

LUMINAUT

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Project Title

NORTHERN KENTUCKY
UNIVERSITY NUNN
HALL RENOVATION

University Drive
Highland Heights, KY 41099



Issue Date: 04/06/2023

Issued for: CONSTRUCTION DOCUMENTS

Revision: 0 Issue for Bid 04/06/2023

Sheet Title
FIRST FLOOR AIR
DISTRIBUTION PLAN

Project No.
ONKU22

Drawn By: KAS

Reviewed By: BR

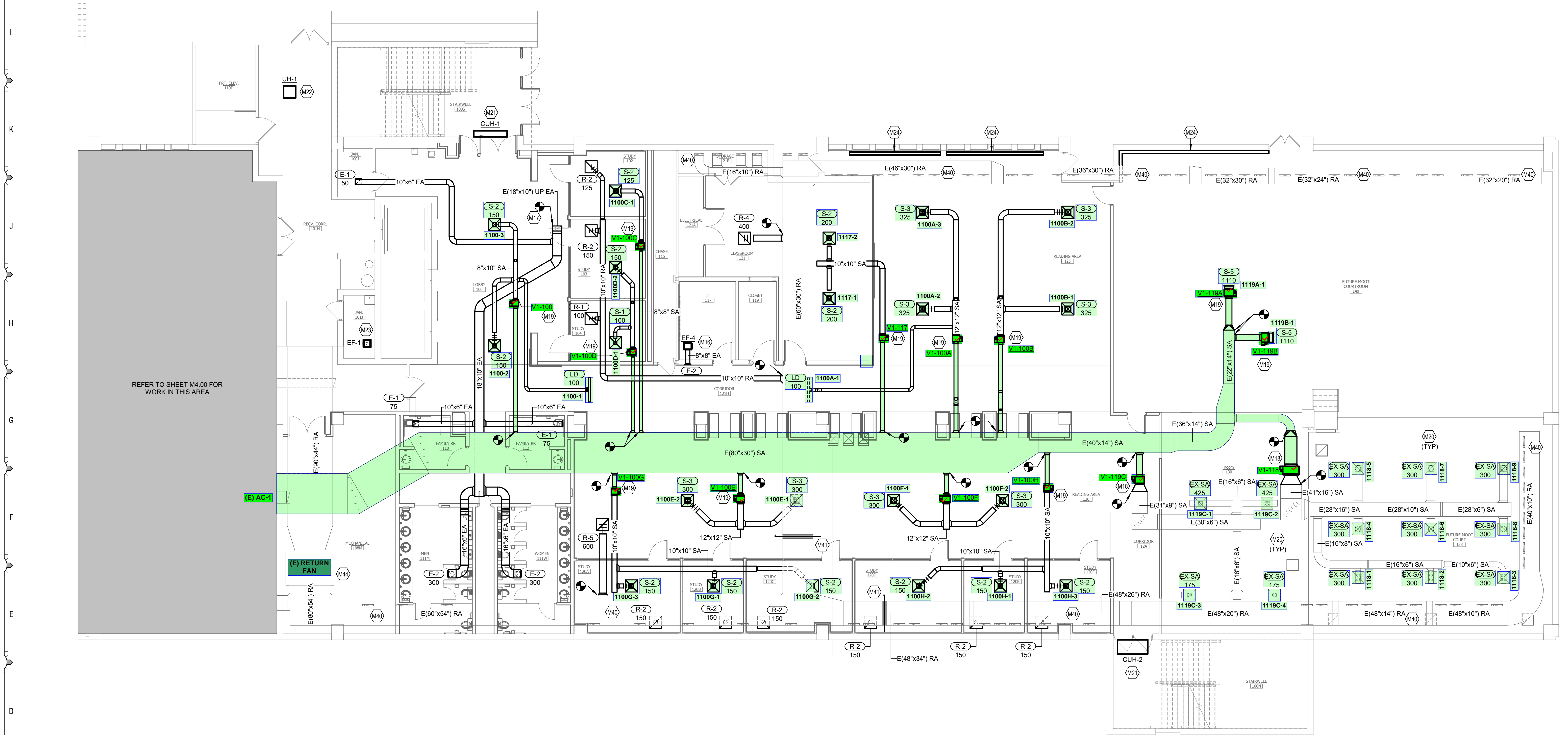
Scale: 1/8" = 1'-0"

M2.01

- TAGGED NOTES**
- M16 PROVIDE NEW INLINE EXHAUST FAN AND DUCT TO CEILING PLENUM.
 - M17 CONNECT TO EXISTING EXHAUST DUCT AT BOTTOM OF RISER.
 - M18 PROVIDE NEW VAV BOX IN PLACE OF THE EXISTING. CONTRACTOR TO FIELD COORDINATE REQUIRED HANDING OF NEW UNIT PRIOR TO PURCHASE. PROVIDE TRANSITIONS AND ADDITIONAL DUCTWORK TO RECONNECT TO EXISTING DUCTWORK AS NECESSARY. CONTRACTOR SHALL COORDINATE TO ENSURE ADEQUATE SERVICE CLEARANCE IS PROVIDED AT VAV.
 - M19 PROVIDE NEW VAV BOX IN THIS LOCATION. CONTRACTOR TO COORDINATE REQUIRED HANDING OF NEW UNIT PRIOR TO PURCHASE. CONTRACTOR SHALL COORDINATE TO ENSURE ADEQUATE SERVICE CLEARANCE IS PROVIDED AT VAV.
 - M20 REBALANCE EXISTING AIR DEVICES TO LISTED AIRFLOWS AFTER NEW VAV BOX IS INSTALLED.
 - M21 PROVIDE NEW CABINET UNIT HEATER IN PLACE OF THE EXISTING. CONNECT TO EXISTING HOT WATER PIPING. REFER TO DETAIL ON M5.03
 - M22 PROVIDE NEW SUSPENDED UNIT HEATER IN PLACE OF THE EXISTING. PROVIDE NEW HANGERS TO SUSPEND FROM STRUCTURE. EXTEND AND CONNECT TO EXISTING HOT WATER PIPING.
 - M23 PROVIDE NEW EXHAUST FAN IN PLACE OF EXISTING. CONNECT FAN TO EXISTING GRILLE IN CEILING. FAN SHALL DISCHARGE TO RELIEF AIR SHAFT.
 - M24 PROVIDE NEW FLOOR MOUNTED, SLOPED TOP BASEBOARD HEATER. CONTRACTOR SHALL VERIFY IN FIELD EXACT LENGTH OF HEATERS PER THE EXISTING FIELD CONDITIONS. HEATING CAPACITY SHALL AVERAGE 300 BTU/HFT AT 130°F EWT. BASIS OF DESIGN MANUFACTURER SHALL BE VULCAN OR APPROVED EQUAL. ENCLOSURE TYPE SHALL BE 1/4" WITH CUSTOM FRONT INLET OPENING FOR DIRECT FLOOR MOUNTING. CONTRACTOR SHALL FIELD VERIFY HEIGHT AND DEPTH OF EXISTING ENCLOSURES AND MATCH NEW ENCLOSURE DIMENSIONS AS CLOSELY AS POSSIBLE. COORDINATE REQUIRED HEIGHT AND DEPTH DIMENSIONS WITH MANUFACTURER. CONNECT TO EXISTING BRANCH PIPING THROUGH FLOOR. PROVIDE PIPING AND FITTINGS TO TRANSITION TO NEW CONNECTION POINTS AS NECESSARY. REFER TO HOT WATER RADIATOR PIPING SCHEMATIC.
 - M40 RETURN AIR ON SECOND LEVEL SUPPLIED FROM DUCT ON FIRST LEVEL.
 - M41 PROVIDE BALANCE DAMPER FOR TEST AND BALANCE.
 - M44 EXISTING RETURN FAN TO REMAIN.

GRD RUNOUT SCHEDULE

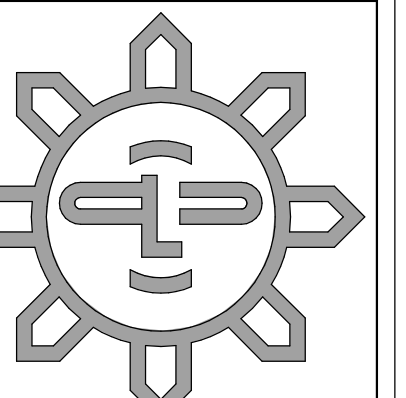
MARK	DUCT OUTLET
E-1	6"0
E-2	10"0
LD	8"0
R-1	8"0
R-2	8"0
R-3	10"0
R-4	12"0
R-5	14"0
R-6	16"0
S-1	6"0
S-1A	6"0
S-2	8"0
S-3	10"0
S-4	12"0
S-5	18"x14"
T-1	VARIES



REFER TO SHEET M4.09 FOR WORK IN THIS AREA

1 FIRST FLOOR AIR DISTRIBUTION PLAN
M2.01
1/8" = 1'-0"

DATE PLOTTED: 04/06/2023 04:13 PM



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Sheet Title
THIRD FLOOR AIR
DISTRIBUTION PLAN

Project No. ONKU22

Drawn By: KAS

Reviewed By: BR

Scale: 1/8" = 1'-0"

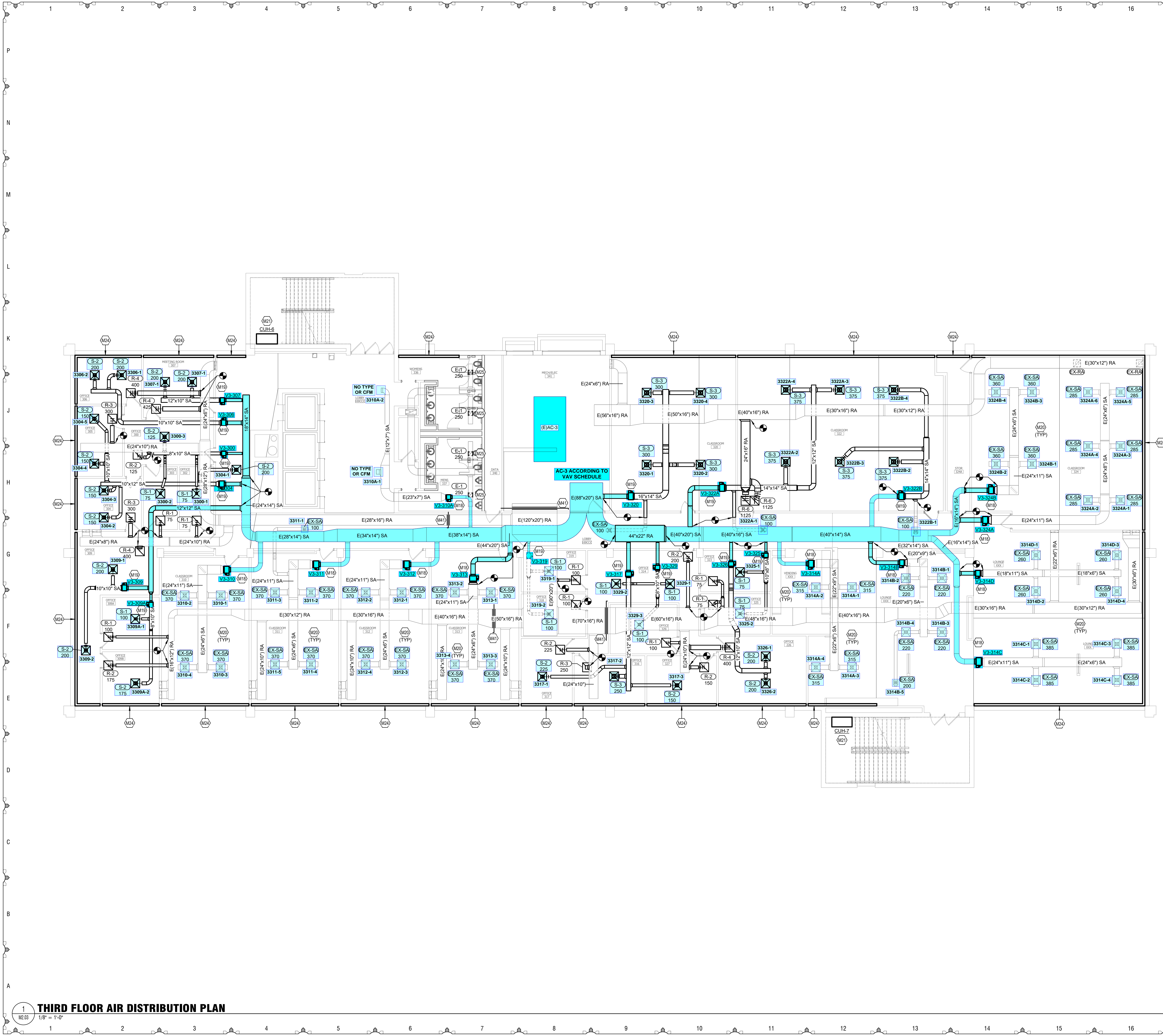
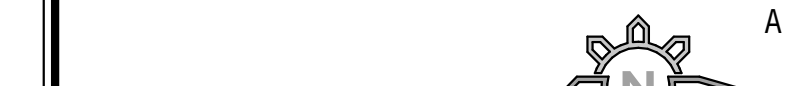
M2.03

TAGGED NOTES

- M18 PROVIDE NEW VAV BOX IN PLACE OF THE EXISTING. CONTRACTOR TO FIELD COORDINATE REQUIRED HANDING OF NEW UNIT PRIOR TO PURCHASE. PROVIDE TRANSITIONS AND ADDITIONAL DUCTWORK TO RECONNECT TO EXISTING DUCTWORK AS NECESSARY. CONTRACTOR SHALL COORDINATE TO ENSURE ADEQUATE SERVICE CLEARANCE IS PROVIDED AT VAV.
- M19 PROVIDE NEW VAV BOX IN THIS LOCATION. CONTRACTOR TO COORDINATE REQUIRED HANDING OF NEW UNIT PRIOR TO PURCHASE. CONTRACTOR SHALL COORDINATE TO ENSURE ADEQUATE SERVICE CLEARANCE IS PROVIDED AT VAV.
- M20 REBALANCE EXISTING AIR DEVICES TO LISTED AIRFLOWS AFTER NEW VAV BOX IS INSTALLED.
- M21 PROVIDE NEW CABINET UNIT HEATER IN PLACE OF THE EXISTING. CONNECT TO EXISTING HOT WATER PIPING. REFER TO DETAIL ON M5.03
- M24 PROVIDE NEW FLOOR MOUNTED, SLOPED TOP BASEBOARD HEATER. CONTRACTOR SHALL VERIFY IN FIELD EXACT LENGTH OF HEATERS PER THE EXISTING FIELD CONDITIONS. HEATING CAPACITY SHALL AVERAGE 300 BTU/HFT AT 130°F EWT. BASIS OF DESIGN MANUFACTURER SHALL BE VULCAN OR APPROVED EQUAL. ENCLOSURE TYPE SHALL BE 1/4" WITH CUSTOM FRONT INLET OPENING FOR DIRECT FLOOR MOUNTING. CONTRACTOR SHALL FIELD VERIFY HEIGHT AND DEPTH OF EXISTING ENCLOSURES AND MATCH NEW ENCLOSURE DIMENSIONS AS CLOSELY AS POSSIBLE. COORDINATE REQUIRED HEIGHT AND DEPTH DIMENSIONS WITH MANUFACTURER. CONNECT TO EXISTING BRANCH PIPING THROUGH FLOOR. PROVIDE PIPING AND FITTINGS TO TRANSITION TO NEW CONNECTION POINTS AS NECESSARY. REFER TO HOT WATER RADIATOR PIPING SCHEMATIC.
- M25 PROVIDE NEW EXHAUST GRILLES AND CONNECT TO EXISTING EXHAUST DUCTWORK. BALANCE TO AIRFLOWS AS SHOWN.
- M41 PROVIDE BALANCE DAMPER FOR TEST AND BALANCE.

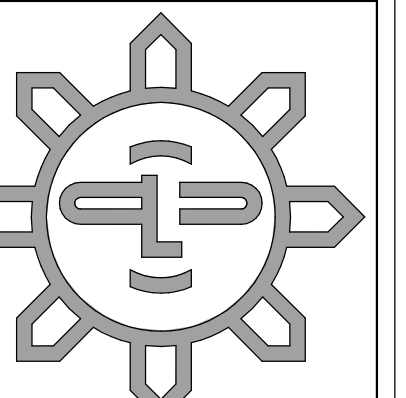
GRD RUNOUT SCHEDULE

MARK	DUCT OUTLET
E-1	6"0"
E-2	10"0"
LD	8"0"
R-1	8"0"
R-2	8"0"
R-3	10"0"
R-4	12"0"
R-5	14"0"
R-6	16"0"
S-1	6"0"
S-1A	6"0"
S-2	8"0"
S-3	10"0"
S-4	12"0"
S-5	18"x14"
T-1	VARIES



1 THIRD FLOOR AIR DISTRIBUTION PLAN
1/8" = 1'-0"

DATE PLOTTED: 04/06/2023 10:43:33 AM



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Sheet Title
**FOURTH FLOOR AIR
DISTRIBUTION PLAN**

Project No.
ONKU22

Drawn By: KAS

Reviewed By: BR

Scale: 1/8" = 1'-0"

M2.04

TAGGED NOTES

- M18 PROVIDE NEW VAV BOX IN PLACE OF THE EXISTING. CONTRACTOR TO FIELD COORDINATE REQUIRED HANDING OF NEW UNIT PRIOR TO PURCHASE. PROVIDE TRANSITIONS AND ADDITIONAL DUCTWORK TO RECONNECT TO EXISTING DUCTWORK AS NECESSARY. CONTRACTOR SHALL COORDINATE TO ENSURE ADEQUATE SERVICE CLEARANCE IS PROVIDED AT VAV.
- M19 PROVIDE NEW VAV BOX IN THIS LOCATION. CONTRACTOR TO COORDINATE REQUIRED HANDING OF NEW UNIT PRIOR TO PURCHASE. CONTRACTOR SHALL COORDINATE TO ENSURE ADEQUATE SERVICE CLEARANCE IS PROVIDED AT VAV.
- M20 REBALANCE EXISTING AIR DEVICES TO LISTED AIRFLOWS AFTER NEW VAV BOX IS INSTALLED.
- M21 PROVIDE NEW CABINET UNIT HEATER IN PLACE OF THE EXISTING. CONNECT TO EXISTING HOT WATER PIPING. REFER TO DETAIL ON M5.03
- M24 PROVIDE NEW FLOOR MOUNTED, SLOPED TOP BASEBOARD HEATER. CONTRACTOR SHALL VERIFY IN FIELD EXACT LENGTH OF HEATERS PER THE EXISTING FIELD CONDITIONS. HEATING CAPACITY SHALL AVERAGE 300 BTU/HFT AT 130°F EWT. BASIS OF DESIGN MANUFACTURER SHALL BE VULCAN OR APPROVED EQUAL. ENCLOSURE TYPE SHALL BE V4 WITH CUSTOM FRONT INLET OPENING FOR DIRECT FLOOR MOUNTING. CONTRACTOR SHALL FIELD VERIFY HEIGHT AND DEPTH OF EXISTING ENCLOSURES AND MATCH NEW ENCLOSURE DIMENSIONS AS CLOSELY AS POSSIBLE. COORDINATE REQUIRED HEIGHT AND DEPTH DIMENSIONS WITH MANUFACTURER. CONNECT TO EXISTING BRANCH PIPING THROUGH FLOOR. PROVIDE PIPING AND FITTINGS TO TRANSITION TO NEW CONNECTION POINTS AS NECESSARY. REFER TO HOT WATER RADIATOR PIPING SCHEMATIC.
- M25 PROVIDE NEW EXHAUST GRILLES AND CONNECT TO EXISTING EXHAUST DUCTWORK. BALANCE TO AIRFLOWS AS SHOWN.

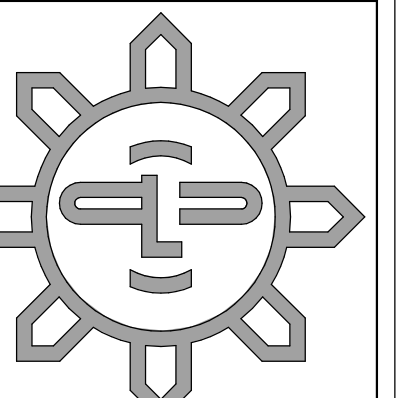
GRD RUNOUT SCHEDULE

MARK	DUCT OUTLET
E-1	6"0
E-2	10"0
LD	8"0
R-1	8"0
R-2	8"0
R-3	10"0
R-4	12"0
R-5	14"0
R-6	16"0
S-1	6"0
S-1A	6"0
S-2	8"0
S-3	10"0
S-4	12"0
S-5	18"x14"
T-1	VARIES



1 FOURTH FLOOR AIR DISTRIBUTION PLAN
1/8" = 1'-0"

04/06/2023 10:44:42 AM



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Sheet Title

FIFTH FLOOR AIR
DISTRIBUTION PLAN

Project No.

ONKU22

Drawn By: KAS

Reviewed By: BR

Scale: 1/8" = 1'-0"

M2.05

TAGGED NOTES

- M16 PROVIDE NEW INLINE EXHAUST FAN AND DUCT TO CEILING PLENUM.
- M18 PROVIDE NEW VAV BOX IN PLACE OF THE EXISTING. CONTRACTOR TO FIELD COORDINATE REQUIRED HANDING OF NEW UNIT PRIOR TO PURCHASE. PROVIDE TRANSITIONS AND ADDITIONAL DUCTWORK TO RECONNECT TO EXISTING DUCTWORK AS NECESSARY. CONTRACTOR SHALL COORDINATE TO ENSURE ADEQUATE SERVICE CLEARANCE IS PROVIDED AT VAV.
- M19 PROVIDE NEW VAV BOX IN THIS LOCATION. CONTRACTOR TO COORDINATE REQUIRED HANDING OF NEW UNIT PRIOR TO PURCHASE. CONTRACTOR SHALL COORDINATE TO ENSURE ADEQUATE SERVICE CLEARANCE IS PROVIDED AT VAV.
- M20 REBALANCE EXISTING AIR DEVICES TO LISTED AIRFLOWS AFTER NEW VAV BOX IS INSTALLED.
- M21 PROVIDE NEW CABINET UNIT HEATER IN PLACE OF THE EXISTING. CONNECT TO EXISTING HOT WATER PIPING. REFER TO DETAIL ON M2.03.
- M22 PROVIDE NEW SUSPENDED UNIT HEATER IN PLACE OF THE EXISTING. PROVIDE NEW HANGERS TO SUSPEND FROM STRUCTURE. EXTEND AND CONNECT TO EXISTING HOT WATER PIPING.
- M24 PROVIDE NEW FLOOR MOUNTED, SLOPED TOP BASEBOARD HEATER. CONTRACTOR SHALL VERIFY IN FIELD EXACT LENGTH OF HEATERS PER THE EXISTING FIELD CONDITIONS. HEATING CAPACITY SHALL AVERAGE 300 BTU/HFT AT 130°F EWT. BASIS OF DESIGN MANUFACTURER SHALL BE VULCAN OR APPROVED EQUAL. ENCLOSURE TYPE SHALL BE LV4 WITH CUSTOM FRONT INLET OPENING FOR DIRECT FLOOR MOUNTING. CONTRACTOR SHALL FIELD VERIFY HEIGHT AND DEPTH OF EXISTING ENCLOSURES AND MATCH NEW ENCLOSURE DIMENSIONS AS CLOSELY AS POSSIBLE. COORDINATE REQUIRED HEIGHT AND DEPTH DIMENSIONS WITH MANUFACTURER. CONNECT TO EXISTING BRANCH PIPING THROUGH FLOOR. PROVIDE PIPING AND FITTINGS TO TRANSITION TO NEW CONNECTION POINTS AS NECESSARY. REFER TO HOT WATER RADIATOR PIPING SCHEMATIC.
- M25 PROVIDE NEW EXHAUST GRILLES AND CONNECT TO EXISTING EXHAUST DUCTWORK. BALANCE TO AIRFLOWS AS SHOWN.
- M27 PROVIDE NEW EXHAUST FAN ON ROOF IN PLACE OF EXISTING. REUSE ROOF CURB AND PROVIDE ADAPTER AS NECESSARY.
- M28 PROVIDE NEW INLINE EXHAUST FAN. PROVIDE NEW TRANSITIONS AND FLEX CONNECTORS TO RECONNECT TO EXISTING DUCTWORK.

2 SOUTH PENTHOUSE AIR DISTRIBUTION PLAN

M2.05 1/8" = 1'-0"

GRD RUNOUT SCHEDULE

MARK	DUCT OUTLET
E-1	6"
E-2	10"
LD	8"
R-1	8"
R-2	8"
R-3	10"
R-4	12"
R-5	14"
R-6	16"
S-1	6"
S-1A	6"
S-2	8"
S-3	10"
S-4	12"
S-5	18"x14"
T-1	VARIES



1 FIFTH FLOOR AIR DISTRIBUTION PLAN

M2.05 1/8" = 1'-0"

DATE PLOTTED: 04/06/2023 04:53:09 PM

