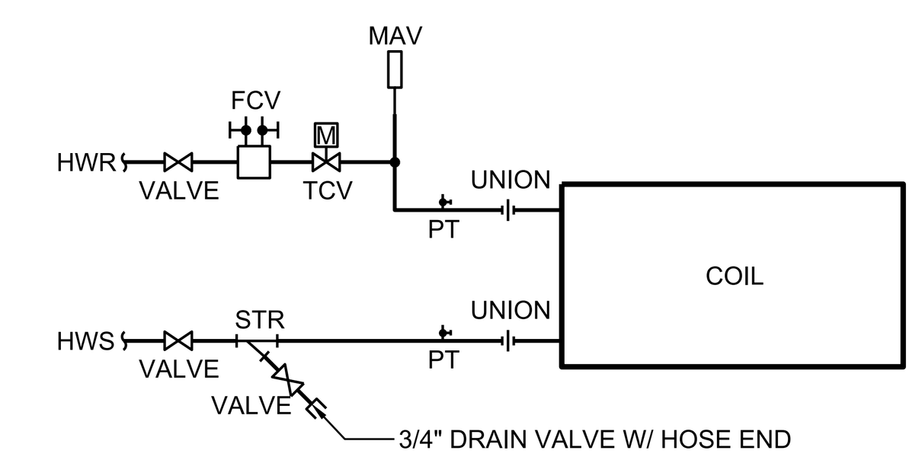


20 UNIT VENTILATOR PIPING SCHEMATIC - HOT WATER - 2-WAY
NOT TO SCALE

NOTE TO CONTRACTOR
CONTROL VALVE SHALL BE PROVIDED WITH ADJACENT UNIONS TO FACILITATE REMOVAL

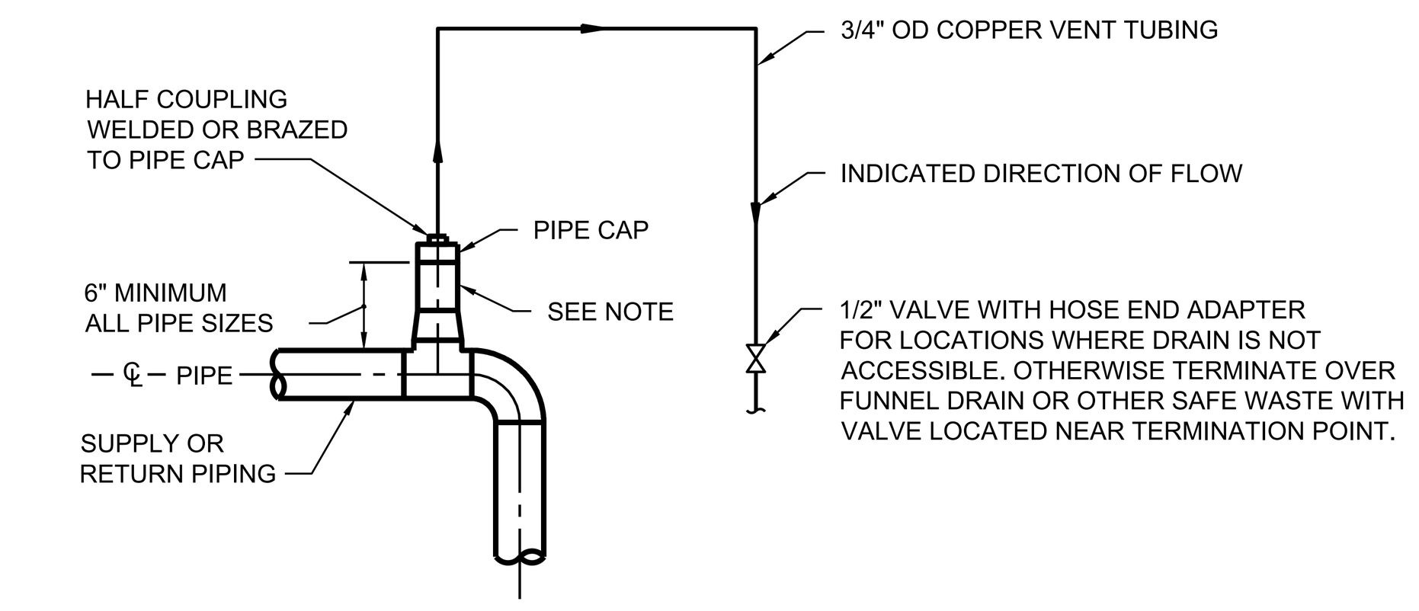


21 FAN COIL PIPING SCHEMATIC HOT WATER - 2-WAY
NOT TO SCALE

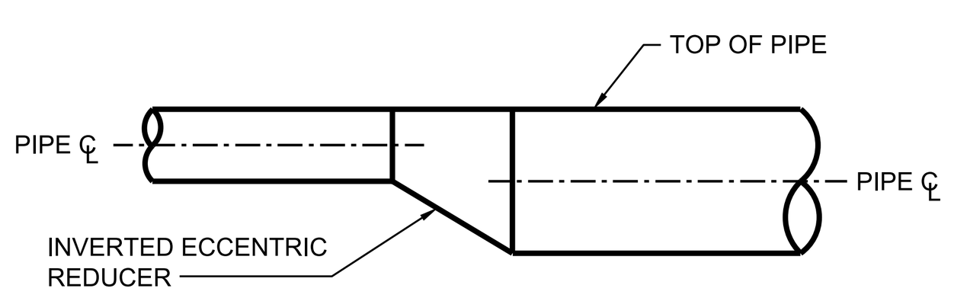


22 HORIZONTAL AND VERTICAL UNIT HEATER PIPING SCHEMATIC - HOT WATER
NOT TO SCALE

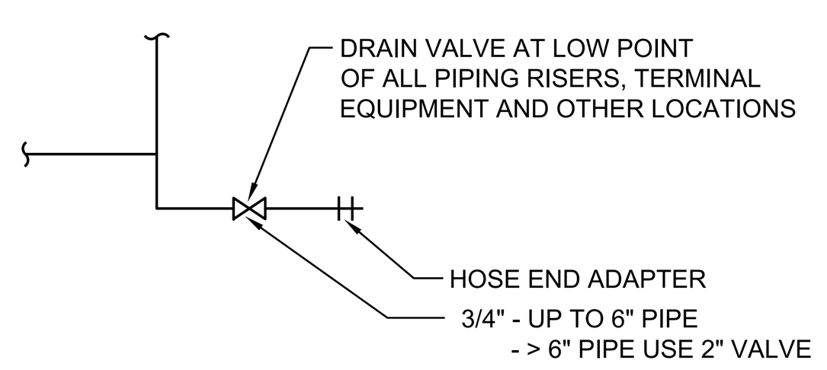
NOTE:
AIR COLLECTION CHAMBER SHALL BE FULL SIZE OF MAIN PIPING UP THROUGH 4". AIR COLLECTION CHAMBER ON ALL MAINS AND RISERS 5" AND UP SHALL BE 4".



23 MANUAL AIR VENT SCHEMATIC
NOT TO SCALE

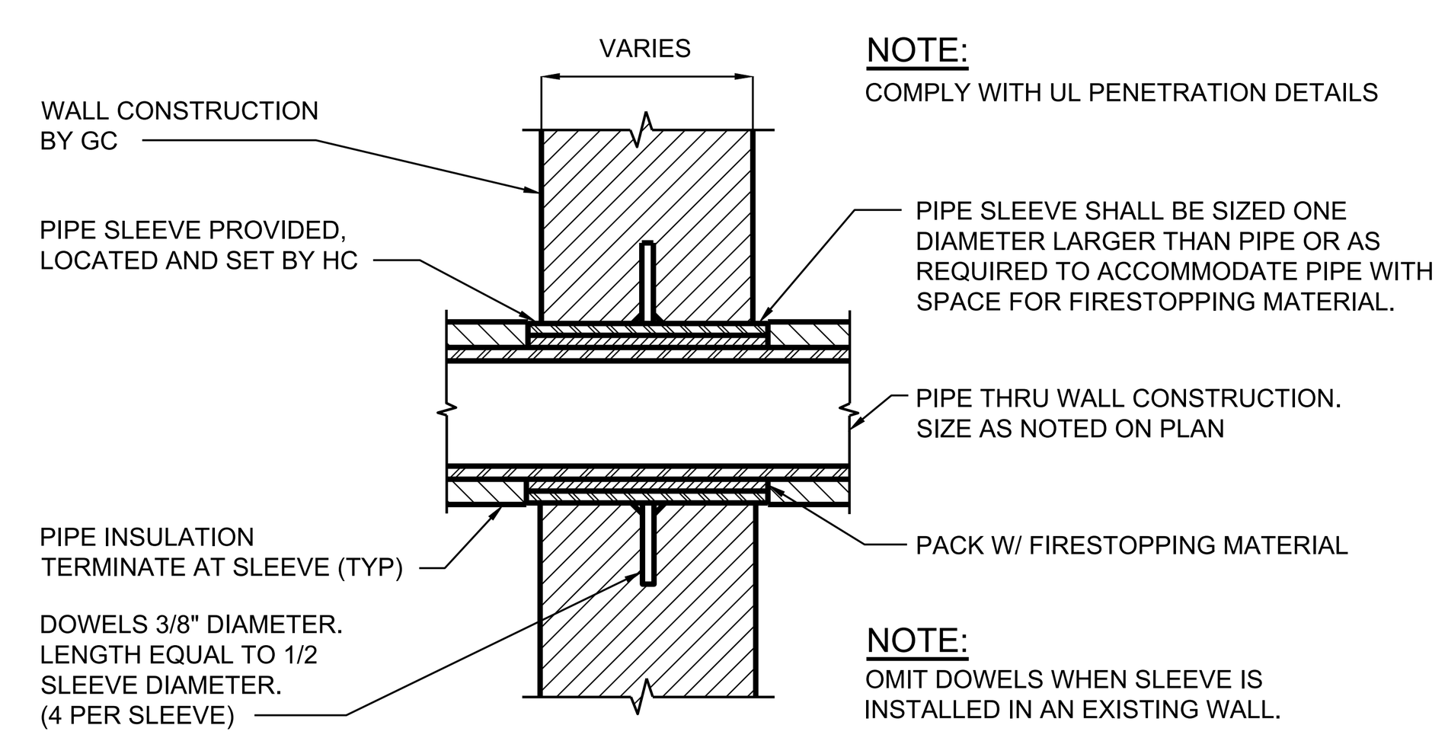


24 TYPICAL PIPE SIZE CHANGE FOR WATER
NOT TO SCALE



25 PIPING SYSTEM DRAIN DETAIL
NOT TO SCALE

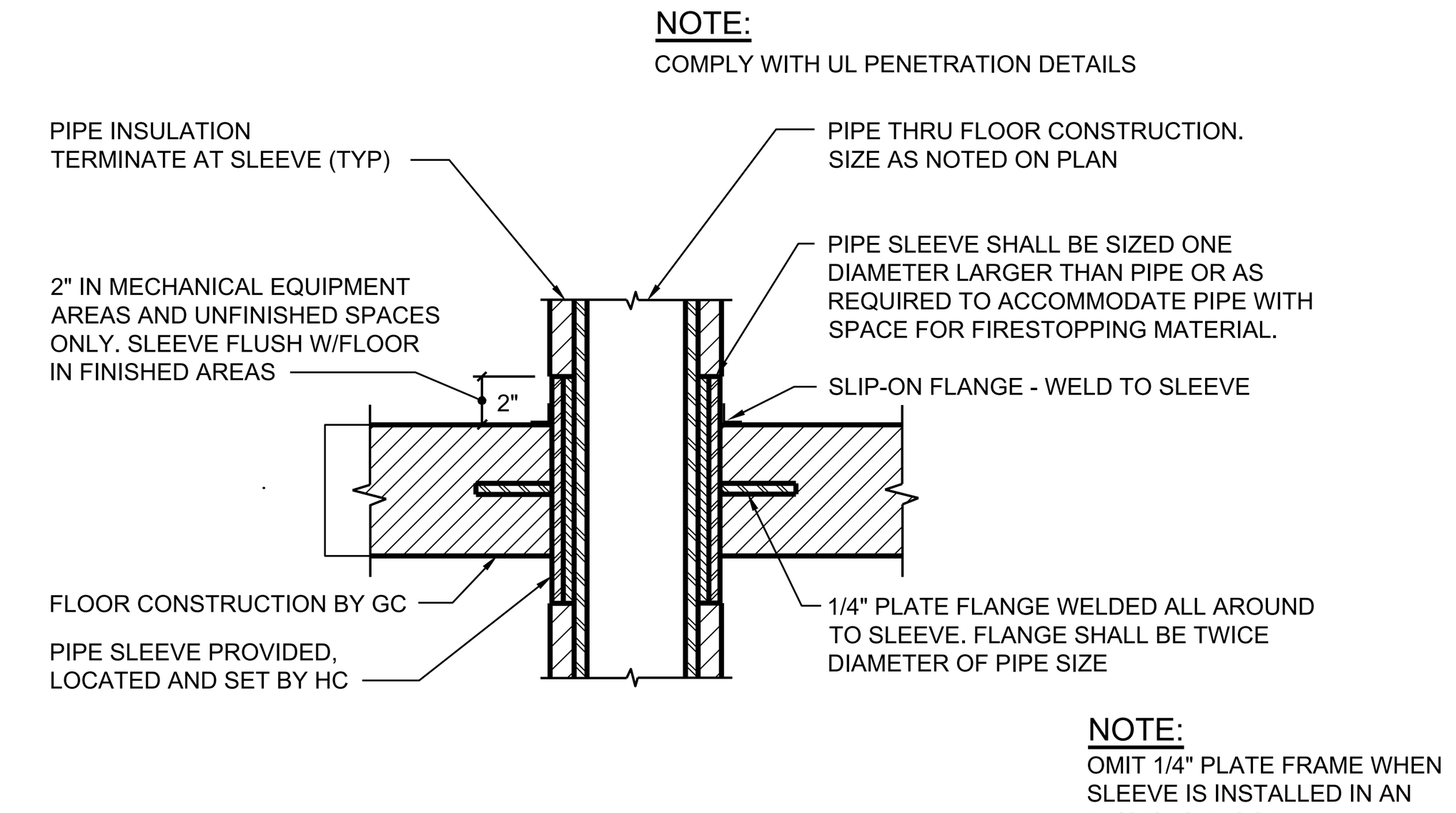
NOTE:
COMPLY WITH UL PENETRATION DETAILS



NOTE:
OMIT DOWELS WHEN SLEEVE IS INSTALLED IN AN EXISTING WALL.

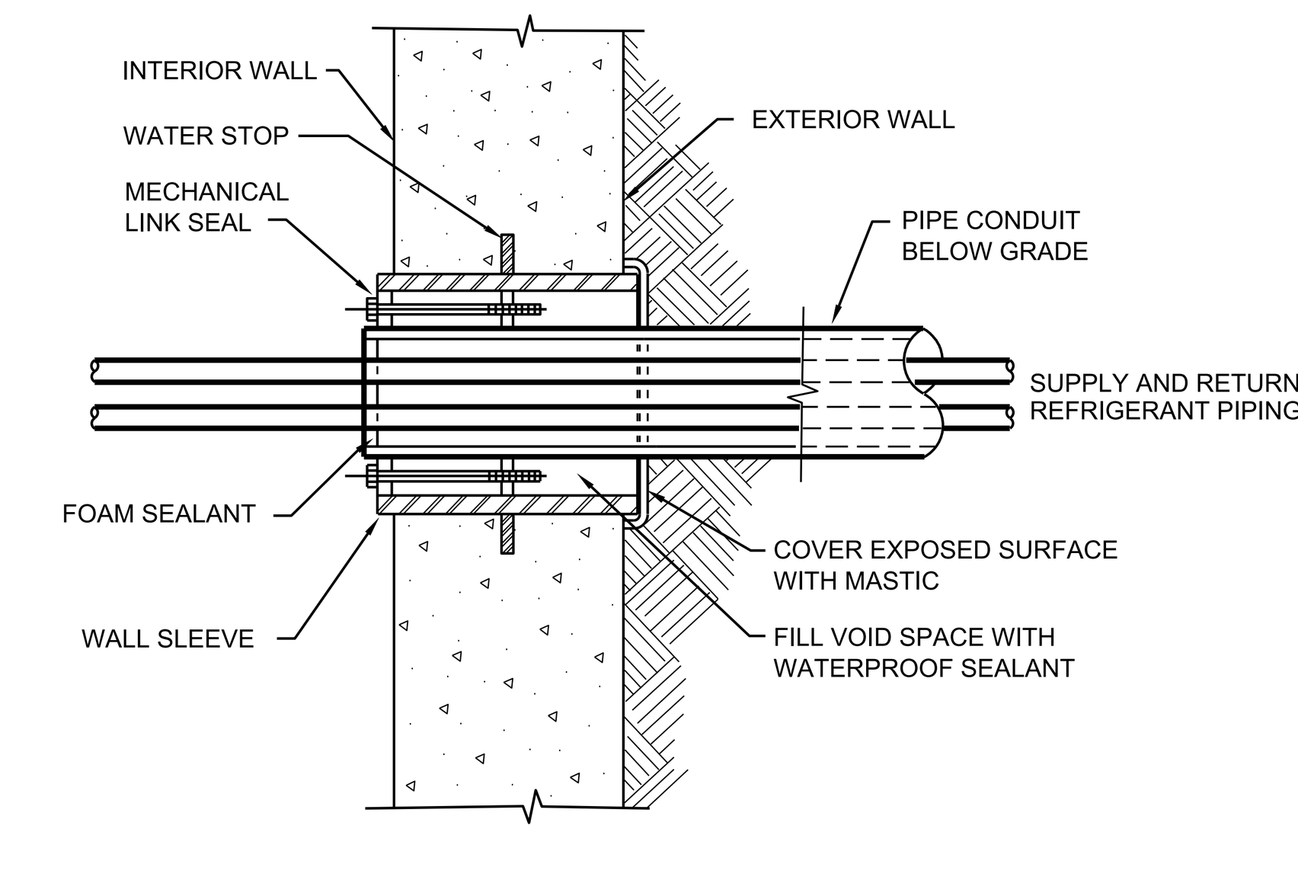
26 WALL SLEEVE DETAIL
NOT TO SCALE

NOTE:
COMPLY WITH UL PENETRATION DETAILS

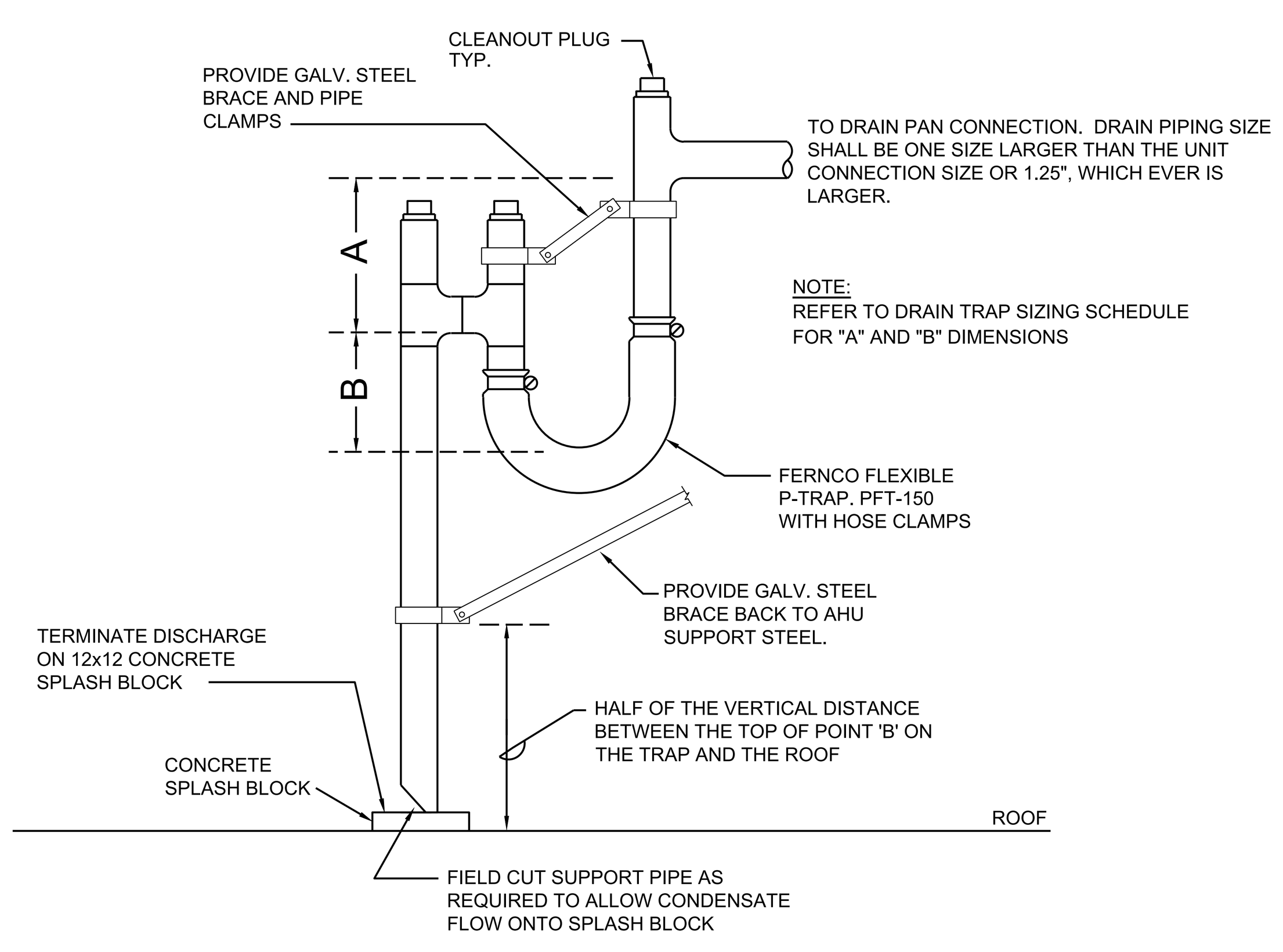


NOTE:
OMIT 1/4" PLATE FRAME WHEN SLEEVE IS INSTALLED IN AN EXISTING FLOOR.

27 FLOOR SLEEVE DETAIL
NOT TO SCALE



28 PIPE PENETRATION BELOW GRADE
NOT TO SCALE

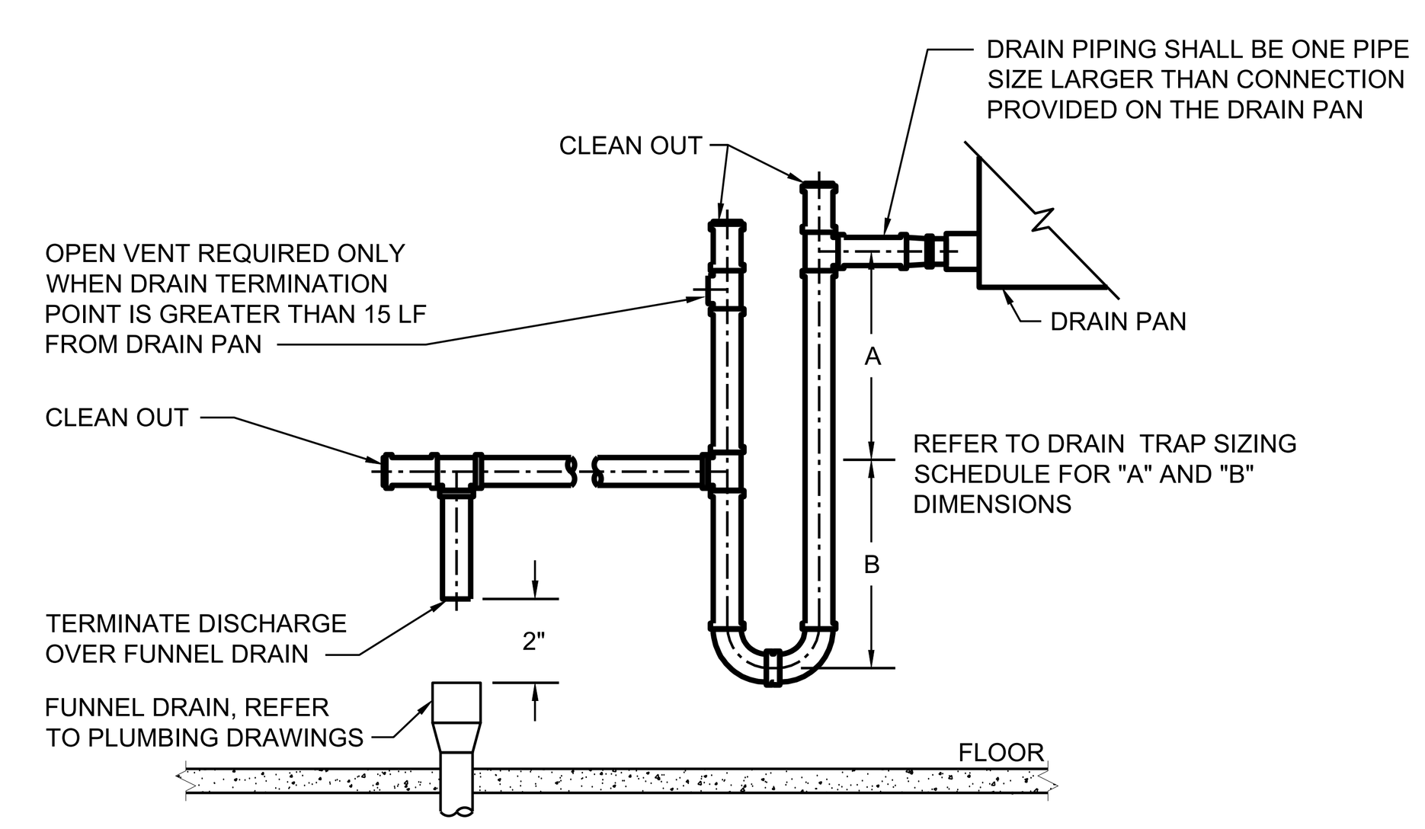


NOTE:
DRAIN PAN MAY BE LOCATED IN THE NEGATIVE OR POSITIVE PRESSURE AREA OF THE AIR STREAM. REFER TO DRAIN TRAP SIZING SCHEDULE FOR DIMENSIONAL DATA REQUIRED FOR SPECIFIC DRAIN LOCATION.

DIMENSION	DRAIN TRAP LOCATION FOR NEGATIVE PRESSURE	DRAIN TRAP LOCATION FOR POSITIVE PRESSURE
A	TOTAL AHU SP ± 1 (4" MINIMUM)	2"
B	4"	TOTAL AHU SP ± 1 (4" MINIMUM)

CONDENSATE DRAIN TRAP SIZING SCHEDULE

29 OUTDOOR AIR HANDLING UNIT CONDENSATE DRAIN TRAP PIPING DETAIL
NOT TO SCALE

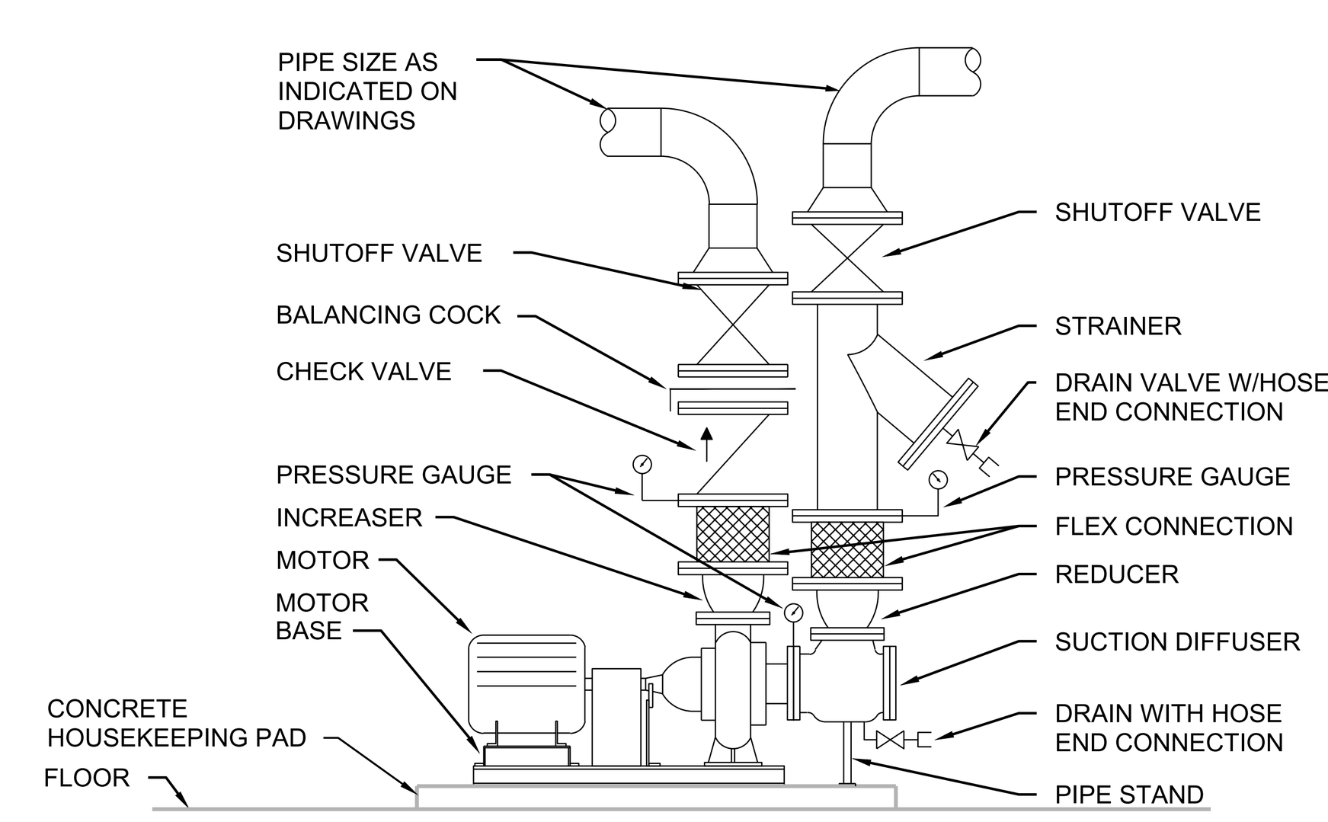


NOTE:
DRAIN PAN MAY BE LOCATED IN THE NEGATIVE OR POSITIVE PRESSURE AREA OF THE AIR STREAM. REFER TO DRAIN TRAP SIZING SCHEDULE FOR DIMENSIONAL DATA REQUIRED FOR SPECIFIC DRAIN LOCATION.

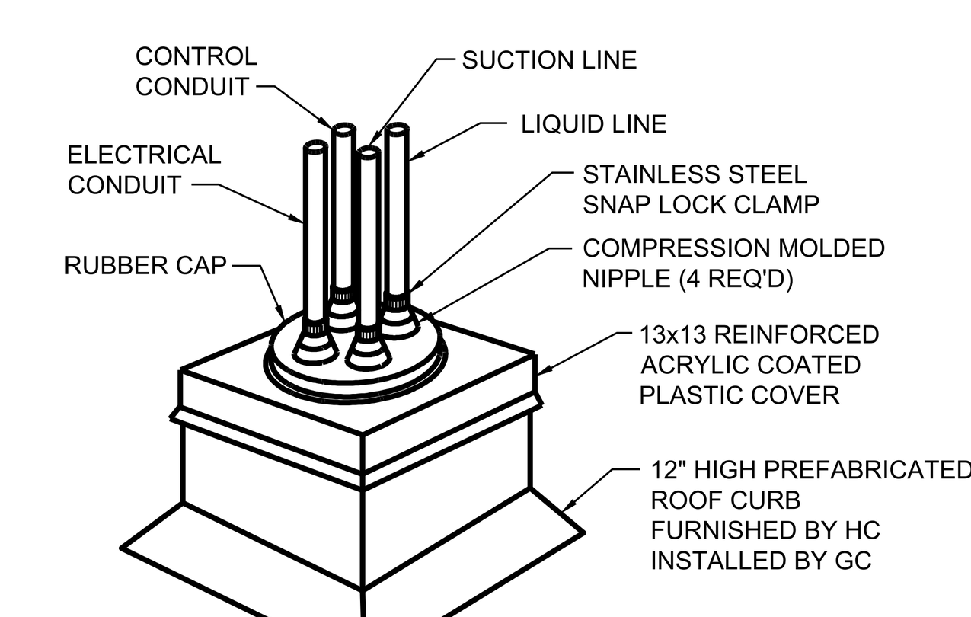
DIMENSION	DRAIN TRAP LOCATION FOR NEGATIVE PRESSURE	DRAIN TRAP LOCATION FOR POSITIVE PRESSURE
A	TOTAL AHU SP ± 1 (4" MINIMUM)	2"
B	4"	TOTAL AHU SP ± 1 (4" MINIMUM)

CONDENSATE DRAIN TRAP SIZING SCHEDULE

30 INDOOR CONDENSATE DRAIN TRAP PIPING DETAIL
NOT TO SCALE



31 END SUCTION PUMP MOUNTING AND PIPING DETAIL
NOT TO SCALE



32 PIPE PORTAL DETAIL
NOT TO SCALE

DRAW COLLECTIVE
470 Washington Road, Pittsburgh, PA 15228
412.561.7117 www.DRAWcollective.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER JOHN WEILAND PE074367

H.F. LENZ ENGINEERING
Headquarters
1407 Scalp Avenue
Johnstown, PA 15904-3329
Phone: 814-269-9300
www.hflenz.com

REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL DETAILS

Proj No. 23-S43-01
Issue Date 02/19/2024

M502

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AIR HANDLING UNIT SCHEDULE (CW/HW)

SYMBOL	SERVES	TOTAL CFM	OA CFM	EXT SP	SUPPLY FAN DATA QTY	CFM	DRIVE	TYPE	RPM	HP	BHP	TOT SP	FLA	MCA	MCOP	VFD	CHILLED WATER COOLING COIL DATA EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	SP IN	TOT MBH	SENS MBH	GPM	EWT °F	LWT °F	WPD	FACE VELOCITY	ROWS	FPI	HOT WATER HEATING COIL DATA EAT °F DB	LAT °F DB	SP IN	TOT MBH	GPM	EWT °F	LWT °F	WPD	FACE VELOCITY	ROWS	FPI	FILTER DATA TYPE	%	MERV	SP INITIAL	SP FINAL	ELECT CHAR	FLA	MCA	MOP	UNIT SIZE (LxWxH)	UNIT WEIGHT	BASIS OF DESIGN
AHU-B01	CAFETERIA	6,000	2,630	1.5	1	6,000	DIRECT	AIRFOIL	2,118	5	4.07	2.78	6.33	7.90	12.00	BY MANUF	81.6	67.1	55.1	53.7	0.67	237.0	164.0	47.2	45.0	55.0	7.70	492.0	5	12	38.2	100.6	0.11	411.0	28.3	200.0	170.0	2.50	492.0	2	8	2" PLEATED	30%	8	0.0	1.0	3/60/460V	6.33	7.90	12.00	139" x 66" x 42"	2,705 lbs	YORK XTI-42x66
AHU-E01	MAIN GYMNASIUM	12,500	3,100	1.0	1	12,500	DIRECT	AIRFOIL	1,688	10	8.33	2.41	13.90	17.40	30.00	BY MANUF	78.7	65.1	54.8	53.5	0.66	420.0	309.0	83.3	45.0	55.0	6.60	512.0	5	13	52.9	102.3	0.17	659.0	45.4	200.0	170.0	3.30	517.0	1	14	2" PLEATED	30%	8	0.0	1.0	3/60/460V	13.90	17.40	30.00	145" x 90" x 54"	3,879 lbs	YORK XTI-54x90
AHU-E02	MAIN GYMNASIUM	12,500	3,100	1.0	1	12,500	DIRECT	AIRFOIL	1,688	10	8.33	2.41	13.90	17.40	30.00	BY MANUF	78.7	65.1	54.8	53.5	0.66	420.0	309.0	83.3	45.0	55.0	6.60	512.0	5	13	52.9	102.3	0.17	659.0	45.4	200.0	170.0	3.30	517.0	1	14	2" PLEATED	30%	8	0.0	1.0	3/60/460V	13.90	17.40	30.00	145" x 90" x 54"	3,879 lbs	YORK XTI-54x90
AHU-F01	AUXILIARY GYM	8,300	2,100	1.0	1	8,300	DIRECT	AIRFOIL	2,574	7.5	6.29	2.34	9.30	11.60	20.00	BY MANUF	78.8	65.5	54.7	53.3	0.78	294.0	207.0	58.9	45.0	54.9	8.30	522.0	5	12	52.2	100.0	0.09	424.0	29.3	200.0	170.1	3.30	522.0	1	14	2" PLEATED	30%	8	0.0	1.0	3/60/460V	9.30	11.60	20.00	142" x 66" x 51"	2,984 lbs	YORK XTI-51x66
AHU-F02	AUXILIARY GYM	8,300	2,100	1.0	1	8,300	DIRECT	AIRFOIL	2,574	7.5	6.29	2.34	9.30	11.60	20.00	BY MANUF	78.8	65.5	54.7	53.3	0.78	294.0	207.0	58.9	45.0	54.9	8.30	522.0	5	12	52.2	100.0	0.09	424.0	29.3	200.0	170.1	3.30	522.0	1	14	2" PLEATED	30%	8	0.0	1.0	3/60/460V	9.30	11.60	20.00	142" x 66" x 51"	2,984 lbs	YORK XTI-51x66
AHU-F03	LGI	4,325	1,688	1.0	1	4,325	DIRECT	FC	-	5	2.83	2.02	8.80	11.00	15.00	BY MANUF	80.8	66.7	55.2	54.0	-	169.1	122.8	33.7	45.0	55.0	7.19	-	6	10	41.6	98.4	-	266.1	18.4	200.0	170.1	2.77	-	2	8	2" PLEATED	30%	8	0.0	1.0	3/60/460V	8.80	11.00	15.00	126" x 58" x 34"	1,407 lbs	YORK AMI-H10
AHU-F04	LGI	4,325	1,688	1.0	1	4,325	DIRECT	FC	-	5	2.81	1.99	8.80	11.00	15.00	BY MANUF	80.8	66.7	55.2	54.0	-	169.1	122.8	33.7	45.0	55.0	7.19	-	6	10	41.6	98.4	-	266.1	18.4	200.0	170.1	2.77	-	2	8	2" PLEATED	30%	8	0.0	1.0	3/60/460V	8.80	11.00	15.00	126" x 58" x 34"	1,407 lbs	YORK AMI-H10
AHU-F05	WRESTLING GYM & BAND / CHORAL	3,375	1,200	1.0	1	3,375	DIRECT	FC	-	3	2.19	2.03	6.90	8.63	15.00	BY MANUF	79.5	66.0	53.4	52.6	-	134.8	97.1	26.7	45.0	55.1	6.11	-	8	8	49.0	102.6	-	194.6	13.4	200.0	169.9	1.33	-	2	8	2" PLEATED	30%	8	0.0	1.0	3/60/460V	6.90	8.63	15.00	126" x 48" x 34"	1,284 lbs	YORK AMI-H08
AHU-F06	WRESTLING GYM & BAND / CHORAL	3,375	1,200	1.0	1	3,375	DIRECT	FC	-	3	2.19	2.03	6.90	8.63	15.00	BY MANUF	79.5	66.0	53.4	52.6	-	134.8	97.1	26.7	45.0	55.1	6.11	-	8	8	49.0	102.6	-	194.6	13.4	200.0	169.9	1.33	-	2	8	2" PLEATED	30%	8	0.0	1.0	3/60/460V	6.90	8.63	15.00	126" x 48" x 34"	1,284 lbs	YORK AMI-H08
AHU-F07	INDUSTRIAL ARTS	5,000	1,600	1.0	1	5,000	DIRECT	FC	-	3	2.20	1.74	6.90	8.63	15.00	BY MANUF	79.8	66.2	53.9	53.0	-	199.8	143.6	39.9	45.0	55.0	5.83	-	6	10	47.4	103.9	-	306.0	21.1	200.0	170.1	2.06	-	2	8	2" PLEATED	30%	8	0.0	1.0	3/60/460V	6.90	8.63	15.00	130" x 66" x 44"	1,689 lbs	YORK AMI-H12
AHU-F08	TECH ED	4,000	1,000	1.0	1	4,000	DIRECT	FC	-	3	2.39	1.92	6.90	8.63	15.00	BY MANUF	78.8	65.5	53.9	53.1	-	148.6	110.6	29.5	45.0	55.0	2.77	-	6	12	52.7	106.7	-	234.2	16.2	200.0	170.1	2.16	-	2	8	2" PLEATED	30%	8	0.0	1.0	3/60/460V	6.90	8.63	15.00	126" x 58" x 34"	1,406 lbs	YORK AMI-H10
AHU-F09	WEIGHT TRAINING	5,500	1,300	1.0	1	5,500	DIRECT	AIRFOIL	3,163	7.5	4.79	3.60	8.70	10.88	15.00	BY MANUF	78.5	65.0	54.6	53.2	0.67	193.0	146.0	38.5	45.0	55.0	8.50	489.0	5	12	53.8	98.1	0.06	264.0	18.2	200.0	170.0	1.70	489.0	1	13	2" PLEATED	30%	8	0.0	1.0	3/60/460V	8.70	10.88	15.00	106" x 69" x 66"	2,457 lbs	YORK XTI-33x66 & XTI-39x66
AHU-G01	AUDITORIUM	6,600	2,000	1.0	1	6,600	DIRECT	AIRFOIL	2,163	5	4.04	2.23	6.30	7.90	12.00	BY MANUF	79.5	65.9	55.1	53.7	0.70	235.0	166.0	47.2	45.0	54.9	7.90	512.0	5	13	48.7	98.4	0.08	352.0	24.3	200.0	170.0	2.90	512.0	1	14	2" PLEATED	30%	8	0.0	1.0	3/60/460V	6.30	7.90	12.00	139" x 69" x 42"	2,742 lbs	YORK XTI-42x69
AHU-G02	AUDITORIUM	13,050	4,350	1.0	1	13,050	DIRECT	AIRFOIL	2,219	15	10.72	2.47	18.60	23.30	40.00	BY MANUF	80.0	66.2	54.7	53.4	0.77	488.0	341.0	97.2	45.0	55.0	8.10	508.0	5	13	46.3	99.0	0.09	742.0	51.0	200.0	170.0	5.70	508.0	1	14	2" PLEATED	30%	8	0.0	1.0	3/60/460V	18.60	23.30	40.00	143" x 90" x 57"	3,845 lbs	YORK XTI-57x90
AHU-G03	AUDITORIUM	13,050	4,350	1.0	1	13,050	DIRECT	AIRFOIL	2,219	15	10.72	2.47	18.60	23.30	40.00	BY MANUF	80.0	66.2	54.7	53.4	0.77	488.0	341.0	97.2	45.0	55.0	8.10	508.0	5	13	46.3	99.0	0.09	742.0	51.0	200.0	170.0	5.70	508.0	1	14	2" PLEATED	30%	8	0.0	1.0	3/60/460V	18.60	23.30	40.00	143" x 90" x 57"	3,845 lbs	YORK XTI-57x90
AHU-G04	COMMONS	5,000	1,670	1.0	1	5,000	DIRECT	FC	-	3	2.20	1.74	6.90	8.63	15.00	BY MANUF	80.0	66.3	54.0	53.0	-	200.9	144.4	39.9	45.0	55.0	5.83	-	6	10	46.3	103.3	-	308.5	21.3	200.0	170.1	2.08	-	2	8	2" PLEATED	30%	8	0.0	1.0	3/60/460V	6.90	8.63	15.00	130" x 66" x 44"	1,689 lbs	YORK AMI-H12

NOTE:
1. VFD PROVIDED AND MOUNTED TO EXTERIOR OF UNIT BY MANUFACTURER

AIR HANDLING UNIT SCHEDULE (DX/HW)

SYMBOL	SERVES	TOTAL CFM	OA CFM	EXT SP	SUPPLY FAN DATA QTY	CFM	DRIVE	TYPE	HP	BHP	TOT SP	FLA	MCA	MCOP	VFD	DX COOLING COIL DATA EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	TOT MBH	SENS MBH	HOT WATER HEATING COIL EAT °F DB	LAT °F DB	TOT MBH	GPM	EWT °F	LWT °F	WPD	FILTER DATA %	TYPE	MERV	SP INITIAL	SP FINAL	ELECT CHAR	FLA	MCA	MOP	UNIT SIZE (LxWxH)	UNIT WEIGHT	BASIS OF DESIGN
AHU-A01	ADMIN	6,610	1,152	1.50	1	6,610	DIRECT	AIRFOIL	5.00	4.13	2.35	8.8	11.0	15.0	BY MANUF	77.6	64.7	54.5	53.2	225.5	168.9	58.6	106.4	343.3	23.7	200.0	170.1	2.3	30%	2" PLEATED	8	0.0	1.0	3/60/460V	8.8	11.0	15.0	115" x 70" x 88"	1,986 lbs	YORK AMI-V14

NOTE:
1. VFD PROVIDED AND MOUNTED TO EXTERIOR OF UNIT BY MANUFACTURER

CLASSROOM VERTICAL UNIT VENTILATORS SCHEDULE (CW/HW)

SYMBOL	SERVES	TOTAL CFM	MIN OA CFM	EXT SP	EXH CFM	SUPPLY FAN DATA CFM	FAN HP	FLA	MIN OA	EXT SP	RELIEF FAN HP	FLA	CHILLED WATER COOLING COIL DATA EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	TOT MBH	SENS MBH	GPM	EWT °F	LWT °F	WPD	ROWS	HOT WATER HEATING COIL DATA EAT °F DB	LAT °F DB	TOT MBH	GPM	EWT °F	LWT °F	WPD	ROWS	ERW - HEATING (WINTER) OA CFM	EXH CFM	OA DB °F	ROOM DB °F	LAT DB °F	MBH	TOT EFFECT %	ERW - COOLING (SUMMER) OA CFM	EXH CFM	OA DB °F	OA WB °F	ROOM DB °F	ROOM WB °F	LAT DB °F	LAT WB °F	ERW FLA	MBH	TOT EFFECT %	FILTER DATA TYPE	MERV	ELECT CHAR	MCA	MOP	UNIT SIZE (LxWxH)	UNIT WEIGHT	BASIS OF DESIGN
CAH-01	1ST FLOOR CLASSROOMS	1,200	425	0.5	425	1,200	1/2	4.00	425	0.5	1/3	2.80	76.3	64.0	53.8	53.2	38.2	29.7	7.6	45.0	55.0	1.11	4	65.7	105.2	51.8	3.6	200.0	170.3	0.2	1	425	425	5.6	72.0	54.3	28.3	73.8%	425	425	90.0	72.0	75.0	63.0	78.6	65.7	0.30	9.5	71.4%	2" DISPOSABLE FILTER	8	1/60/208V	8.10	15.00	25" x 39.75" x 91"	750 lbs	FRESHMAN HCW ERW - B CABINET
CAH-02	2ND FLOOR CLASSROOMS	1,450	475	0.5	475	1,450	3/4	5.90	475	0.5	1/3	2.80	76.3	64.0	54.6	53.8	43.9	34.7	8.7	45.0	55.0	1.40	4	65.7	102.6	58.6	4.1	200.0	170.5	0.2	1	475	475	5.6	72.0	52.8	30.7	71.7%	475	475	90.0	72.0	75.0	63.0	79.0	65.9	0.30	10.4	69.4%	2" DISPOSABLE FILTER	8	1/60/208V	10.50	15.00	25" x 39.75" x 91"	750 lbs	FRESHMAN HCW ERW - B CABINET
CAH-03	LIBRARY	1,200	500	0.5	500	1,200	1/2	4.00	500	0.5	1/3	2.80	76.7	64.3	54.0	53.4	38.8	30.1	7.6	45.0	55.2	1.11	4	63.7	103.7	52.6	3.6	200.0	169.9	0.2	1	500	500	5.6	72.0	52.1	31.9	70.7%	500	500	90.0	72.0	75.0	63.0	79.1	66.0	0.30	10.8	68.5%	2" DISPOSABLE FILTER	8	1/60/208V	8.10	15.00	25" x 39.75" x 91"	750 lbs	FRESHMAN HCW ERW - B CABINET

NOTE:
1. HC SHALL PROVIDE LOUVER TO GC. GC TO PROVIDE LINTEL AND INSTALL LINTEL AND LOUVER
2. PROVIDE DUCT COVER WITH REMOVABLE FRONT SEE TWO DETAILS ONE ON M501 & ONE ON M502 (TYPICAL CLASSROOM (CAH) VENTING DETAIL ONE FOR WALL WITHOUT WINDOW AND ONE FOR WALL WITH IN-FILLED WINDOW)
3. PROVIDE SHEET METAL CLOSE-OFF PANEL BETWEEN CAH AND IN-FILLED WINDOW SEE DETAIL ON DRAWING M501 (TYPICAL CLASSROOM (CAH) VENTING DETAIL FOR WALL WITH IN-FILLED WINDOW)

SPLIT AIR COOLED CHILLER SCHEDULE

SYMBOL	TYPE	NOMINAL TONS	# CIRCUITS	REFRIGERANT	REFRIG. CHARGE (LBS)	EWT °F	LWT °F	GPM	MIN. FLOW RATE	MAX. FLOW RATE	WPD FT	TONS	OPERATING EER	AHRI IPLV EER	COMPRESSORS QTY	C1 RLA	C2 RLA	C3 RLA	CIRCUIT 1 CONDENSOR FANS QTY	FLA EA.	CIRCUIT 2 CONDENSOR FANS QTY	FLA EA.	CIRCUIT 3 CONDENSOR FANS QTY	FLA EA.	MCA	MOCP	TOT COMP KW	TOT FAN KW	TOT KW	ELEC CHAR	UNIT WEIGHT	SOUND POWER LEVELS (DB) @ 100 % LOAD 63	125	250	500	1000	2000	4000	8000	LpA	BASIS OF DESIGN
ACC-01	SCREW	280.0	3	R-134A	524.8	55.0	45.0	670.2	282.1	1,205.0	10.5	280.0	9.221	14.13	3	146.0	164.0	108.0	5	2.8	4	2.8	4	2.8	495.0	600.0	395.7	342.6	364.4	460/3/60	22,251 lbs	98.0	99.0	100.0	104.0	97.0	92.0	86.0	81.0	103.0	YORK YCIV0287HH46VABBXTX
ACC-02	SCREW	280.0	3	R-134A	524.8	55.0	45.0	670.2	282.1	1,205.0	10.5	280.0	9.221	14.13	3	146.0	164.0	108.0	5	2.8	4	2.8	4	2.8	495.0	600.0	395.7	342.6	364.4	460/3/60	22,251 lbs	98.0	99.0	100.0	104.0	97.0	92.0	86.0	81.0	103.0	YORK YCIV0287HH46VABBXTX

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NOTES:
1. UNIT SHALL BE PROVIDED WITH SINGLE POINT CONNECTION, ELECTRICAL DISCONNECT AND STARTERS
2. CAPACITIES BASED ON 95°F AMBIENT.
3. UNIT SHALL BE PROVIDED WITH NOISE CONTROL BLANKET ON THE COMPRESSORS AND NOISE REDUCING FANS .
4. INDOOR EVAPORATOR HEAT EXCHANGER SHALL BE PLATE AND FRAME TYPE.
5. INSTALL REFRIGERANT PIPING BETWEEN OUTDOOR AND INDOOR UNIT PER MFG'S RECOMMENDATIONS.

UNIT VENTILATOR SCHEDULE (HW/CW)

SYMBOL	TOTAL CFM	OA CFM	EXT SP	SUPPLY FAN DATA QTY	CFM	DRIVE	HP	FLA	MCA	MCOP	VFD	CHILLED WATER COOLING COIL DATA EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	TOT MBH	SENS MBH	GPM	EWT °F	LWT °F	WPD	FACE VELOCITY	ROWS	FPI	HOT WATER HEATING COIL DATA EAT °F DB	LAT °F DB	TOT MBH	GPM	EWT °F	LWT °F	WPD	FACE VELOCITY	ROWS	FPI	ELEC CHAR	WALLBOX (IN)	MOUNTING	BASIS OF DESIGN
UV-01	NOT USED																																					
UV-02	1,480	560	0.10	4	1,480	DIRECT	1/2	4.7	5.9	15.0	BY MANUF	82.50	66.00	54.43	53.27	54.36	43.89	10.0	45.00	55.84	9.63	289.2	5	14	45.00	112.01	112.55	7.0	200.00	166.80	5.46	310.6	2	10	1/60/120V	42 1/2x10 3/8	VERTICAL	JCI JCUVF521FEB223A0J1DAA8AAA1H0
UV-03	755	150	0.10	3	755	DIRECT	1/3	3.7	4.6	15.0	BY MANUF	79.00	64.50	55.23	53.80	23.22	19.09	4.5	45.00	55.29	4.74	296.8	5	14	56.60	115.88	49.67	3.5	200.00	170.70	0.96	310.0	2	10	1/60/120V	42 1/2x10 3/8	VERTICAL	JCI JCUVF221FEB223A0J1DAA8AAA1H0
UV-04	755	75	0.10	2	755	DIRECT	1/3	3.7	4.6	15.0	BY MANUF	77.00	63.50	55.22	53.76	20.98	17.55	4.0	45.00	55.47	3.91	298.0	5	14	64.00	119.82	46.12	3.2	200.00	170.24	0.83	305.6	2	10	1/60/120V	54 1/2x10 3/8	VERTICAL	JCI JCUVF221FEB223A0J1DAA8AAA1H0
UV-05	NOT USED																																					
UV-06	NOT USED																																					
UV-07	985	345	0.10	2	985	DIRECT	1/3	4.0	5.0	15.0	BY MANUF	81.90	65.80	54.95	53.69	34.88	28.36	6.0	45.00	56.60	9.75	291.8	5	14	45.40	110.44	73.38	5.0	200.00	169.70	2.19	291.8	2	10	1/60/120V	66 1/2x10 3/8	VERTICAL	JCI JCUVF321FEB223A0J1DAA8AAA1H0
UV-08	NOT USED																																					
UV-09	755	75	0.10	1	755	DIRECT	1/3	3.7	4.6	15.0	BY MANUF	77.00	64.00	54.73	53.55	22.59	17.94	4.5	45.00	55.02	4.74	298.0	5	14	64.00	120.63	46.79	3.5	200.00	172.41	0.96	305.6	2	10	1/60/120V	66 1/2x10 3/8	VERTICAL	JCI JCUVF221FEB223A0J1DAA8AAA1H0
HUV-01	1,980	375	0.10	3	1,980	DIRECT	3/4	9.6	12.0	20.0	BY MANUF	77.70	64.80	55.93	54.65	58.57	45.94	10.2	45.00	56.46	9.98	390.4	5	14	58.10	90.91	71.89	5.0	200.00	170.31	1.59	405.2	1	10	1/60/120V	78 1/2x10 3/8	HORIZONTAL - RECESSED	JCI JCUHF6BAABD223A0J1BAA8AAA1H0
HUV-02	NOT USED																																					
HUV-03	755	100	0.10	1	755	DIRECT	1/3	3.7	4.6	15.0	BY MANUF	76.90	64.30	54.86	53.74	22.95	17.76	4.5	45.00	55.17	4.74	298.0	5	14	62.00	95.19	27.53	2.0	200.00	171.59	0.18	306.8	1	10	1/60/120V	78 1/2x10 3/8	HORIZONTAL - RECESSED	JCI JCUHF2BAABC223A0J1BAA8AAA1H0
HUV-04	1,480	375	0.10	1	1,480	DIRECT	1/2	4.7	5.9	15.0	BY MANUF	78.70	66.40	54.10	53.47	55.96	38.72	10.0	45.00	56.16	9.63	291.2	5	14	52.70	116.21	105.09	6.5	200.00	166.62	4.80	306.0	2	10	1/60/120V	78 1/2x10 3/8	HORIZONTAL - RECESSED	JCI JCUHF5BAABC223A0J1BAA8AAA1H0
HUV-05	NOT USED																																					
HUV-06	1,980	855	0.25	8	1,980	DIRECT	3/4	9.6	12.0	20.0	BY MANUF	82.00	66.00	56.64	54.93	64.33	63.11	11.0	45.00	56.67	11.44	387.2	5	14	39.00	114.78	172.31	9.0	200.00	160.45	8.52	420.6	2	14	1/60/120V	78 1/2x10 3/8	HORIZONTAL - RECESSED	JCI JCUHF6BAABD223A0J1DAA8AAA1H0
HUV-07	985	120	0.25	1	985	DIRECT	1/3	4.0	5.0	15.0	BY MANUF	76.80	64.20	53.69	52.86	32.17	24.55	6.0	45.00	55.70	9.75	294.8	5	14	62.80	97.20	37.55	2.8	200.00	172.32	0.41	302.7	1	10	1/60/120V	78 1/2x10 3/8	HORIZONTAL	JCI JCUHF3BAABC223A0J1BAA8AAA1H0
HUV-08	1,980	700	0.25	2	1,980	DIRECT	3/4	9.6	12.0	20.0	BY MANUF	81.00	65.80	56.41	54.85	63.59	51.58	11.0	45.00	56.53	11.44	388.0	5	14	45.00	118.42	164.98	9.0	200.00	162.14	8.52	415.6	2	14	1/60/120V	78 1/2x10 3/8	HORIZONTAL	JCI JCUHF6BAABD223A0J1DAA8AAA1H0
HUV-09	1,980	1,000	0.25	2	1,980	DIRECT	3/4	9.6	12.0	20.0	BY MANUF	83.00	67.00	57.09	55.49	67.81	54.15	11.0	45.00	57.30	11.44	386.6	5	14	33.50	111.40	179.09	9.0	200.00	158.89	8.52	425.4	2	14	1/60/120V	78 1/2x10 3/8	HORIZONTAL	JCI JCUHF6BAABD223A0J1DAA8AAA1H0
HUV-10	1,480	560	0.10	1	1,480	DIRECT	1/2	4.7	5.9	15.0	BY MANUF	79.20	65.70	54.07	53.24	53.35	39.53	10.0	45.00	55.64	9.63	291.0	5	14	50.00	117.20	111.77	9.0	200.00	174.37	8.52	307.6	2	10	1/60/120V	78 1/2x10 3/8	HORIZONTAL - RECESSED	JCI JCUHF5BAABC223A0J1DAA8AAA1H0
HUV-11	1,240	375	0.10	1	1,240	DIRECT	1/2	4.7	5.9	15.0	BY MANUF	78.40	65.20	54.25	53.41	41.87	31.63	8.0	45.00	55.44	5.49	290.7	5	14	51.00	115.60	89.14	6.5	200.00	171.69	4.11	306.2	2	10	1/60/120V	78 1/2x10 3/8	HORIZONTAL - RECESSED	JCI JCUHF4BAABC223A0J1BAA8AAA1H0
HUV-12	985	450	0.10	2	985	DIRECT	1/3	4.0	5.0	15.0	BY MANUF	82.70	66.80	55.03	54.00	37.31	29.07	6.0	45.00	57.41	9.75	291.5	5	14	38.50	106.30	77.55	5.2	200.00	169.21	2.34	317.3	2	10	1/60/120V	78 1/2x10 3/8	HORIZONTAL	JCI JCUHF3BAABC223A0J1BAA8AAA1H0

NOTES:
1. FOR CEILING RECESSED UNITS, HVAC CONTRACTOR SHALL COORDINATE TYPE FOR PROPER INSTALLATION. HVAC CONTRACTOR SHALL COORDINATE REMOVAL OF EXISTING CEILINGS AND WALLS FOR PROPER INSTALLATION.

KITCHEN HOOD MAKE-UP AIR UNIT SCHEDULE

SYMBOL	SERVES	ROOF OPENING L x W	SUPPLY AIR SYSTEM CFM	FAN CFM	RPM	SP HOOD	SP TOTAL	EXT SP	OV FPM	DRIVE	HP	GAS FURNACE DATA EAT °F DB	LAT °F DB	TURNDOWN	INPUT MBH	TOT OUTPUT MBH	GAS IP MIN	GAS IP MAX	SP IN	SOUND POWER LEVELS (DB) @ 100 % LOAD 63	125	250	500	1000	2000	4000	8000	dBA	ELECT CHAR	MCA	MCOP	SCCR	UNIT WEIGHT	BASIS OF DESIGN
MAU-B01	109 - KITCHEN	N/A	4,500	4,500	1,203	0.082	2.106	1.25	874	DIRECT	3	-10.0	65.0	25:1	396.2	364.5	12 in-wg	0.5 PSI	0.625	75	75	77	78	76	72	68	65	69	3/60/460V	6.3	15.0	5.0 kA	1,222 lbs	GREENHECK - DGX-P122-H22-D1

NOTES:
1. FILTERS SHALL BE 1" WASHABLE TYPE.

PUMP SCHEDULE

PUMP No	TYPE FLR MTD/IN-LINE	SYSTEM	OPERATION DUTY/STAND-BY	FLUID TYPE	MOTOR HP	MAX RPM	DUTY-POINT RPM	MOTOR BHP	ELECTRICAL CHAR	EMERGENCY POWER	VARIABLE FREQ DRIVE	OPERATING CONDITIONS	IMPELLER SIZE	MAX IMPELLER SIZE	BASIS OF DESIGN
HWP-01	FLR MTD	HOT WATER	DUTY	WATER	20	1,800	1,783	16.4	3/60/460V	YES	YES	GPM 500 FT HD 105 EFF 78.0%	10.625"	11.0"	BELL & GOSSETT - E-1510 4EB
HWP-02	FLR MTD	HOT WATER	DUTY	WATER	20	1,800	1,783	16.4	3/60/460V	YES	YES	GPM 500 FT HD 105 EFF 78.0%	10.625"	11.0"	BELL & GOSSETT - E-1510 4EB
HWP-03	FLR MTD	HOT WATER	STAND-BY	WATER	20	1,800	1,783	16.4	3/60/460V	YES	YES	GPM 500 FT HD 105 EFF 78.0%	10.625"	11.0"	BELL & GOSSETT - E-1510 4EB
HWP-04	IN-LINE	HOT WATER	DUTY	WATER	3	1,200	1,116	2.01	3/60/460V	YES	YES	GPM 462.7 FT HD 15 EFF 83.5%	5.5"	7.0"	BELL & GOSSETT - E-80 6x6x7B
HWP-05	IN-LINE	HOT WATER	DUTY	WATER	3	1,200	1,116	2.01	3/60/460V	YES	YES	GPM 462.7 FT HD 15 EFF 83.5%	5.5"	7.0"	BELL & GOSSETT - E-80 6x6x7B
HWP-06	IN-LINE	HOT WATER	DUTY	WATER	3	1,200	1,116	2.01	3/60/460V	YES	YES	GPM 462.7 FT HD 15 EFF 83.5%	5.5"	7.0"	BELL & GOSSETT - E-80 6x6x7B
CWP-01	FLR MTD	CHILLED WATER	DUTY	WATER	40	1,800	1,689	24.1	3/60/460V	NO	YES	GPM 725 FT HD 105 EFF 79.7%	11.0"	11.0"	BELL & GOSSETT - E-1510 5EB
CWP-02	FLR MTD	CHILLED WATER	DUTY	WATER	40	1,800	1,689	24.1	3/60/460V	NO	YES	GPM 725 FT HD 105 EFF 79.7%	11.0"	11.0"	BELL & GOSSETT - E-1510 5EB
CWP-03	FLR MTD	CHILLED WATER	STAND-BY	WATER	40	1,800	1,689	24.1	3/60/460V	NO	YES	GPM 725 FT HD 105 EFF 79.7%	11.0"	11.0"	BELL & GOSSETT - E-1510 5EB

NOTES:
1. VFD'S PROVIDED AND INSTALLED BY EC.

FAN COIL UNIT SCHEDULE (CW/HW)

SYMBOL	CFM	OA CFM	EXT SP (IN)	QTY	MOTOR DATA SPEED	WATTS	TYPE	HP	FLA	MCA	MCOP	ELECT CHAR	CHILLED WATER COOLING COIL DATA EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	TOT MBH	SENS MBH	GPM	EWT °F	LWT °F	WPD FT	HOT WATER HEATING COIL DATA EAT °F DB	LAT °F DB	TOT MBH	GPM	EWT °F	LWT °F	WPD FT	MOUNTING	BASIS OF DESIGN
FC-01	400	50	0.03	2	HIGH	50.00	ECM	1/4	1.30	1.63	15.00	1/60/115V	78.0	64.0	57.5	55.1	10.57	9.07	2.2	45.0	54.9	2.30	65.2	117.8	23.14	1.6	200.0	170.1	1.87	FLOOR	JCI FWX-C04
FC-02	240	30	0.18	1	HIGH	55.00	ECM	1/4	1.30	1.63	15.00	1/60/115V	78.0	64.0	59.5	56.5	5.38	4.85	1.1	45.0	55.0	2.10	64.0	114.0	13.27	0.9	200.0	170.0	0.23	FLOOR	JCI FWX-C03
FC-03	600	75	0.01	5	HIGH	90.00	ECM	1/4	2.30	2.88	15.00	1/60/115V	78.0	64.0	58.7	56.0	14.37	12.76	2.9	45.0	55.1	1.47	65.2	113.3	31.87	2.2	200.0	170.0	0.60	FLOOR	JCI FWX-C06
FC-04	400	55	0.03	4	HIGH	50.00	ECM	1/4	1.30	1.63	15.00	1/60/115V	78.0	64.0	57.5	55.1	10.57	9.07	2.2	45.0	54.9	2.30	64.0	117.1	23.35	1.6	200.0	170.0	1.89	FLOOR	JCI FWX-C04
FC-05	310	60	0.18	2	HIGH	52.00	ECM	1/4	1.20	1.50	15.00	1/60/115V	78.0	64.0	58.2	55.9	7.57	6.77	1.5	45.0	55.1	1.18	60.1	115.3	18.72	1.3	200.0	170.0	1.29	HORIZONTAL	JCI FHX-D04
FC-06	230	45	0.36	1	HIGH	49.00	ECM	1/4	1.10	1.38	15.00	1/60/115V	78.0	64.0	56.2	54.1	6.76	5.53	1.4	45.0	55.0	4.85	60.1	114.6	13.74	0.9	200.0	170.0	0.60	HORIZONTAL	JCI FHX-D03
FC-07	240	30	0.31	1	HIGH	47.00	ECM	1/4	1.10	1.38	15.00	1/60/115V	78.0	64.0	57.5	55.2	6.22	5.38	1.3	45.0	55.1	2.30	64.0	122.7	15.40	1.1	200.0	170.0	0.33	HORIZONTAL	JCI FHX-D03
FC-08	320	165	0.38	1	HIGH	96.00	ECM	1/4	2.00	2.50	15.00	1/60/115V	83.8	67.4	52.7	51.7	15.15	11.03	3.1	45.0	55.1	5.25	34.0	109.1	26.29	1.8	200.0	170.1	2.93	HORIZONTAL	JCI FHX-D06

NOTES:
1. FOR CEILING RECESSED UNITS, HVAC CONTRACTOR SHALL COORDINATE TYPE FOR PROPER INSTALLATION. HVAC CONTRACTOR SHALL COORDINATE REMOVAL OF EXISTING CEILINGS AND WALLS FOR PROPER INSTALLATION.

BOILER SCHEDULE

SYMBOL	FIRE RATING PRIMARY	FIRE RATING FUTURE	INPUT MBH	GROSS OUTPUT MBH	BOILER HP	FUEL PRIMARY	FUEL FUTURE	NATURAL GAS PRESSURE	ELECTRICAL BLOWER HP	VOLTS	FLA	MANUFACTURER & MODEL #	BURNER MANUFACTURER
B-01	5,865	N/A	5,865	4,627	138.22 HP	NATURAL GAS	N/A	1 PSIG	4.2	3/60/480V	5.4	HB SMITH G4500-W-14	WEISHAUPT
B-02	5,865	N/A	5,865	4,627	138.22 HP	NATURAL GAS	N/A	1 PSIG	4.2	3/60/480V	5.4	HB SMITH G4500-W-14	WEISHAUPT
B-03	5,865	N/A	5,865	4,627	138.22 HP	NATURAL GAS	N/A	1 PSIG	4.2	3/60/480V	5.4	HB SMITH G4500-W-14	WEISHAUPT

NOTES:
1. BOILER BURNER MUST BE WEISHAUPT MODEL WM-G 20/2. ALTERNATE BURNER MANUFACTURERS WILL NOT BE ACCEPTED.
2. RELIEF VALVE SET PRESSURE 60 PSIG.
3. MINIMUM BOILER EFFICIENCY 83% WHEN FIRING NATURAL GAS AT HIGH FIRE AND 81.5% AT LOW FIRE.

DRAW COLLECTIVE
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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL SCHEDULES

Proj No. 23-S43-01
Issue Date 02/19/2024

M601

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POWER ROOF VENTILATOR SCHEDULE

SYMBOL	LOCATION	SERVES	TYPE	ROOF OPENING	SYSTEM CFM	FAN CFM	RPM	STATIC PRESSURE	TIP SPEED	DRIVE	HP	ELECT CHAR	WEIGHT	CONTROL TYPE	BASIS OF DESIGN
PRV-A01	ABOVE 412 ON ROOF	TR401, TR402, 410	RE	15.5 x 15.5	970	970	1,060	0.375	3,625	DIRECT	1/4	1/60/115 V	48 lbs	BMS	GREENHECK G-120-VG
PRV-B01	ABOVE 108 ON ROOF	108	RE	13.5 x 13.5	450	450	1,271	0.25	3,618	DIRECT	0.01	1/60/115 V	30 lbs	BMS	GREENHECK G-090-VG
PRV-B02	ABOVE 106 ON ROOF	101, 105, 106, 107	RE	13.5 x 13.5	450	450	1,414	0.375	4,026	DIRECT	0.01	1/60/115 V	30 lbs	BMS	GREENHECK G-090-VG
PRV-B03	ABOVE 2XC ON ROOF	TR101, TR102, 114, ...	RE	18.5 x 18.5	2,235	2,235	952	0.375	6,044	DIRECT	1	1/60/115 V	65 lbs	BMS	GREENHECK G-160-VG
PRV-B04	ABOVE 109 ON ROOF	109	KHE	36.5 x 36.5	8,214	8,214	757	1.25	5,266	DIRECT	5	3/60/230 V	397 lbs	LOCAL SWITCH, INTERLOCKED WITH KITCHEN HOOD	GREENHECK CUE-300-C-VGD
PRV-B05	ABOVE 109C ON ROOF	109C	HE	15.5 x 15.5	600	600	960	0.25	2,795	DIRECT	1/4	1/60/115 V	62 lbs	BMS	GREENHECK CUE-100-VG
PRV-B06	ABOVE 110A ON ROOF	109C	HE	18.5 x 18.5	1,695	1,695	811	0.375	3,528	DIRECT	1/2	1/60/115 V	90 lbs	BMS	GREENHECK CUE-160-VG
PRV-C01	ABOVE 190 ON ROOF	109	RE	18.5 x 18.5	1,900	1,900	1,142	0.25	4,373	DIRECT	1/2	1/60/115 V	55 lbs	BMS	GREENHECK G-140-VG
PRV-C02	ABOVE 190 ON ROOF	186 FUME HOOD	HE	15.5 x 15.5	1,000	1,000	1,562	0.625	4,549	DIRECT	1/4	1/60/115 V	49 lbs	BMS	GREENHECK CUE-100-VG
PRV-D01	ABOVE 184 ON ROOF	186 FUME HOOD	RE	18.5 x 18.5	1,900	1,900	1,142	0.25	4,373	DIRECT	1/2	1/60/115 V	55 lbs	BMS	GREENHECK G-140-VG
PRV-D02	ABOVE 182 ON ROOF	182	RE	18.5 x 18.5	1,900	1,900	1,142	0.25	4,373	DIRECT	1/2	1/60/115 V	55 lbs	BMS	GREENHECK G-140-VG
PRV-D03	ABOVE 178 ON ROOF	180 FUME HOOD	HE	15.5 x 15.5	1,000	1,000	1,562	0.625	4,549	DIRECT	1/4	1/60/115 V	49 lbs	BMS	GREENHECK CUE-100-VG
PRV-D04	ABOVE 182 ON ROOF	180 FUME HOOD	HE	15.5 x 15.5	1,000	1,000	1,562	0.625	4,549	DIRECT	1/4	1/60/115 V	49 lbs	BMS	GREENHECK CUE-100-VG
PRV-D05	ABOVE 178 ON ROOF	178	RE	18.5 x 18.5	1,900	1,900	1,142	0.25	4,373	DIRECT	1/2	1/60/115 V	55 lbs	BMS	GREENHECK G-140-VG
PRV-D06	ABOVE 176 ON ROOF	176	RE	18.5 x 18.5	1,900	1,900	1,142	0.25	4,373	DIRECT	1/2	1/60/115 V	55 lbs	BMS	GREENHECK G-140-VG
PRV-D07	ABOVE 179 ON ROOF	179	RE	18.5 x 18.5	1,900	1,900	1,142	0.25	4,373	DIRECT	1/2	1/60/115 V	55 lbs	BMS	GREENHECK G-140-VG
PRV-D08	ABOVE 173 ON ROOF	173	RE	18.5 x 18.5	1,900	1,900	1,142	0.25	4,373	DIRECT	1/2	1/60/115 V	55 lbs	BMS	GREENHECK G-140-VG
PRV-D09	ABOVE 172 ON ROOF	172	RE	18.5 x 18.5	1,900	1,900	1,142	0.25	4,373	DIRECT	1/2	1/60/115 V	55 lbs	BMS	GREENHECK G-140-VG
PRV-D10	ABOVE 170 ON ROOF	TR171, TR172	RE	15.5 x 15.5	640	640	1,532	0.375	4,488	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-098-VG
PRV-D11	ABOVE TR181 ON ROOF	TR181, TR182, 183	HE	15.5 x 15.5	640	640	1,618	0.375	4,606	DIRECT	1/10	1/60/115 V	30 lbs	BMS	GREENHECK CUE-090-VG
PRV-D12	ABOVE 184 ON ROOF	184	RE	15.5 x 15.5	1,000	1,000	1,725	0.625	5,053	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-099-VG
PRV-E01	ABOVE 154 ON ROOF	154, 156, 158	RE	15.5 x 15.5	1,000	1,000	1,580	0.375	4,627	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-099-VG
PRV-E02	ABOVE 160 ON ROOF	160, 162, 164	RE	15.5 x 15.5	1,000	1,000	1,580	0.375	4,627	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-099-VG
PRV-E03	ABOVE 210 ON ROOF	212	RE	13.5 x 13.5	370	370	1,693	0.375	4,819	DIRECT	1/10	1/60/115 V	29 lbs	BMS	GREENHECK G-080-VG
PRV-E04	ABOVE 216 ON ROOF	TR161, TR162, 161, 216	RE	15.5 x 15.5	1,135	1,135	1,725	0.371	5,053	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-099-VG
PRV-F01	ABOVE 163 ON ROOF	163 EXH. HOOD	RE	15.5 x 15.5	150	150	1,148	0.375	3,361	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-097-VG
PRV-F02	ABOVE 163 ON ROOF	163 EXH. HOOD	RE	15.5 x 15.5	150	150	1,148	0.375	3,361	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-097-VG
PRV-F03	ABOVE 165 ON ROOF	163 EXH. HOOD	RE	15.5 x 15.5	150	150	1,148	0.375	3,361	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-097-VG
PRV-F04	ABOVE 165 ON ROOF	163 EXH. HOOD	RE	15.5 x 15.5	150	150	1,148	0.375	3,361	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-097-VG
PRV-F05	ABOVE 300 ON ROOF	300	RE	15.5 x 15.5	2,000	2,000	1,593	0.5	5,473	DIRECT	3/4	1/60/115 V	53 lbs	BMS	GREENHECK G-130-VG
PRV-F06	ABOVE DARK RM ON ROOF	DARK ROOM	RE	13.5 x 13.5	400	400	1,199	0.25	3,413	DIRECT	1/10	1/60/115 V	30 lbs	BMS	GREENHECK G-090-VG
PRV-F07	ABOVE 303 ON ROOF	301, 303, 305, 306, 307	RE	15.5 x 15.5	730	730	1,687	0.375	4,942	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-098-VG
PRV-F08	ABOVE 309 ON ROOF	309	RE	15.5 x 15.5	1,600	1,600	1,486	0.375	5,082	DIRECT	1/2	1/60/115 V	49 lbs	BMS	GREENHECK G-120-VG
PRV-F09	ABOVE 314A ON ROOF	314A, 314B	RE	15.5 x 15.5	1,000	1,000	1,580	0.375	4,627	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-099-VG
PRV-G01	ABOVE 327 ON ROOF	325B, 326, 327, 328	RE	15.5 x 15.5	1,070	1,070	1,488	0.375	4,334	DIRECT	1/4	1/60/115 V	41 lbs	BMS	GREENHECK G-100-VG
PRV-G02	ABOVE TR301 ON ROOF	TR301, TR302, 317	RE	13.5 x 13.5	755	755	1,577	0.375	4,491	DIRECT	1/6	1/60/115 V	33 lbs	BMS	GREENHECK G-095-VG
PRV-G03	ABOVE 318 ON ROOF	318	RE	13.5 x 13.5	850	850	1,682	0.375	4,790	DIRECT	1/6	1/60/115 V	33 lbs	BMS	GREENHECK G-095-VG
PRV-G04	ABOVE 320 ON ROOF	320	RE	13.5 x 13.5	800	800	1,627	0.375	4,631	DIRECT	1/6	1/60/115 V	33 lbs	BMS	GREENHECK G-095-VG

NOTES:
1. PROVIDE AND INSTALL 20" HIGH CURBS.

CEILING EXHAUST FAN SCHEDULE

SYMBOL	EXH. CAP LOCATION	SERVES	WHEEL DIA.	TYPE	SYSTEM CFM	FAN CFM	RPM	STATIC PRESSURE	TIP SPEED	HP	ELECT CHAR	WEIGHT	BASIS OF DESIGN
CEF-A01	ABOVE A-14 ON ROOF	A-13	5.5	OP	100	100	950	0.233	1368	17 W	1/60/115 V	17 lbs	SP-A110
CEF-A02	ABOVE A-14 ON ROOF	A-14	5.5	OP	100	100	950	0.233	1368	17 W	1/60/115 V	17 lbs	SP-A110
CEF-B01	ABOVE C101 ON ROOF	120	7.75	TN	165	165	1100	0.375	1897	25 W	1/60/115 V	24 lbs	SP-A390-VG
CEF-B02	ABOVE C101 ON ROOF	124	7.75	TN	165	165	1100	0.375	1897	25 W	1/60/115 V	24 lbs	SP-A390-VG
CEF-B03	ABOVE C101 ON ROOF	128	7.75	TN	165	165	1100	0.375	1897	25 W	1/60/115 V	24 lbs	SP-A390-VG
CEF-B04	ABOVE C101 ON ROOF	150	7.75	TN	165	165	1100	0.375	1897	25 W	1/60/115 V	24 lbs	SP-A390-VG
CEF-C01	ABOVE 196 ON ROOF	196	7.75	TN	165	165	1100	0.375	1897	25 W	1/60/115 V	24 lbs	SP-A390-VG
CEF-E01	AB0VE C101 ON ROOF	152A	7.75	TN	165	165	1100	0.375	1897	25 W	1/60/115 V	24 lbs	SP-A390-VG
CEF-E02	ABOVE C101 ON ROOF	143	7.5	TN	880	880	1212	0.375	2356	185 W	1/60/115 V	50 lbs	SP-A1050-VG
CEF-G01	ABOVE 325 ON ROOF	325D	7.75	TN	165	165	1100	0.375	1897	25 W	1/60/115 V	24 lbs	SP-A390-VG
CEF-G02	ABOVE 324 ON ROOF	324	7.5	TN	350	350	1178	0.5	2012	76 W	1/60/115 V	32 lbs	SP-A510-VG
CEF-G03	ABOVE - ON ROOF	SOUND BOOTH	7.5	TN	350	350	1178	0.5	2012	76 W	1/60/115 V	32 lbs	SP-A510-VG

CABINET UNIT HEATER SCHEDULE (WATER)

SYMBOL	LOCATION	CFM	MBH	GPM	WTD °F	PD FT	FAT °F	COIL ROWS	COIL FPI	HP	AMPS	RPM	ELECT CHAR	RECESS	MOUNTED	BASIS OF DESIGN
CUH-B01	101 - RECIEVING	420	41.7	2.73	30.0	0.68	151.4	2 ROWS	12	1/10	1.4	1,050	1/60/115V	9"	CEILING	STERLING - RC-1200-04

NOTES:
1. HEATING CAPACITIES BASED ON 200°F EWT, 60°F EAT, AND HIGH FAN SPEED.
2. PROVIDE WITH ELECTRICAL DISCONNECT

GRAVITY ROOF VENTILATOR SCHEDULE

SYMBOL	TYPE	LOCATION OVER	SERVES	ROOF OPENING	INTAKE/RELIEF	REMARKS
GRV-C01	B-1	ABOVE 196 ON ROOF	FC-06	8 x 8	INTAKE	GREENHECK FGI
GRV-F01	B-1	ABOVE 171 ON ROOF	HUV-01	20 x 20	INTAKE	GREENHECK FGI
GRV-F02	B-1	ABOVE 171 ON ROOF	HUV-01	20 x 20	INTAKE	GREENHECK FGI
GRV-F03	B-1	ABOVE 308 ON ROOF	HUV-08	20 x 20	INTAKE	GREENHECK FGI
GRV-F04	B-1	ABOVE 308 ON ROOF	FC-08	8 x 8	INTAKE	GREENHECK FGI

VARIABLE VOLUME BOX SCHEDULE W/ ELECTRIC REHEAT

SYMBOL	LOCATION	SERVES ROOM	CFM			BOX DIMENSIONS			INLET DUCT (IN)	NOM COIL SIZE OR DISCH DUCT W x H (IN)	AUXILIARY HEATING COIL (ELECTRIC)							ELECTRICAL		MAX SP LOSS (IN)	BASIS OF DESIGN
			MIN	MAX	HEATING	L (IN)	W (IN)	H (IN)			HEATING CFM	FV FPM	EAT °F	LAT °F	kW	STEPS	ELEC CHARGE	MCA	MCOP		
VVB-001	A-16 - CORRIDOR	A-2	150	425	180	39 1/2	16	15	12	16" x 15"	180	108	55.0	90.1	2.0	SCR	3/60/480V	12.0	15.0	0.25	TITUS DESV
VVB-002	A-1 - GENERAL OFFICE	A-1	215	610	215	39 1/2	16	15	12	16" x 15"	215	129	55.0	91.7	2.5	SCR	3/60/480V	15.0	15.0	0.25	TITUS DESV
VVB-003	A-11 - WAITING	A-11, A-11A, A-16, A-17, & A-18	325	920	360	39 1/2	24	18	6	24" x18"	360	120	55.0	90.1	4.0	SCR	3/60/480V	24.0	25.0	0.25	TITUS DESV
VVB-004	A-12 - REGISTRATION OFFICE	A-16	60	165	165	39 1/2	12	10	6	12" x 10"	165	198	55.0	93.3	2.0	SCR	3/60/480V	12.0	15.0	0.25	TITUS DESV
VVB-005	A-12 - REGISTRATION OFFICE	A-12	55	150	90	39 1/2	12	10	8	12" x 10"	90	108	55.0	90.1	1.0	SCR	1/60/120V	6.0	15.0	0.25	TITUS DESV
VVB-006	A-6 - BUSINESS OFFICE	A-3, A-4, A-5, A-6, & A-6A	530	1,510	530	39 1/2	24	18	8	24" x18"	530	177	55.0	90.8	6.0	SCR	3/60/480V	36.1	40.0	0.25	TITUS DESV
VVB-007	A-10 - BOARD ROOM	A-10	500	1,420	500	39 1/2	24	18	8	24" x18"	500	167	55.0	89.8	5.5	SCR	3/60/480V	33.1	35.0	0.25	TITUS DESV
VVB-008	A-9A - SCHOOL PSYCHOLOGIST	A-9A	65	180	90	39 1/2	12	10	8	12" x 10"	90	108	55.0	90.1	1.0	SCR	1/60/120V	6.0	15.0	0.25	TITUS DESV
VVB-009	A-9 - ROOM	413	75	205	90	39 1/2	12	10	6	12" x 10"	90	108	55.0	90.1	1.0	SCR	1/60/120V	6.0	15.0	0.25	TITUS DESV
VVB-010	A-7A - COORDINATOR'S OFFICE	A-7 & A-7A	365	1,030	365	39 1/2	20	17 1/2	6	20" x 17 1/2"	365	151	55.0	89.6	4.0	SCR	3/60/480V	24.0	25.0	0.25	TITUS DESV

AIR COOLED CONDENSING UNIT SCHEDULE

SYMBOL	UNIT SERVES	CONDENSOR FANS		MAX SUCTION TEMP	COOLING AIR TEMP RANGE		COMPRESSOR				TONS	TOTAL GROSS CAPACITY, MBH	MCA	MCOP	TOTAL KW	EER	ELECT CHAR	UNIT WEIGHT	BASIS OF DESIGN
		QTY	FLA (EA)		MINIMUM	MAXIMUM	QTY	LRA		RLA									
								CIRCUIT 1	CIRCUIT 2	CIRCUIT 1	CIRCUIT 2								
ACCU-01	AHU-A01	4	1.60	45"	-	-	2	16.7	16.7	114.0	114.0	20.0	217.0	73.3	100.0	17.28	-	3/60/208V	930.0 lbs	JCI - YD240C00A2GAB5
ACCU-02	SSAHU-01	2	0.50	-	-40.0	115.0	1	13.0	-	8.0	-	3.0	-	25.0	31.0	-	10.8	1/60/208V	121.0 lbs	MITSUBISHI - PUY-A36NKA7
ACCU-03	SSAHU-02	1	0.50	-	-40.0	115.0	1	12.0	-	7.0	-	1.0	-	11.0	28.0	-	12.0	1/60/208V	92.0 lbs	MITSUBISHI - PUY-A12NKA7
ACCU-04	SSAHU-03	1	0.40	-	-40.0	115.0	1	11.0	-	7.0	-	2.5	-	19.0	26.0	-	9.5	1/60/208V	151.0 lbs	MITSUBISHI - PUY-A30NHA7
ACCU-05	SSAHU-04	1	0.40	-	-40.0	115.0	1	11.0	-	7.0	-	2.0	-	19.0	26.0	-	12.2	1/60/208V	151.0 lbs	MITSUBISHI - PUY-A24NHA7
ACCU-06	SSAHU-05	1	0.50	-	-40.0	115.0	1	12.0	-	7.0	-	1.0	-	11.0	28.0	-	12.0	1/60/208V	92.0 lbs	MITSUBISHI - PUY-A12NKA7

NOTES:
1. CAPACITIES BASED ON 95°F AMBIENT TEMPERATURE.
2. CAPACITIES BASED ON R-410A REFRIGERANT.
3. PROVIDE UNITS WITH LOW AMBIENT KITS AND WIND BAFFLES.
4. PROVIDE HOT GAS BYPASS ON ALL COMPRESSOR CIRCUITS OVER 5 TON

SPLIT SYSTEM AIR HANDLING UNIT SCHEDULE

SYMBOL	UNIT SERVES	HIGH CFM	OA CFM	COOLING CAPACITY BTUH	FLA	MCA	ELECT CHAR	EER	SEER	UNIT WEIGHT	MOUNTING	BASIS OF DESIGN
SSAHU-01	413 - NETWORK	920	0	36,000	0.265	1.0	1/60/208V	10.8	19.4	46.0 lbs	WALL	MITSUBISHI - PKA-A36KA8
SSAHU-02	127 - DATA	425	0	12,000	0.33	1.0	1/60/208V	12.0	20.8	29.0 lbs	WALL	MITSUBISHI - PKA-A12HA7
SSAHU-03	193A - DATA ROOM	775	0	30,000	0.36	1.0	1/60/208V	9.5	19.8	46.0 lbs	WALL	MITSUBISHI - PKA-A30KA7
SSAHU-04	187 - COMMUNICATION CLOSET	775	0	24,000	0.265	1.0	1/60/208V	12.2	21.3	46.0 lbs	WALL	MITSUBISHI - PKA-A24KA8
SSAHU-05	212 - DATA	425	0	12,000	0.33	1.0	1/60/208V	12.0	20.8	29.0 lbs	WALL	MITSUBISHI - PKA-A12HA7

NOTES:
1. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURERS RECOMMENDATIONS.
2. UNITS SHALL BE PROVIDED WITH A CONDENSATE PUMP.
3. PROVIDE UNITS WITH HAND-HELD WIRELESS CONTROLLER AND LOCKING WALL BRACKET.

HORIZONTAL UNIT HEATER SCHEDULE (WATER)

SYMBOL	CFM	RPM	MOTOR HP	ELECT CHAR	MBH	GPM	PD FT	FAT °F	WTD °F	MOUNTING HEIGHT	BASIS OF DESIGN
HUH-01	550	1,550	25 Watt	115V/1/60	26.1	2.7	0.09	103.9	20	7.5'	STERLING HS-36

NOTES:
1. HEATING CAPACITIES BASED ON 200°F EWT AND 60°F EAT.
2. INSTALL ELECTRIC THERMOSTAT ON 0'-6" CONDUIT EXTENSION FROM BOTTOM OF UNIT HEATER.
3. SUPPLY ALL UNIT HEATERS W/DOUBLE DEFLECTION LOUVERS.

KILN VENTILATION SYSTEM

SYMBOL	LOCATION	SERVES	HOOD DIAMETER	BLOWER RATING	HOSE DIAMETER	BASIS OF DESIGN
KVS-01	RECIEVING & STORAGE	KILNS	44"	500 CFM	6"	VENT-A-KILN MODEL No. 1544
KVS-02	RECIEVING & STORAGE	KILNS	44"	500 CFM	6"	VENT-A-KILN MODEL No. 1544

NOTES:
1. HC SHALL PROVIDE EACH KILN VENT SYSTEM IN A POSITIVE-PRESSURE SYSTEM CONFIGURATION.

DRAW COLLECTIVE
470 Washington Road, Pittsburgh, PA 15228
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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
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REVISIONS
1 02/29/24 ADDENDUM NO. 1

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL SCHEDULES

Proj No. 23-S43-01
Issue Date 02/19/2024

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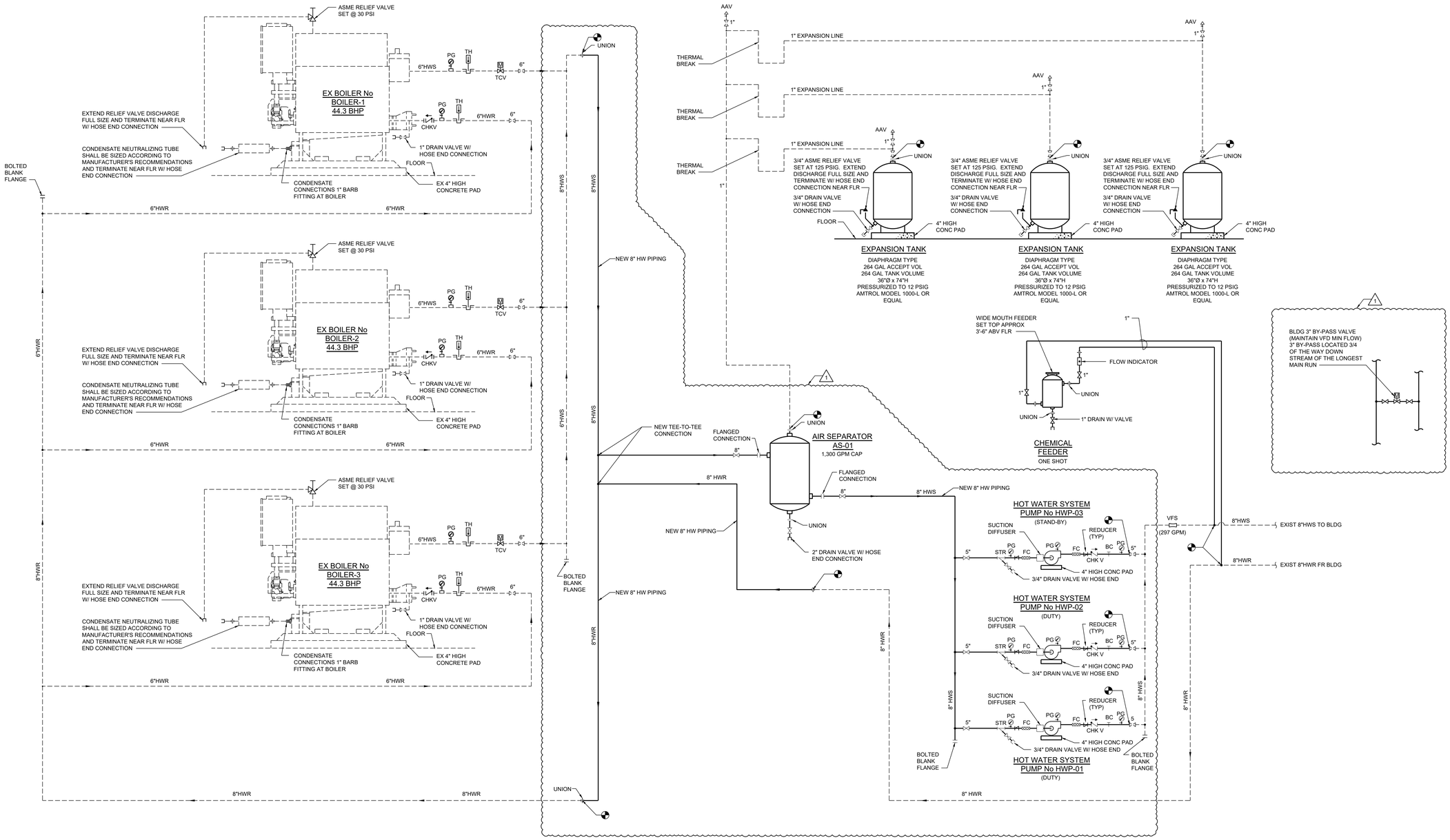

1 HOT WATER FLOW DIAGRAM

Scale: NTS

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL HOT WATER FLOW DIAGRAM - NEW WORK

Proj No. 23-S43-01
Issue Date 02/19/2024

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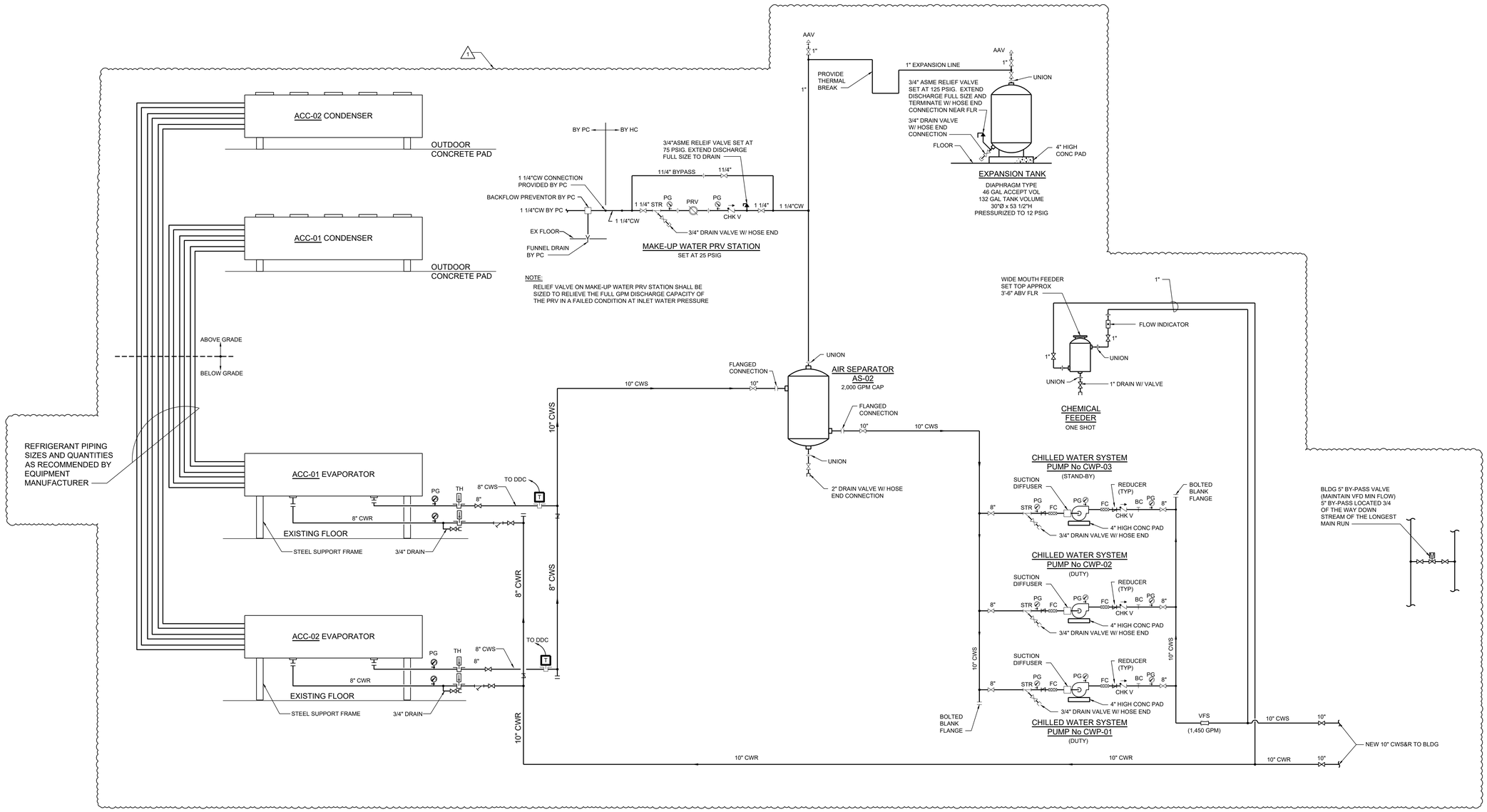

1 CHILLED WATER FLOW DIAGRAM

Scale: NTS

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REVISIONS
02/29/24 ADDENDUM NO. 1

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HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

MECHANICAL CHILLED WATER FLOW DIAGRAM - NEW WORK

Proj No. 23-S43-01
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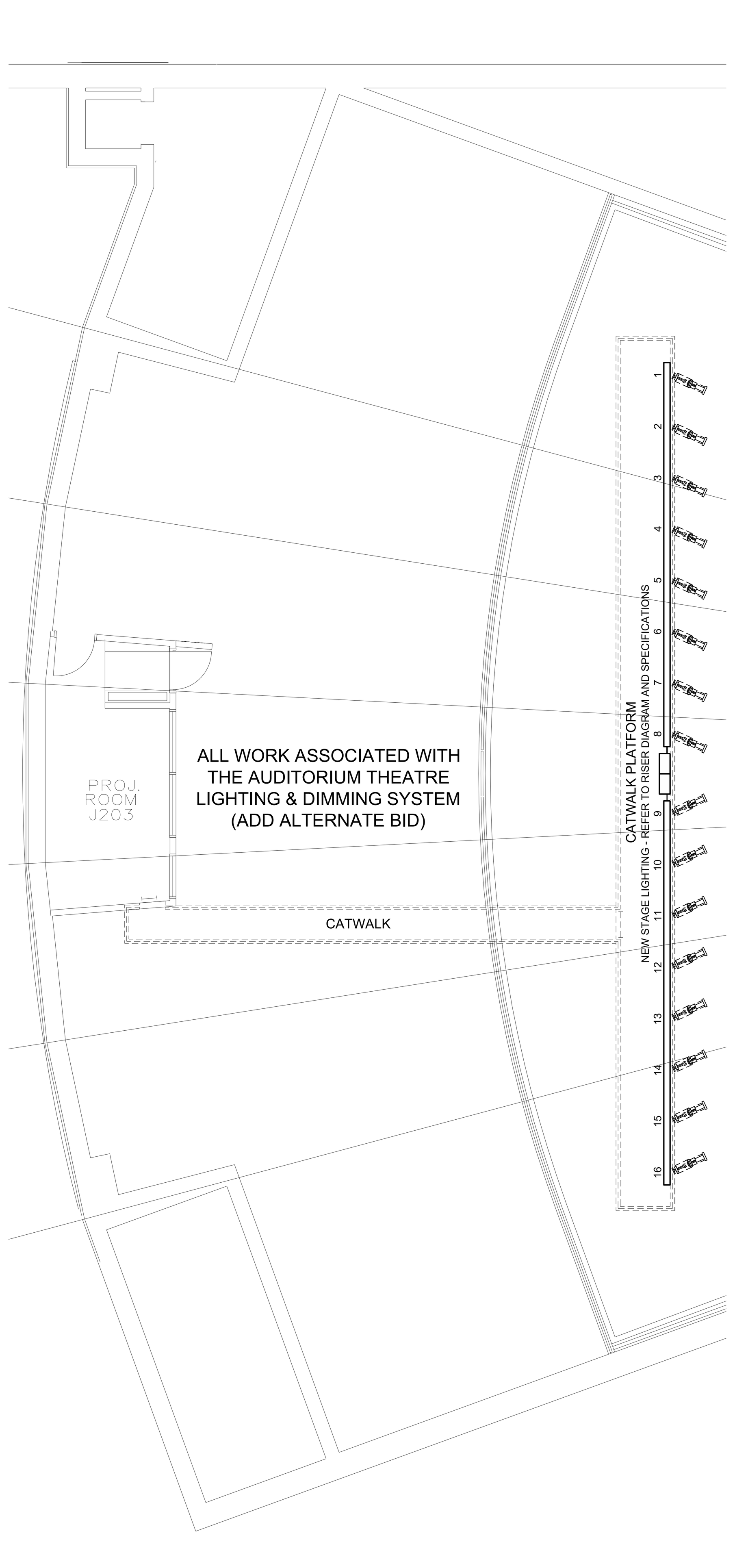
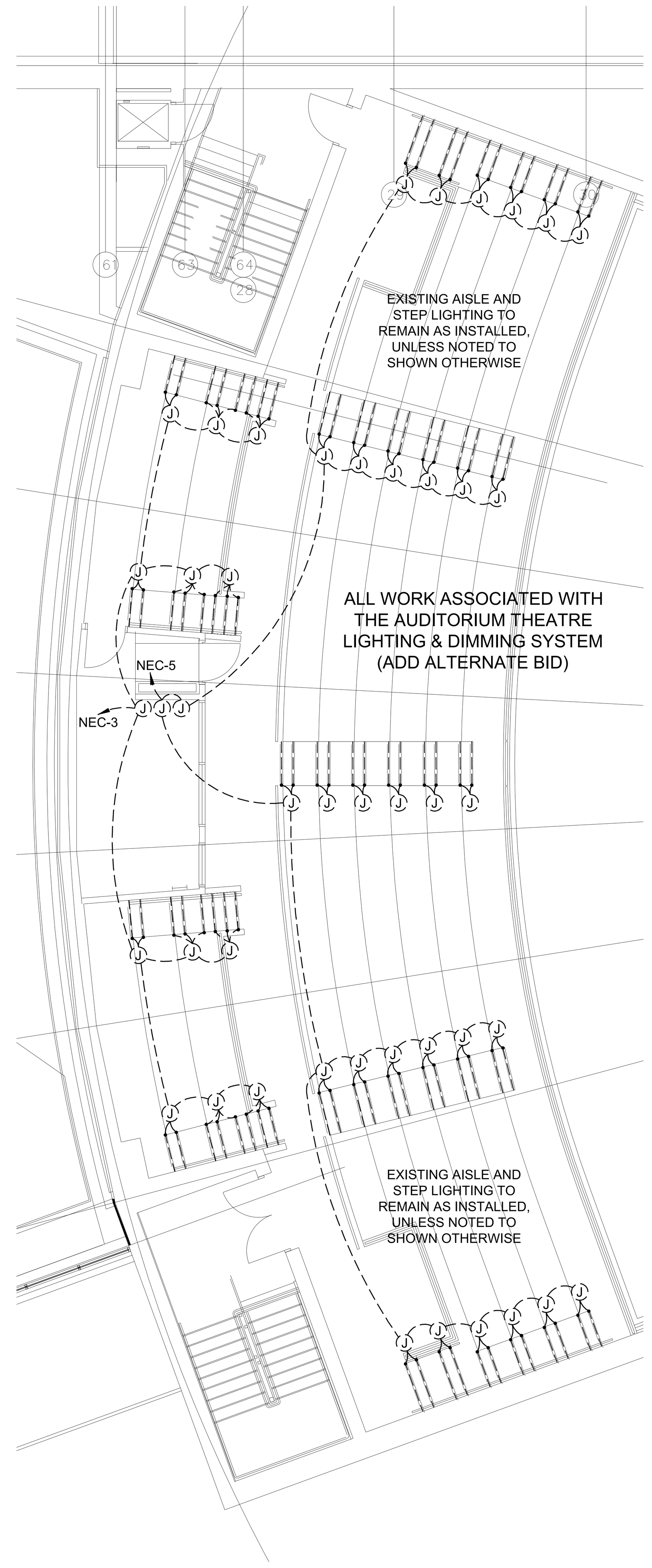
JMcMunn



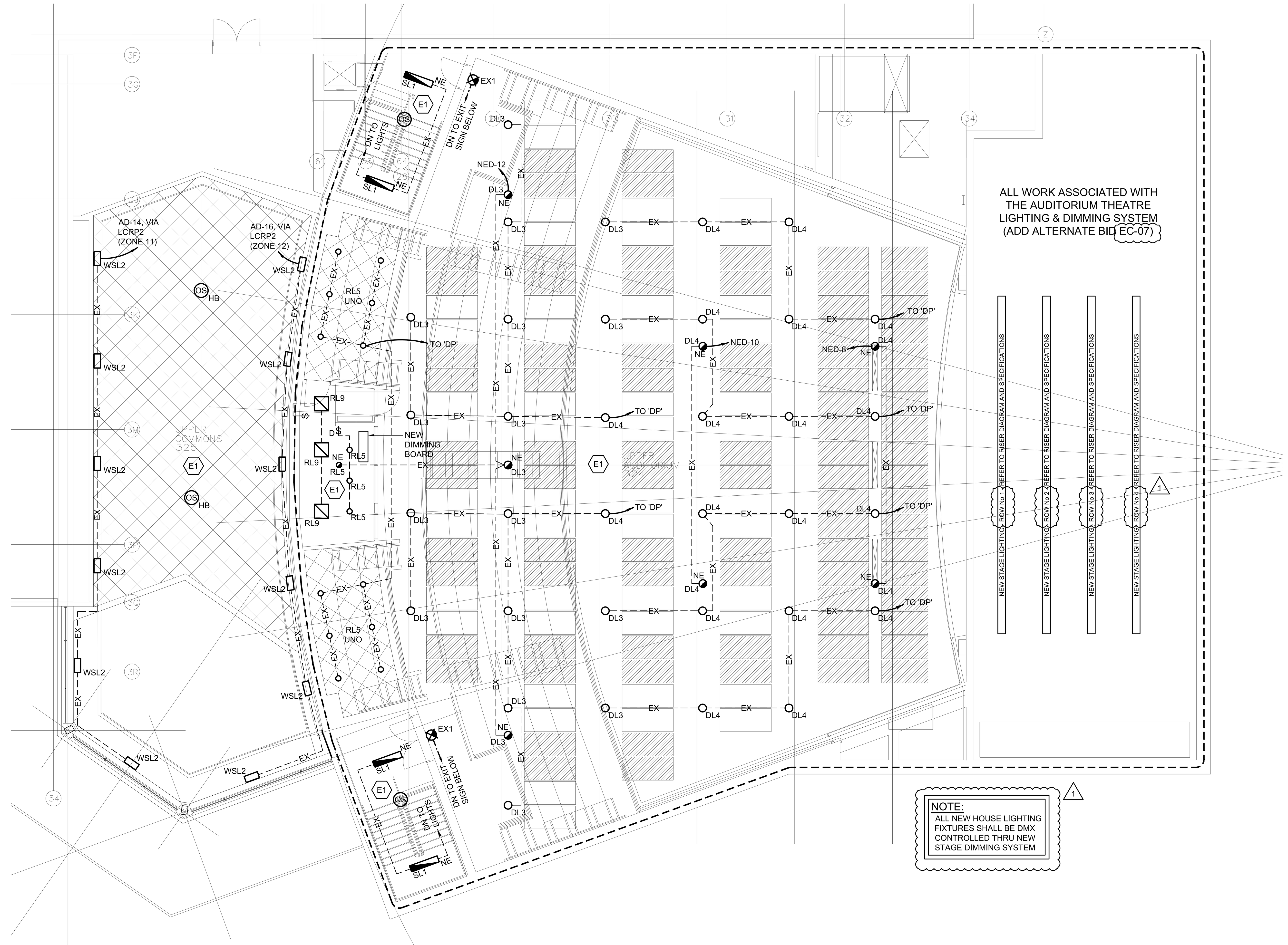
3 CATWALK - STAGE LIGHTING

Scale: 1/8" = 1'-0"



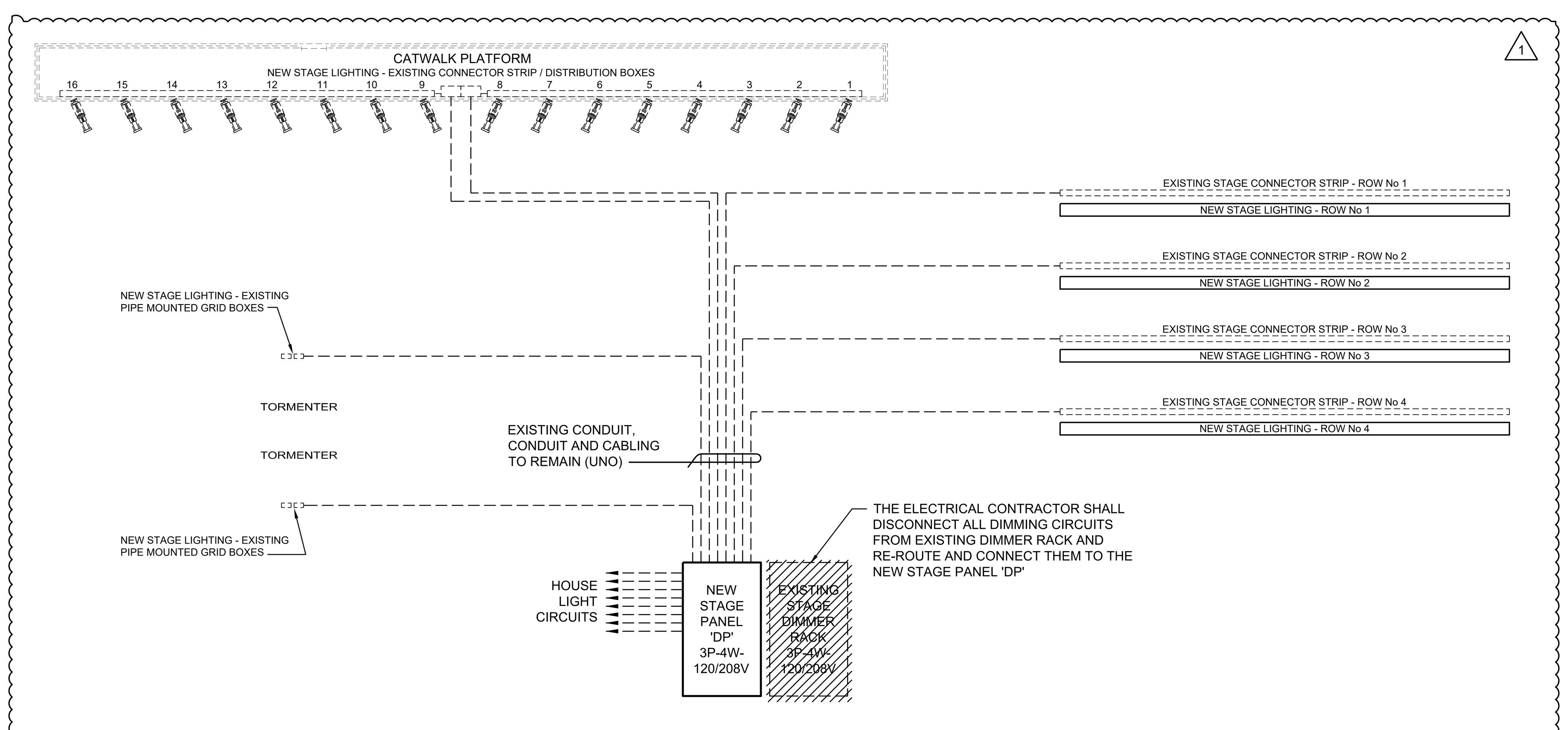
2 BALCONY - STEP LIGHTING

Scale: 1/8" = 1'-0"



1 SECOND FLOOR PLAN - AREA 'G' - LIGHTING

Scale: 1/8" = 1'-0"



AUDITORIUM DIMMING SYSTEM - POWER DISTRIBUTION RISER DIAGRAM

NOT TO SCALE

(ADD ALTERNATE BID EC-07)

NEW STAGE PANEL 'DP'

MAIN MLO — VOLTAGE 208 /120V — MOUNTING SURFACE
BUSING 400A AMPS — 3-Ph 4-W
SCR 22,000 AIC

(ADD ALTERNATE BID EC-07)

NO	DESCRIPTION	CB/P	CB/P	DESCRIPTION	NO
1	HOUSE LIGHTING CIRCUIT	20/1	20/1	HOUSE LIGHTING CIRCUIT	2
3	HOUSE LIGHTING CIRCUIT	20/1	20/1	HOUSE LIGHTING CIRCUIT	4
5	HOUSE LIGHTING CIRCUIT	20/1	20/1	HOUSE LIGHTING CIRCUIT	6
7	HOUSE LIGHTING CIRCUIT	20/1	20/1	HOUSE LIGHTING CIRCUIT	8
9	SPARE	20/1	20/1	SPARE	10
11	PIPE MOUNTED PLUG BOX - HOUSE LEFT TORMENTOR	20/1	20/1	PIPE MOUNTED PLUG BOX - HOUSE LEFT TORMENTOR	12
13	PIPE MOUNTED PLUG BOX - HOUSE LEFT TORMENTOR	20/1	20/1	PIPE MOUNTED PLUG BOX - HOUSE LEFT TORMENTOR	14
15	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20/1	20/1	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	16
17	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20/1	20/1	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	18
19	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20/1	20/1	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20
21	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20/1	20/1	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	22
23	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20/1	20/1	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	24
25	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20/1	20/1	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	26
27	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20/1	20/1	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	28
29	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	20/1	20/1	FRONT OF HOUSE SPOT - CATWALK PLUG BOX	30
31	PIPE MOUNTED PLUG BOX - STAGE ROW No 1	20/1	20/1	PIPE MOUNTED PLUG BOX - STAGE ROW No 2	32
33	PIPE MOUNTED PLUG BOX - STAGE ROW No 1	20/1	20/1	PIPE MOUNTED PLUG BOX - STAGE ROW No 2	34
35	PIPE MOUNTED PLUG BOX - STAGE ROW No 1	20/1	20/1	PIPE MOUNTED PLUG BOX - STAGE ROW No 2	36
37	PIPE MOUNTED PLUG BOX - STAGE ROW No 1	20/1	20/1	PIPE MOUNTED PLUG BOX - STAGE ROW No 2	38
39	PIPE MOUNTED PLUG BOX - STAGE ROW No 3	20/1	20/1	PIPE MOUNTED PLUG BOX - STAGE ROW No 4	40
41	PIPE MOUNTED PLUG BOX - STAGE ROW No 3	20/1	20/1	PIPE MOUNTED PLUG BOX - STAGE ROW No 4	42
43	PIPE MOUNTED PLUG BOX - STAGE ROW No 3	20/1	20/1	PIPE MOUNTED PLUG BOX - STAGE ROW No 4	44
45	PIPE MOUNTED PLUG BOX - STAGE ROW No 3	20/1	20/1	PIPE MOUNTED PLUG BOX - STAGE ROW No 4	46
47	PIPE MOUNTED PLUG BOX - HOUSE RIGHT TORMENTOR	20/1	20/1	PIPE MOUNTED PLUG BOX - HOUSE RIGHT TORMENTOR	48
49	PIPE MOUNTED PLUG BOX - HOUSE RIGHT TORMENTOR	20/1	20/1	PIPE MOUNTED PLUG BOX - HOUSE RIGHT TORMENTOR	50
51	SPARE	20/1	20/1	SPARE	52
53	SPARE	20/1	20/1	SPARE	54
55	SPACE			SPACE	56
57	SPACE			SPACE	58
59	SPACE			SPACE	60

KEY NOTES THIS DRAWING:

E1 DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES . FURNISH AND INSTALL NEW LIGHT FIXTURES AT EXISTING FIXTURE LOCATIONS AND CONNECT TO EXISTING CIRCUITING. FURNISH AND INSTALL NEW LIGHTING CONTROL DEVICES AS SHOWN.

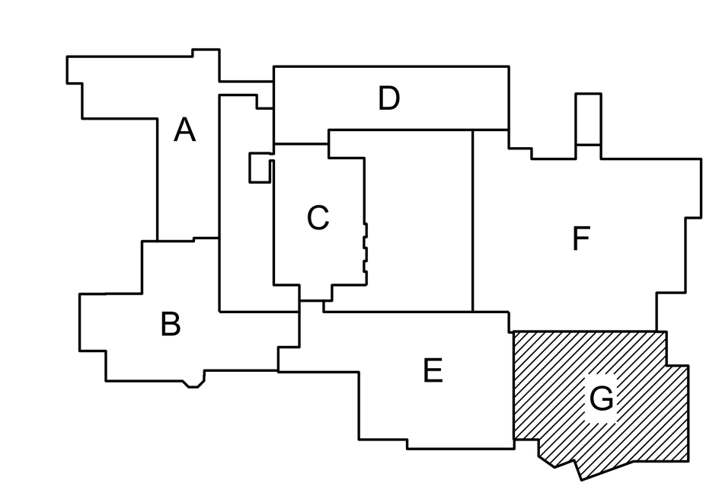
E2 DISCONNECT EXISTING LIGHTING CIRCUIT SERVING THIS ROOM AND OR AREA. RE-ROUTE EXISTING LIGHTING CIRCUIT THRU NEW LIGHTING CONTROL DEVICE AND RE-FEED LIGHTING. RE-CONNECT TO EXISTING LIGHTING CIRCUIT SERVING THIS ROOM OR AREA.

GENERAL NOTES THIS DRAWING:

1. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING EXIT SIGNS. (NOT INDICATED BY "EX" TO REMAIN) FURNISH AND INSTALL NEW EXIT SIGNS AT EXISTING EXIT SIGN LOCATIONS AND CONNECT TO EXISTING EXIT SIGN NORMAL / EMERGENCY CIRCUIT. UNLESS NOTED OR SHOWN OTHERWISE.
2. AT EACH LOCATION A NEW LIGHTING FIXTURE IS SHOWN, THE CONTRACTOR SHALL DISCONNECT AND REMOVE THE EXISTING FIXTURE AT THE LOCATION THE NEW FIXTURE IS SHOWN.

CEILING REMOVAL NOTE:

ALL CEILING REMOVAL TO ACCOMPLISH THE WORK SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE DONE BY THE ELECTRICAL CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CEILING TILES AND GRIDS AS NEEDED, STORE THEM IN A SAFE AND DRY LOCATION, AND REINSTALL THEM WHEN COMPLETE. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY CEILING TILES OR CEILING GRIDS DAMAGED DURING THE COMPLETION OF THE WORK. CEILING TILES SHALL BE SALVAGED FROM A DONOR ROOM DETERMINED BY ARCHITECT. WHEN DONOR ROOM HAS NO REMAINING EXISTING TILES TO BE SALVAGED THE EC SHALL PROVIDE NEW CEILING TILES TO MATCH EXISTING. COORDINATE THIS WORK WITH THE OTHER CONTRACTORS AND ARCHITECT.



KEY PLAN

NOT TO SCALE

DRAW COLLECTIVE
470 Washington Road, Pittsburgh, PA 15228
412.561.7117 www.DRAWcollective.com

H.F. LENZ ENGINEERING
Headquarters:
1407 Scalp Avenue
Johnstown, PA 15904-3329
Phone: 814-269-9300
www.hflenz.com

REVISIONS
1 ADDENDUM No 1 02/29/24

BID SET 02/19/24

HIGH SCHOOL RENOVATIONS
511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

SECOND FLOOR PLAN - AREA 'G' LIGHTING

Proj No. 23-S43-01
Issue Date 02/19/2024

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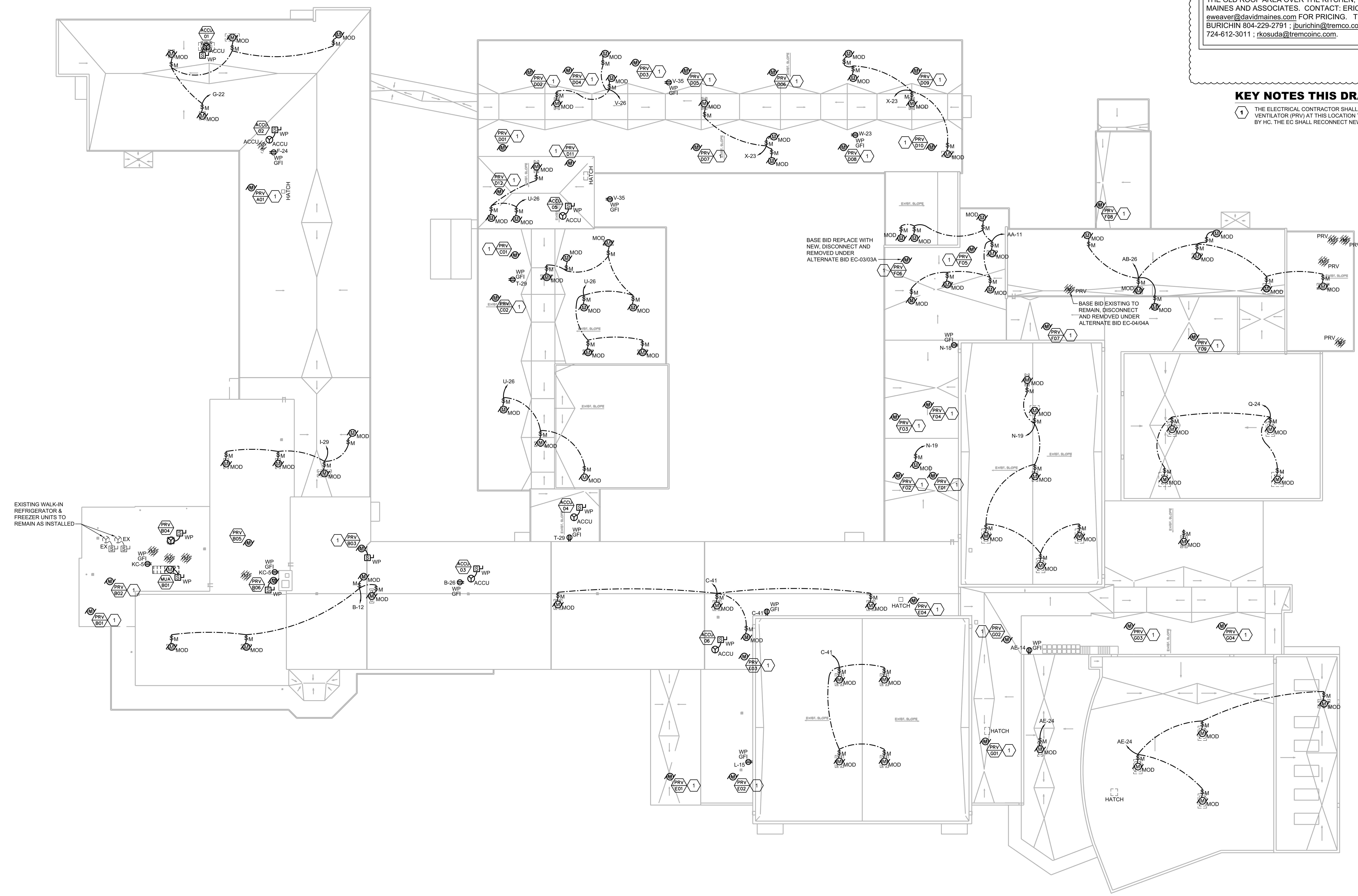


1 OVERALL ROOF PLAN - POWER & SIGNAL

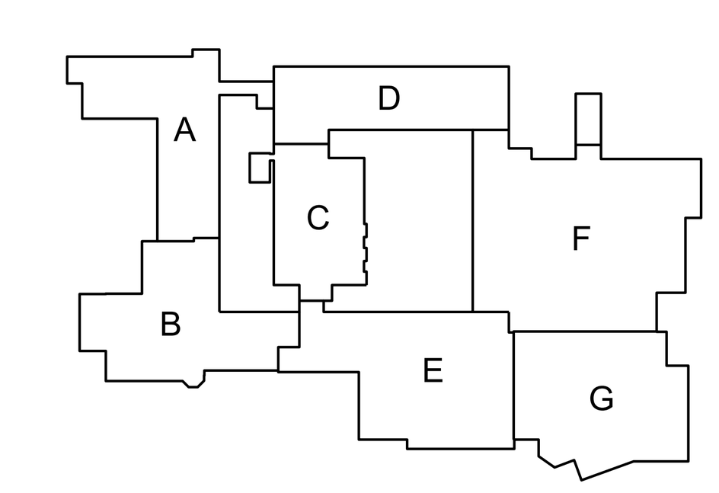
Scale: 1" = 20'-0"

△1

ROOF WARRANTY NOTE:
THE SCHOOL DISTRICT CONTRACTED WITH DAVID MAINES AND ASSOCIATES THIS PAST YEAR AND THE ENTIRE ROOF WAS REPLACED AND RESTORED WITH A TREMCO ROOF SYSTEM WITH THE EXCEPTION OF THE AREA OVER THE KITCHEN. THE ROOFING OVER THE KITCHEN WILL BE COMPLETED BY DAVID MAINES AND ASSOCIATES ONCE ALL OF THE NEW CONTRACT WORK IS COMPLETED. ALL ROOF WORK NECESSARY UNDER THIS CONTRACT (PATCHING, CURB FLASHINGS, ETC.) THAT IS NOT WITHIN THE OLD ROOF AREA OVER THE KITCHEN, MUST BE COMPLETED BY DAVID MAINES AND ASSOCIATES. CONTACT: ERIC WEAVER 717-437-5677 ; eweaver@davidmaines.com FOR PRICING. TREMCO ROOFING CONTACT: JIM BURICHIN 804-229-2791 ; jburichin@tremco.com OR RICHARD KOSUDA 724-612-3011 ; rkosuda@tremcoinc.com.

KEY NOTES THIS DRAWING:

1. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT THE EXISTING POWER ROOF VENTILATOR (PRV) AT THIS LOCATION TO ALLOW THE REMOVAL/REPLACEMENT BY HC. THE EC SHALL RECONNECT NEW PRV TO EXISTING CIRCUITING.



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NOT TO SCALE

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511 HIGHLAND AVENUE, GROVE CITY, PA 16127
GROVE CITY AREA SCHOOL DISTRICT

OVERALL ROOF PLAN
POWER & SIGNAL

Proj No. 23-S43-01
Issue Date 02/19/2024

E211