JON ANDERSON ARCHITECTURE
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ADDENDUM NUMBER **TWO**

100% Construction Documents (Dated 11.04.22)

Date: **December 21, 2022**

Project: **Sandia Base Elementary School**

Notice to all Perspective Offerors:

*This **Addendum No.2** becomes a part of the Contract Documents and modifies the original bidding documents dated November 04, 2022. All other provisions of the Contract Documents shall remain unchanged.*

Section 1 – GENERAL

1. The Deadline for Questions has been extended to Wednesday, December 28th, 2022 by 3:00pm MST.

2. Construction Industries Division (CID) Permit Review Fee:
    a. Please include the initial construction Permit Review Fee of ***$19,480.50*** (Nineteen thousand four hundred eighty and fifty cents) in the bid. The actual building permit fee amount will be determined based on the approved construction cost.

3. Approximate Square Footage of Buildings to be demolished:
    a. The existing one-story mini gym to be demolished is approximately 4,160 Square Feet.
    b. The existing one-story school building to be demolished is approximately 50,919 Square Feet.
    c. See Attachments for As-Built Diagrams provided by APS.

Section 2 – QUESTIONS AND ANSWERS

1. On Sheet EL101A, the area 'marked security entry 100' and the wall that shares with the nurses restroom-114D have a light type WL2 that is not in the electrical luminaire schedule. What kind of light is this? Please clarify.

    a. ***RESPONSE: Revised fixture schedule to be provided in Addendum #3***.

2. On Sheet EL101A, in the Elevator Area EV, the light fixture diagram looks like the N3W light fixture on the same page. It does not look like the BV light fixture diagram. Please clarify.

    a. ***RESPONSE: The BV fixture is the correct fixture type.***

3. EL101B: In Stage Area 133A, under note EL24, RGBW led light bar-surface mount chauvet dj6spot. This is not in the electrical luminaire schedule. Please clarify the fixture model number.

    a. RESPONSE: Specification per keyed note

4. EL101B: On the east end of the plan sheet, there are fixtures with WXL. Are these light fixtures that need to be counted? They are not in the electrical luminaire schedule. Please clarify.

    a. ***RESPONSE: Revised fixture schedule to be provided in Addendum #3.***

5. Will there be any restrictions regarding noise or odor during roofing operations, either before or after the new gym becomes occupied per Phasing General Note, Sheet A.103?

    a. ***RESPONSE: Noise and odor should be kept to a minimum during construction. Please review Specification Section 01 3510, paragraph 1.8 Schedule and Hours of Operation and Kirtland AFB requirements for Hazardous Materials. Prior to commencement of the work, the awarded Contractor shall meet with APS and the KAFB Contracting Officer to discuss and develop a mutual understanding relative, but not limited, to safety, noise and air quality, schedule and required KAFB permits.***

6. Burn Permits for Hot Asphalt Work – Will this be the General Contractors' Responsibility or the Roofing Subcontractor's?

    a. ***RESPONSE: The responsibility for Hot asphalt Burn Permits shall be the General Contractor's decision and coordinated with the Fire Marshal.***

7. At Quality Requirements (01 4000) Summary includes Item No. 3 – Mock-ups. Section does not define Mock-up and/or their limitation. Will Mock-ups be required?

    a. ***RESPONSE: Mock-ups are not required. Assemblies will have third-party envelope testing and inspections.***

8. At 07 51 10, 1.05, D. uplift resistance is called to be no less than ninety (90) psf. Plan Page S.003 has calculated uplifts presented. Does 07 51 10, 1.05, D supersede the

work presented on S.003?

a. ***RESPONSE: The wind uplift loads for the roofing material per spec 07 51 10 are different than the roof wind loads shown on S.003. The roof loads shown on S.003 are for the roof structure, including beams, joists, metal deck, etc., and should not be superseded by the wind uplift load provided in spec 07 51 10.***

9. At 07 56 13, 2.3, C. Protection Board 1/2-inch Cement Backer Board Thinset (applied) directly to sloping Concrete Topping Slab. Detail 2 / A.803 shows board on top of Roofing Membrane – Specification would have this board applied under Hot Rubberized Asphalt (HRA) Membrane which would be correct.

   If board is to be applied under membrane, it is not necessary as the HRA can be applied directly to the Sloped Concrete Topping Slab. Can the Board be eliminated?

   If there is a protection board required above the HRA membrane either an integrally applied protection board (sheet) provided by the HRA Membrane Manufacturer should be utilized or an Insulation Board (Extruded Polystyrene) should be applied. Which application would be appropriate for this install?

   a. ***RESPONSE: Please provide an integrally-applied protection board OVER the HRA Membrane.***

10. Roof plan notes and Spec Section 075110 G.2 state that PermaFlash requires a TopGuard base and 2 coats of TopGuard 4000, and that the coatings must be applied a minimum of 90 days after PermaFlash application (General Note 8). Since Perma-Flash cures within 2-3 days:

    Is the coating and 90 day time requirement meant for application over plastic cement flashing instead? Can broadcast granules be used immediately over the PermaFlash system to achieve a matching color to the roof field for cost savings?

    a. ***RESPONSE: To be provided in next Addendum.***

11. Detail 4 on Sheet A.821 shows an 8” radius joint cover on a 4” expansion joint. Specifications call for an elastomeric joint by InPro. Is this detail intended to be the 671-G02-200 which has a 4” radius and allows for 4” movement horizontal and vertical?

    a. ***RESPONSE: Yes, 4 inches of movement horizontal and vertical is required. However, due to the thickness and geometry of the wall that the joint cover sits on, an 8" radius joint cover needs to be used. The model number is 674-G02-200.***

12. Detail 4 / A.803 indicates a “2-Ply Roofing up Sloped Surface” Is this to be the same system as the Base Flashings? Base Flashing vertical rise is less than 24” above the Knee Wall transition to vertical. Will the small insert of EPDM Flashing be required at this detail? At Base Flashing Heights of 24” or less (i.e. 6 / A.803) can the EPDM be eliminated?

    a. ***RESPONSE: To be provided in next Addendum.***

13. The metal coping at ACM walls (10/A.801) is called out to have a Kynar finish that matches the ACM panels. If the metal coping is to be fabricated from steel sheets and be included in the roofing warranty, the metal finishes will not match unless the coping is a custom color with minimum order quantities. Is the metal coping at ACM walls to be custom color steel installed by the roofer, or a standard steel color selected by architect as a close match? Or should the coping be provided and installed by the ACM subcontractor?

    a. ***RESPONSE: The metal coping at ACM walls is to be color ‘White’ from standard steel color selections to be included in the roofing warranty. It is the Architect’s intent to have the coping match the white ACM panels as much as possible.***

14. Sealant beads are shown between the kick of the metal coping and the wall finishes. This is not recommended due to the differential movement between the finishes. Is this sealant going to be required, and is it to match the wall finish color or the coping color?

    a. ***RESPONSE: The sealant beads shown at metal coping conditions are NOT required.***

15. Stair 3 roof structure seems to be sloped east to west, yet roof plan calls for drainage to go from north to south. Does this roof require tapered insulation to counteract the deck slope and discharge to the scupper at the center of the south parapet?

    a. ***RESPONSE: The roof structure at Stair No.3 roof is to be flat with the slope achieved by tapered insulation sloping north to south as shown on the Roof Plan. A structural clarification drawing will be forthcoming.***

16. Building sections and Spec Section 07 56 13 Fluid Applied Roofing reference a concrete paver system on pedestals, but no section on the pavers (32 14 14) were provided. Can specifications on the required paver system be provided via Addendum?

    a. ***RESPONSE: Please see Attachments for specifications Section 32 14 14 - Pressed Concrete Pavers.***

17. Storefront sill detail 13/A.832 calls for sill flashing with back and end dams. Is this metal to match the storefront system and be provided by the storefront subcontractor as part of their system?

    a. ***RESPONSE: Sill flashing and Parapet Coping colors vary depending on the adjacent materials. See the clarification schedule below. The GC shall determine the subcontractor's scope of work; however, the architect prefers to have the storefront contractor install the window flashing.***

    b. *Metal Parapet Coping color schedule:*
        i. *At ACM and Stucco, White Finish.*
        ii. *At CMU and Translucent Panel, Galvalume Finish.*

    c. *Storefront sill flashing color schedule:*
        i. *At ACM, Stucco and Translucent Panel, White Finish.*
        ii. *At CMU, Dark Bronze Finish (to match storefront)*

18. Specification section 07 41 13, 1.3 H calls for ES-1 tested edge metal (at standing seam metal roof areas). IBC Section 1504.5 states that ES-1 testing is only required at low slope Built Up or membrane roofs. Will this requirement be removed from the project?

    a. ***RESPONSE: To be provided in next Addendum.***

19. Specification section 07 41 13, Part 3 calls for ¾" plywood underlayment where detail 8/A.802 calls for ½" plywood. Which thickness of plywood will be required?

    a. ***RESPONSE: The plywood underlayment should be 1/2 inch fire-rated.***

20. Specification section 07 41 13, 2.3 calls for MBCI Ultra Dek with a 3" rib as the basis of design. This panel system is a structural panel that does not typically require a solid underlay. Since "Ultra-Dek" profile is only available from MBCI, will other profiles be acceptable or is this to be a closed specification for MBCI? Since a solid underlay is provided, should the system be revised to an architectural panel with a lower rib height?

    a. ***RESPONSE: A structural panel is not required for the standing seam roof; the profile should have 1-1/2 inch ribs. Please refer to Changes to the Specifications.***

21. There is a round opening through the roof in the Kinder Court. Section A1/A.351 shows the inner wall with an EIFS finish and an outer wall finish of roof flashing (black EPDM). Since this inner round wall is 12" above the outer parapet, it may be visible from the ground. Should the visible portion of the outer wall also have an EIFS finish to match the building elevations? Is the metal coping on this wall to be segmented, or factory curved? Specifications are not provided on metal coping; can we assume 24 gauge, standard

color options?

a. ***RESPONSE: The round 'oculus' parapet at the Kindergarten Courtyard should be the same height as the adjacent parapet, 18-2", obscured from view. The metal coping may be segmented, 24 gage, with factory standard White Finish.***

22. Sheet SN201, Detail 13, Hallway 100A – East – Decal & Wayfinding Legend horses calls out "9.70" which Keynote reads "Painted Wall Graphic"; however, Sheet A701, Detail 2, ST-1 – Section A calls out "10.14" which Keynote reads "Custom color Vinyl Wall Graphic." Please confirm if fabrication method is to be painted or vinyl graphic.

    a. ***RESPONSE: The wall graphics in high-traffic areas are to be Keynote 09.70, "Painted Wall Graphic" per APS preference.***

23. Sheet SN201, Detail 6, 7, and 8 "BOYS", "GIRLS" and "LIBRARY" call out Keynote "9.70" which reads "Painted Wall Graphic"; however, Sheet A431, Details 7 and 3 and Sheet A41, Detail 9 "GIRLS", "BOYS", and "LIBRARY", respectively, call out Keynote 10.14B and 10.14C which reads "Custom Color Vinyl Wall Graphic". Please confirm if fabrication method is to be painted or vinyl graphic.

    a. ***RESPONSE: The wall graphics in high-traffic areas are to be Keynote 09.70, "Painted Wall Graphic" per APS preference.***

24. Sheet SN201 Signage & Graphics Details, Detail 1 Cafeteria Vinyl Graphic Sign graphic calls out keynote "9.70" which reads "Painted Wall Graphic" Sheet A405 Detail 7 Cafeteria Sign call out Keynote 10.14 which reads "Custom color vinyl wall graphic". Please confirm if fabrication method is to be painted or vinyl graphic.

    a. ***RESPONSE: The wall graphics in high-traffic areas are to be Keynote 09.70, "Painted Wall Graphic" per APS preference.***

25. Is playground equipment salvage by APS?

    a. ***RESPONSE: Playground equipment salvage will be by APS On-call Contractor. The General Contractor will be responsible for demolition of the play courts, basketball posts, and dining tables.***

26. AD101/3: Are we to demolish curb and gutter along E. Sandia Cir?

    a. ***RESPONSE: The new design is matching grades at the existing E. Sandia Circle so it is possible that some of the existing curb and gutter can remain depending on tie-in transitions and conditions at new driveways and***

sidewalks.

27. Please identify what gas lines are to be abandoned in place and what gas lines will need to be removed.

    a. ***RESPONSE: To be provided in next Addendum.***

28. Are all site furnishings NIC?

    a. ***RESPONSE: There are several site furnishings that are to be provided by the Contractor unless noted as N.I.C including site benches, waste receptacles, bicycle racks, etc. See specification sections 12 93 00 and 12 93 13 and Sheets AS.101A and AS.101B.***

29. What material should the outdoor basketball courts be constructed with?

    a. ***RESPONSE: The outdoor basketball court play surface is to be 3" asphalt per Keynote 8 on Sheet CP.102.***

30. Sheet A.602B indicates CT02 Carpet for 2/3 of the Media Center. The flooring on the Reading Area side is not indicated. Please clarify.

    a. ***RESPONSE: The floor finish of the Reading Area within the Media Center is also CT02 Carpet Tile.***

31. Please provide a specification for the Pedestal Paver System located on the balcony of Copy Room 209.

    a. ***RESPONSE: Please see Attachments for specifications Section 32 14 14 - Pressed Concrete Pavers.***

32. 1/A.401 Detail shows SS1 counter tops but calls out Keyed Note 09.39 that designates Plastic Laminate tops. Please clarify if countertops are to be Solid Surface or Plastic Laminate.

    a. ***RESPONSE: The countertop shown in the Art Room should be Solid Surface. Please revise Keynote 09.39 to be "09.46 Solid Surface Countertop and Backsplash."***

33. Regarding the RFP, please confirm that residential/veteran contractor preference is not applicable.

a. ***RESPONSE: Correct, Veteran Contractor preference is not applicable for this project.***

34. Section 2, B6 there is no reference to digital/electronic copies of the RFP. However, 4B and 4C reference digital copies on flash drive. Are flash drives required?

    a. ***RESPONSE: To be provided in next Addendum.***

35. Can the question deadline be pushed closer to the bid date?

    a. ***RESPONSE: The Deadline for Questions has been extended to Wednesday December 28th, 2022 by 3:00pm MST.***

36. Does Kirtland have a separate Covid safety protocol?

    a. ***RESPONSE: To be provided in next Addendum.***

37. Please confirm if the sub-qualification list is complete. Do any other trades require qualification?

    a. ***RESPONSE: The sub-qualification list in the RFP is complete.***

Section 3 – PRIOR APPROVALS (Per Section 01 63 00 Product Substitution Procedures)

1. Section 05 73 00 - Tempered Glass Guardrails
    a. Product: OPTK in lieu of CRL or GlasPro.
    b. Manufacturer: HDI Railings
    c. Submitted by: Shawn Maguire, HDI Railings, 3905 Continental Dr. Columbia PA 17512, (717) 381-0830.

2. Section 07 28 00 – Thermal and Air Barrier Wall System
    a. Product: ECOMAX ci Wall Solution in lieu of Thermax XArmor
    Ecomax ci FR Air Barrier (Board)
    LF 2000 (Liquid Flashing)
    b. Manufacturer: RMax, a Sika Company.
    c. Submitted by: Ben Herlache, RMax, 210 Lyon Dr. Fernley, NV 89408, (279) 206-1407.

3. Section 08 80 00 - Glazing
    a. Product - SuperLite II XL 60 in GPX Architectural Series Framing in lieu of FireLite.
    b. Manufacturer: SAFTI FIRST

c. Submitted by: Armane Pita, SAFTI FIRST Fire Rated Glazing Solutions, 100 N Hill Drive Suite 12, Brisbane, CA 94005, (888) 653-3333.

4. Section 09 54 34 - Suspended Acoustical Clouds
    a. Product: USG Ensemble in lieu of Armstrong Acoustibuilt
    b. Manufacturer: United States Gypsum
    c. Submitted by: Megan Peters, United States Gypsum Company, 550 West Adams St., Chicago, IL 60661, (904) 252-9013.

5. Section 12 31 30 - Trophy Case
    a. Product: SDC Series Display Case
    b. Manufacturer: Nelson Adams NACO
    c. Submitted by: Melanie Mojica, Nelson Adams NACO, 160 N Cactus Ave. Rialto, CA 92376, (909) 879-0421.

Section 4 – CHANGES TO THE PROJECT MANUAL (SPECIFICATIONS)

1. Add Section 32 14 14 - Pressed Concrete Pavers. See Attachments.
2. Revise Section 07 41 13, 3.1B to read “1/2 inch layer of fire-rated plywood” in lieu of 3/4 inch.
3. Revise Section 07 41 13, 2.3B and 2.3D as follows:

    B. Type: Factory roll formed, standing seam with concealed clip attachment and mechanically joined with double lock at 180 degrees; Una-Clad UC-3 as manufactured by Firestone Building Products.

    D. Profile: 1-1/2 inch high rib each side panel and 20 inch wide, smooth surface.

Section 5 – CHANGES TO THE DRAWINGS

ARCHITECTURAL DRAWINGS

1. Sheet A.431 ENLARGED RESTROOMS + ELEVATIONS
    a. Detail 3: Change Keynote 10.14C to “09.70 Painted Wall Graphic”.
    b. Detail 7: Change Keynote 10.14B to “09.70 Painted Wall Graphic”.

2. Sheet A.432 ENLARGED RESTROOMS + ELEVATIONS
    a. Detail 1: Change Keynote 10.14B to “09.70 Painted Wall Graphic”

3. Sheet A3.51 WALL SECTIONS

a. Detail 1: Change height of round ‘oculus’ parapet to 18’-2”.

4. Sheet A8.01 EXTERIOR DETAILS
    a. Details 5 & 10: Remove sealant from typical metal coping conditions

MECHANICAL DRAWINGS

1. Sheet MH.101A – HVAC LEVEL 1 FLOOR PLAN – AREA A
    1. **ADD** sound attenuator, SA-1, to DOAS-1 supply duct.
    2. **MODIFY** outside air cfm for 125 Teacher’s Workroom.
    3. **MODIFY** transfer air duct size in 114 Nurse.
    4. **ADD** transfer air duct to 300 Hallway.
    5. **REMOVE** keynote 2.
    6. **MODIFY** exhaust duct size and routing in 125 Teacher Workroom.
    7. **MODIFY** exhaust duct sizes and cfm values in Nurse’s Suite.

2. Sheet MH.101B – HVAC LEVEL 1 FLOOR PLAN – AREA B
    1. **ADD** sound attenuator, SA-2, to FC3-04 supply duct.
    2. **ADD** sound attenuator, SA-3, to FC3-05 supply duct.
    3. **MODIFY** duct sizes and cfm values for FC7-07.
    4. **MODIFY** cfm values for FC7-08.
    5. **MODIFY** cfm in 100A Hallway.
    6. **ADD** return grille to 142 Family RR, 100B Hallway.
    7. **ADD** transfer duct to 141 Unisex.
    8. **MODIFY** duct sizes and cfm values for RTU-3.
    9. **ADD** duct sizes to kitchen hood make-up air duct.
    10. **ADD** keyed note 21 to cooler/freezer condensing units.
    11. **ADD** keyed note 22 to exposed rectangular duct in 129 STEAM.
    12. **ADD** keyed note 21 and 22.
    13. **ADD** sound attenuator, SA-7, to RTU-4 supply duct
    14. **REROUTE** supply duct to 133D Chair.

3. Sheet MH.102A – HVAC LEVEL 2 FLOOR PLAN – AREA A
    1. **ADD** sound attenuator, SA-4, to FC5-01 supply duct.
    2. **MODIFY** outside air cfm for 209 Copy Room.
    3. **MODIFY** exhaust duct sizes.

4. Sheet MH.102B – HVAC LEVEL 2 FLOOR PLAN – AREA B
    1. **ADD** sound attenuator, SA-8, to DOAS-2 exhaust duct.
    2. **RELOCATE** thermostat for FC5-06.
    3. **ADD** duct sizes in 212 Media Center.
    4. **MODIFY** duct size and cfm values for FC5-07.
    5. **MODIFY** cfm values for FC9-10.
    6. **ADD** keyed note 7.

7. **MODIFY** cfm value in Breakout 238, 200A Hallway.
8. **ADD** sound attenuator, SA-6, to DOAS-4 supply drop in chase.
9. **MODIFY** exhaust duct from 212C Workroom and 209 Copy Room.
10. **ADD** transfer duct and grille from 212 Media Center to 240 Girls.
11. **REROUTE** outside air duct to 212A Office.
12. **ADD** transfer duct in 212C Workroom and 212A Office.

5. Sheet MH.102C – HVAC LEVEL 2 FLOOR PLAN – AREA C
    1. **ADD** sound attenuator, SA-5, to DOAS-5 supply duct drop.
    2. **MODIFY** cfm value in Hallway 200B.
    3. **ADD** keyed note 4.
    4. **ADD** exhaust duct and balancing damper to Hallway 200B.

6. Sheet M-502 – MECHANICAL DETAILS
    1. **ADD** Drum Punkah Louver Connection Detail, A4/M-502.

7. Sheet M-701 – MECHANICAL SCHEDULES
    1. **ADD** Sound Attenuator Schedule
    2. **MODIFY** Area Served for AC-11, and RTU-3.
    3. **MODIFY** Dedicated Outside Air Units Schedule for DOAS-5.

8. Sheet M-702 – MECHANICAL SCHEDULES
    1. **MODIFY** Exhaust Fan Schedule for EF-3.
    2. **MODIFY** Area Served for CEF-1.

9. Sheet M-801 – MECHANICAL SCHEDULES
    1. **MODIFY** IAQ Calculations

List of Attachments:

1. Sheet MH.101A, MH.101B, MH-102A, MH.102B, MH.102C, M-502, M-701, M-702, M-801.
2. Specification Section 32 14 14 - Pressed Concrete Pavers.
3. As-Built Floor Plan Diagrams.

Note: Questions that have been submitted or approved Substitution Requests not yet addressed in this Addendum No.2 will be issued in the forthcoming Addendum.

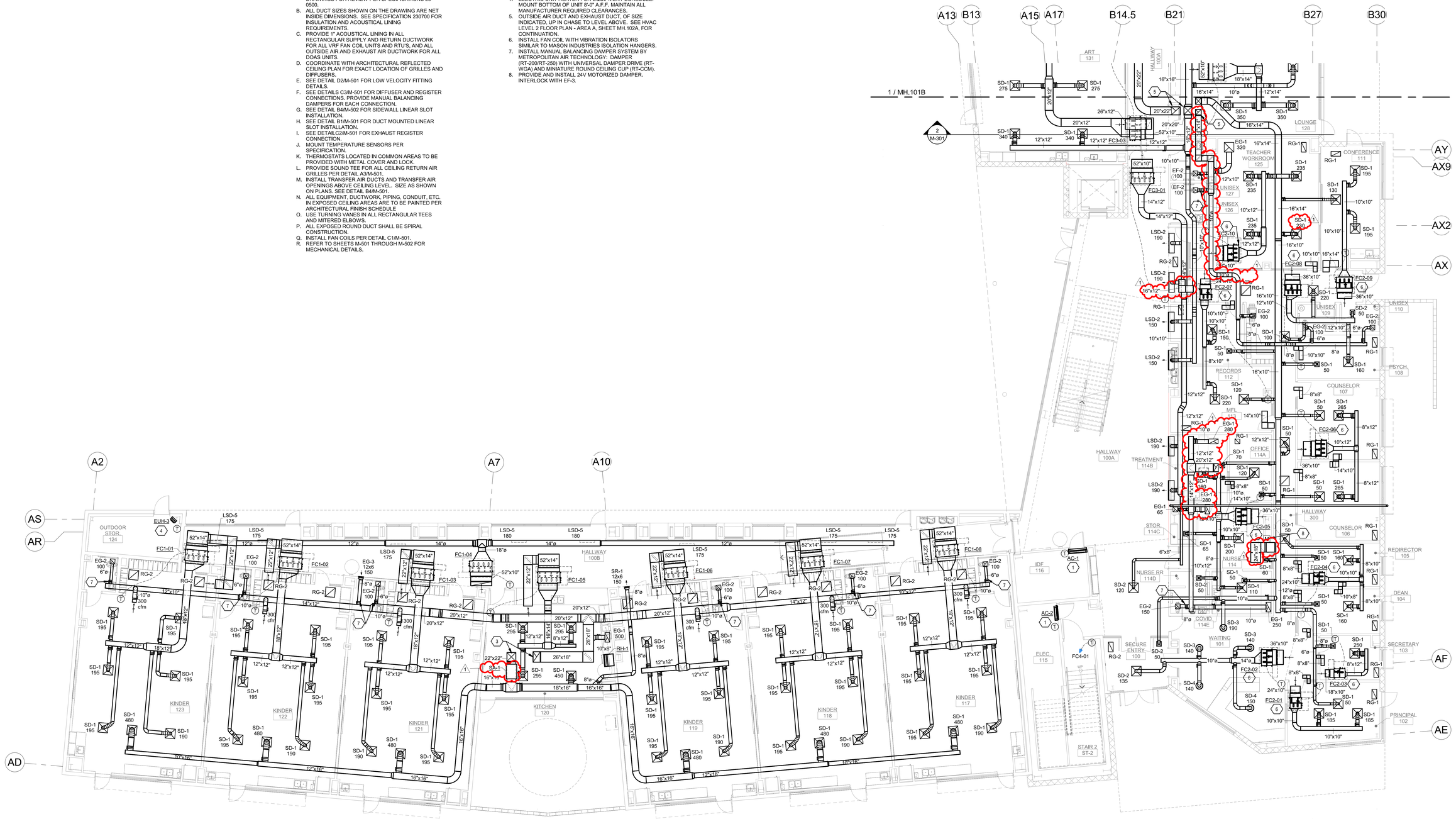
ATTACHMENTS

GENERAL NOTES:

A. COORDINATE DUCT ROUTING AND EQUIPMENT INSTALLATION WITH STRUCTURAL PLANS, ARCHITECTURAL PLANS AND ELECTRICAL PLANS. GIVE SPECIAL ATTENTION TO STRUCTURAL BEAM ELEVATIONS, CEILING HEIGHTS, CABLE TRAYS, AND ROOF DRAIN LEADERS. SUBMIT 3D COORDINATION DRAWINGS FOR REVIEW PER SPECIFICATIONS 23 0500.
B. ALL DUCT SIZES SHOWN ON THE DRAWING ARE NET INSIDE DIMENSIONS. SEE SPECIFICATION 230700 FOR INSULATION AND ACOUSTICAL LINING REQUIREMENTS.
C. PROVIDE 1" ACOUSTICAL LINING IN ALL RECTANGULAR SUPPLY AND RETURN DUCTWORK FOR ALL VRF FAN COIL UNITS AND RTU'S, AND ALL OUTSIDE AIR AND EXHAUST AIR DUCTWORK FOR ALL DOAS UNITS.
D. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.
E. SEE DETAIL D2/M-501 FOR LOW VELOCITY FITTING DETAILS.
F. SEE DETAILS C3/M-501 FOR DIFFUSER AND REGISTER CONNECTIONS. PROVIDE MANUAL BALANCING DAMPERS FOR EACH CONNECTION.
G. SEE DETAIL B4/M-502 FOR SIDEWALL LINEAR SLOT INSTALLATION.
H. SEE DETAIL B1/M-501 FOR DUCT MOUNTED LINEAR SLOT INSTALLATION.
I. SEE DETAILC2/M-501 FOR EXHAUST REGISTER CONNECTION.
J. MOUNT TEMPERATURE SENSORS PER SPECIFICATION.
K. THERMOSTATS LOCATED IN COMMON AREAS TO BE PROVIDED WITH METAL COVER AND LOCK.
L. PROVIDE SOUND TEE FOR ALL CEILING RETURN AIR GRILLES PER DETAIL A3/M-501.
M. INSTALL TRANSFER AIR DUCTS AND TRANSFER AIR OPENINGS ABOVE CEILING LEVEL. SIZE AS SHOWN ON PLANS. SEE DETAIL B4/M-501.
N. ALL EQUIPMENT, DUCTWORK, PIPING, CONDUIT, ETC. IN EXPOSED CEILING AREAS ARE TO BE PAINTED PER ARCHITECTURAL FINISH SCHEDULE
O. USE TURNING VANES IN ALL RECTANGULAR TEES AND MITERED ELBOWS.
P. ALL EXPOSED ROUND DUCT SHALL BE SPIRAL CONSTRUCTION.
Q. INSTALL FAN COILS PER DETAIL C1/M-501.
R. REFER TO SHEETS M-501 THROUGH M-502 FOR MECHANICAL DETAILS.

KEYNOTES

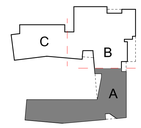
1. INDOOR AIR CONDITIONING UNIT MOUNTED ABOVE CEILING. COORDINATE LOCATION WITH ARCHITECT.
2. NOT USED.
3. OUTSIDE AIR DUCT AND EXHAUST DUCT, OF SIZE INDICATED, UP THROUGH ROOF TO ENERGY RECOVERY UNIT.
4. ELECTRIC UNIT HEATER PER EQUIPMENT SCHEDULE. MOUNT BOTTOM OF UNIT 8'-0" A.F.F, MAINTAIN ALL MANUFACTURER REQUIRED CLEARANCES.
5. OUTSIDE AIR DUCT AND EXHAUST DUCT, OF SIZE INDICATED, UP IN CHASE TO LEVEL ABOVE. SEE HVAC LEVEL 2 FLOOR PLAN - AREA A, SHEET MH.102A, FOR CONTINUATION.
6. INSTALL FAN COIL WITH VIBRATION ISOLATORS SIMILAR TO MASON INDUSTRIES ISOLATION HANGERS.
7. INSTALL MANUAL BALANCING DAMPER SYSTEM BY METROPOLITAN AIR TECHNOLOGY: DAMPER (RT-200/RT-250) WITH UNIVERSAL DAMPER DRIVE (RT-WGA) AND MINIATURE ROUND CEILING CUP (RT-CCM).
8. PROVIDE AND INSTALL 24V MOTORIZED DAMPER. INTERLOCK WITH EF-3.



north

1 HVAC LEVEL 1 FLOOR PLAN - AREA A
1/8" = 1'-0"

0' 4' 8' 16'



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REVISIONS		
Revision #	Date	Revision Description
1	12.19.22	Addendum 2

PHASE	DATE
100% CD	11.04.22

MH.101A
HVAC LEVEL 1 FLOOR PLAN - AREA A

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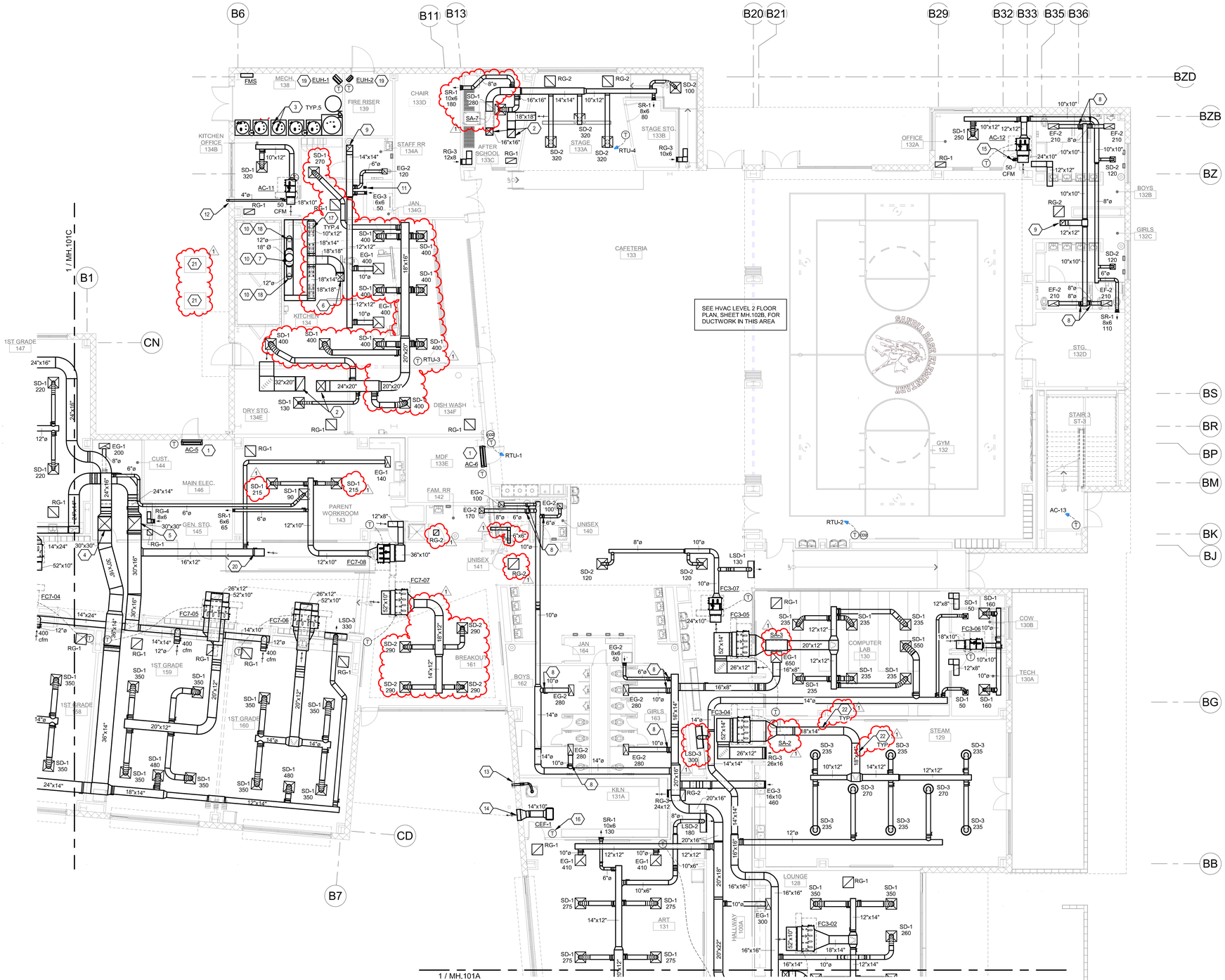


GENERAL NOTES:

A. COORDINATE DUCT ROUTING AND EQUIPMENT INSTALLATION WITH STRUCTURAL PLANS, ARCHITECTURAL PLANS AND ELECTRICAL PLANS. GIVE SPECIAL ATTENTION TO STRUCTURAL BEAM ELEVATIONS, CEILING HEIGHTS, CABLE TRAYS, AND ROOF DRAIN LEADERS. SUBMIT 3D COORDINATION DRAWINGS FOR REVIEW PER SPECIFICATIONS 23 0500.
B. ALL DUCT SIZES SHOWN ON THE DRAWING ARE NET INSIDE DIMENSIONS. SEE SPECIFICATION 230700 FOR INSULATION AND ACOUSTICAL LINING REQUIREMENTS.
C. PROVIDE 1" ACOUSTICAL LINING IN ALL RECTANGULAR SUPPLY AND RETURN DUCTWORK FOR ALL VRF FAN COIL UNITS AND RTU'S, AND ALL OUTSIDE AIR AND EXHAUST AIR DUCTWORK FOR ALL DOAS UNITS.
D. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.
E. SEE DETAIL D2/M-501 FOR LOW VELOCITY FITTING DETAILS.
F. SEE DETAILS C3/M-501 FOR DIFFUSER AND REGISTER CONNECTIONS. PROVIDE MANUAL BALANCING DAMPERS FOR EACH CONNECTION.
G. SEE DETAIL B4/M-502 FOR SIDEWALL LINEAR SLOT INSTALLATION.
H. SEE DETAIL B1/M-501 FOR DUCT MOUNTED LINEAR SLOT INSTALLATION.
I. SEE DETAILC2/M-501 FOR EXHAUST REGISTER CONNECTION.
J. MOUNT TEMPERATURE SENSORS PER SPECIFICATION.
K. THERMOSTATS LOCATED IN COMMON AREAS TO BE PROVIDED WITH METAL COVER AND LOCK.
L. PROVIDE SOUND TEE FOR ALL CEILING RETURN AIR GRILLES PER DETAIL A3/M-501.
M. INSTALL TRANSFER AIR DUCTS AND TRANSFER AIR OPENINGS ABOVE CEILING LEVEL. SIZE AS SHOWN ON PLANS, SEE DETAIL B4/M-501.
N. ALL EQUIPMENT, DUCTWORK, PIPING, CONDUIT, ETC. IN EXPOSED CEILING AREAS ARE TO BE PAINTED PER ARCHITECTURAL FINISH SCHEDULE.
O. USE TURNING VANES IN ALL RECTANGULAR TEES AND MITERED ELBOWS.
P. ALL EXPOSED ROUND DUCT SHALL BE SPIRAL CONSTRUCTION.
Q. INSTALL FAN COILS PER DETAIL C1/M-501.
R. REFER TO SHEETS M-501 THROUGH M-502 FOR MECHANICAL DETAILS.

KEYNOTES

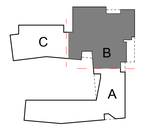
1. INDOOR AIR CONDITIONING UNIT MOUNTED ABOVE DOOR. COORDINATE LOCATION WITH ARCHITECT.
2. SUPPLY AND RETURN AIR DUCT, OF SIZE INDICATED, UP THROUGH ROOF TO ROOFTOP UNIT. SEE MECHANICAL ROOF PLAN, SHEET MH.103, FOR CONTINUATION.
3. WATER HEATER 4"Ø STAINLESS STEEL DOUBLE-WALLED CATEGORY IV VENT PIPING AND 4"Ø GALVANIZED STEEL COMBUSTION AIR PIPING UP THROUGH ROOF. ALL JOINTS AND SEAMS MUST BE SEALED GAS TIGHT. INSTALL PER MANUFACTURER'S INSTALLATION MANUAL.
4. OUTSIDE AIR DUCT, OF SIZE INDICATED, UP IN CHASE TO FLOOR ABOVE. SEE SECOND FLOOR HVAC PLAN, SHEET MH.102B, FOR CONTINUATION.
5. EXHAUST AIR DUCT, OF SIZE INDICATED, UP IN CHASE TO FLOOR ABOVE. SEE SECOND FLOOR HVAC PLAN, SHEET MH.102B, FOR CONTINUATION.
6. MAKE-UP AIR DUCT UP THROUGH ROOF TO MAKE-UP AIR UNIT. DO NOT ACOUSTICALLY LINE. SEE MECHANICAL ROOF PLAN, SHEET MH.103, FOR CONTINUATION.
7. 18"X18" GREASE EXHAUST DUCT UP THROUGH ROOF TO KITCHEN EXHAUST FAN. SEE MECHANICAL ROOF PLAN, SHEET MH.103, FOR CONTINUATION. INSTALL PER DETAIL A2/M-502.
8. INSTALL MANUAL BALANCING DAMPER SYSTEM BY METROPOLITAN AIR TECHNOLOGY: DAMPER (RT-200/RT-250) WITH UNIVERSAL DAMPER DRIVE (RT-WGA) AND MINIATURE ROUND CEILING CUP (RT-CCM).
9. EXHAUST DUCT, OF SIZE INDICATED, UP THROUGH ROOF TO EXHAUST FAN.
10. GREASE EXHAUST DUCT SHALL BE CONSTRUCTED OF 16 GA. WELDED BLACK IRON WITH ALL JOINTS WELDED LIQUID TIGHT. INSULATE ALL GREASE DUCT IN CEILING SPACE WITH 2" THICK UNIFRAX "FIREWRAP MAX 2.0 – ICC SYSTEM" OR EQUIVALENT 2-HOUR RATED MATERIAL. PROVIDE ACCESS DOORS IN DUCTWORK FOR CLEANING AS REQUIRED BY LOCAL CODES. REFER TO DETAIL A2/M-502 AND SPECIFICATIONS.
11. 4" Ø RIGID DUCT DRYER VENT UP THROUGH ROOF TO GOOSENECK. DO NOT ASSEMBLE WITH FASTENERS THAT EXTEND INTO DUCT. DO NOT INSTALL SCREEN IN OR OVER DRYER VENT. WRAP DRYER VENT IN WALL AND IN CEILING PLENUM WITH TYPE D-6 INSULATION.
12. 4" DIA. FRESH AIR DUCT THROUGH EXTERIOR WALL. TERMINATE WITH MANUFACTURER APPROVED WALL CAP.
13. KILN DOWNDRAFT VENTILATION SYSTEM. INSTALL VENT SYSTEM PER DETAIL C4/M-502 AND MANUFACTURER'S INSTALLATION MANUAL. PROVIDE 20 GA. 1/2" MESH SCREEN GUARD OVER WALL CAP. LEAVE MIN. 4" GAP BETWEEN GUARD AND CAP.
14. 24"X18" EXHAUST WALL LOUVER, RUSKIN MODEL ELF375DX.
15. 4" DIA. OUTSIDE AIR DUCT UP THROUGH ROOF TO RAIN CAP. TERMINATE 3'-0" ABOVE ROOF LEVEL.
16. MOUNT THERMOSTAT AS HIGH AS POSSIBLE BELOW CEILING.
17. CONNECT MAKE-UP AIR DUCT TO KITCHEN HOOD. PROVIDE TRANSITION NECESSARY. VERIFY DUCT CONNECTION SIZE WITH HOOD PROVIDED BY FOOD SERVICE EQUIPMENT CONTRACTOR.
18. CONNECT GREASE EXHAUST DUCT TO KITCHEN HOOD. PROVIDE TRANSITION NECESSARY. VERIFY DUCT CONNECTION SIZE WITH HOOD PROVIDED BY FOOD SERVICE EQUIPMENT CONTRACTOR.
19. ELECTRIC UNIT HEATER PER EQUIPMENT SCHEDULE. MOUNT BOTTOM OF UNIT 7'-6" A.F.F.
20. BALANCE DAMPER TO 700 CFM.
21. COOLER/FREEZER CONDENSING UNIT FURNISHED BY FOOD SERVICE EQUIPMENT CONTRACTOR. MECHANICAL CONTRACTER SHALL PROVIDE AND INSTALL REFRIGERANT PIPING FROM ROOFTOP CONDENSING UNIT TO INDOOR COOLER/FREEZER EVAPORATOR COIL. INSTALL PIPING PER MANUFACTURER'S REQUIREMENTS. SEE ARCHITECTURAL PLANS FOR EXACT LOCATION.
22. LAG EXPOSED RECTANGULAR SUPPLY DUCT MAINS.

north

1 HVAC LEVEL 1 FLOOR PLAN - AREA B

1/8" = 1'-0"

0' 4' 8' 16'



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1	12.19.22	Addendum 2

PHASE	DATE
100% CD	11.04.22

ILIR MESITI NEW MEXICO 20505 PROFESSIONAL ENGINEER

MH.101B

HVAC LEVEL 1 FLOOR PLAN - AREA B

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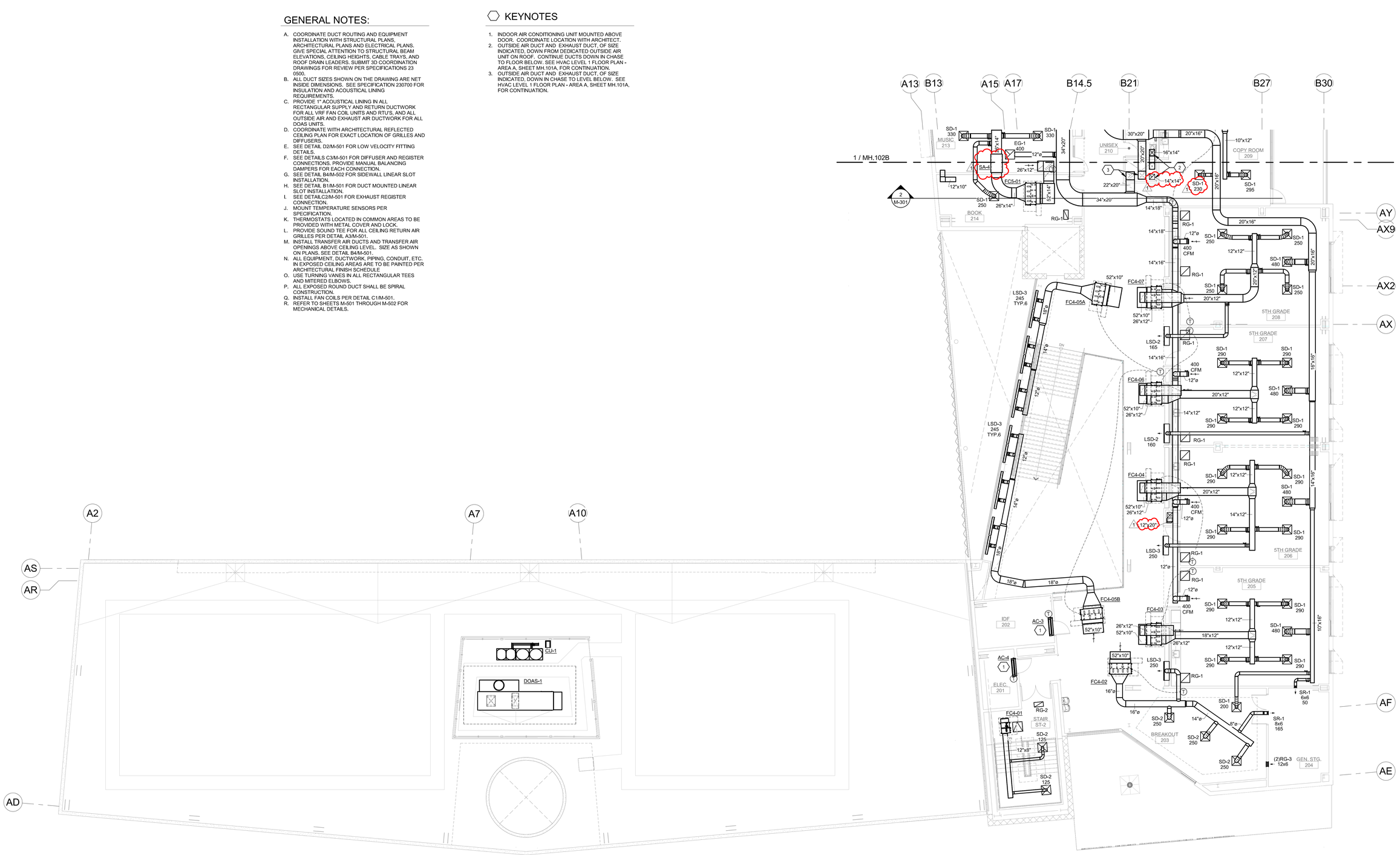
GENERAL NOTES:

A. COORDINATE DUCT ROUTING AND EQUIPMENT INSTALLATION WITH STRUCTURAL PLANS, ARCHITECTURAL PLANS AND ELECTRICAL PLANS. GIVE SPECIAL ATTENTION TO STRUCTURAL BEAM ELEVATIONS, CEILING HEIGHTS, CABLE TRAYS, AND ROOF DRAIN LEADERS. SUBMIT 3D COORDINATION DRAWINGS FOR REVIEW PER SPECIFICATIONS 23 0500.
B. ALL DUCT SIZES SHOWN ON THE DRAWING ARE NET INSIDE DIMENSIONS. SEE SPECIFICATION 230700 FOR INSULATION AND ACOUSTICAL LINING REQUIREMENTS.
C. PROVIDE 1" ACOUSTICAL LINING IN ALL RECTANGULAR SUPPLY AND RETURN DUCTWORK FOR ALL VRF FAN COIL UNITS AND RTU'S, AND ALL OUTSIDE AIR AND EXHAUST AIR DUCTWORK FOR ALL DOAS UNITS.
D. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.
E. SEE DETAIL D2/M-501 FOR LOW VELOCITY FITTING DETAILS.
F. SEE DETAILS C3/M-501 FOR DIFFUSER AND REGISTER CONNECTIONS. PROVIDE MANUAL BALANCING DAMPERS FOR EACH CONNECTION.
G. SEE DETAIL B4/M-502 FOR SIDEWALL LINEAR SLOT INSTALLATION.
H. SEE DETAIL B1/M-501 FOR DUCT MOUNTED LINEAR SLOT INSTALLATION.
I. SEE DETAILC2/M-501 FOR EXHAUST REGISTER CONNECTION.
J. MOUNT TEMPERATURE SENSORS PER SPECIFICATION.
K. THERMOSTATS LOCATED IN COMMON AREAS TO BE PROVIDED WITH METAL COVER AND LOCK.
L. PROVIDE SOUND TEE FOR ALL CEILING RETURN AIR GRILLES PER DETAIL A3/M-501.
M. INSTALL TRANSFER AIR DUCTS AND TRANSFER AIR OPENINGS ABOVE CEILING LEVEL. SIZE AS SHOWN ON PLANS. SEE DETAIL B4/M-501.
N. ALL EQUIPMENT, DUCTWORK, PIPING, CONDUIT, ETC. IN EXPOSED CEILING AREAS ARE TO BE PAINTED PER ARCHITECTURAL FINISH SCHEDULE
O. USE TURNING VANES IN ALL RECTANGULAR TEES AND MITERED ELBOWS.
P. ALL EXPOSED ROUND DUCT SHALL BE SPIRAL CONSTRUCTION.
Q. INSTALL FAN COILS PER DETAIL C1/M-501.
R. REFER TO SHEETS M-501 THROUGH M-502 FOR MECHANICAL DETAILS.

KEYNOTES

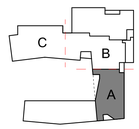
1. INDOOR AIR CONDITIONING UNIT MOUNTED ABOVE DOOR. COORDINATE LOCATION WITH ARCHITECT.
2. OUTSIDE AIR DUCT AND EXHAUST DUCT, OF SIZE INDICATED, DOWN FROM DEDICATED OUTSIDE AIR UNIT ON ROOF. CONTINUE DUCTS DOWN IN CHASE TO FLOOR BELOW. SEE HVAC LEVEL 1 FLOOR PLAN - AREA A, SHEET MH.101A, FOR CONTINUATION.
3. OUTSIDE AIR DUCT AND EXHAUST DUCT, OF SIZE INDICATED, DOWN IN CHASE TO LEVEL BELOW. SEE HVAC LEVEL 1 FLOOR PLAN - AREA A, SHEET MH.101A, FOR CONTINUATION.



north

1 HVAC LEVEL 2 FLOOR PLAN - AREA A
1/8" = 1'-0"

0' 4' 8' 16'



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Revision #	Date	Revision Description
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PHASE	DATE
100% CD	11.04.22

ILIR MESITI NEW MEXICO 20505 PROFESSIONAL ENGINEER

MH.102A

HVAC LEVEL 2 FLOOR PLAN - AREA A

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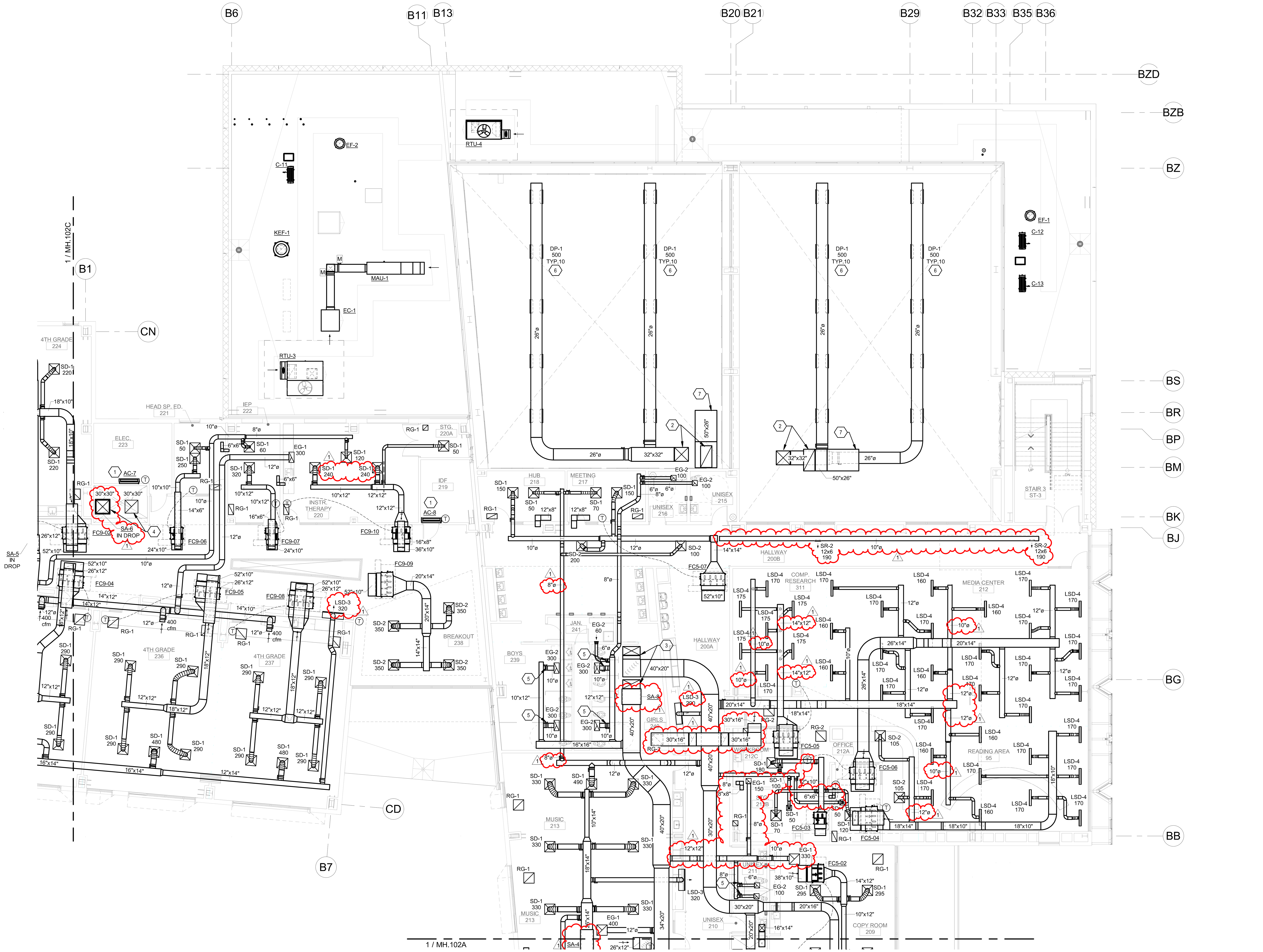


GENERAL NOTES:

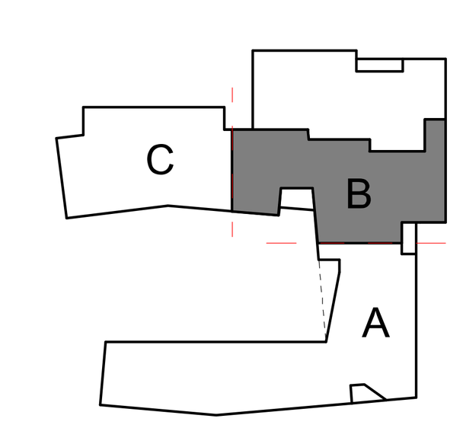
A. COORDINATE DUCT ROUTING AND EQUIPMENT INSTALLATION WITH STRUCTURAL PLANS, ARCHITECTURAL PLANS AND ELECTRICAL PLANS. GIVE SPECIAL ATTENTION TO STRUCTURAL BEAM ELEVATIONS, CEILING HEIGHTS, CABLE TRAYS, AND ROOF DRAIN LEADERS. SUBMIT 3D COORDINATION DRAWINGS FOR REVIEW PER SPECIFICATIONS 23 0500.
B. ALL DUCT SIZES SHOWN ON THE DRAWING ARE NET INSIDE DIMENSIONS. SEE SPECIFICATION 230700 FOR INSULATION AND ACOUSTICAL LINING REQUIREMENTS.
C. PROVIDE 1" ACOUSTICAL LINING IN ALL RECTANGULAR SUPPLY AND RETURN DUCTWORK FOR ALL VRF FAN COIL UNITS AND RTU'S, AND ALL OUTSIDE AIR AND EXHAUST AIR DUCTWORK FOR ALL DOAS UNITS.
D. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.
E. SEE DETAIL D2/M-501 FOR LOW VELOCITY FITTING DETAILS.
F. SEE DETAILS C3/M-501 FOR DIFFUSER AND REGISTER CONNECTIONS. PROVIDE MANUAL BALANCING DAMPERS FOR EACH CONNECTION.
G. SEE DETAIL B4/M-502 FOR SIDEWALL LINEAR SLOT INSTALLATION.
H. SEE DETAIL B1/M-501 FOR DUCT MOUNTED LINEAR SLOT INSTALLATION.
I. SEE DETAILC2/M-501 FOR EXHAUST REGISTER CONNECTION.
J. MOUNT TEMPERATURE SENSORS PER SPECIFICATION.
K. THERMOSTATS LOCATED IN COMMON AREAS TO BE PROVIDED WITH METAL COVER AND LOCK.
L. PROVIDE SOUND TEE FOR ALL CEILING RETURN AIR GRILLES PER DETAIL A3/M-501.
M. INSTALL TRANSFER AIR DUCTS AND TRANSFER AIR OPENINGS ABOVE CEILING LEVEL. SIZE AS SHOWN ON PLANS. SEE DETAIL B4/M-501.
N. ALL EQUIPMENT, DUCTWORK, PIPING, CONDUIT, ETC. IN EXPOSED CEILING AREAS ARE TO BE PAINTED PER ARCHITECTURAL FINISH SCHEDULE
O. USE TURNING VANES IN ALL RECTANGULAR TEES AND MITERED ELBOWS.
P. ALL EXPOSED ROUND DUCT SHALL BE SPIRAL CONSTRUCTION.
Q. INSTALL FAN COILS PER DETAIL C1/M-501.
R. REFER TO SHEETS M-501 THROUGH M-502 FOR MECHANICAL DETAILS.

KEYNOTES

1. INDOOR AIR CONDITIONING UNIT MOUNTED ABOVE DOOR. COORDINATE LOCATION WITH ARCHITECT.
2. SUPPLY AND RETURN DUCT, OF SIZE INDICATED,UP THROUGH ROOF TO ROOFTOP UNIT.
3. OUTSIDE AIR DUCT AND EXHAUST DUCT, OF SIZE INDICATED, UP THROUGH ROOF TO ENERGY RECOVERY UNIT.
4. OUTSIDE AIR DUCT AND EXHAUST DUCT, OF SIZE INDICATED, DOWN FROM ROOFTOP ENERGY RECOVERY UNIT. ROUTE DOWN IN CHASE TO LEVEL BELOW. SEE HVAC LEVEL 1 FLOOR PLAN - AREA B, SHEET MH.101B, FOR CONTINUATION.
5. INSTALL MANUAL BALANCING DAMPER SYSTEM BY METROPOLITAN AIR TECHNOLOGY: DAMPER (RT-200/RT-250) WITH UNIVERSAL DAMPER DRIVE (RT-WGA) AND MINIATURE ROUND CEILING CUP (RT-CCM).
6. MOUNT DRUM PUNKAHS 45 DEGREES FROM HORIZONTAL, DIRECTED DOWN.
7. INSTALL MESH SCREEN AT RETURN DUCT TERMINATION.

1

1 HVAC LEVEL 2 FLOOR PLAN - AREA B
1/8" = 1'-0"



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Revision #	Date	Revision Description
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PHASE	DATE
100% CD	11.04.22

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MH.102B

HVAC LEVEL 2 FLOOR PLAN - AREA B

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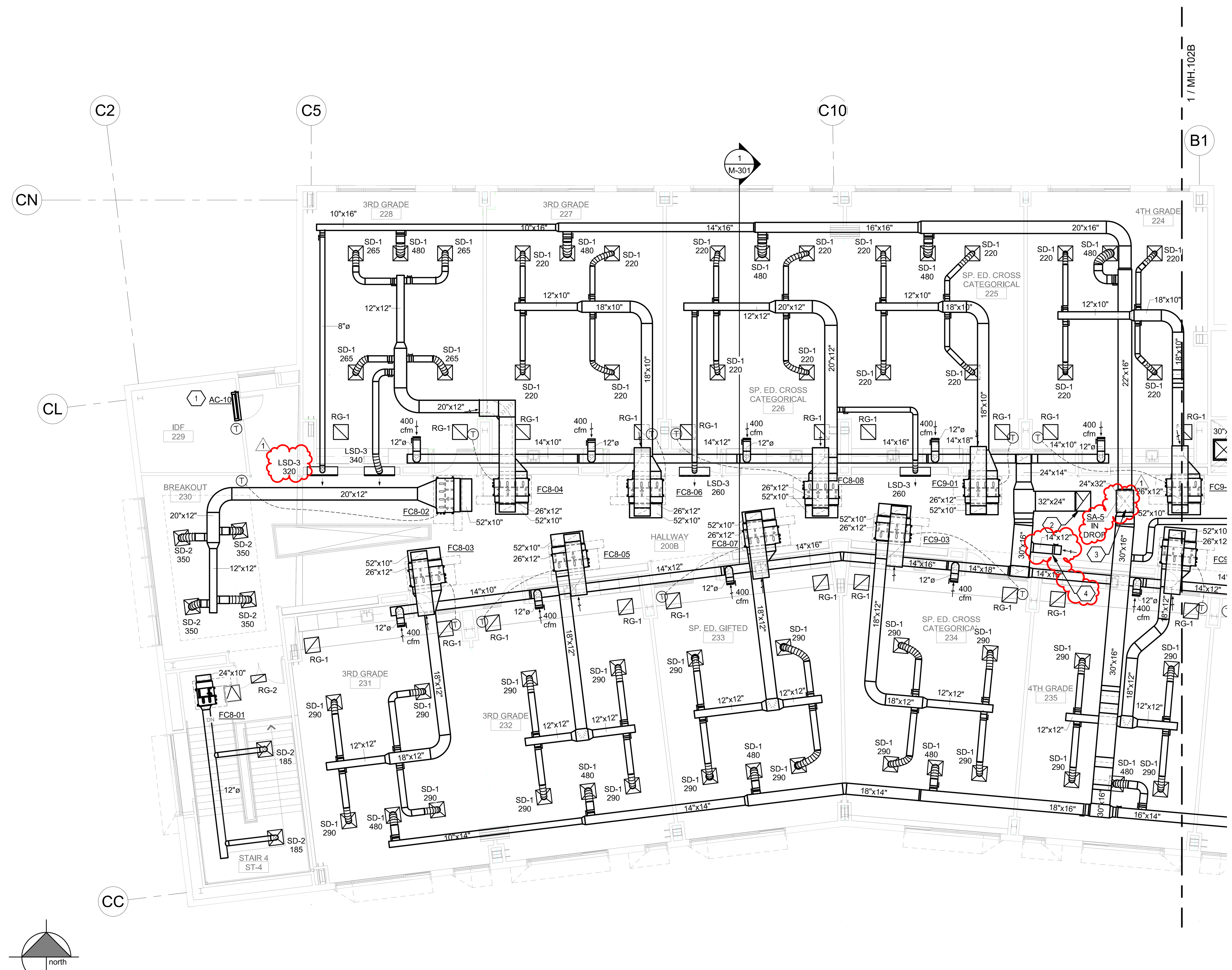
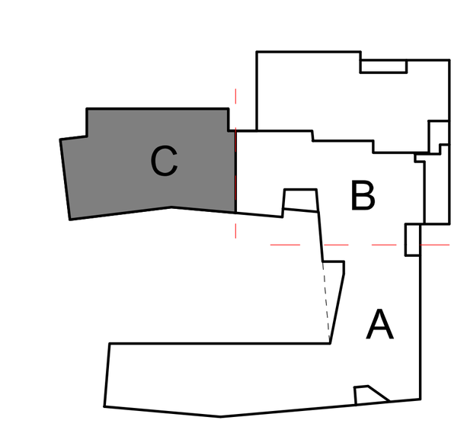


1 HVAC LEVEL 2 FLOOR PLAN - AREA C
1/8" = 1'-0"

0' 4' 8' 16'



GENERAL NOTES:

A. COORDINATE DUCT ROUTING AND EQUIPMENT INSTALLATION WITH STRUCTURAL PLANS, ARCHITECTURAL PLANS AND ELECTRICAL PLANS. GIVE SPECIAL ATTENTION TO STRUCTURAL BEAM ELEVATIONS, CEILING HEIGHTS, CABLE TRAYS, AND ROOF DRAIN LEADERS. SUBMIT 3D COORDINATION DRAWINGS FOR REVIEW PER SPECIFICATIONS 23 0500.
B. ALL DUCT SIZES SHOWN ON THE DRAWING ARE NET INSIDE DIMENSIONS. SEE SPECIFICATION 230700 FOR INSULATION AND ACOUSTICAL LINING REQUIREMENTS.
C. PROVIDE 1" ACOUSTICAL LINING IN ALL RECTANGULAR SUPPLY AND RETURN DUCTWORK FOR ALL VRF FAN COIL UNITS AND RTU'S, AND ALL OUTSIDE AIR AND EXHAUST AIR DUCTWORK FOR ALL DOAS UNITS.
D. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF GRILLES AND DIFFUSERS.
E. SEE DETAIL D2/M-501 FOR LOW VELOCITY FITTING DETAILS.
F. SEE DETAILS C3/M-501 FOR DIFFUSER AND REGISTER CONNECTIONS. PROVIDE MANUAL BALANCING DAMPERS FOR EACH CONNECTION.
G. SEE DETAIL B4/M-502 FOR SIDEWALL LINEAR SLOT INSTALLATION.
H. SEE DETAIL B1/M-501 FOR DUCT MOUNTED LINEAR SLOT INSTALLATION.
I. SEE DETAILC2/M-501 FOR EXHAUST REGISTER CONNECTION.
J. MOUNT TEMPERATURE SENSORS PER SPECIFICATION.
K. THERMOSTATS LOCATED IN COMMON AREAS TO BE PROVIDED WITH METAL COVER AND LOCK.
L. PROVIDE SOUND TEE FOR ALL CEILING RETURN AIR GRILLES PER DETAIL A3/M-501.
M. INSTALL TRANSFER AIR DUCTS AND TRANSFER AIR OPENINGS ABOVE CEILING LEVEL. SIZE AS SHOWN ON PLANS. SEE DETAIL B4/M-501.
N. ALL EQUIPMENT, DUCTWORK, PIPING, CONDUIT, ETC. IN EXPOSED CEILING AREAS ARE TO BE PAINTED PER ARCHITECTURAL FINISH SCHEDULE
O. USE TURNING VANES IN ALL RECTANGULAR TEES AND MITERED ELBOWS.
P. ALL EXPOSED ROUND DUCT SHALL BE SPIRAL CONSTRUCTION.
Q. INSTALL FAN COILS PER DETAIL C1/M-501.
R. REFER TO SHEETS M-501 THROUGH M-502 FOR MECHANICAL DETAILS.

KEYNOTES

1. INDOOR AIR CONDITIONING UNIT MOUNTED ABOVE DOOR. COORDINATE LOCATION WITH ARCHITECT.
2. OUTSIDE AIR DUCT, OF SIZE INDICATED, UP IN CHASE TO FLOOR ABOVE. SEE SECOND FLOOR HVAC PLAN, SHEET MH.102B, FOR CONTINUATION.
3. EXHAUST AIR DUCT, OF SIZE INDICATED, UP IN CHASE TO FLOOR ABOVE. SEE SECOND FLOOR HVAC PLAN, SHEET MH.102B, FOR CONTINUATION.
4. BALANCING DAMPER SET TO 900 CFM.

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REVISIONS

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1	12.19.22	Addendum 2

PHASE	DATE
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ILIR MESITI NEW MEXICO 20505 PROFESSIONAL ENGINEER

MH.102C

HVAC LEVEL 2 FLOOR PLAN - AREA C

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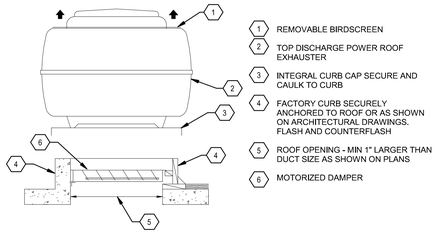
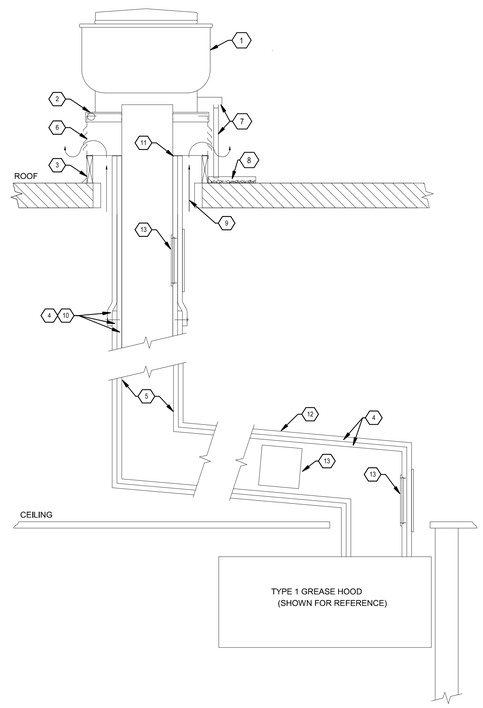


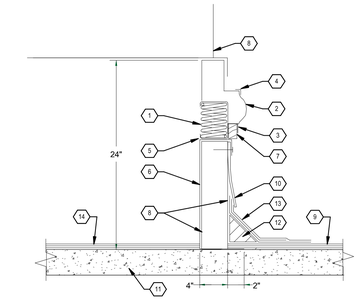
1. REMOVABLE BIRDSCREEN
2. TOP DISCHARGE POWER ROOF EXHAUSTER
3. INTEGRAL CURB CAP SECURE AND CAULK TO CURB
4. FACTORY CURB SECURELY ANCHORED TO ROOF OR AS SHOWN ON ARCHITECTURAL DRAWINGS. FLASH AND COUNTERFLASH
5. ROOF OPENING - MIN 1" LARGER THAN DUCT SIZE AS SHOWN ON PLANS
6. MOTORIZED DAMPER

B2 UP-BLAST POWER ROOF EXHAUSTER DETAIL
SCALE = NONE



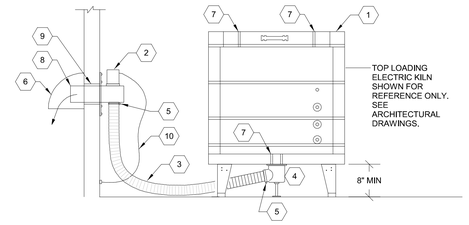
1. TOP DISCHARGE POWER ROOF EXHAUSTER
2. INTEGRAL CURB CAP. SECURE AND CAULK TO CURB.
3. 12" TALL MIN. FACTORY ROOF CURB SECURELY ANCHORED TO ROOF AS SHOWN ON ARCHITECTURAL DRAWINGS. FLASH AND COUNTERFLASH CURB TO ROOF.
4. FIELD APPLIED 2 HOUR FIRE RATED DUCT WRAP. (TYP. COMPRISING OF 2 LAYERS OF MATERIAL). UNIFRAX "FIREWRAP MAX 2.0 - ICC SYSTEM", INSTALL DUCT WRAP PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
5. 16 GA. WELDED BLACK IRON DUCTWORK FROM KITCHEN HOOD.
6. VENTILATED CURB EXTENSION
7. GREASE CUP WITH DRAIN TUBE
8. 2'x2'x3" GREASE PAN WITH 2" PEA GRAVEL BED. SOLDER BOTTOM AND SIDES OF PAN.
9. MAINTAIN 1" CLEARANCE (MINIMUM) BETWEEN ROOF OPENING AND 2 HOUR FIRE RATED DUCT WRAP. AN AIR GAP SHALL BE MAINTAINED AROUND DUCT SO THAT AIR CIRCULATES FROM CEILING CAVITY UP AND OUT OF VENTILATED CURB EXTENSION.
10. OVERLAP 2 HOUR FIRE WRAP AT SEAMS AND SECURE FIRE WRAP WITH METAL PINS AND STAINLESS STEEL BANDING PER MANUFACTURER'S INSTALLATION REQUIREMENTS. NOTE: WHERE SEAMS OCCUR, DUCT WRAP MATERIAL CAN BE UP TO 3 LAYERS THICK. CONSIDER MATERIAL THICKNESS WHEN COORDINATING ROOF OPENINGS AND DUCT ENCLOSURES.
11. 2 HOUR RATED FIRE WRAP MATERIAL SHALL EXTEND UP THROUGH ROOF TO TOP OF ROOF CURB AND/OR BOTTOM OF VENTILATED CURB EXTENSION.
12. SLOPE GREASE DUCT A MINIMUM OF 1/4" PER FOOT TOWARDS HOOD.
13. UL LISTED GREASE DUCT ACCESS DOOR CONSTRUCTED OF SAME GAUGE MATERIAL AS GREASE DUCT. INSTALL ACCESS DOOR ON SIDE OF GREASE DUCT EVERY 8'-0".

A2 GREASE EXHAUST FAN AND DUCT DETAIL
SCALE = NONE



1. 2" SPRING ISOLATORS WITH RETAINERS THYCURB MODEL TR5V OR EQUIVALENT.
2. EPDM ROOFING MATERIAL
3. 18 G.A. STRIP
4. CLIP ANGLE
5. WEATHERPROOF SEAL, CONTINUOUS
6. 1" DEFLECTION 4" STRUCTURAL CHANNEL
7. 2x4 WOOD NAILER STRIP, CONTINUOUS
8. 14 GA. GALVANIZED STEEL CONSTRUCTION
9. ROOFING, SEE ARCHITECTURAL FOR TYPE
10. 20 GA. GALV. STEEL COUNTERFLASH, CONTINUOUS
11. 6" CONCRETE PAD, SEE STRUCTURAL.
12. FIBER CANT STRIP, BY OTHERS
13. FLASHING, BY OTHERS
14. ROOFING, SEE ARCHITECTURAL FOR TYPE
13. FLASHING, BY OTHERS

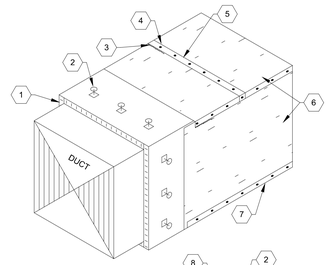
C3 SPRING ISOLATED CURB DETAIL
SCALE = NONE



1. TOP LOADING 12 CUBIC FOOT (OR SMALLER) ELECTRIC KILN - SEE ARCH DWGS FOR MANUFACTURER AND MODEL NUMBER
2. BLOWER WITH MOTOR:
   - 115/60/1 MOTOR, 1.4 AMPS
   - 6 FT POWER CORD WITH IN-LINE SWITCH
   - 140 CFM
   - 8"x12" WALL MOUNTING PLATE
3. FLEXIBLE EXHAUST HOSE:
   - TRIPLE PLY LAMINATE, ALUMINIZED POLYESTER FACE AND AN ALUMINUM FOIL BACKING
   - CORROSION, MOISTURE, TEMPERATURE (250°F), AND FLAME RESISTANT
   - 3" DIAMETER, 8 FOOT MAX LENGTH
   - FLEXIBLE HOSE FASTENED BY PLASTIC HOSE CLAMPS (QTY=2)
4. SPRING LOADED PLENUM CUP ASSEMBLY
5. HOSE CLAMP
6. RAIN HOOD OR VENT
7. DRILLED OPENINGS THRU LID AND DECK OF KILN PER FAN MANUFACTURER'S INSTALLATION INSTRUCTIONS
8. DISCHARGE TUBE
9. 3-1/8" CUTOUT IN WALL
10. 115V CORDSET W/SWITCH

NOTE:
KILN VENT TO BE SKUTT ENVIROVENT 2 WITH ENVIROLINK CONTROLLER. INSTALL ALL COMPONENTS PER MANUFACTURER'S REQUIREMENTS.

C4 KILN VENTING DETAIL
SCALE = NONE



1. MINIMUM 2" TYPE D-8 INSULATION. SEE SPECS.
2. STICK PINS AND WASHERS 12" O.C. UNDER ALUMINUM JACKET.
3. USE CAULKING TO SEAL JOINTS.
4. SCREWS FOR OVERLAPPED JOINTS. 3"-6" O.C.
5. OVERLAPPED JOINTS. OVERLAP ALUMINUM 2"-3".
6. .016" ALUMINUM JACKET WITH VAPOR BARRIER.
7. BREAK ALL CORNERS. NO FIELD BENDS.
8. TAPERED INSULATION ON ONE SIDE. SLOPE TOP INSULATION AND ALUMINUM CAP 1/2" PER FOOT.

GENERAL NOTES

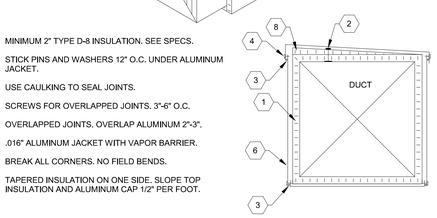
A. TAKE CARE TO ENSURE STICK PINS DO NOT PROTRUDE THROUGH ALUMINUM JACKET. IF STICK PIN PROTRUDES THROUGH ALUMINUM JACKET USE S.S.DOMED WASHER AND CAULK. NO FLAT WASHERS TO BE USED.

B. BOTTOM ALUMINUM CAP MUST BE INSTALLED FIRST TO PROVIDE FOR A MOUNTING SURFACE FOR ALUMINUM SIDES.

C. ALUMINUM SIDES SHALL BE MOUNTED SECOND. SCREW INTO BOTTOM ALUMINUM CAP.

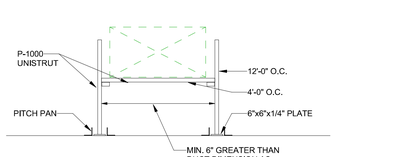
D. LASTLY, INSTALL TOP ALUMINUM CAP. SCREW INTO FLAT ALUMINUM SIDES AND SEAL JOINTS WITH CAULKING.

B3 EXTERIOR DUCT INSULATION DETAIL
SCALE = NONE

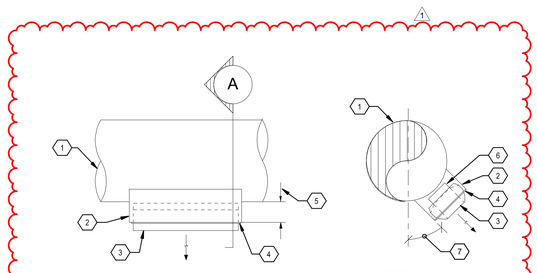


1. SLOT DIFFUSER, SEE PLANS FOR NUMBER OF SLOTS AND LENGTH
2. INTERNAL INSULATION
3. FACTORY PLENUM
4. BRANCH RUNOUT, SEE PLANS FOR SIZE
5. ROUND INLET
6. SOFFIT, SEE ARCH. DWGS. FOR CONSTRUCTION
7. PLENUM SUPPORT MOUNTED PLENUM AND ARCH. FRAMING
8. SUPPLY DUCT, SEE PLANS FOR SIZE
9. ARCHITECTURAL ENCLOSURE, SEE ARCH DWGS.

B4 SIDEWALL LINEAR DIFFUSER DETAIL
SCALE = NONE



A3 ABOVE ROOF DUCT SUPPORT DETAIL
SCALE = NONE



1. ROUND OR RECTANGULAR SUPPLY DUCT
2. RECTANGULAR EXTENSION, SIZE TO FIT DIFFUSER FRAME, (SEE NOTE 5 BELOW).
3. DRUM PUNKAH LOUVER
4. LOUVER FRAME
5. FOR MAIN SUPPLY VELOCITIES GREATER THAN 1000 FPM. PROVIDE EXTENSION TO MOVE DRUM OUTSIDE MAIN AIR STREAM. (6 TO 12 INCHES)
6. OPPOSED BLADE DAMPER
7. INSTALL DRUM PUNKAH 45 DEGREES FROM VERTICAL.

A4 DRUM PUNKAH LOUVER CONNECTION DETAIL
SCALE = NONE

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REVISIONS		
Revision #	Date	Revision Description
1	12.19.22	Addendum 2

PHASE	DATE
100% CD	11.04.22

ILIR MESITI
NEW MEXICO
20505
PROFESSIONAL ENGINEER

M-502

MECHANICAL DETAILS

Bridgers & Paxton Project No: 8331 12/19/2022 1:27:38 PM D:\Revit 2022\Projects\8331_SBES_MEP_jmdoughterty@bpce.com.rvt

ROOFTOP DEDICATED OUTSIDE AIR UNITS

SYMBOL	VALENT MODEL NO.	SUPPLY FAN AIRFLOW (CFM)	SUPPLY FAN EXT. SP (IN. WC)	SUPPLY FAN FAN RPM	SUPPLY FAN FAN BHP	SUPPLY FAN MOTOR HP	EXHAUST FAN AIRFLOW (CFM)	EXHAUST FAN EXT. SP (IN. WC)	EXHAUST FAN FAN RPM	EXHAUST FAN FAN BHP	EXHAUST FAN MOTOR HP	DX COOLING COIL PERFORMANCE REFRIG TYPE	DX COOLING COIL PERFORMANCE TOTAL CAPACITY (MBH)	DX COOLING COIL PERFORMANCE SENSIBLE CAPACITY (MBH)	DX COOLING COIL PERFORMANCE LAT DB	DX COOLING COIL PERFORMANCE LAT WB	HEATING PERFORMANCE- FORCE-DRAFT INDIRECT GAS FURNACE GAS TYPE	INPUT @ SEA LEVEL (MBH)	OUTPUT (MBH)	LAT DB	FURNACE CONTROLS	SUMMER OPERATION FLAT PLATE HEAT EXCHANGER PERFORMANCE OUTSIDE AIR EDB (°F)	SUMMER OPERATION FLAT PLATE HEAT EXCHANGER PERFORMANCE OUTSIDE AIR LDB (°F)	SUMMER OPERATION FLAT PLATE HEAT EXCHANGER PERFORMANCE EXHAUST AIR EDB (°F)	SUMMER OPERATION FLAT PLATE HEAT EXCHANGER PERFORMANCE EXHAUST AIR LDB (°F)	HEATING OPERATION FLAT PLATE HEAT EXCHANGER PERFORMANCE OUTSIDE AIR EDB (°F)	HEATING OPERATION FLAT PLATE HEAT EXCHANGER PERFORMANCE OUTSIDE AIR LDB (°F)	HEATING OPERATION FLAT PLATE HEAT EXCHANGER PERFORMANCE EXHAUST AIR EDB (°F)	HEATING OPERATION FLAT PLATE HEAT EXCHANGER PERFORMANCE EXHAUST AIR LDB (°F)	FILTER TYPE	ELECTRICAL DATA MAIN POWER TO UNIT V/PH/HZ	ELECTRICAL DATA MAIN POWER TO UNIT MCA (A)	ELECTRICAL DATA MAIN POWER TO UNIT MOP (A)	SOUND POWER BY OCTAVE BAND 63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz	WEIGHT (LBS.)
DOAS-1	VPRP-210-8F-20I-C-1GC	3,600	1.0	2000	2.36	3	3,600	0.8	1896	2	3	R410A	81.2	81.2	56.9	51.4	NATURAL GAS	200	141	83.2	MODULATING 5:1	96	82	72	82	12	47	72	47	MERV 13	460/3/60	25.3	35	92	90	92	88	88	84	81	76	3,800
DOAS-2	VPRP-310-25C-60I-C-1DC	8,000	1.5	1610	6.67	10	8,000	1.0	2087	2.67	3	R410A	263.7	245.8	47.4	46.6	NATURAL GAS	600	424	96.8	MODULATING 5:1	96	81.6	72	81.6	12	47.9	72	47.9	MERV 13	460/3/60	79.1	90	81	84	91	93	89	84	78	74	7,500
DOAS-3	VPRP-110-5C-10I-C-1DC	1,400	1.6	2236	.94	1.5	1,400	1.0	1755	.48	.75	R410A	54.8	46.5	43.6	43.1	NATURAL GAS	100	71	97.3	MODULATING 5:1	96	80.5	72	80.5	12	50.7	72	50.7	MERV 13	460/3/60	18.7	25	84	81	92	87	88	88	79	76	4,000
DOAS-4	VPRP-210-16F-40I-C-1GC	6,800	1.5	1657	6.15	7.5	6,800	1.0	2203	3.13	5	R410A	170.1	170.1	54.6	50.5	NATURAL GAS	400	283	84.2	MODULATING 5:1	96	82.5	72	82.5	12	45.8	72	45.8	MERV 13	460/3/60	55.7	60	83	85	90	86	83	78	73	71	5,500
DOAS-5	VPRP-210-16F-40I-C-1GC	6,800	1.5	1657	6.15	7.5	6,800	1.0	2203	3.13	5	R410A	170.1	170.1	54.6	50.5	NATURAL GAS	400	283	84.2	MODULATING 5:1	96	82.5	72	82.5	12	45.8	72	45.8	MERV 13	460/3/60	55.7	60	83	85	90	86	83	78	73	71	5,500

PROVIDE 24" TALL VIBRATION ISOLATION CURB PER DETAIL C3/M-502, LOW LEAKAGE DAMPER, SINGLE POINT CONNECTION, NON-POWERED CONVENIENCE OUTLET, STARTER/DISCONNECT. SEE SPECIFICATION 23 7200.

PACKAGED ROOFTOP UNIT (DX/GAS)

SYMBOL	AAON MODEL NO.	TYPE	AREA SERVED	SUPPLY FAN CFM	SUPPLY FAN FAN RPM	SUPPLY FAN EXT. SP (IN. WC)	SUPPLY FAN FAN BHP	SUPPLY FAN HP	COOLING PERFORMANCE NOMINAL CAPACITY (TONS)	COOLING PERFORMANCE EER @ ARI	COOLING PERFORMANCE GROSS TOTAL COOLING (MBH)	COOLING PERFORMANCE GROSS SENSIBLE COOLING (MBH)	COOLING PERFORMANCE EAT DB (°F)	COOLING PERFORMANCE EAT WB (°F)	COOLING PERFORMANCE LAT DB (°F)	COOLING PERFORMANCE LAT WB (°F)	GAS HEAT EXCHANGER HEATING INPUT AT SEA LEVEL (MBH)	GAS HEAT EXCHANGER HEATING OUTPUT AT ALTITUDE (MBH)	EAT DB (°F)	LAT DB (°F)	MINIMUM OUTSIDE AIR (CFM)	FILTER TYPE	REFRIG. TYPE	OPERATING WEIGHT (LBS.)	ELECTRICAL V	ELECTRICAL PH	ELECTRICAL HZ	ELECTRICAL MCA	ELECTRICAL MOP
RTU-1	RN-025-3-0-EA09-5CB	VERTICAL SUPPLY/ VERTICAL RETURN	132 GYMNASIUM	10,000	1852	1.0	9.52	10	25	11.4	270.38	270.38	82	60	54	50	540	354.1	40.1	80.1	2000	MERV 13	R410A	3,500	460	3	60	61	70
RTU-2	RN-025-3-0-EA09-5CB	VERTICAL SUPPLY/ VERTICAL RETURN	133 CAFETERIA	10,000	1852	1.0	9.52	10	25	11.4	270.38	270.38	82	60	54	50	540	354.1	40.1	80.1	4000	MERV 13	R410A	3,500	460	3	60	61	70
RTU-3	RN-010-3-0-EA09-5KB	VERTICAL SUPPLY/ VERTICAL RETURN	134 KITCHEN 1	4,000	2117	0.5	2.9	3	10	11.7	97.63	97.63	77	56	52	46	150	98.4	64.2	92	350	MERV 13	R410A	2,000	460	3	60	27	40
RTU-4	RQ-004-9-V-EA09-53B	VERTICAL SUPPLY/ VERTICAL RETURN	133A STAGE	1,600	1858	0.5	0.86	1	4	13.3	43.56	40.97	80	57	50	46	100	66.4	44	91	560	MERV 13	R410A	1,200	208	1	60	36	50

PROVIDE INLET HOOD, STD REFRIG CONTROLS, FROSTAT AND CRANKCASE HEATER, PACKAGED LOW VOLT CONTROLS, 100% ECONOMIZER - DRY BULB, COMMUNICATIONS, STD. CONDENSOR COIL W/ HAIL GUARD, NON-POWERED CONVENIENCE OUTLET, STARTER/ DISCONNECT. RTU-1, RTU-2, RTU-4: 24" TALL VIBRATION ISOLATION CURB PER DETAIL C3/M-502. RTU-3: STANDARD 24" TALL ROOF CURB.

SOUND ATTENUATOR

SYMBOL	VIBRO-ACOUSTICS MODEL NO.	LOCATION	DIMENSIONS WxHxL (INCH)	AIR VOLUME (CFM)	VELOCITY (FPM)	PD (IN.WG)	MINIMUM/MAXIMUM DYNAMIC INSERTION LOSS (dB) 63 HZ	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ
SA-1	RED-HV-F5	DOAS-1 SUPPLY	22 X 22 X 36	3600	1071	0.16	5/59	7/48	10/41	17/38	20/40	10/39	9/28	11/25
SA-2	RED-MV-F7	FC3-04 SUPPLY	18 X 18 X 36	1410	628	0.11	5/52	9/37	12/32	21/31	25/29	22/26	18/19	17/24
SA-3	RD-MLV-F6	FC3-05 SUPPLY	20 X 12 X 48	1410	847	0.15	5/47	9/40	17/34	29/33	34/33	21/33	14/24	10/22
SA-4	RED-MHV-F9	FC5-01 SUPPLY	26 X 14 X 48	2540	1006	0.19	5/58	8/46	13/38	20/36	31/37	33/37	25/29	21/24
SA-5	RMB-MV-F9	DOAS-5 SUPPLY	24 X 32 X 36	5400	1013	0.11	4/52	6/47	13/43	23/46	33/49	24/51	15/39	10/27
SA-6	BMB-MHV-F1	DOAS-4 SUPPLY	30 X 30 X 36	6800	1088	0.09	4/53	8/48	12/47	13/47	15/49	13/45	12/33	11/25
SA-7	REMB-MV-F8	RTU-4 SUPPLY	16 X 16 X 48	1600	900	0.2	6/52	11/43	17/41	24/43	32/41	33/35	25/26	19/27
SA-8	RMB-MV-F6	DOAS-2 EXHAUST	40 X 20 X 36	8000	1440	0.21	4/55	7/54	12/50	19/52	24/55	18/57	12/48	8/35

1

INDOOR SPLIT SYSTEM SCHEDULE

SYMBOL	MITSUBISHI INDOOR MODEL NUMBER	AREA SERVED	TYPE	REFRIG TYPE	AIRFLOW (CFM)	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	EAT DB (F)	EAT WB (F)	SOUND LEVEL (dBA)	EER/SEER	MOTOR DATA VOLT	MOTOR DATA PH	MOTOR DATA HZ	WEIGHT (LBS)	HEIGHT / WIDTH / DEPTH (IN)
AC-1	PKA-A36KA7 (CO)	116 IDF	COOLING ONLY	R-410A	920	36,000	N/A	80	67	49	10.8/18.8	208	1	60	46	46-1/16" X 11-5/8" X 14-3/8"
AC-2	PKA-A12HA7 (CO)	115 ELEC	COOLING ONLY	R-410A	425	12,000	N/A	80	67	43	12.0/20.8	208	1	60	30	35-3/8" X 9-13/16" X 11-5/8"
AC-3	PKA-A36KA7	202 IDF	HEAT PUMP	R-410A	920	36,000	38,000	80	67	49	10.8/18.8	208	1	60	46	46-1/16" X 11-5/8" X 14-3/8"
AC-4	PKA-A12HA7	201 ELEC	HEAT PUMP	R-410A	425	12,000	14,000	80	67	43	12.0/20.8	208	1	60	30	35-3/8" X 9-13/16" X 11-5/8"
AC-5	PKA-A24KA7	146 MAIN ELECTRICAL	HEAT PUMP	R-410A	775	24,000	26,000	80	67	45	12.2/21.4	208	1	60	46	46-1/16" X 11-5/8" X 14-3/8"
AC-6	PKA-A36KA7 (CO)	133E MDF	COOLING ONLY	R-410A	920	36,000	N/A	80	67	49	10.8/18.8	208	1	60	46	46-1/16" X 11-5/8" X 14-3/8"
AC-7	PKA-A12HA7	223 ELEC	HEAT PUMP	R-410A	425	12,000	14,000	80	67	43	12.0/20.8	208	1	60	30	35-3/8" X 9-13/16" X 11-5/8"
AC-8	PKA-A36KA7 (CO)	219 IDF	COOLING ONLY	R-410A	920	36,000	N/A	80	67	49	10.8/18.8	208	1	60	46	46-1/16" X 11-5/8" X 14-3/8"
AC-9	PKA-A36KA7	152 MDF	HEAT PUMP	R-410A	920	36,000	38,000	80	67	49	10.8/18.8	208	1	60	46	46-1/16" X 11-5/8" X 14-3/8"
AC-10	PKA-A36KA7	229 IDF	HEAT PUMP	R-410A	920	36,000	38,000	80	67	49	10.8/18.8	208	1	60	46	46-1/16" X 11-5/8" X 14-3/8"
AC-11	PEAD-A09AA7	134B OFFICE 1	HEAT PUMP	R-410A	320	9,000	11,400	80	67	28	12.5/19.4	208	1	60	60	35-7/16" X 28-7/8" X 9-7/8"
AC-12	PEAD-A18AA7	132A OFFICE	HEAT PUMP	R-410A	600	18,000	19,000	80	67	37	10.8/19.9	208	1	60	31	35-7/16" X 28-7/8" X 9-7/8"
AC-13	PEAD-A18AA7	ST-3 STAIRS	HEAT PUMP	R-410A	600	18,000	19,000	80	67	37	10.8/19.9	208	1	60	31	35-7/16" X 28-7/8" X 9-7/8"

INDOOR UNIT SHALL BE ELECTRICALLY SERVED FROM THE OUTDOOR UNIT PER THE MANUFACTURER'S ELECTRICAL REQUIREMENTS AND DIAGRAMS. PROVIDE REFRIGERANT PIPING AND ALL ACCESSORIES FOR A COMPLETE AND FUNCTIONAL SYSTEM PER MANUFACTURER'S INSTALLATION MANUAL. PROVIDE WALL MOUNTED, HARD-WIRED T-STAT, CONDENSATE LIFT PUMP.

ALL SELECTIONS ARE BASED ON 5300 FT. ABOVE SEA LEVEL.

OUTDOOR SPLIT SYSTEM SCHEDULE

SYMBOL	MITSUBISHI MODEL NUMBER	LOCATION	INDOOR UNIT SERVED	TYPE	RATED CAPACITY (BTUH)	AMBIENT DB (F)	COMPRESSOR DATA TYPE	COMPRESSOR DATA REFRIG. TYPE	COMPRESSOR DATA MAX PIPING LENGTH	COMPRESSOR DATA LIQUID SIZE	COMPRESSOR DATA SUCTION SIZE	ELECTRICAL DATA VOLTS	ELECTRICAL DATA PH	ELECTRICAL DATA HZ	ELECTRICAL DATA MCA	ELECTRICAL DATA MOP	SOUND POWER (dBA)	WEIGHT (LBS)	WIDTH X DEPTH X HEIGHT (IN.)
C-1	PUY-A36NKA7	ROOF	AC-1	COOLING ONLY	36,000	95	INVERTOR	R-410A	225'	3/8"	5/8"	208	1	60	25	31	52	210	41-5/16" X 14-3/16" X 52-11/16"
C-2	PUY-A12NKA7	ROOF	AC-2	COOLING ONLY	12,000	95	INVERTOR	R-410A	165'	1/4"	1/2"	208	1	60	11	28	44	95	34-1/4" X 11-13/16" X 24-13/16"
C-3	PUZ-A36NKA7	ROOF	AC-3	HEAT PUMP	36,000	95	INVERTOR	R-410A	165'	3/8"	5/8"	208	1	60	25	31	52	215	41-5/16" X 14-3/16" X 52-11/16"
C-4	PUZ-A12NKA7	ROOF	AC-4	HEAT PUMP	12,000	95	INVERTOR	R-410A	100'	1/4"	1/2"	208	1	60	11	28	44	95	34-1/4" X 11-13/16" X 24-13/16"
C-5	PUZ-A24NHA7	ROOF	AC-5	HEAT PUMP	24,000	95	INVERTOR	R-410A	165'	3/8"	5/8"	208	1	60	19	26	48	160	37-13/32" X 14-3/16" X 37-1/8"
C-6	PUY-A36NKA7	ROOF	AC-6	COOLING ONLY	36,000	95	INVERTOR	R-410A	225'	3/8"	5/8"	208	1	60	25	31	52	210	41-5/16" X 14-3/16" X 52-11/16"
C-7	PUZ-A12NKA7	ROOF	AC-7	HEAT PUMP	12,000	95	INVERTOR	R-410A	100'	1/4"	1/2"	208	1	60	11	28	44	95	34-1/4" X 11-13/16" X 24-13/16"
C-8	PUY-A36NKA7	ROOF	AC-8	COOLING ONLY	36,000	95	INVERTOR	R-410A	225'	3/8"	5/8"	208	1	60	25	31	52	210	41-5/16" X 14-3/16" X 52-11/16"
C-9	PUZ-A36NKA7	ROOF	AC-9	HEAT PUMP	36,000	95	INVERTOR	R-410A	165'	3/8"	5/8"	208	1	60	25	31	52	215	41-5/16" X 14-3/16" X 52-11/16"
C-10	PUZ-A36NKA7	ROOF	AC-10	HEAT PUMP	36,000	95	INVERTOR	R-410A	165'	3/8"	5/8"	208	1	60	25	31	52	215	41-5/16" X 14-3/16" X 52-11/16"
C-11	SUZ-KA09NAR1	ROOF	AC-11	HEAT PUMP	9,000	95	INVERTOR	R-410A	65'	1/4"	3/8"	208	1	60	12	15	46	70	31-1/2" X 11-1/4" X 21-5/8"
C-12	PUZ-A18NKA7	ROOF	AC-12	HEAT PUMP	18,000	95	INVERTOR	R-410A	100'	1/4"	1/2"	208	1	60	11	28	44	100	34-1/4" X 11-13/16" X 24-13/16"
C-13	PUZ-A18NKA7	ROOF	AC-13	HEAT PUMP	18,000	95	INVERTOR	R-410A	100'	1/4"	1/2"	208	1	60	11	28	44	100	34-1/4" X 11-13/16" X 24-13/16"

INDOOR UNIT SHALL BE ELECTRICALLY SERVED FROM THE OUTDOOR UNIT PER THE MANUFACTURER'S ELECTRICAL REQUIREMENTS AND DIAGRAMS. PROVIDE REFRIGERANT PIPING AND ALL ACCESSORIES FOR A COMPLETE AND FUNCTIONAL SYSTEM PER MANUFACTURER'S INSTALLATION MANUAL. PROVIE WIND BAFFLE AND HAIL GUARD.

MAKE-UP AIR UNIT

SYMBOL	GREENHECK MODEL NO.	FOOD SERVICE ITEM SERVED	SUPPLY FAN CFM	SUPPLY FAN EXT. SP (IN. WC)	SUPPLY FAN TOTAL SP (IN. WC)	SUPPLY FAN FAN RPM	SUPPLY FAN FAN BHP	ELECTRICAL DATA RPM	ELECTRICAL DATA HP	ELECTRICAL DATA MCA	ELECTRICAL DATA MOP	ELECTRICAL DATA V	ELECTRICAL DATA PH	ELECTRICAL DATA HZ	DIRECT FIRED HEAT EXCHANGER GAS INPUT (MBH)	DIRECT FIRED HEAT EXCHANGER HEATING OUTPUT (MBH)	DIRECT FIRED HEAT EXCHANGER EAT DB (°F)	DIRECT FIRED HEAT EXCHANGER LAT DB (°F)	WEIGHT (LBS.)	OUTSIDE AIRFLOW (CFM)
MAU-1	DG-110-H10	134 KITCHEN- TYPE 1 GREASE HOOD	2200	0.5	1.269	1232	0.93	1725	1.5	4.1	15	460	3	60	111.0	102.1	18	70	1200	2200

HORIZONTAL DISCHARGE, 2" ALUMINUM FILTERS, INTERNAL DISCHARGE TEMP CONTROL WITH COOLING THERMOSTAT, FREEZE PROTECTION KIT, 24" ROOF CURB, MOTORIZED DAMPER WITH ACTUATOR, 100% OUTSIDE AIR, PROVIDE STARTER/DISCONNECT, NON-POWERED CONVENIENCE OUTLET WITH UNIT.

MAKE-UP AIR UNIT SOUND

SYMBOL	INLET SOUND POWER BY OCTAVE BAND 63 HZ	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ
MAU-1	90	93	83	75	73	71	69	64

EVAPORATIVE COOLING UNIT SCHEDULE

SYMBOL	CHAMPION MODEL NO.	AREA SERVED	SUPPLY FAN CFM	SUPPLY FAN TOTAL SP (IN. WC)	ELECTRICAL DATA SPEEDS	ELECTRICAL DATA HP	ELECTRICAL DATA AMPS	ELECTRICAL DATA V	ELECTRICAL DATA PH	ELECTRICAL DATA HZ	COOLING MEDIA MEDIA	COOLING MEDIA EAT DB (°F)	COOLING MEDIA LAT DB (°F)	OUTSIDE AIRFLOW (CFM)	WEIGHT (LBS)	NOTES
EC-1	MASTERCOOL ASA5112	102 KITCHEN	2200	0.5	1	3/4	14.9	115	1	60	12" CELDEK	95	64	2200	300	END DISCHARGE

RANGE HOOD SCHEDULE

SYMBOL	DENLAR MODEL NO.	LOCATION	APPLICATION	OVERALL DIMENSIONS (LxWxH)	ELECTRICAL DATA V/P/H	ELECTRICAL DATA AMPS	ELECTRICAL DATA MOCP	HOOD CONSTRUCTION	WEIGHT (LBS.)
RH-1	D1000	120 KITCHEN	RANGE EXHAUST	29-7/8" X 13-3/8" X 10-1/2"	120/1/60	3	15	SS	55

ELECTRIC UNIT HEATERS

SYMBOL	TRANE MODEL NO.	LOCATION	AIRFLOW (CFM)	AIRFLOW TEMP. RISE (°F)	HEATING (KW)	ELECTRICAL DATA MOTOR HP	MOTOR RPM	V	PH	HZ	MCA (A)	MOP (A)	WEIGHT (LBS.)	NOTES
EUH-1	UHEC-05ACACA	138 MECHANICAL	400	40	5	1/125	1550	277	1	60	18.1	25	30	PROVIDE WALL MOUNTED THERMOSTAT.
EUH-2	UHEC-05ACACA	139 FIRE RISER	400	40	5	1/125	1550	277	1	60	18.1	25	30	PROVIDE WALL MOUNTED THERMOSTAT.
EUH-3	UHEC-05ACACA	124 OUTDOOR STORAGE	400	40	5	1/125	1550	277	1	60	18.1	25	30	PROVIDE WALL MOUNTED THERMOSTAT.

GRILLES AND DIFFUSERS

SYMBOL	MANUFACTURER & MODEL NO.	TYPE	FRAME STYLE	FACE DIMENSIONS (INCH)	NECK DIMENSIONS (INCH)	CFM RANGE	T.P. (IN. W.G.)	MAX NC	NOTES
SD-1	PRICE SCDA, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	12x12, 24x24	6	40-130	0.02-0.06	24	
	PRICE SCDA, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	12x12, 24x24	8	131-230	0.02-0.06	25	
	PRICE SCDA, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24x24	10	231-330	0.03-0.06	25	
	PRICE SCDA, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24x24	12	331-480	0.03-0.06	25	
	PRICE SCDA, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24x24	14	481-530	0.04-0.06	25	
SD-2	PRICE SCDA, TYPE 1	SUPPLY DIFFUSER	FIXED CEILING	12x12, 24x24	6	40-130	0.02-0.09	25	PROVIDE OBD
	PRICE SCDA, TYPE 1	SUPPLY DIFFUSER	FIXED CEILING	12x12, 24x24	8	131-230	0.02-0.09	25	PROVIDE OBD
	PRICE SCDA, TYPE 1	SUPPLY DIFFUSER	FIXED CEILING	24x24	10	231-330	0.02-0.08	25	PROVIDE OBD
	PRICE SCDA, TYPE 1	SUPPLY DIFFUSER	FIXED CEILING	24x24	12	331-430	0.02-0.08	25	PROVIDE OBD
	PRICE SCDA, TYPE 1	SUPPLY DIFFUSER	FIXED CEILING	24x24	14	431-530	0.03-0.08	25	PROVIDE OBD
SD-3	PRICE RCD	ROUND SUPPLY	EXPOSED CEILING	14	6	40-120	0.02-0.09	25	
	PRICE RCD	ROUND SUPPLY	EXPOSED CEILING	18	8	121-210	0.02-0.09	25	
	PRICE RCD	ROUND SUPPLY	EXPOSED CEILING	23	10	211-330	0.02-0.08	25	
SD-4	PRICE RCD	ROUND SUPPLY	FIXED CEILING	14	6	40-120	0.02-0.09	25	
	PRICE RCD	ROUND SUPPLY	FIXED CEILING	18	8	121-210	0.02-0.09	25	
DP-1	PRICE HCD	DRUM PUNKAH	DUCT MOUNTED	24x6	N/A	500	0.03-0.06	25	
SR-1	PRICE 520	SIDEWALL SUPPLY	FLAT MARGIN	SEE PLAN	SEE PLANS	SEE PLANS	0.03-0.06	25	
LSD-1	PRICE SDBI 75	LINEAR SUPPLY	SURF MOUNTED	3' LONG	7	SEE PLANS	0.03-0.06	25	3 SLOT, 3/4" SLOT, PROVIDE PLENUM WITH CABLE OPERATED DAMPER, PRICE MODEL VCR85C, SEE DETAIL B4/M-502.
LSD-2	PRICE SDBI 50	LINEAR SUPPLY	SURF MOUNTED	4' LONG	7	SEE PLANS	0.03-0.06	25	3 SLOT, 1/2" SLOT, PROVIDE PLENUM WITH CABLE OPERATED DAMPER, PRICE MODEL VCR85C, SEE DETAIL B4/M-502.
LSD-3	PRICE SDBI 100	LINEAR SUPPLY	SURF MOUNTED	4' LONG	10	SEE PLANS	0.03-0.06	25	4 SLOT, 1" SLOT, PROVIDE PLENUM WITH CABLE OPERATED DAMPER, PRICE MODEL VCR85C, SEE DETAIL B4/M-502.
LSD-4	PRICE SDBI 50	LINEAR SUPPLY	LAY-IN CEILING	3' LONG	7	SEE PLANS	0.03-0.06	25	4 SLOT, 1/2" SLOT, PROVIDE PLENUM WITH CABLE OPERATED DAMPER, PRICE MODEL VCR85C, SEE DETAIL B4/M-502.
LSD-5	PRICE SDS100	LINEAR SUPPLY	DUCT MOUNTED	3' LONG	N/A	SEE PLANS	0.03-0.06	25	3 SLOT, 1" SLOT, TYPE 16 FRAME, COLOR PER ARCHITECT, SEE DETAIL B1/M-501.
RG-1	PRICE 80	RETURN GRILLE	LAY-IN CEILING	24x24, 24x12, 12x12	SEE PLANS	-	N/A	N/A	
RG-2	PRICE 80	RETURN GRILLE	FIXED CEILING	24x24, 24x12, 12x12	SEE PLANS	-	N/A	N/A	
RG-3	PRICE 530	RETURN GRILLE	SIDEWALL	SEE PLAN	SEE PLANS	-	N/A	N/A	
EG-1	PRICE 80	EXHAUST GRILLE	LAY-IN CEILING	24x24, 24x12, 12x12	SEE PLANS	SEE PLANS	0.01-0.08	25	
EG-2	PRICE 80	EXHAUST GRILLE	FIXED CEILING	24x24, 24x12, 12x12	SEE PLANS	SEE PLANS	0.01-0.08	25	
EG-3	PRICE 530	EXHAUST GRILLE	SIDEWALL	SEE PLAN	N/A	SEE PLANS	0.01-0.08	25	

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REVISIONS

Revision #	Date	Revision Description
1	12.19.22	Addendum 2

PHASE	DATE
100% CD	11.04.22

M-701

MECHANICAL SCHEDULES

Bridgers & Paxton Project No: 8331 12/19/2022 1:27:43 PM D:\Revit 2022\Projects\8331_SBES_MEP_jmdoughlerty@bpce.com.rvt

VRF HEAT RECOVERY BRANCH CIRCUIT CONTROLLER

SYMBOL	SYSTEM	MODEL NUMBER	NUMBER OF PORTS	CONNECTED CAPACITY	V/PH/HZ
BS1-1	CU-1	TCMBM0108JA11N4	8	294,000.0	208/1/60
BS2-1	CU-2	TCMBM1012JA11N4	12	164,700.0	208/1/60
BS3-1	CU-3	TCMBM0108JA11N4	8	241,700.0	208/1/60
BS4-1	CU-4	TCMBM0108JA11N4	8	306,100.0	208/1/60
BS5-1	CU-5	TCMBM1012JA11N4	12	284,900.0	208/1/60
BS6-1	CU-6	TCMBM0108JA11N4	8	294,000.0	208/1/60
BS7-1	CU-7	TCMBM0108JA11N4	8	303,000.0	208/1/60
BS8-1	CU-8	TCMBM0108JA11N4	8	293,900.0	208/1/60
BS9-1	CU-9	TCMBM1012JA11N4	12	284,000.0	208/1/60

INCLUDE DIAMONDBACK BALL VALVES BV-SERIES, 700PSIG WORKING PRESSURE, FULL PORT, 410A RATED.

MITSUBISHI ELECTRIC TRANE HVAC US: CITY MULTI VRF OUTDOOR UNIT SCHEDULE

SYMBOL	MODEL NUMBER	MODULES	NOMINAL COOLING CAPACITY (BTU/h)	NOMINAL HEATING CAPACITY (BTU/h)	COOLING EFFICIENCY IEER/EER	HEATING COP @ 47°F	NOM SYSTEM CONNECTED CAPACITY (% of NOM)	DESIGN COOLING OUTDOOR AIR TEMP DB (°F)	DESIGN HEATING OUTDOOR AIR TEMP WB (°F)	CORRECTED COOLING TOTAL CAPACITY	CORRECTED HEATING TOTAL CAPACITY (BTU/h)	SOUND PRESSURE (dBA)	ELECTRICAL- PER MODULE V/PH/HZ	MCA	RFS	MOCP
CU-1	TURYP3124BN40AN	P168, P144	312,000.0	350,000.0	23 / 10.15	3.28	94.2%	100.0	10.6	285,126.8	210,798.7	67/69	460/3/60	28, 20	40, 30	40, 30
CU-2	TURYP1684AN40AN	P168	168,000.0	188,000.0	23.55 / 10.8	3.55	98.2%	100.0	10.6	146,630.2	112,063.6	62.5/66.5	460/3/60	28	40	40
CU-3	TURYP2644BN40AN	P144, P120	264,000.0	295,000.0	24.3 / 11	3.39	91.7%	100.0	10.6	239,218.4	176,482.7	66.5/67.5	460/3/60	20, 18	30, 25	30, 25
CU-4	TURYP3124BN40AN	P168, P144	312,000.0	350,000.0	23 / 10.15	3.28	98.1%	100.0	10.6	275,594.0	208,834.5	67/69	460/3/60	28, 20	40, 30	40, 30
CU-5	TURYP3124BN40AN	P168, P144	312,000.0	350,000.0	23 / 10.15	3.28	91.3%	100.0	10.6	289,701.3	211,366.1	67/69	460/3/60	28, 20	40, 30	40, 30
CU-6	TURYP3124BN40AN	P168, P144	312,000.0	350,000.0	23 / 10.15	3.28	94.2%	100.0	10.6	280,465.1	209,183.7	67/69	460/3/60	28, 20	40, 30	40, 30
CU-7	TURYP3124BN40AN	P168, P144	312,000.0	350,000.0	23 / 10.15	3.28	97.1%	100.0	10.6	283,990.7	211,409.7	67/69	460/3/60	28, 20	40, 30	40, 30
CU-8	TURYP2884BN40AN	P144, P144	288,000.0	320,000.0	24.25 / 10.55	3.32	102.1%	100.0	10.6	245,528.0	189,105.0	68/68.5	460/3/60	20, 20	30, 30	30, 30
CU-9	TURYP2884BN40AN	P144, P144	288,000.0	320,000.0	24.25 / 10.55	3.32	98.6%	100.0	10.6	257,965.0	192,596.1	68/68.5	460/3/60	20, 20	30, 30	30, 30

EFFICIENCY VALUES FOR EER, IEER, COP ARE BASED ON AHRI 1230 TEST METHOD FOR MIXTURE OF DUCTED & NON-DUCTED INDOOR UNITS.
FOR SYSTEMS WITH MULTIPLE MODULES, REFRIGERANT PIPE DIMENSIONS INDICATE TOTAL SYSTEM COMBINED PIPING DOWNSTREAM OF MODULE TWINNING.
ADDED FIELD CHARGE LISTED IS IN ADDITION TO FACTORY CHARGE, THIS MUST BE UPDATED BASED UPON FINAL AS-BUILT PIPING LAYOUT.

ALL SELECTIONS ARE BASED ON 5300 FT. ABOVE SEA LEVEL.

MITSUBISHI ELECTRIC TRANE HVAC US: CITY MULTI VRF INDOOR UNIT SCHEDULE

SYMBOL	MODEL	NOMINAL COOLING CAPACITY (BTUH)	NOMINAL NEATING CAPACITY (BTUH)	COOLING DESIGN ENTERING TEMP DB/WB	HEATING DESIGN ENTERING TEMP DB/WB	CORRECTED CAPACITY COOLING TOTAL CAPACITY	CORRECTED CAPACITY COOLING SENSIBLE TOTAL	CORRECTED CAPACITY HEATING CAPACITY (BTU/h)	ESTIMATED COOLING COIL LAT (°F)	ESTIMATED HEATING COIL LAT (°F)	REFRIG PIPE SIZE LIQUID/SUCTION (INCH)	PEAK FAN AIRFLOW CFM)	SOUND PRESSURE 208V (dBA)	V/PH/HZ	ELECTRICAL MCA/MFS
FC1-01	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	25,707.2	48.8	93.7	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC1-02	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	25,707.2	48.8	93.7	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC1-03	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	25,707.2	48.8	93.7	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC1-04	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	34,704.7	47.8	96.4	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC1-05	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	22,115.1	19,922.9	21,851.1	48.6	96.6	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC1-06	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	25,707.2	48.8	93.7	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC1-07	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	25,707.2	48.8	93.7	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC1-08	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	25,707.2	48.8	93.7	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC2-1	TPEFYP012MS140C	11,900.0	13,600.0	73.0/60.0	70.0	8,772.3	7,937.6	8,198.3	49.9	93.7	1/4 / 1/2	371	23-28-35	208/1/60	0.68/15
FC2-2	TPEFYP024MS140C	23,900.0	27,000.0	73.0/60.0	70.0	17,618.4	15,424.9	16,276.0	49.4	94.7	3/8 / 5/8	706	30-35-40	208/1/60	1.57/15
FC2-3	TPEFYP006MS140C	6,100.0	6,800.0	73.0/60.0	70.0	4,496.7	4,496.7	4,099.2	53.3	87.8	1/4 / 1/2	247	22-24-28	208/1/60	0.47/15
FC2-4	TPEFYP012MS140C	11,900.0	13,600.0	73.0/60.0	70.0	8,772.3	7,937.6	8,198.3	49.9	93.7	1/4 / 1/2	371	23-28-35	208/1/60	0.68/15
FC2-5	TPEFYP024MS140C	23,900.0	27,000.0	73.0/60.0	70.0	17,618.4	15,424.9	16,276.0	49.4	94.7	3/8 / 5/8	706	30-35-40	208/1/60	1.57/15
FC2-6	TPEFYP018MS140C	18,100.0	20,100.0	73.0/60.0	70.0	13,342.8	11,774.2	12,116.6	49.0	94.5	1/4 / 1/2	530	30-34-37	208/1/60	1.20/15
FC2-7	TPEFYP012MS140C	11,900.0	13,600.0	73.0/60.0	70.0	8,772.3	7,937.6	8,198.3	49.9	93.7	1/4 / 1/2	371	23-28-35	208/1/60	0.68/15
FC2-8	TPEFYP018MS140C	18,100.0	20,100.0	73.0/60.0	70.0	13,342.8	11,774.2	12,116.6	49.0	94.5	1/4 / 1/2	530	30-34-37	208/1/60	1.20/15
FC2-9	TPEFYP015MS140C	15,000.0	17,100.0	73.0/60.0	70.0	11,057.6	9,412.4	10,308.2	46.8	98.5	1/4 / 1/2	388	28-30-33	208/1/60	1.20/15
FC2-10	TPEFYP024MS140C	23,900.0	27,000.0	73.0/60.0	70.0	17,618.4	15,424.9	16,276.0	49.4	94.7	3/8 / 5/8	706	30-35-40	208/1/60	1.57/15
FC3-1	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	21,761.1	19,765.0	22,019.9	48.8	96.8	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC3-2	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	34,817.8	32,777.9	34,972.7	47.9	96.6	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC3-3	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	34,817.8	32,777.9	34,972.7	47.9	96.6	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC3-4	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	34,817.8	32,777.9	34,972.7	47.9	96.6	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC3-5	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	34,817.8	32,777.9	34,972.7	47.9	96.6	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC3-6	TPEFYP008MS140C	7,800.0	8,900.0	73.0/60.0	70.0	5,657.9	5,657.9	5,764.0	53.8	89.5	1/4 / 1/2	318	23-26-30	208/1/60	0.47/15
FC3-7	TPEFYP012MS140C	11,900.0	13,600.0	73.0/60.0	70.0	8,631.9	7,875.2	8,807.9	50.1	95.5	1/4 / 1/2	371	23-28-35	208/1/60	0.68/15
FC4-1	TPEFYP006MS140C	6,100.0	6,800.0	73.0/60.0	70.0	4,496.7	4,496.7	4,166.9	53.3	88.1	1/4 / 1/2	247	22-24-28	208/1/60	0.47/15
FC4-2	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	24,511.1	48.8	92.6	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC4-3	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	24,511.1	48.8	92.6	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC4-4	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	33,090.0	47.8	95.2	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC4-5A	TPEFYP054MA143A	54,000.0	60,000.0	73.0/60.0	70.0	39,807.3	35,862.0	36,766.6	46.9	96.6	3/8 / 5/8	1483	36-41-45	208/1/60	3.51/15
FC4-5B	TPEFYP054MA143A	54,000.0	60,000.0	73.0/60.0	70.0	39,807.3	35,862.0	36,766.6	46.9	96.6	3/8 / 5/8	1483	36-41-45	208/1/60	3.51/15
FC4-6	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	24,511.1	48.8	92.6	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC4-7	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	24,511.1	48.8	92.6	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC5-1	TPEFYP072MH140A	72,000.0	80,000.0	73.0/60.0	70.0	53,076.3	53,058.1	53,073.7	50.5	92.4	3/8 / 3/4	2542	36-39-43	208/1/60	7.7/15
FC5-2	TPEFYP024MA143A	24,000.0	27,000.0	73.0/60.0	70.0	17,692.1	17,692.1	17,912.4	51.4	91.8	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC5-3	TPEFYP012MS140C	11,900.0	13,600.0	73.0/60.0	70.0	8,772.3	7,937.6	9,022.5	49.9	96.1	1/4 / 1/2	371	23-28-35	208/1/60	0.68/15
FC5-4	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	35,824.8	47.8	97.2	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC5-5	TPEFYP027MA143A	27,000.0	30,000.0	73.0/60.0	70.0	19,903.6	18,945.1	19,902.6	49.8	94.2	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC5-6	TPEFYP072MH140A	72,000.0	80,000.0	73.0/60.0	70.0	53,076.3	53,058.1	53,073.7	50.5	92.4	3/8 / 3/4	2542	36-39-43	208/1/60	7.7/15
FC5-7	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	22,115.1	19,922.9	22,556.3	48.6	97.4	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC6-1	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	25,355.6	48.8	93.4	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC6-2	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	34,230.1	47.8	96.0	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC6-3	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	34,230.1	47.8	96.0	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC6-4	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	34,230.1	47.8	96.0	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC6-5	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	22,115.1	19,922.9	21,552.3	48.6	96.2	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC6-6	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	34,230.1	47.8	96.0	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC6-7	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	25,355.6	48.8	93.4	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC7-1	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	33,478.4	47.8	95.4	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC7-2	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	22,115.1	19,922.9	21,079.0	48.6	95.6	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC7-3	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	22,115.1	19,922.9	21,079.0	48.6	95.6	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC7-4	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	33,478.4	47.8	95.4	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC7-5	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	33,478.4	47.8	95.4	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC7-6	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	35,384.2	33,027.4	33,478.4	47.8	95.4	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC7-7	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,538.2	26,088.0	24,798.8	48.8	92.8	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC7-8	TPEFYP015MA143A	15,000.0	17,000.0	73.0/60.0	70.0	11,057.6	10,592.3	10,539.5	49.9	92.9	1/4 / 1/2	494	28-30-34	208/1/60	1.45/15
FC8-1	TPEFYP012MS140C	11,900.0	13,600.0	73.0/60.0	70.0	8,631.9	7,875.2	7,802.9	50.1	92.6	1/4 / 1/2	371	23-28-35	208/1/60	0.68/15
FC8-2	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	34,817.8	32,777.9	30,982.0	47.9	93.6	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC8-3	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,113.3	25,903.9	22,949.6	49.0	91.1	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC8-4	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	34,817.8	32,777.9	30,982.0	47.9	93.6	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC8-5	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,113.3	25,903.9	22,949.6	49.0	91.1	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC8-6	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	21,761.1	19,765.0	19,507.2	48.8	93.7	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC8-7	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,113.3	25,903.9	22,949.6	49.0	91.1	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC8-8	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	34,817.8	32,777.9	30,982.0	47.9	93.6	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC9-1	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	21,761.1	19,765.0	20,605.0	48.8	95.0	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC9-2	TPEFYP030MA143A	30,000.0	34,000.0	73.0/60.0	70.0	21,761.1	19,765.0	20,605.0	48.8	95.0	3/8 / 5/8	883	30-34-39	208/1/60	2.73/15
FC9-3	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,113.3	25,903.9	24,241.2	49.0	92.3	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC9-4	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,113.3	25,903.9	24,241.2	49.0	92.3	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC9-5	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,113.3	25,903.9	24,241.2	49.0	92.3	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC9-6	TPEFYP006MS140C	6,100.0	6,800.0	73.0/60.0	70.0	4,424.8	4,424.8	4,121.0	53.7	87.9	1/4 / 1/2	247	22-24-28	208/1/60	0.47/15
FC9-7	TPEFYP008MS140C	7,800.0	8,900.0	73.0/60.0	70.0	5,657.9	5,657.9	5,393.7	53.8	88.2	1/4 / 1/2	318	23-26-30	208/1/60	0.47/15
FC9-8	TPEFYP036MA143A	36,000.0	40,000.0	73.0/60.0	70.0	26,113.3	25,903.9	24,241.2	49.0	92.3	3/8 / 5/8	1165	32-37-41	208/1/60	3.50/15
FC9-9	TPEFYP048MA143A	48,000.0	54,000.0	73.0/60.0	70.0	34,817.8	32,777.9	32,725.6	47.9	94.9	3/8 / 5/8	1412	35-40-44	208/1/60	3.51/15
FC9-10	TPEFYP018MS140C	18,100.0	20,100.0	73.0/60.0	70.0	13,129.2	11,678.2	12,181.2	49.2	94.7	1/4 / 1/2	530	30-34-37	208/1/60	1.20/15

SEE OUTDOOR UNIT SCHEDULE FOR OUTDOOR AMBIENT CONDITIONS, CONNECTED CAPACITY, AND OTHER FACTORS ASSOCIATED WITH CORRECTED CAPACITIES.
SEE SCHEMATIC PIPING/CONTROL DIAGRAM FOR INDICATION OF REQUIRED INDOOR UNIT REMOTE CONTROLLERS, SYSTEM CONTROLLERS, AND INTEGRATION DEVICES.
FULL DEMAND CORRECTED CAPACITY INCLUDES DE-RATE ASSOCIATED WITH INDOOR VS. OUTDOOR CONNECTED CAPACITY INDICATED ON OUTDOOR UNIT SCHEDULE FOR ASSOCIATED SYSTEM. PARTIAL CORRECTED CAPACITY ASSUMES SUFFICIENT DIVERSITY EXISTS SUCH THAT THE CONNECTED CAPACITY DE-RATE DOES NOT APPLY.
PROVIDE 2" EXTENDED SURFACE MERV 13 FILTER AND FILTER RACK ACCESSORY.

EXHAUST FANS

SYMBOL	GREENHECK MODEL NO.	LOCATION	AREA SERVED	TYPE	CFM	S.P. (IN. WC)	FAN RPM	BHP	MOTOR DATA HP	VOLT	PH	HZ	FLA	INLET SOUND POWER BY OCTAVE BAND 63 HZ	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ	OPERATING WEIGHT (LBS.)	NOTES
CEF-1	SP-A900	CEILING	131A KILN	CEILING EXHAUST FAN	600	0.3	864		301 WATTS	115	1	60	3.0									60	PROVIDE WALL MOUNTED THERMOSTAT.
EF-1	G-120-VG	ROOF	GYMNASIUM RESTROOMS	ROOFTOP CENTRIFUGAL DOWNBLAST	840	0.5	1133	0.11	1/4	115	1	60	3.5	67	73	71	64	58	56	50	48	80	PROVIDE 115V MOTORIZED DAMPER. INSTALL ON 24" ROOF CURB. REFER TO DETAIL B2/M-501.
EF-2	G-120-VG	ROOF	KITCHEN/ RESTROOM/ LAUNDRY	ROOFTOP CENTRIFUGAL DOWNBLAST	970	0.5	1190	0.13	1/4	115	1	60	2.85	68	73	73	66	60	57	52	50	80	PROVIDE 115V MOTORIZED DAMPER. INSTALL ON 24" ROOF CURB. REFER TO DETAIL B2/M-501.
EF-3	G-120-VG	ROOF	NURSES SUITE	ROOFTOP CENTRIFUGAL DOWNBLAST	1000	0.8	1408	0.21	1/2	115	1	60	6.4	70	76	78	71	64	63	57	55	60	PROVIDE 115V MOTORIZED DAMPER. INSTALL ON 24" ROOF CURB. REFER TO DETAIL B2/M-501.
KEF-1	CUBE-180-VG	ROOF	134 KITCHEN- TYPE 1 GREASE HOOD	DIRECT DRIVE CENTRIFUGAL UPBLAST	2550	1.2	1221	0.85	2	460	3	60	3.2	78	81	83	69	69	66	64	61	200	PROVIDE 24V MOTORIZED DAMPER. INSTALL ON 24" ROOF CURB. REFER TO DETAIL A2/M-502.

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REVISIONS

Revision #	Date	Revision Description
1	12.19.22	Addendum 2

PHASE	DATE
100% CD	11.04.22

ILIR MESITI
NEW MEXICO
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PROFESSIONAL ENGINEER
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MECHANICAL SCHEDULES

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Bridgers & Paxton Project No: 8331

100% Outdoor air

DOAS-1

Show simple view

System name and number	DOAS-1
Condition analyzed (impacts Ez)	Heating

Zone Name and Number	Occupancy Category	Zone Floor Area Az (sq ft)	Are you using default value for zone population?	Zone Population Pz (people)	Zone Air Distribution Effectiveness Ez	Zone Outdoor Airflow Voz (cfm)	Zone Outdoor Airflow Provided (measured or design) (cfm)
100B Hallway	Corridors	1,700	Yes	0.00	1.00	132.60	150
120 Kindergarten Kitchen	Classrooms (ages 5-8)	606	No	22.00	1.00	380.53	450
121 Kindergarten	Classrooms (ages 5-8)	1,200	No	22.00	1.00	473.20	480
122 Kindergarten	Classrooms (ages 5-8)	1,200	No	22.00	1.00	473.20	480
123 Kindergarten	Classrooms (ages 5-8)	1,200	No	22.00	1.00	473.20	480
117 Kindergarten	Classrooms (ages 5-8)	1,200	No	22.00	1.00	473.20	480
118 Kindergarten	Classrooms (ages 5-8)	1,200	No	22.00	1.00	473.20	480
119 Kindergarten	Classrooms (ages 5-8)	1,200	No	22.00	1.00	473.20	480
						0.00	

System area (sq ft)	As	(sq ft)	9,506.00
System population	Ps	(people)	154.00
Outdoor air intake flow (30% above 62.1 requirement)	Vot	(cfm)	3,352

Outdoor air intake flow provided (measured or design)	(cfm)	3,480

100% Outdoor air

DOAS-2

Show simple view

System name and number	DOAS-2
Condition analyzed (impacts Ez)	Heating

Zone Name and Number	Occupancy Category	Zone Floor Area Az (sq ft)	Are you using default value for zone population?	Zone Population Pz (people)	Zone Air Distribution Effectiveness Ez	Zone Outdoor Airflow Voz (cfm)	Zone Outdoor Airflow Provided (measured or design) (cfm)
200a Corridor	Corridors	2,870	Yes	0.00	1.00	223.86	290
204 Gen Storage	Storage rooms	271	Yes	0.00	1.00	42.27	50
203 Breakout	Conference / meeting	500	No	24.00	1.00	195.00	200
205 5th	Classrooms (age 9 plus)	860	No	26.00	1.00	472.16	480
206 5th	Classrooms (age 9 plus)	860	No	26.00	1.00	472.16	480
207 5th	Classrooms (age 9 plus)	860	No	26.00	1.00	472.16	480
208 5th	Classrooms (age 9 plus)	860	No	26.00	1.00	472.16	480
214 Books	Occupiable storage rooms for dry materials	340	No	0.00	1.00	26.52	50
213 Music	Music / theater/ dance	1,225	No	26.00	1.00	433.55	440
209 Cozy Room	Office space	550	No	8.00	1.00	102.70	230
212 Media Center	Media center	1,900	No	40.00	1.00	616.40	620
211 Computer Research	Computer lab	600	No	18.00	1.00	296.40	300
212b Workroom	Office space	150	No	2.00	1.00	24.70	100
212b Storage	Storage rooms	200	Yes	0.00	1.00	31.20	50
212a Office	Office space	140	No	2.00	1.00	23.92	50
95 Reading Area	Media center	880	No	24.00	1.00	418.08	420
131a Kiln	Storage rooms	300	Yes	0.00	1.00	46.80	60
131 Art	Art classroom	1,200	No	26.00	1.00	618.80	620
100b Corridor	Corridors	1,050	Yes	0.00	1.00	81.90	220
130 Computer Lab	Computer lab	820	No	32.00	1.00	543.52	550
130b COW	Storage rooms	110	Yes	0.00	1.00	17.16	50
130a Tech	Office space	120	No	2.00	1.00	22.36	50
129 STEM	Classrooms (age 9 plus)	1,270	No	26.00	1.00	536.12	540
128 Lounge	Break rooms (general)	920	No	30.00	1.00	608.96	269
200b Corridor	Corridors	1,215	Yes	0.00	1.00	94.77	100
216 HUB	Office space	160	No	2.00	1.00	25.48	50
217 Meeting	Conference / meeting	150	No	2.00	1.00	24.70	70
100a Corridor/Lobby	Main entry lobbies	3,170	No	20.00	1.00	377.26	380

System area (sq ft)	As	(sq ft)	23,151.00
System population	Ps	(people)	388.00
Outdoor air intake flow (30% above 62.1 requirement)	Vot	(cfm)	7,171

Outdoor air intake flow provided (measured or design)	(cfm)	7,950

100% Outdoor air

DOAS-3

Show simple view

System name and number	DOAS-3
Condition analyzed (impacts Ez)	Heating

Zone Name and Number	Occupancy Category	Zone Floor Area Az (sq ft)	Are you using default value for zone population?	Zone Population Pz (people)	Zone Air Distribution Effectiveness Ez	Zone Outdoor Airflow Voz (cfm)	Zone Outdoor Airflow Provided (measured or design) (cfm)
308 Hallway	Corridors	600	Yes	0.00	1.00	46.80	50
101 Waiting	Reception areas	380	No	16.00	1.00	133.64	140
112 Records	Office space	200	No	1.00	1.00	22.10	50
101 Reception	Reception areas	200	No	2.00	1.00	28.60	50
106 Secure entry	Corridors	155	Yes	0.00	1.00	12.09	50
108 Psych	Office space	160	No	2.00	1.00	25.48	50
107 Counselor	Office space	280	No	4.00	1.00	47.84	50
106 Counselor	Office space	280	No	4.00	1.00	47.84	50
105 Redirect	Office space	160	No	2.00	1.00	25.48	50
104 Dean	Office space	160	No	2.00	1.00	25.48	50
113 MFL	Conference / meeting	280	No	6.00	1.00	60.84	70
102 Principal	Office space	250	No	4.00	1.00	45.56	50
103 Secretary	Office space	120	No	2.00	1.00	22.36	50
125 Teachers Workroom	Office space	640	No	8.00	1.00	101.92	230
111 Conference	Conference / meeting	305	No	14.00	1.00	114.79	130
114e Covid	Office space	110	No	1.00	1.00	15.08	50
114b Treatment	Office space	170	No	2.00	1.00	26.26	70
114a Nurse Office	Office space	125	No	2.00	1.00	22.75	50
114 Nurse	Office space	220	No	6.00	1.00	56.18	60
114c Nurse Storage	Storage rooms	45	Yes	0.00	1.00	7.02	50
						0.00	
						0.00	

System area (sq ft)	As	(sq ft)	4,840.00
System population	Ps	(people)	78.00
Outdoor air intake flow (30% above 62.1 requirement)	Vot	(cfm)	888

Outdoor air intake flow provided (measured or design)	(cfm)	1,400

100% Outdoor air

DOAS-4

Show simple view

System name and number	DOAS-4
Condition analyzed (impacts Ez)	Heating

Zone Name and Number	Occupancy Category	Zone Floor Area Az (sq ft)	Are you using default value for zone population?	Zone Population Pz (people)	Zone Air Distribution Effectiveness Ez	Zone Outdoor Airflow Voz (cfm)	Zone Outdoor Airflow Provided (measured or design) (cfm)
153 Breakout	Conference / meeting	270	No	24.00	1.00	177.06	180
161 Breakout	Conference / meeting	470	No	24.00	1.00	192.66	200
161 Corridor- 1st	Corridors	3,280	Yes	0.00	1.00	255.84	260
160 1st	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
159 1st	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
158 1st	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
157 Sp Ed	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
156 Sp Ed	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
155 2nd	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
154 2nd	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
151 Sp Ed	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
150 Sp Ed	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
149 2nd	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
148 2nd	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
147 1st	Classrooms (ages 5-8)	850	No	26.00	1.00	470.66	480
143 Parent Workroom	Conference / meeting	590	No	6.00	1.00	85.02	90
						0.00	

System area (sq ft)	As	(sq ft)	14,810.00
System population	Ps	(people)	366.00
Outdoor air intake flow (30% above 62.1 requirement)	Vot	(cfm)	6,357

Outdoor air intake flow provided (measured or design)	(cfm)	6,490

100% Outdoor air

DOAS-5

Show simple view

System name and number	DOAS-5
Condition analyzed (impacts Ez)	Heating

Zone Name and Number	Occupancy Category	Zone Floor Area Az (sq ft)	Are you using default value for zone population?	Zone Population Pz (people)	Zone Air Distribution Effectiveness Ez	Zone Outdoor Airflow Voz (cfm)	Zone Outdoor Airflow Provided (measured or design) (cfm)
220 Instr Therapy	Conference / meeting	540	No	6.00	1.00	81.12	120
222 IEP	Conference / meeting	190	No	6.00	1.00	53.82	60
224 4th	Classrooms (age 9 plus)	870	No	26.00	1.00	473.72	480
225 Sp Ed	Classrooms (age 9 plus)	870	No	26.00	1.00	473.72	480
226 Sp Ed	Classrooms (age 9 plus)	870	No	26.00	1.00	473.72	480
227 3rd	Classrooms (age 9 plus)	870	No	26.00	1.00	473.72	480
228 3rd	Classrooms (age 9 plus)	870	No	26.00	1.00	473.72	480
231 3rd	Classrooms (age 9 plus)	850	No	26.00	1.00	470.60	480
232 3rd	Classrooms (age 9 plus)	850	No	26.00	1.00	470.60	480
233 3rd	Classrooms (age 9 plus)	850	No	26.00	1.00	470.60	480
234 Sp Ed	Classrooms (age 9 plus)	850	No	26.00	1.00	470.60	480
235 4TH	Classrooms (age 9 plus)	850	No	26.00	1.00	470.60	480
236 4TH	Classrooms (age 9 plus)	850	No	26.00	1.00	470.60	480
237 4th	Classrooms (age 9 plus)	850	No	26.00	1.00	470.60	480
221 Head Special Ed	Office space	130	No	4.00	1.00	36.53	50
200B Hallway	Corridors	3,380	Yes	0.00	1.00	263.64	265
238 Breakout	Conference / meeting	480	No	24.00	1.00	193.44	195
230 Breakout	Conference / meeting	290	No	24.00	1.00	178.62	180
						0.00	

System area (sq ft)	As	(sq ft)	15,315.00
System population	Ps	(people)	378.00
Outdoor air intake flow (30% above 62.1 requirement)	Vot	(cfm)	6,469

Outdoor air intake flow provided (measured or design)	(cfm)	6,830

JON ANDERSON ARCHITECTURE
912 ROMA AVE NW | ALBUQUERQUE, NEW MEXICO
P | 505.764.8306 F | 505.764.2879
www.jonandersonarchitecture.com

SANDIA BASE ELEMENTARY

BRIDGERS & PAXTON
4900 O Montgomery Blvd. NE
Albuquerque, NM 87109 | 505.883.4111 | www.bpce.com

REVISIONS		
Revision #	Date	Revision Description
1	12.19.22	Addendum 2

PHASE	DATE
100% CD	11.04.22

ILIR MESITI NEW MEXICO 20505 PROFESSIONAL ENGINEER

M-801

IAQ CALCULATIONS

SECTION 32 14 14

PRESSED CONCRETE PAVERS

PART 1 GENERAL

1.1 SUMMARY

A. Section included hydraulically pressed concrete pavers for outdoor roof terrace adjacent to Copy Room 209.

B. Related Sections:

A. Section 07 56 00 – Fluid Applied Roofing: Waterproofing roof membrane and protection board for installation of concrete pavers specified in this Sections.

1.2 SUBMITTALS

A. Submit in accordance with Section 01 33 00 – Submittal Procedures:

A. Product data for concrete pavers, pedestals, and accessories.

B. Shop drawings showing layout, method of installation, and junctures with adjacent materials.

C. Samples:

a. Manufacturer's color sample of each unit paver showing expected color and texture.

b. Pedestals, shims, and metal anchors.

D. Installation instructions and maintenance data.

1.3 QUALITY ASSURANCE

A. Installer: Company experienced in installing concrete pavers and having successfully completed one project of similar scope.

B. All materials and products for concrete avers shall be provided from a single source.

1.4 PRE-INSTALLATION CONFERENCE

A. In accordance with Section 01 31 00 – Project Management and Coordination, convene a pre-installation conference prior to commencing work of this Section.

B. Participants shall be representative of Owner, Architect, concrete paver installer, waterproofing installer, and other concerned entities.

C. Review:

A. Substrate condition, surface preparation, and preparation of penetrations.

B. Installation procedures for roof decks.

C. Protection of pavers, waterproofing membrane, and adjacent installed items and finishes.

D. Special details and conditions.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Protect unit pavers during storage and construction against soiling or contamination from earth and other materials.

B. Wrap pavers in plastic or use other packaging materials that will prevent rust marks from steel strapping.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. American Hydrotech, Inc., Chicago, Illinois; 800-877-6125; www.hydrotechusa.com.

B. Hanover Architectural Products, Inc., Hanover, Pennsylvania; 717-637-0500; hanoverpavers.com

C. Requests to use equivalent products of other manufacturers shall be submitted in accordance with Section 01 25 13 – Product Substitution Procedures. Architect reserves right to reject proposed substitutions on basis of color compatibility even though fabrication and materials are equivalent.

2.2 CONCRETE PAVERS

A. Type: Solid, precast concrete paving units formed under intense vibration and hydraulic pressure.

B. Type: Flat, rectangular panels with nominal size of 24 by 24 by 2 inches.

C. Compressive strength in accordance with ASTM C140: 7,000 PSI average minimum.

D. Flexural strength in accordance with ASTM C293: 600 PSI average minimum.

E. Water absorption in accordance with ASTM C140: Less than 5 percent.

F. Freeze-thaw resistance in accordance with ASTM C67: Less than 1 percent loss of dry weight after 50 cycles.

2.3 SUPPORT PEDESTALS AND SHIMS

A. Support pedestals: Octagonal, high density polyethylene grid type leveling and spacing support device; Hanover Paver Support Pedestals as manufactured by Hanover Architectural Products. Inc.

A. Size: 7 inches across by 5/8 inch thick.

B. Capable of being separated into halves and quarters to accommodate perimeter edges and corners.

C. Provide with drainage holes.

B. Leveling shims: Octagonal, high density polyethylene leveling shims to be used with pedestal supports; Hanover Leveling Shims as manufactured by Hanover Architectural Products, Inc.

C. Compensator shims: High density polyethylene, circular base to compensate for 1/8 inch minimum roof slope and provide level concrete paver surface: Hanover Compensator Leveling Systems as manufactured by Hanover Architectural Products, Inc.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaced indicated to receive paving for compliance with requirements for installation tolerances and other conditions affecting performance of unit pavers. Do not proceed with installation until unsatisfactory conditions have been corrected.

B. Examine fluid applied roofing installation, with waterproofing installer present. Determine methods of protecting waterproofing from paving operations. Examine area where waterproofing system Is turned up or flashed against vertical surfaces as well as horizontal waterproofing. Do not proceed with installation until protection is in place.

3.2 INSTALLATION, GENERAL

A. Do not use pavers with chips, cracks, voids, discolorations, and other defects that might be visible or cause staining in finished work.

B. Mix pavers from serval pallets to produce uniform blend of colors and textures.

C. Cut unit pavers with motor driven masonry say to provided clean, sharp, unchipped edges. Hammer cutting is not acceptable. Cut units to provide pattern indicated and to neatly fit adjoining work. Use full units without cutting whether possible.

D. Place pavers in pattern shown on Drawings and reviewed shop drawings. Joints shall be parallel to adjacent building lines.

3.3 INSTALLATION

A. Install pavers on pedestals over waterproofing protection board on roof terrace.

B. Place protective separation between pedestal and protection board. Use leveling and compensating shims to ensure paver surface is level and joints are flush.

C. Exercise care in placing pavers over waterproofing so protection materials are not displaced and waterproofing is not punctured or otherwise damaged. Carefully replace protection materials that become displaced and arrange for repair of damaged

waterproofing before covering with paving.

D. Tolerances: For finished surface do not exceed 1/32 inch unit-to-unit offset from flush not 1/8 inch in 10 feet from level or indicated slope.

3.4 REPARI, CLEANING, AND PROTECTION

A. Remove and replace unity pavers that are loosed, chipped, broken, stained, or otherwise damaged or if units do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment to eliminate evidence of replacement.

B. Provide final protection that ensures that pavers are without damage or deterioration at the time of Substantial Completion.

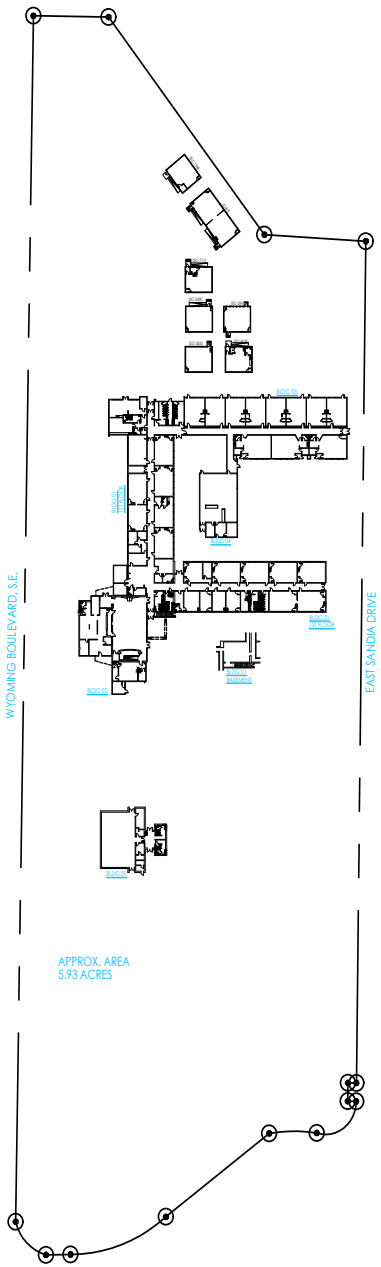
END OF SECTION

Sandia Base ES
Coded Floor Plan
SY 2019-20

ALBUQUERQUE PUBLIC SCHOOLS
Capital Master Plan

Sandia Base Elementary School 21001 Wyoming Blvd SE

Sandia Base ES
Coded Floor Plan
SY 2019-20



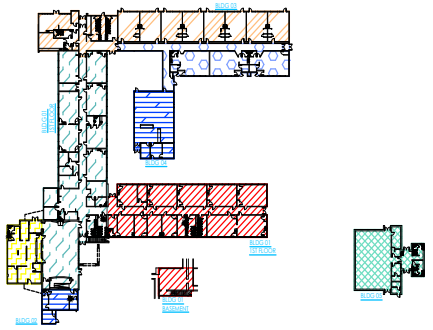
SCHOOL ADDITIONS TO SANDIA BASE E.S.

1949 – MAIN SCHOOL BUILDING	10,927 S.F.
1950 – CLASSROOMS	13,916 S.F.
1961 – CLASSROOMS	9,850 S.F.
1980 – LIBRARY AND KITCHEN ADDITIONS	4,200 S.F.
1992 – KINDERGARTEN ADDITION	5,366 S.F.
1997 – MULTIPURPOSE ADDITION	4,158 S.F.
2014 – CAFETERIA ADDITION	2,502 S.F.
TOTAL SQUARE FEET	50,919 S.F.
PORTABLES (7)	7,056 S.F.

CONSTRUCTION PHASES

DATE: 04–14–2017

PERMANENT BLDG. 50,919 S.F.
PORTABLE BLDG. 7,007 S.F.



ALBUQUERQUE PUBLIC SCHOOLS
CAPITAL MASTER PLAN

NOTE:
ALL DIMENSIONS TO BE FIELD VERIFIED BY CONTRACTOR. MEETS AND BOUNDS SHOWN ARE ESTIMATES AND ARE NOT BASED ON AN OFFICIAL SURVEY.

ROOM LABELS ON DOOR
DESIGNED INSTRUCTIONAL SPACES
NON–INSTRUCTIONAL SPACES
M&O ENVIRONMENTAL ROOM IDENTIFIERS

CMP CAD DIVISION (505)842-4501 915 LOCUST ST. SE

FIELD CHECK:	DATE: 04-14-2017	SANDIA BASE E.S.
	DRAWN BY: DM	SITE PLAN
PORTABLE UPDATE:	CHECKED BY:	LOC. # 348
	SCALE: N.T.S.	SHEET 1 OF 3

Sandia Base ES
Coded Floor Plan
SY 2019-20

PROGRAM USE

- GENERAL INSTRUCTION
- SPED
- SPECIAL PROGRAMS
- PROGRAM USE NO FTE
- SHARED / SIGN-UP
- DISTRICT SPED
- OTHER

LEGEND

FIRE EXTINGUISHER (FE) · FIRE PULL STATIONS (FP) · FIRE HYDRANT (FH) · FIRE ALARM PANEL (FA) · FIRE RISER CONNECTION (FR) · KNOX BOX (KB) · DEFIBULATOR (DB) · BLANKET (B1) CHEM STOR (CS)

ALBUQUERQUE PUBLIC SCHOOLS
CAPITAL MASTER PLAN

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CMP CAD DIVISION (505)842-4501 915 LOCUST ST. SE

FIELD CHECK:
PORTABLE UPDATE:
DATE: 04-14-2017
DRAWN BY: DM
CHECKED BY:
SCALE: N.T.S.

SANDIA BASE E.S.
FLOOR PLAN
LOC.# 348
SHEET 2 OF 3

Sandia Base ES
Coded Floor Plan
SY 2019-20

PROGRAM USE

- GENERAL INSTRUCTION
- SPED
- SPECIAL PROGRAMS
- PROGRAM USE NO FTE
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ALBUQUERQUE PUBLIC SCHOOLS
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CMP CAD DIVISION (505)842-4501 915 LOCUST ST. SE

FIELD CHECK:	DATE: 04-14-2017	SANDIA BASE E.S.
	DRAWN BY: DM	
PORTABLE UPDATE:	CHECKED BY:	FLOOR PLAN
	SCALE: N.T.S.	LOC. # 348 SHEET 3 OF 3