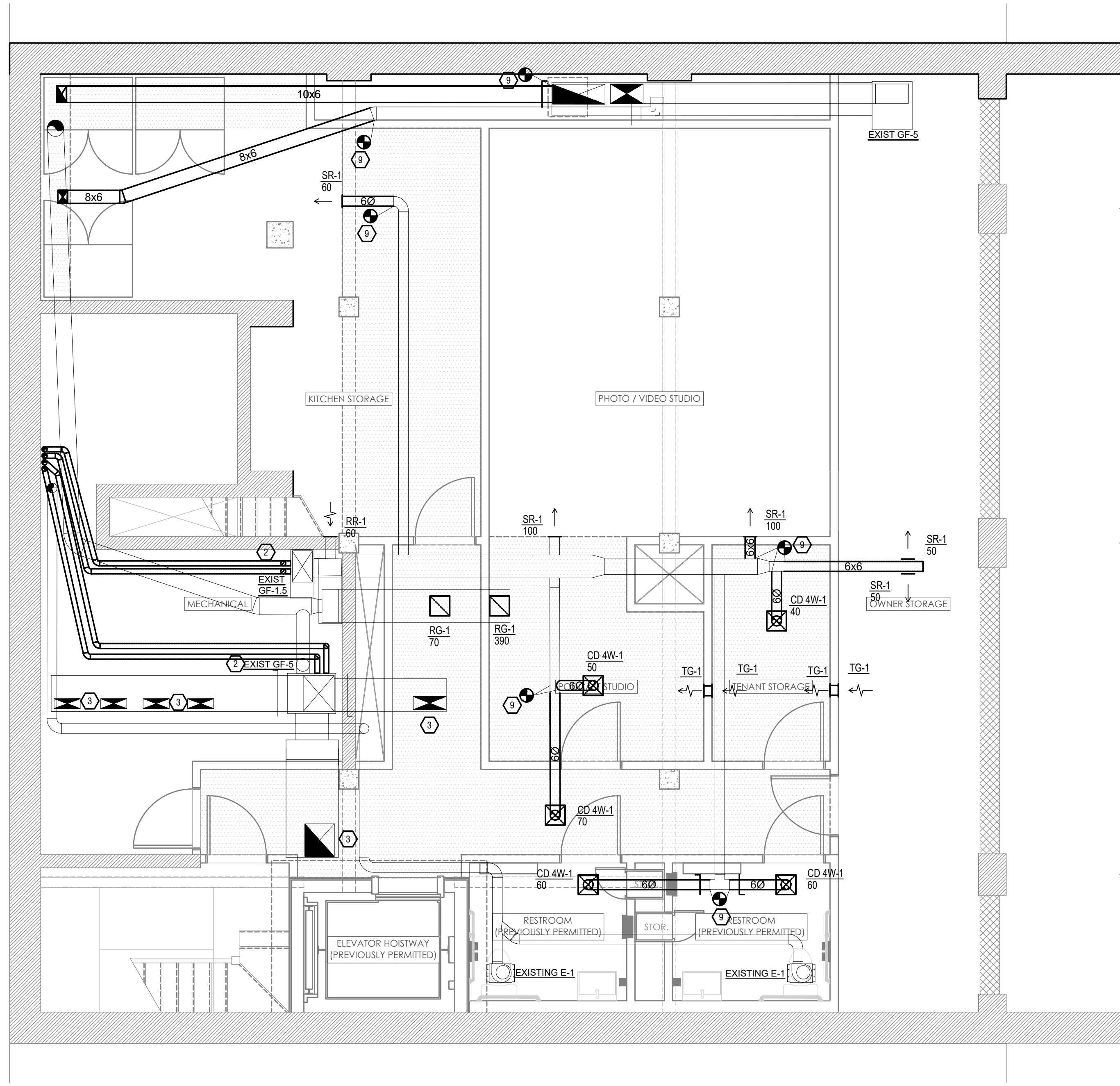


Z:\Project_Directories\7700-7799\7711 - Durner Building - Gilbert Ave - Construction Documents\7711-M1-0-MECHANICAL-FLOOR-PLAN.dwg - ERS - Plot Date/Time: Jun 01, 2023 - 12:16pm - Plt: c:\mehus
 THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.



MECHANICAL BASEMENT PLAN
 SCALE: 1/4" = 1'-0"

MECHANICAL SCOPE OF WORK

PROVIDE MECHANICAL EQUIPMENT FOR TENANT FIT OUT IN BUILDING.

CODES REFERENCED

- 2017 OHIO MECHANICAL CODE
- 2017 OHIO BUILDING CODE
- ASHRAE 90.1-2010

HVAC DESIGN CONDITIONS

COOLING OUTDOOR: 93 DB / 75 WB INDOOR: 72	HEATING OUTDOOR: 0 DB INDOOR: 72
---	--

GENERAL NOTES

- A. FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.
- B. COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- C. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- D. INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- E. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- F. MAINTAIN ALL CODE REQUIRED SERVICE CLEARANCES. FOLLOW CLEARANCE TO COMBUSTIBLE DISTANCE PER MANUFACTURER'S INSTRUCTIONS.
- G. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- H. ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8" PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- I. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.

KEYED SHEET NOTES

1. OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED ABOVE WINDOWS.
2. ROUTE FLUE PIPING UP TO FIRST FLOOR AND OUT THROUGH EXTERIOR WALL AS SHOWN. PROVIDE CONCENTRIC VENT KIT FOR EXTERIOR PENETRATION.
3. COORDINATE DUCTS GOING UP THROUGH FIRST FLOOR WITH EXISTING SLAB RISERS.
4. OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED BELOW WINDOWS.
5. SUPPLY MOUNTED HIGH ON WALL AND RETURN MOUNTED LOW ON WALL IN PRIVATE DINNING ROOM.
6. MOUNT RETURN GRILLE HIGH ON WALL.
7. MOUNT RETURN GRILLE LOW ON WALL.
8. MOUNT SUPPLY REGISTERS HIGH ON WALL ABOVE KITCHEN EQUIPMENT.
9. CONNECT NEW DUCTWORK TO EXISTING DUCTWORK.
10. ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA AND EXPOSED IN MECHANICAL/UTILITY SPACES. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
11. DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
12. PAINT SUPPLY REGISTER BLACK.
13. ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
 - 13.1. 3' FROM PROPERTY LINE.
 - 13.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
 - 13.3. 10' FROM MECHANICAL AIR INTAKE.

SYMBOLS LEGEND - HVAC

	THERMOSTAT
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	DUCT SMOKE DETECTOR
	1.5 HR FIRE DAMPER
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
	DUCT CONTINUATION
	CONNECTION POINT



CITYSTUDIOS
 ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I.
 engineering
 3826 Yorkdale Rd, Suite 100
 Liberty Township, Ohio 45044
 513-549-1434
 www.gai-engineering.com

PR-07711
ENGINEERED BUILDING SYSTEMS INC.
 TEAMWORK • COLLABORATION SHARED SUCCESS
 515 Monmouth Street, Suite 204
 Newark, NJ 07102 (908) 851-0555
 MEP Consulting Services, Inc. in OH
 Copyright © 2015

THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE USED FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS PREPARED WITHOUT WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

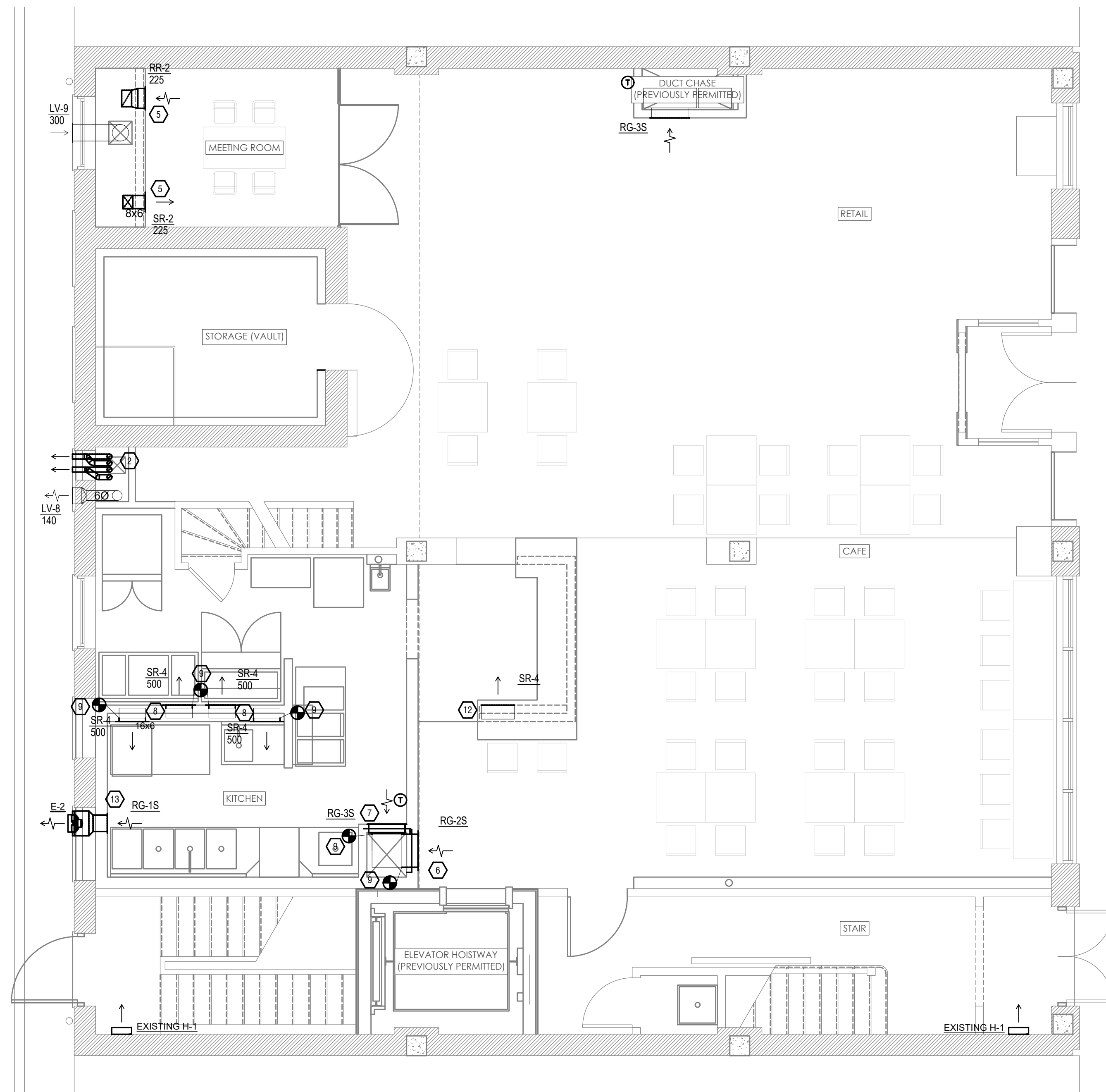
DURNER BUILDING
2453 GILBERT AVENUE
CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 06.01.23
 ENGINEERING CHANGE 04.12.23

M1.0
 MECHANICAL BASEMENT PLAN

Z:\Project_Directories\7700-7799\7711 - Durner Building - Gilbert Ave - Construction Documents\7711-M1-1a-MECHANICAL-FLOOR-PLAN.dwg-EBS-Plt Date/Time: Jun 01, 2023-12:17:0m - Bk: c:\webuser
 THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.



MECHANICAL FIRST FLOOR PLAN
 M1.1a SCALE: 1/4" = 1'-0"

MECHANICAL SCOPE OF WORK

PROVIDE MECHANICAL EQUIPMENT FOR TENANT FIT OUT IN BUILDING.

CODES REFERENCED

- 2017 OHIO MECHANICAL CODE
- 2017 OHIO BUILDING CODE
- ASHRAE 90.1-2010

HVAC DESIGN CONDITIONS

COOLING OUTDOOR: 93 DB / 75 WB INDOOR: 72
 HEATING OUTDOOR: 0 DB INDOOR: 72

GENERAL NOTES

- FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.
- COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- MAINTAIN ALL CODE REQUIRED SERVICE CLEARANCES. FOLLOW CLEARANCE TO COMBUSTIBLE DISTANCE PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8" PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.

KEYED SHEET NOTES

- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED ABOVE WINDOWS.
- ROUTE FLUE PIPING UP TO FIRST FLOOR AND OUT THROUGH EXTERIOR WALL AS SHOWN. PROVIDE CONCENTRIC VENT KIT FOR EXTERIOR PENETRATION.
- COORDINATE DUCTS GOING UP THROUGH FIRST FLOOR WITH EXISTING SLAB RISERS.
- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED BELOW WINDOWS.
- SUPPLY MOUNTED HIGH ON WALL AND RETURN MOUNTED LOW ON WALL IN PRIVATE DINNING ROOM.
- MOUNT RETURN GRILLE HIGH ON WALL.
- MOUNT RETURN GRILLE LOW ON WALL.
- MOUNT SUPPLY REGISTERS HIGH ON WALL ABOVE KITCHEN EQUIPMENT.
- CONNECT NEW DUCTWORK TO EXISTING DUCTWORK.
- ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA AND EXPOSED IN MECHANICAL/UTILITY SPACES. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
- PAINT SUPPLY REGISTER BLACK.
- ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
 - 3' FROM PROPERTY LINE.
 - 3' FROM OPERABLE OPENINGS INTO BUILDING.
 - 10' FROM MECHANICAL AIR INTAKE.

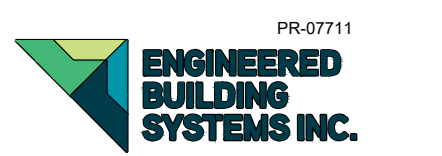
SYMBOLS LEGEND - HVAC

	THERMOSTAT
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	DUCT SMOKE DETECTOR
	1.5 HR FIRE DAMPER
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
	DUCT CONTINUATION
	CONNECTION POINT



CITYSTUDIOS ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I. engineering
 3826 Yorkdale Rd, Suite 100
 Liberty Township, Ohio 45044
 513-549-1434
 www.gai-engineering.com



PR-07711
ENGINEERED BUILDING SYSTEMS INC.
 TEAMWORK • COLLABORATION SHARED SUCCESS
 515 Monmouth Street, Suite 204
 Newport, KY 41071 (859) 251-0585
 MEP Consulting Services, Inc. in OH
 Copyright © 2015
 THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE USED FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS PREPARED WITHOUT WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

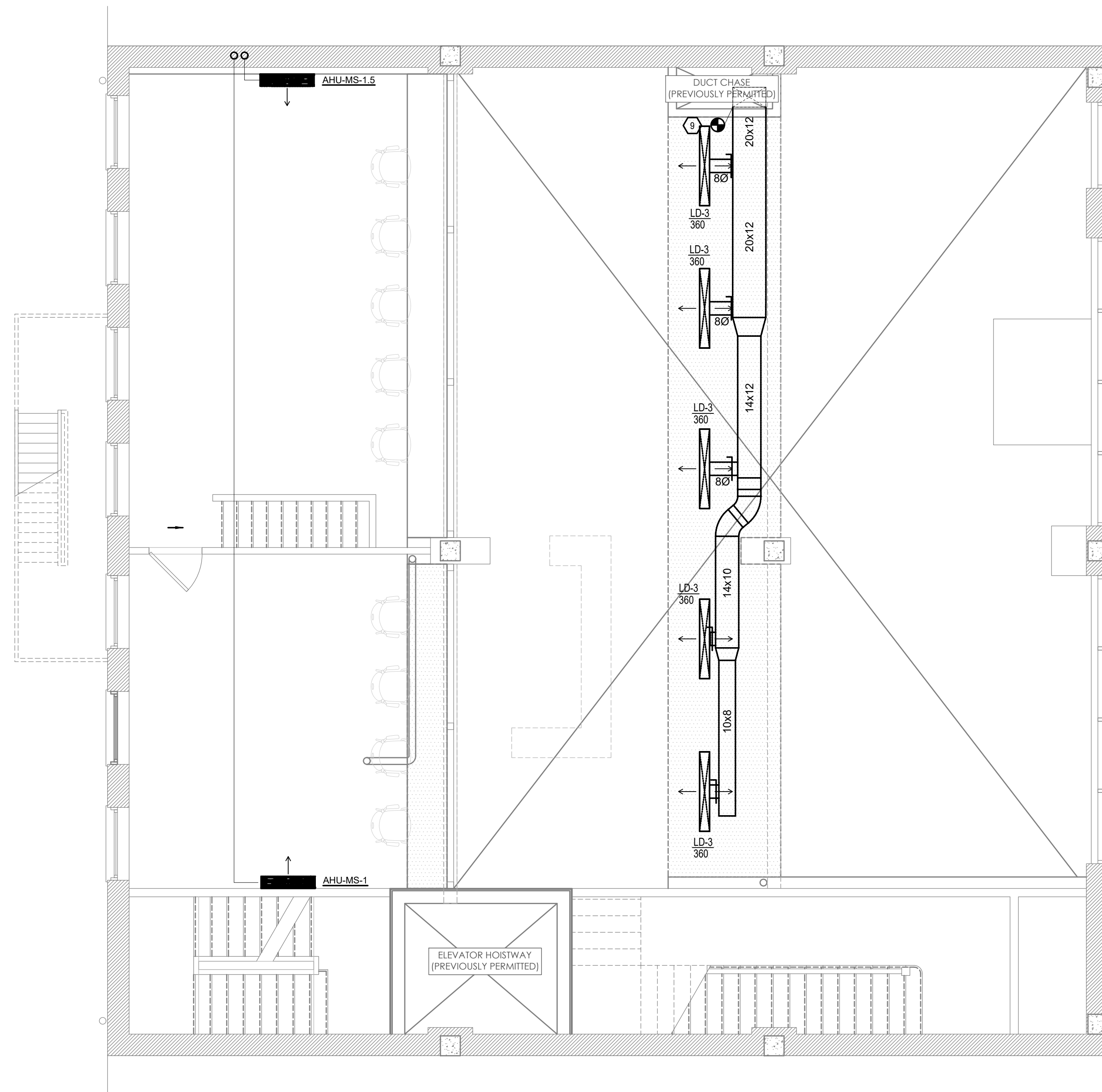
DURNER BUILDING
 2453 GILBERT AVENUE
 CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 06.01.23
 ENGINEERING CHANGE 04.12.23

M1.1a
 MECHANICAL FIRST FLOOR PLAN

Z:\Project_Directories\7700-7799\7711 - Durner Building - Gilbert Ave - Construction Documents\7711-M1-1b-MECHANICAL-FLOOR-PLAN.dwg-EBS- Plot Date/Time: Jun 06, 2023 - 1:29pm - Plt: c:\nhshus
 THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.



MECHANICAL MEZZANINE PLAN
 M1.1b SCALE: 1/4" = 1'-0"

MECHANICAL SCOPE OF WORK

PROVIDE MECHANICAL EQUIPMENT FOR TENANT FIT OUT IN BUILDING.

CODES REFERENCED

- 2017 OHIO MECHANICAL CODE
- 2017 OHIO BUILDING CODE
- ASHRAE 90.1-2010

HVAC DESIGN CONDITIONS

COOLING OUTDOOR: 93 DB / 75 WB INDOOR: 72
 HEATING OUTDOOR: 0 DB INDOOR: 72

GENERAL NOTES

- FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.
- COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- MAINTAIN ALL CODE REQUIRED SERVICE CLEARANCES. FOLLOW CLEARANCE TO COMBUSTIBLE DISTANCE PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8" PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.

KEYED SHEET NOTES

- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED ABOVE WINDOWS.
- ROUTE FLUE PIPING UP TO FIRST FLOOR AND OUT THROUGH EXTERIOR WALL AS SHOWN. PROVIDE CONCENTRIC VENT KIT FOR EXTERIOR PENETRATION.
- COORDINATE DUCTS GOING UP THROUGH FIRST FLOOR WITH EXISTING SLAB RISERS.
- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED BELOW WINDOWS.
- SUPPLY MOUNTED HIGH ON WALL AND RETURN MOUNTED LOW ON WALL IN PRIVATE DINNING ROOM.
- MOUNT RETURN GRILLE HIGH ON WALL.
- MOUNT RETURN GRILLE LOW ON WALL.
- MOUNT SUPPLY REGISTERS HIGH ON WALL ABOVE KITCHEN EQUIPMENT.
- CONNECT NEW DUCTWORK TO EXISTING DUCTWORK.
- ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA AND EXPOSED IN MECHANICAL/UTILITY SPACES. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
- PAINT SUPPLY REGISTER BLACK.
- ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
 - 13.1. 3' FROM PROPERTY LINE.
 - 13.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
 - 13.3. 10' FROM MECHANICAL AIR INTAKE

SYMBOLS LEGEND - HVAC

	THERMOSTAT
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	DUCT SMOKE DETECTOR
	1.5 HR FIRE DAMPER
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
	DUCT CONTINUATION
	CONNECTION POINT



CITYSTUDIOS
 ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I.
 engineering
 3826 Yorkdale Rd, Suite 100
 Liberty Township, Ohio 45044
 513-549-1434
 www.gai-engineering.com



PR-07711
ENGINEERED BUILDING SYSTEMS INC.
 TEAMWORK • COLLABORATION SHARED SUCCESS

513 Main South Street, Suite 204
 Newark, OH 43071 (614) 251-0555
 MEP Consulting Services, Inc. in OH
 Copyright © 2015

THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

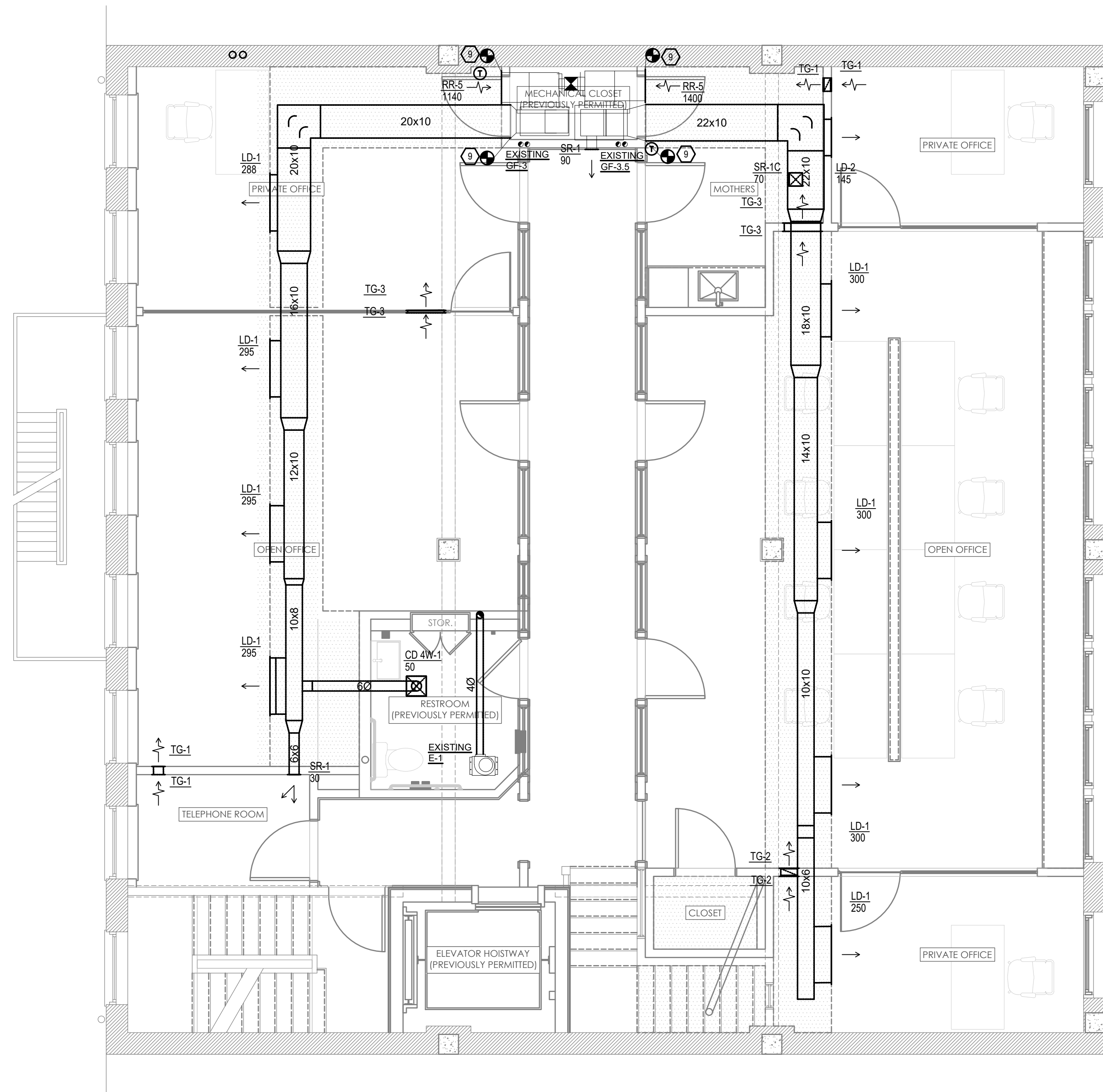
DURNER BUILDING
 2453 GILBERT AVENUE
 CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 06.01.23
 ENGINEERING CHANGE 04.12.23

M1.1b
 MECHANICAL MEZZANINE PLAN

Z:\Project_Directories\7700-7799\7711 - Durner Building - Gilbert Ave - Construction Documents\7711-M1-2-MECHANICAL-FLOOR-PLAN.dwg - ERS - Plot Date/Time: Jun 01, 2023 - 12:18pm - Plt: c:\mehus
 THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.



MECHANICAL SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"

MECHANICAL SCOPE OF WORK

PROVIDE MECHANICAL EQUIPMENT FOR TENANT FIT OUT IN BUILDING.

CODES REFERENCED

- 2017 OHIO MECHANICAL CODE
- 2017 OHIO BUILDING CODE
- ASHRAE 90.1-2010

HVAC DESIGN CONDITIONS

COOLING OUTDOOR: 93 DB / 75 WB INDOOR: 72
 HEATING OUTDOOR: 0 DB INDOOR: 72

GENERAL NOTES

- FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.
- COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- MAINTAIN ALL CODE REQUIRED SERVICE CLEARANCES. FOLLOW CLEARANCE TO COMBUSTIBLE DISTANCE PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8" PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.

KEYED SHEET NOTES

- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED ABOVE WINDOWS.
- ROUTE FLUE PIPING UP TO FIRST FLOOR AND OUT THROUGH EXTERIOR WALL AS SHOWN. PROVIDE CONCENTRIC VENT KIT FOR EXTERIOR PENETRATION.
- COORDINATE DUCTS GOING UP THROUGH FIRST FLOOR WITH EXISTING SLAB RISERS.
- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED BELOW WINDOWS.
- SUPPLY MOUNTED HIGH ON WALL AND RETURN MOUNTED LOW ON WALL IN PRIVATE DINING ROOM.
- MOUNT RETURN GRILLE HIGH ON WALL.
- MOUNT RETURN GRILLE LOW ON WALL.
- MOUNT SUPPLY REGISTERS HIGH ON WALL ABOVE KITCHEN EQUIPMENT.
- CONNECT NEW DUCTWORK TO EXISTING DUCTWORK.
- ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA AND EXPOSED IN MECHANICAL/UTILITY SPACES. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
- PAINT SUPPLY REGISTER BLACK.
- ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
 - 13.1. 3' FROM PROPERTY LINE.
 - 13.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
 - 13.3. 10' FROM MECHANICAL AIR INTAKE.

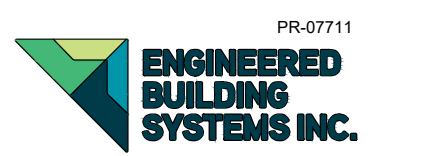
SYMBOLS LEGEND - HVAC

	THERMOSTAT
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	DUCT SMOKE DETECTOR
	1.5 HR FIRE DAMPER
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
	DUCT CONTINUATION
	CONNECTION POINT



CITYSTUDIOS ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I. engineering
 3836 Vanessa Rd, Suite 100
 Liberty Township, Ohio 45044
 513.549.1434
 www.gai-engineering.com



PR-07711
ENGINEERED BUILDING SYSTEMS INC.
 TEAMWORK • COLLABORATION
 SHARED SUCCESS
 515 Mainwood Street, Suite 204
 Newark, OH 43071 (614) 851-5555
 MEP Consulting Services, Inc. in OH
 Copyright © 2015
 THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

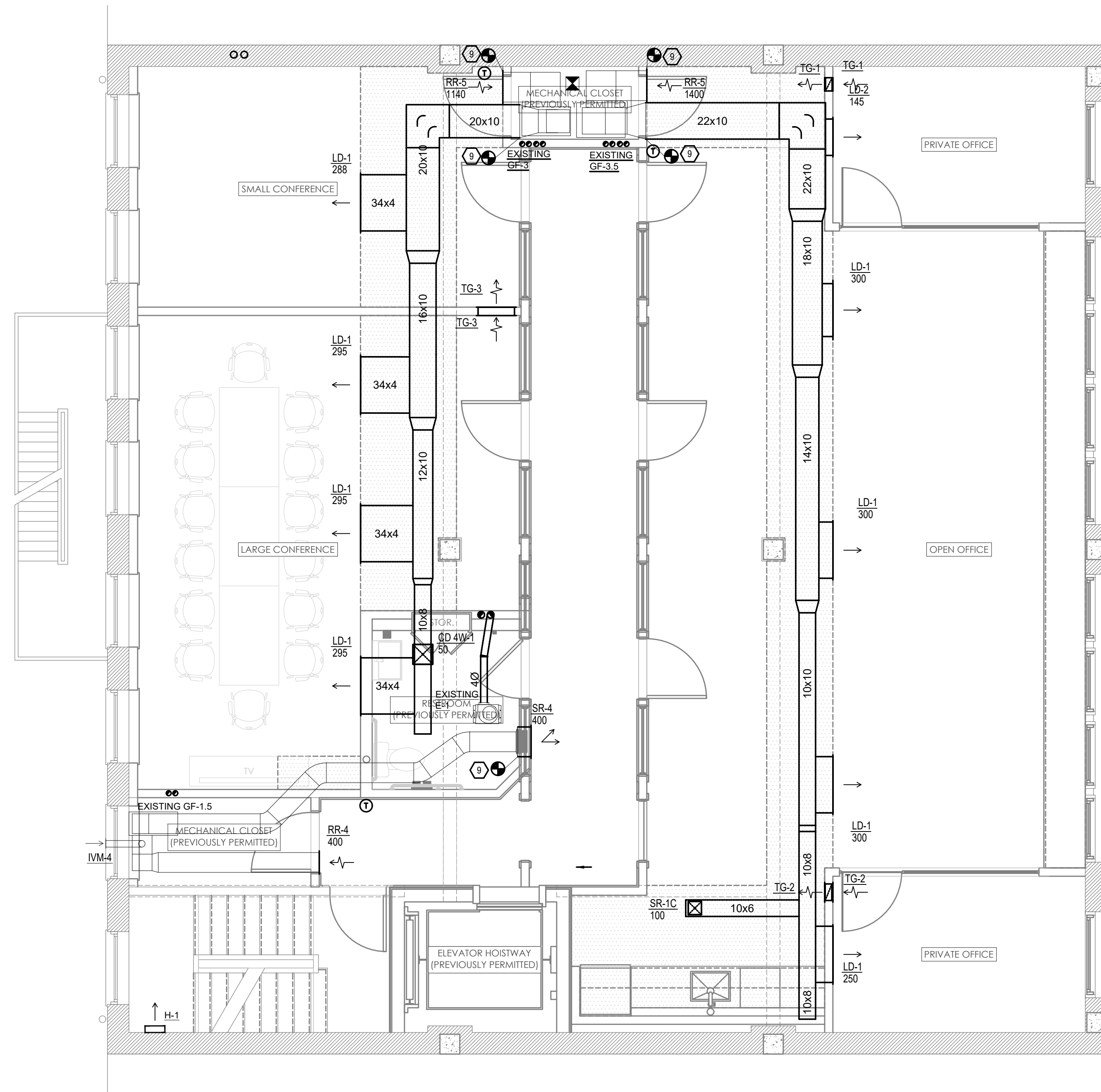
DURNER BUILDING
2453 GILBERT AVENUE
CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 06.01.23
 ENGINEERING CHANGE 04.12.23

M1.2
 MECHANICAL
 SECOND FLOOR PLAN

Z:\Project_Directories\7700-7799\7711 - Durner Building - Gilbert Ave - Construction Documents\7711-M1-3-MECHANICAL-FLOOR-PLAN.dwg - ERS. Plot Date/Time: Jun 01, 2023-12:19pm - Plt: c:\mehus
 THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.



MECHANICAL THIRD FLOOR PLAN
 M1.3 SCALE: 1/4" = 1'-0"

MECHANICAL SCOPE OF WORK

PROVIDE MECHANICAL EQUIPMENT FOR TENANT FIT OUT IN BUILDING.

CODES REFERENCED

- 2017 OHIO MECHANICAL CODE
- 2017 OHIO BUILDING CODE
- ASHRAE 90.1-2010

HVAC DESIGN CONDITIONS

COOLING OUTDOOR: 93 DB / 75 WB INDOOR: 72
 HEATING OUTDOOR: 0 DB INDOOR: 72

GENERAL NOTES

- FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.
- COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- MAINTAIN ALL CODE REQUIRED SERVICE CLEARANCES. FOLLOW CLEARANCE TO COMBUSTIBLE DISTANCE PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8" PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.

KEYED SHEET NOTES

- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED ABOVE WINDOWS.
- ROUTE FLUE PIPING UP TO FIRST FLOOR AND OUT THROUGH EXTERIOR WALL AS SHOWN. PROVIDE CONCENTRIC VENT KIT FOR EXTERIOR PENETRATION.
- COORDINATE DUCTS GOING UP THROUGH FIRST FLOOR WITH EXISTING SLAB RISERS.
- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED ABOVE WINDOWS.
- SUPPLY MOUNTED HIGH ON WALL AND RETURN MOUNTED LOW ON WALL IN PRIVATE DINNING ROOM.
- MOUNT RETURN GRILLE HIGH ON WALL.
- MOUNT RETURN GRILLE LOW ON WALL.
- MOUNT SUPPLY REGISTERS HIGH ON WALL ABOVE KITCHEN EQUIPMENT.
- CONNECT NEW DUCTWORK TO EXISTING DUCTWORK.
- ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA AND EXPOSED IN MECHANICAL/UTILITY SPACES. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
- PAINT SUPPLY REGISTER BLACK.
- ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
1. 3' FROM PROPERTY LINE.
2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
3. 10' FROM MECHANICAL AIR INTAKE.

SYMBOLS LEGEND - HVAC

	THERMOSTAT
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	DUCT SMOKE DETECTOR
	1.5 HR FIRE DAMPER
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
	DUCT CONTINUATION
	CONNECTION POINT



CITYSTUDIOS ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I. engineering
 3826 Yorkdale Rd., Suite 100
 Liberty Township, Ohio 45044
 513-549-1434
 www.gai-engineering.com



PR-07711
ENGINEERED BUILDING SYSTEMS INC.
 TEAMWORK • COLLABORATION
 SHARED SUCCESS
 515 Mainville Street, Suite 204
 Newark, OH 43071 (615) 951-0585
 MEP Consulting Services, Inc. in OH
 Copyright © 2015
 THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

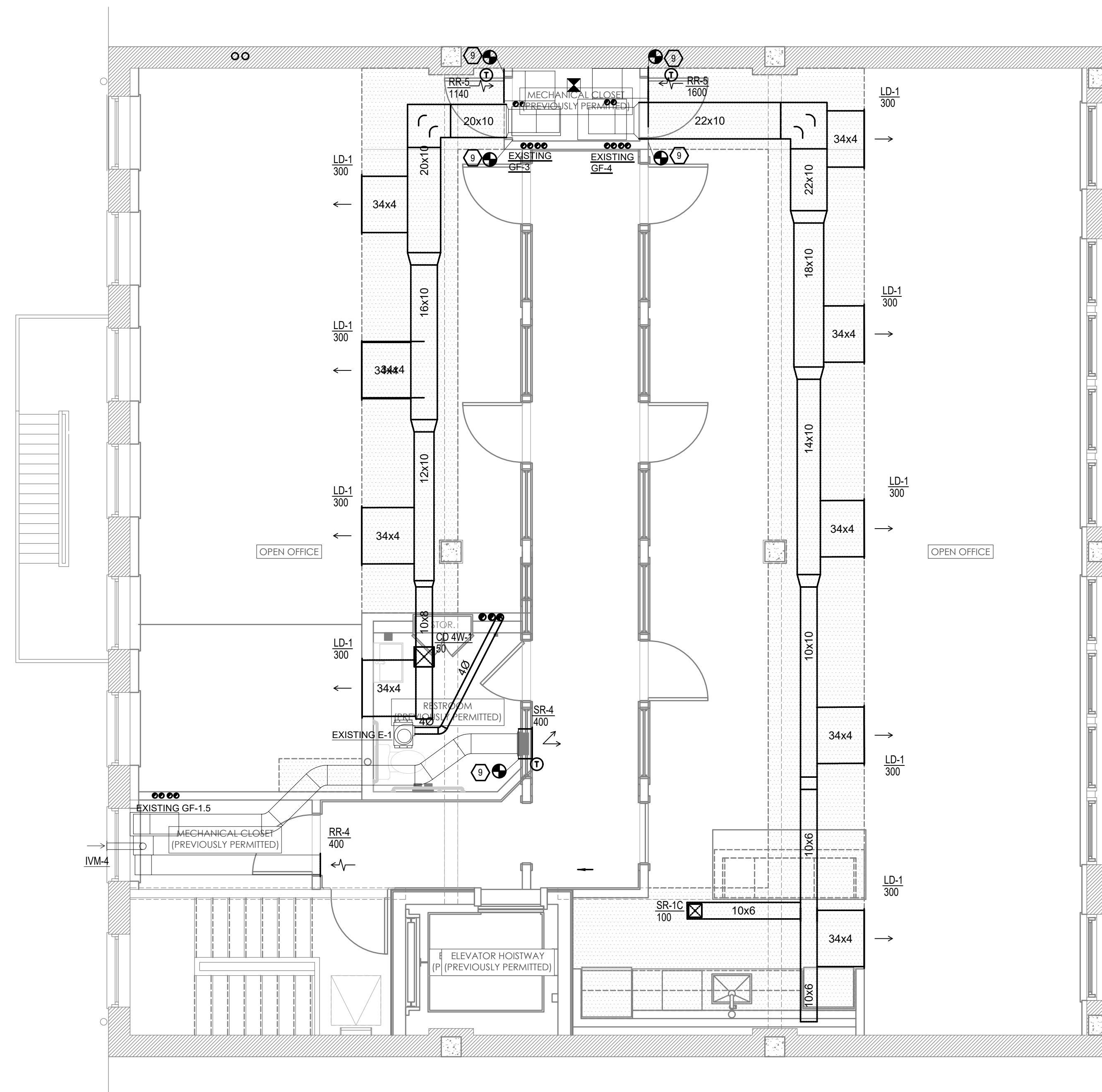
DURNER BUILDING
 2453 GILBERT AVENUE
 CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 06.01.23
 ENGINEERING CHANGE 04.12.23

M1.3
 MECHANICAL
 THIRD FLOOR PLAN

Z:\Project_Directories\7700-7799\7711 - Durner Building - Gilbert Ave - Construction Documents\7711-M1-4-MECHANICAL-FLOOR-PLAN.dwg - ERS, Plot Date/Time: Jun 01, 2023-12:22pm - Plt: c:\mehus
 THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.



MECHANICAL FOURTH FLOOR PLAN
 M1.4 SCALE: 1/4" = 1'-0"

MECHANICAL SCOPE OF WORK

PROVIDE MECHANICAL EQUIPMENT FOR TENANT FIT OUT IN BUILDING.

CODES REFERENCED

- 2017 OHIO MECHANICAL CODE
- 2017 OHIO BUILDING CODE
- ASHRAE 90.1-2010

HVAC DESIGN CONDITIONS

COOLING OUTDOOR: 93 DB / 75 WB INDOOR: 72
 HEATING OUTDOOR: 0 DB INDOOR: 72

GENERAL NOTES

- FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.
- COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- MAINTAIN ALL CODE REQUIRED SERVICE CLEARANCES. FOLLOW CLEARANCE TO COMBUSTIBLE DISTANCE PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8" PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.

KEYED SHEET NOTES

- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED ABOVE WINDOWS.
- ROUTE FLUE PIPING UP TO FIRST FLOOR AND OUT THROUGH EXTERIOR WALL AS SHOWN. PROVIDE CONCENTRIC VENT KIT FOR EXTERIOR PENETRATION.
- COORDINATE DUCTS GOING UP THROUGH FIRST FLOOR WITH EXISTING SLAB RISERS.
- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED BELOW WINDOWS.
- SUPPLY MOUNTED HIGH ON WALL AND RETURN MOUNTED LOW ON WALL IN PRIVATE DINING ROOM.
- MOUNT RETURN GRILLE HIGH ON WALL.
- MOUNT RETURN GRILLE LOW ON WALL.
- MOUNT SUPPLY REGISTERS HIGH ON WALL ABOVE KITCHEN EQUIPMENT.
- CONNECT NEW DUCTWORK TO EXISTING DUCTWORK.
- ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA AND EXPOSED IN MECHANICAL/UTILITY SPACES. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
- PAINT SUPPLY REGISTER BLACK.
- ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
- 3" FROM PROPERTY LINE
- 3" FROM OPERABLE OPENINGS INTO BUILDING.
- 10' FROM MECHANICAL AIR INTAKE

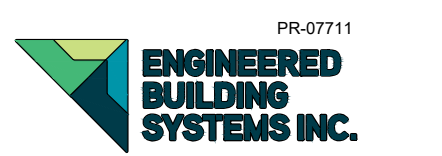
SYMBOLS LEGEND - HVAC

	THERMOSTAT
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	DUCT SMOKE DETECTOR
	1.5 HR FIRE DAMPER
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
	DUCT CONTINUATION
	CONNECTION POINT



CITYSTUDIOS
 ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I.
 engineering
 3826 Yorkshire Rd, Suite 100
 Liberty Township, Ohio 45044
 513-549-1434
 www.g-e-i-engineering.com



PR-07711
ENGINEERED BUILDING SYSTEMS INC.
 TEAMWORK • COLLABORATION
 SHARED SUCCESS
 515 Mainville Street, Suite 204
 Newark, OH 43071 (615) 851-0585
 MEP Consulting Services, Inc. in OH
 Copyright © 2015
 THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

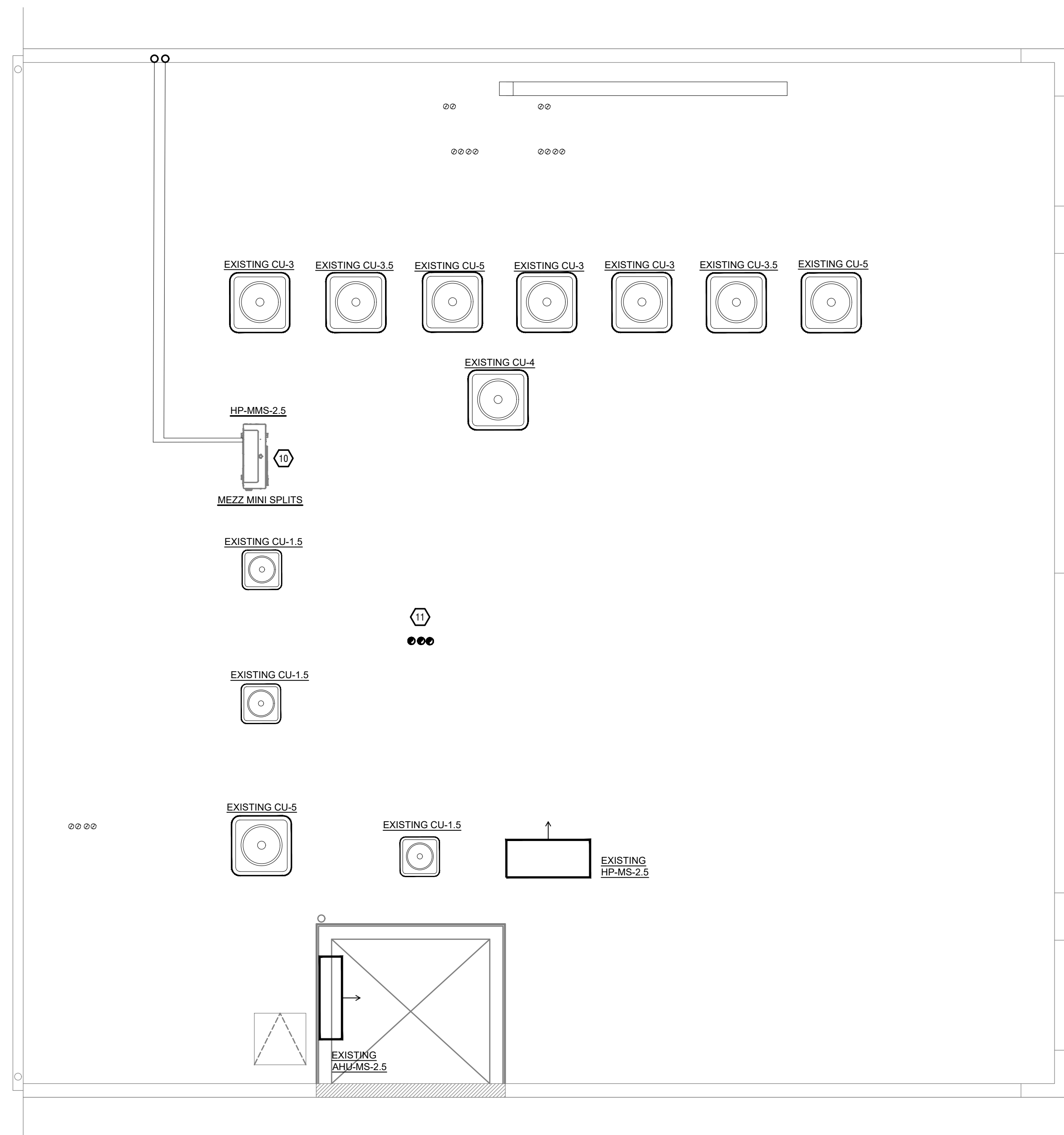
DURNER BUILDING
 2453 GILBERT AVENUE
 CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 06.01.23
 ENGINEERING CHANGE 04.12.23

M1.4
 MECHANICAL
 FOURTH FLOOR PLAN

Z:\Project_Directories\7700-7799\7711 - Durner Building - Gilbert Ave - Construction Documents\7711-M1-5-MECHANICAL-ROOF-PLAN.dwg - Plot Date/Time: Jun 01, 2023 - 12:24pm - Bc: clwibus
 THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.



MECHANICAL ROOF PLAN
 M1.5 SCALE: 1/4" = 1'-0"

MECHANICAL SCOPE OF WORK

PROVIDE MECHANICAL EQUIPMENT FOR TENANT FIT OUT IN BUILDING.

CODES REFERENCED

- 2017 OHIO MECHANICAL CODE
- 2017 OHIO BUILDING CODE
- ASHRAE 90.1-2010

HVAC DESIGN CONDITIONS

COOLING OUTDOOR: 93 DB / 75 WB INDOOR: 72
 HEATING OUTDOOR: 0 DB INDOOR: 72

GENERAL NOTES

- FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.
- COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- MAINTAIN ALL CODE REQUIRED SERVICE CLEARANCES. FOLLOW CLEARANCE TO COMBUSTIBLE DISTANCE PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8" PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.

KEYED SHEET NOTES

- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED ABOVE WINDOWS.
- ROUTE FLUE PIPING UP TO FIRST FLOOR AND OUT THROUGH EXTERIOR WALL AS SHOWN. PROVIDE CONCENTRIC VENT KIT FOR EXTERIOR PENETRATION.
- COORDINATE DUCTS GOING UP THROUGH FIRST FLOOR WITH EXISTING SLAB RISERS.
- OUTSIDE AIR/EXHAUST DUCTWORK TO BE CENTERED BELOW WINDOWS.
- SUPPLY MOUNTED HIGH ON WALL AND RETURN MOUNTED LOW ON WALL IN PRIVATE DINNING ROOM.
- MOUNT RETURN GRILLE HIGH ON WALL.
- MOUNT RETURN GRILLE LOW ON WALL.
- MOUNT SUPPLY REGISTERS HIGH ON WALL ABOVE KITCHEN EQUIPMENT.
- CONNECT NEW DUCTWORK TO EXISTING DUCTWORK.
- ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA AND EXPOSED IN MECHANICAL/UTILITY SPACES. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
- PAINT SUPPLY REGISTER BLACK.
- ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
1. 3' FROM PROPERTY LINE.
2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
3. 10' FROM MECHANICAL AIR INTAKE.

SYMBOLS LEGEND - HVAC

	THERMOSTAT
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	DUCT SMOKE DETECTOR
	1.5 HR FIRE DAMPER
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
	DUCT CONTINUATION
	CONNECTION POINT



CITYSTUDIOS
 ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I.
 engineering
 3826 Yorkdale Rd., Suite 100
 Liberty Township, Ohio 45044
 513-549-1434
 www.gai-engineering.com



PR-07711
ENGINEERED BUILDING SYSTEMS, INC.
 TEAMWORK • COLLABORATION
 SHARED SUCCESS

515 Monmouth Street, Suite 204
 Newport, KY 41071 (502) 851-0585
 MEP Consulting Services, Inc. in OH
 Copyright © 2015

THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

DURNER BUILDING
 2453 GILBERT AVENUE
 CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 06.01.23
 ENGINEERING CHANGE 04.12.23

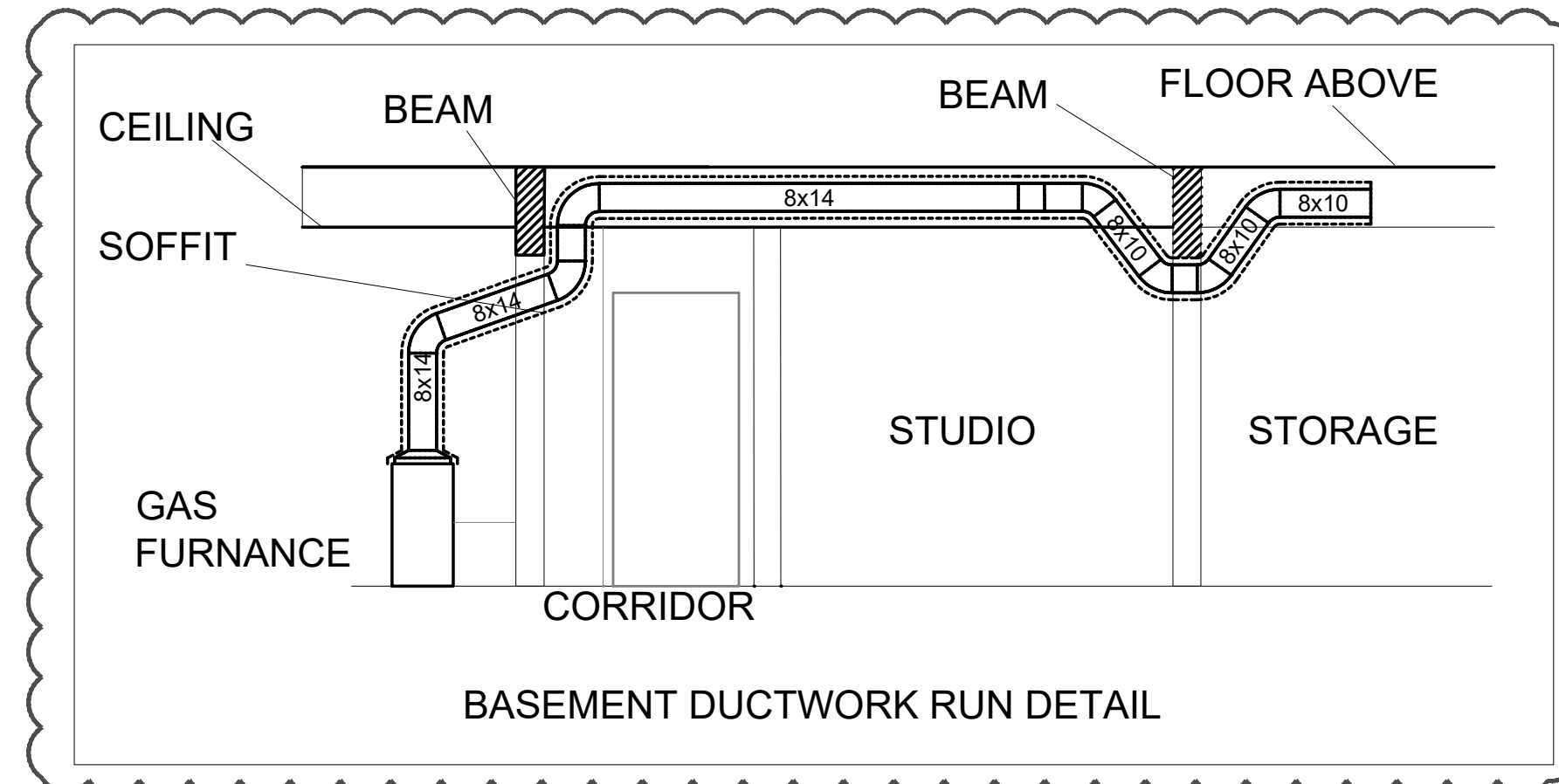
M1.5
 MECHANICAL
 ROOF PLAN

Z:\Project_Directories\7700-7799\7711 - Durner Building - Gilbert Ave - Construction Documents\7711-M2-0-MECHANICAL-DETAILS.dwg-EBS-Plt Date/Time: Apr 13, 2023-10:45am - Bk: c:\hewlett
 THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.

Split System Schedule

Unit Tag	Manufacturer	Outdoor Tag	Model Number	Outdoor Condensing Unit				MCA Amps	MOCF Amps	Weight lb	Furnace Tag	Model Number	Orientation	Furnace				MCA Amps	MOCF Amps	Weight lb	Model Number	Evaporator Coil				Weight lb	Accessories										
				Nominal SEER	Nominal Tons	Out DB	Stages							Volts	Phase	AFUE	Heating Input Btuh					Heating Output Btuh	Max Equivalent Vent Length (ft) / Diameter	Nominal Air Flow cfm	Outside Air cfm			Static in wg	HP	EAT DB °F	EAT WB °F	FLAT DB °F	FLAT WB °F	TOT MBH	SENS MBH		
GF-1.5	SYS-01	Carrier	CU-1.5	24ACC418A003	14	1.5	95	1	208/230	1	11.7	20	123	GF-1.5	595P6A040V14-10	Vertical	0.96	40000	39000	1	155 / 2"	600	90	0.5	0.5	7	15	123	CNPVP181A1A	80	67	58.19	57.68	17.84	14.13	36	1-4
GF-3	SYS-03	Carrier	CU-3	24ACC436A003	14	3.0	95	1	208/230	1	18.1	30	134	GF-3	595P6A080V17-16	Vertical	0.96	80000	78000	1	55 / 2"	1200	180	0.5	0.75	10	15	150	CNPVP3617A1A	80	67	58.81	58.12	34.13	27.46	48.5	1-4
GF-3.5	SYS-3.5	Carrier	CU-3.5	24ACC442A003	14	3.5	95	1	208/230	1	22.3	35	192	GF-3.5	595P6A080V21-20	Vertical	0.96	80000	78000	1	55 / 2"	1400	210	0.5	1	12.8	20	161	CNPVP4217A1A	80	67	60.29	59.02	36.14	29.8	56.5	1-4
GF-4	SYS-04	Carrier	CU-4	24ACC448A003	14	4.0	95	1	208/230	1	20.8	35	182	GF-4	595P6A100V21-20	Vertical	0.96	100000	97000	1	175 / 3"	1600	240	0.5	1	12.6	20	170	CNPVP4821A1A	80	67	60.48	58.91	41.87	33.73	65.5	1-4
GF-5	SYS-05	Carrier	CU-5	24ACC460A003	14	5.0	95	1	208/230	1	27.5	40	197	GF-5	595P6A120V24-22	Vertical	0.96	120000	117000	1	75 / 3"	2000	300	0.5	1	12.6	20	189	CNPVP6024A1A	80	67	59.86	58.21	56.41	43.5	78	1-4

- 1 Motomaster Low Ambient Kit for cooling operation down to 0°F
- 2 Concentric Vent Kit
- 3 Long Line Accessories for refrigerant piping lengths between 80ft. - 200ft.:
- 4 Thermostat 7 Day Programmable
- 5 2" Diversitech Condensing Unit Pad



OUTDOOR MINI SPLIT SYSTEM SCHEDULE

TAG	AREA SERVED	MANUFACTURER	MODEL	CLG-MBH	NOMINAL TONS	MIN SEER	HEAT-MBH	MAX HEAT @ 5 DEGREES/ MBH	COOLING OPERATING RANGE (F)	HEATING OPERATING RANGE (F)	VOLT/PHASE	MCA	MOCF	REFRIGERANT	WEIGHT	NOTES
HP-MS-2.5	REFER TO DRAWINGS	LG	LSU303HLV3	30	2.5	20	32.4	28.08	0-118	-13-65	208-230/1	23	30	R410A	160	1,2,3

1. PROVIDE EQUIPMENT STAND EQUAL TO DIVERSITECH MODEL QSMS2100
2. NO LOW TEMP CUT OUT OR RESTART.
3. LOW AMBIENT WIND BAFFLE

INDOOR MINI SPLIT SYSTEM SCHEDULE

TAG	AREA SERVED	MANUFACTURER	MODEL	CFM	ESP	VOLT/PHASE	WEIGHT	NOTE
AHU-MS-2.5	REFER TO DRAWINGS	LG	LSN303HLV3	1100/883/742/601	N/A	208-230/1	49	1,2

1. PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT.
2. PROVIDE/INSTALL PRE-FABRICATED HONEYWELL JACKETED METAL CLAD MINI-SPLIT CABLE FOR INDOOR/OUTDOOR UNIT CONNECTION

FAN SCHEDULE

TAG	TYPE	AREA SERVED	MANUFACTURER	MODEL	DRIVE	CFM	ESP	WATTS	AMPS	RPM	VOLT/PHASE	MOUNTING	WEIGHT	NOTES
E-1	EXHAUST	TOILET	GREENHECK	SP-B80	DIRECT	70	0.2	18	0.16	900	115/60/1	CEILING	9	1

1. FAN TO RUN OFF A SWITCH.
2. FAN TO RUN OFF OF A TIMELOCK.

HEATER SCHEDULE

TAG	TYPE	AREA SERVED	MANUFACTURER	MODEL	HEAT-MBH	FUEL	HEAT-KW	AMPS	VOLT/PHASE	MOUNTING	WEIGHT	NOTES
H-1	WALL HEATER	REFER TO PLANS	BERKO	FR4020	6.8	ELECTRIC	2	-	208/1/60	WALL	22	1,2

1. SURFACE MOUNT FRAME
2. INTEGRAL THERMOSTAT

MECHANICAL EXHAUST SCHEDULE - 2017 OHIO MECHANICAL CODE

ROOM NUMBER	ROOMNAME	OCCUPANCY CLASSIFICATION	AREA (ft2)	EXHAUST AIRFLOW RATE (CFM/R2)	EXHAUST RATE PER FIXTURE (CFM)	FIXTURES			TOTAL EXHAUST AIRFLOW REQ. (CFM)	TOTAL EXHAUST AIRFLOW ACT. (CFM)
						LOWER CONTINUOUS RATE?	HIGHER INTERMITTENT RATE?	QTY. OF		
N/A	1ST FLR RESTROOM	PUBLIC SPACES - TOILET ROOM	48	N/A	50/70	NO	YES	1	70	70
N/A	1ST FLR RESTROOM	PUBLIC SPACES - TOILET ROOM	48	N/A	50/70	NO	YES	1	70	70
N/A	2ND FLR RESTROOM	PUBLIC SPACES - TOILET ROOM	56	N/A	50/70	NO	YES	1	70	70
N/A	3RD FLR RESTROOM	PUBLIC SPACES - TOILET ROOM	56	N/A	50/70	NO	YES	1	70	70
N/A	4TH FLR RESTROOM	PUBLIC SPACES - TOILET ROOM	56	N/A	50/70	NO	YES	1	70	70

DUCT INSULATION SCHEDULE

EQUIPMENT	AIR DISTRIBUTION TYPE				ADDITIONAL NOTES
	SA	RA	OA	EA	
GF-1.5	R-3.5	N/A	R-3.5	N/A	-
GF-3	R-3.5	N/A	R-3.5	N/A	-
GF-3.5	R-3.5	N/A	R-3.5	N/A	-
GF-4	R-3.5	N/A	N/A	N/A	-
GF-5	R-3.5	N/A	N/A	N/A	-
EX-1	N/A	N/A	N/A	R-3.5	1

DUCT INSULATION REQUIREMENTS ARE BASED ON TABLE 6.8.2B OF ASHRAE 90.1 2010 ENERGY CODE.

PROVIDE DUCTWORK OF SUFFICIENT THICKNESS TO MEET THE INSTALLED R-VALUE REQUIREMENTS LISTED ABOVE. ITEMS NOT REQUIRED TO BE INSULATED: FIBROUS-GLASS DUCTS, DUCTS WITH LINER THAT MEETS ASHRAE 90.1, FACTORY-INSULATED FLEXIBLE DUCTS, FACTORY-INSULATED PLENUMS AND CASINGS, FLEX CONNECTORS, VIBRATION-CONTROL DEVICES, FACTORY-INSULATED ACCESS PANELS AND DOORS.

1. EXHAUST AIR DUCTS TO HAVE R-3.5 INSULATION A MINIMUM OF 5FT FROM EXTERIOR PENETRATIONS.
- Duct Thermal Insulation
- a. Ductwork exposed to the weather shall be protected with an approved weatherproof barrier/jacketing. Insulation of all ductwork shall be continuous thru all walls and floors. Thermal insulation and sealers shall comply with NFPA flame spread of 25 or less, and smoke developed index of 50 or less.

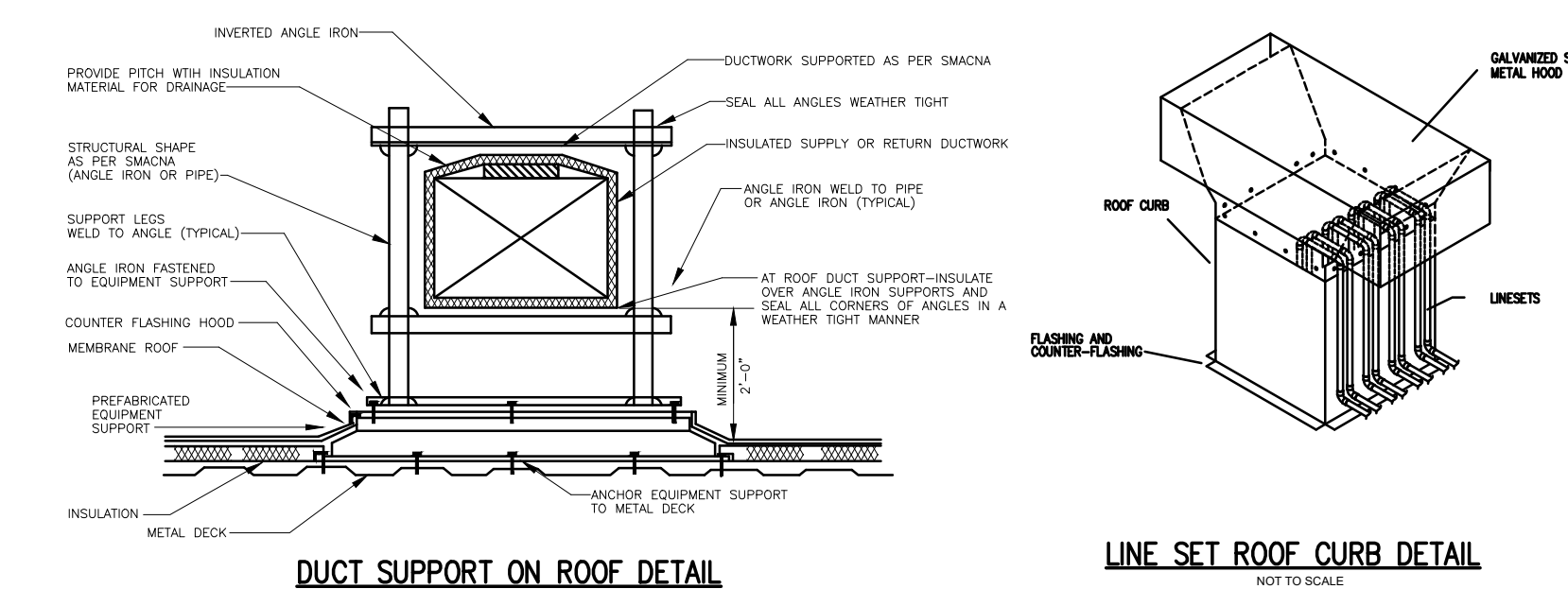
NATURAL VENTILATION SCHEDULE

UNIT	ROOMNAME	AREA	DOOR OPENABLE AREA (SQ. FT)	WINDOW OPENABLE AREA (SQ. FT)	TOTAL OPENABLE AREA	4% OF FLOOR AREA	8% OF FLOOR AREA	UNOBSTRUCTED OPENING
FIRST FLOOR SPACE		1800	35	12	47	72	144	164
MEZZ LOUNGE		382	0	27	27	15	N/A	N/A
MEZZ BREAK ROOM		296	0	20	20	11	N/A	N/A
THRID FLOOR EAST		1100	0	110	110	44	N/A	N/A
THRID FLOOR WEST		648	0	66	66	26	N/A	N/A
FOURTH FLOOR EAST		1100	0	110	110	44	N/A	N/A
FOURTH FLOOR WEST		648	0	66	66	26	N/A	N/A

NATURAL VENTILATION CALCULATIONS PER SEC 402.1 OF 2017 OHIO MECHANICAL CODE

NATURAL VENTILATION OF THE OCCUPIED SPACE SHALL BE THROUGH WINDOWS, DOORS, OR OTHER OPENINGS TO THE SPACE. THE OPERATING MECHANISM FOR SUCH OPENINGS SHALL BE PROVIDED WITH READY ACCESS SO THAT THE OPENINGS ARE READILY CONTROLLABLE BY THE BUILDING OCCUPANTS.

** OPENABLE AREA IS THROUGH ADJOINING SPACES PER SECTION 402.3 OF THE 2017 OMC. THE OPENING BETWEEN ADJOINING SPACES MUST BE UNOBSTRUCTED AND SHALL HAVE AN AREA NOT LESS THAN 8 PERCENT OF THE INTERIOR AREA OR A MINIMUM OF 25 SQUARE FEET. SINCE THE MEZZANINE OPEN TO THE FLOOR BELOW THE 8% MINIMUM IS ACHIEVED.



CITYSTUDIOS ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I. engineering
 3834 Yorkess Rd, Suite 100
 Liberty Township, Ohio 45044
 513.549.1434
 www.g-e-i-engineering.com

PR-07711
ENGINEERED BUILDING SYSTEMS INC.
 TEAMWORK • COLLABORATION
 SHARED SUCCESS
 515 Mainville Street, Suite 204
 Newport, KY 41071 (502) 581-0585
 MEP Consulting Services, Inc. in OH
 Copyright © 2015

THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE USED FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS PREPARED WITHOUT WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

DURNER BUILDING
 2453 GILBERT AVENUE
 CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 08.25.22
 ENGINEERING CHANGE 04.12.23

M2.0
 MECHANICAL
 DETAILS & SCHEDULES

Z:\Project_Directories\7700-7789\7711 - Durner Building - Gilbert_Awa - Construction Documents\7711-M2-0-MECHANICAL-DETAILS-REV-01.dwg - EBS - Plot Date/Time: Jun 01, 2013--12:23:00 - Bk: r:\webuser... THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INTENDED TO PROVIDE THE AUTHORITIES HAVING JURISDICTION WITH INFORMATION TO DETERMINE CODE COMPLIANCE. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTUAL AGREEMENT THAT MAY EXIST WITH AN OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, ETC.

MECHANICAL SPECIFICATIONS

1. General
 - a. Refer to architectural drawings, general notes, instructions to bidders, general conditions, supplementary general conditions, base building specifications and drawings, shop drawing manuals and as-built plans, except as noted herein, which apply in all respects to this section. The contractor shall visit the site and familiarize himself with all existing conditions prior to bidding the work.
2. Use of Drawings And Specifications
 - a. EBS drawings and specifications are intended to convey design intent only. All means and methods sequences, techniques, and procedures of construction as well as any associated safety precautions and programs, and all incidental and temporary devices required to construct the project, and to provide a complete and fully operational mechanical system are the responsibility of the mechanical contractor.
3. Standards
 - a. Equipment and materials shall conform with appropriate provisions of AGA, ARI, ASME, ASTM, CISPL, UL, NEMA, ANSI, SMACNA, ASHRAE, NFPA, NEC, as applicable to each individual unit or assembly. All equipment must bear UL label.
4. License / Experience
 - a. Contractor must be licensed by the state to install HVAC systems/equipment. Contractor must also have a minimum of 5 years of experience and have installed at least (5) successful project installations of similar size and scope. References must be provided upon request.
5. Codes
 - a. All work shall be performed in strict accordance with all applicable state and local codes and ordinances. The mechanical contractor shall satisfy code requirements at a minimum without any extra cost to the owner. In case of conflict between the drawings/specifications and the codes and ordinances, the highest standard shall apply.
6. Permits and Fees
 - a. The mechanical contractor shall procure and pay for all permits, fees, taxes, and inspections necessary to complete the mechanical work. Furnish certificate of approval for work from inspection authority to owner before final acceptance for work. Certificate of final inspection and approval shall be submitted with the contractor's request for payment. No final payment will be approved without this certificate.
7. Site Examination
 - a. The mechanical contractor shall thoroughly examine all areas of work where equipment, ductwork, and piping will be installed and shall report any condition that, in his opinion, prevents the proper installation of the mechanical work prior to bid. Contractor shall also examine the drawings and specifications of other branches of work, making reference to them for details of new or existing building conditions. No extras will be allowed for failure to include all required work in bid.
 - b. All work shall be done at times convenient to the owner and only during normal working hours, unless specified otherwise.
 - c. Mechanical contractor shall take their own measurements and be responsible for them.
 - d. Access panels are not shown on drawings. During site examination, contractor shall identify all areas where access panels are required, and report to general contractor. Designation of who furnishes and who installs access panels must be coordinated with general contractor prior to starting work.
8. Contractor Coordination
 - a. Coordination drawings showing system and component installation layout, routing, details, etc. Shall be produced by the mechanical contractor and under the supervision of the general contractor/construction manager, or appropriate party as applicable.
 - b. All systems installed by each sub-contractor shall be coordinated with one another and approved by general contractor/construction manager, etc. prior to installation and/or fabrication.
 - c. If questions concerning design intent arise during coordination, EBS can assist where appropriate.
 - d. The architectural drawings shall take precedence over all other drawings. Do not scale distances off the mechanical drawings; use actual building dimensions.
9. Shop Drawings / Submittals
 - a. Submit to the architect electronic copies of complete and certified shop drawings, descriptive data, performance data and ratings, diagrams and specifications on all specified equipment, including accessories, and materials for review. The make, model number, type, finish and accessories of all equipment and materials shall be reviewed and approved by the mechanical contractor and general contractor prior to submitting to the architect for their review and approval. Approval of shop drawings does not relieve the mechanical contractor/vendor from compliance with the requirements of the contract drawings, specifications and applicable codes.
 - b. Shop drawings shall be required for the following:
 - i. HVAC equipment
 - ii. Sheet metal coordination drawings
 - c. Products installed by the mechanical contractor and provided by others must be submitted for review prior to purchasing. Products shall not be selected based on permit drawings without express permission - products shall be selected based on construction drawings.
10. Record Drawing
 - a. The mechanical contractor shall be responsible for creating record drawings where required. Drawings shall be produced in Autocad 2004 format or later.
11. Testing
 - a. All mechanical systems shall be tested for proper operation.
12. Access Panels
 - a. Provide ceiling and wall access panel quantities & locations to the general contractor prior to bidding. Access panels are required for all concealed appliances, controls devices, heat exchangers and HVAC system components that utilize energy. Where access panels are used, the access panel should be sized to allow accessibility for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances, venting systems or any other piping or ducts not connected to the appliance being inspected, serviced, repaired or replaced. There shall be no extras for having to add access panels after bids are awarded.
13. Cutting and Patching
 - a. Neatly do all cutting as required and patch all cut surfaces to match building construction. The contractor shall employ and pay a trade trained and qualified to perform the required patching work. All surfaces disturbed shall be restored with like materials to the satisfaction of the owner. All penetrations through roof shall be made by bonded roofer. Mechanical contractor shall pay all fees required.
14. Flashing & Counterflashing
 - a. Roof flashing shall be furnished and installed by the roofing contractor. Roof counterflashing shall be furnished and installed by the mechanical contractor. Coordinate work with roofing contractor and pay all fees.
 - b. Obtain approval from general contractor, construction manager, owner and/or roofing contractor prior to making any penetrations so that warranties are not compromised or voided.
15. Warranty
 - a. The mechanical contractor shall unconditionally warrant all work to be free of defects in equipment, material and workmanship for a period of one (1) year from the date of final acceptance by owner. The mechanical contractor will repair or replace any defective work promptly and without charge to the owner.
 - b. Restore any other existing work damaged in the course of repairing defective equipment, materials and workmanship.
16. Mechanical Work
 - a. The mechanical contractor shall provide new hvac equipment, fans, ductwork, piping, air devices, controls as indicated on drawings and as specified. Startup and 1st year parts and labor warranty shall be included and manufacturer's extended warranties. Equipment and appliances shall be installed as required by the terms of their approval, in accordance with the conditions of the listing, the manufacturer's installation instructions, and the applicable code.
17. Owner's Instructions
 - a. Provide two sets of complete operating and maintenance instructions with drawings, typewritten instructions and operating sequences and descriptive data sheets. Assemble each set in a hard-bound cover. Provide pdf files of all documentation.
18. Finale

- a. Put all equipment in service and demonstrate that all conditions of the contract have been fulfilled. Remove all tools, debris, etc. occasioned by work under this contract. Submit all warranties, test reports, operating and maintenance manuals for HVAC systems, log sheets and charts, and guarantees as previously specified. Provide all reports, forms, etc. required by inspectors to the satisfaction of the owner. Provide as-built record drawings (in Autocad 2007 or later) showing an accurate account of the final installed systems. Systems including but not limited to all equipment and associated controls, ductwork/piping, air devices, etc.
19. Sheetmetal Ductwork
 - a. All sizes of ducts shown on the drawings are interior duct dimensions. All ductwork shall be rigid sheetmetal constructed from galvanized sheet steel in accordance with SMACNA low velocity duct construction standards. All exposed ductwork shall be rectangular look-seam type, as shown on HVAC drawings. Assemble and install ductwork in accordance with recognized industry practice for achieving air tight (5% leakage) and noiseless (no objectionable noise) systems, capable of performing each indicated service. Furnish all required dampers, transitions, offsets, connections to air devices, and other accessories necessary for a complete operating system. Flexible ductwork shall not exceed 8'-0" long.
20. Adhesives and Sealants
 - a. Seal all longitudinal and transverse duct joints with a UL 181A or 181B non-hardening, non-migrating mastic or liquid elastic sealant of a type recommended by the manufacturer for sealing joints and seams in sheet metal ductwork. Cover all field joints, joints around spin-in fittings and fastening screws with mastic. All sealants and gaskets shall have surface-burning characteristics with a maximum flame-spread index of 25 and a maximum smoke-developed index of 50 when tested according to UL 723.
 - b. Exposed Ductwork: trim duct sealants flush with metal. Create a smooth and uniform exposed bead. Do not use two-part tape sealing system.
21. Duct Supports
 - a. Furnish and install hot-dipped galvanized steel fasteners, hangers, anchors, rods, straps, trim, and angles for support of ductwork.
22. Flexible Connections
 - a. Furnish and install neoprene flexible duct connections at the inlet and discharge of units and fans.
23. Duct Manual Volume Dampers
 - a. Furnish and install opposed-blade, leak-proof volume control dampers where indicated on drawings and locations in supply, return and exhaust ducts where branches are taken from larger ducts or at each individual duct register in order to achieve system air balance quantities. Balancing devices must be provided in accordance with IMC 903.17. All manual volume dampers must be shown on coordination drawings when submitted for review.
24. Duct Access Doors
 - a. Furnish and install conveniently located duct access doors of ample size and quantity for servicing the dampers.
25. Non-Ducted Mini-Split Systems
 - y. Split systems shall consist of indoor air handler and associated outdoor heat pump unit. Equipment shall have manufacturer's standard warranty. Provide an inline check valve located in the drain line or trap.
 - z. Mini-split system manufacturer shall be Mitsubishi, Daikin, or engineered equal.
26. Condensate Drain Piping
 - a. The mechanical contractor shall furnish and install condensate drains, p-traps with removable cleanout caps for air equipment per manufacturer's recommendations. The p-trap depth shall be at least the depth specified for the respective pressure drop of the unit. Condensate drain piping shall be schedule 40 PVC pipe with solvent weld fittings or CPVC. All condensate drain lines shall be configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be cut. For condensate pumps located in uninhabitable spaces (i.e. attics and crawl spaces), provide controls that will shut down the air equipment if the condensate pump fails.
 - b. All cooling equipment shall have a wet switch in the primary drain line, the overflow drain line, or in the equipment-supplied drain pan (located at a point higher than the primary drain line connection and below the overflow rim of the pan) that will shut down the unit when the condensate is clogged.
27. Piping Supports (Metal Pipe)
 - a. Furnish and install hot-dipped galvanized steel fasteners, hangers, anchors, rods, straps, trim and angles for support of piping.
28. Piping Supports (Plastic Pipe)
 - a. Furnish and install hangers for plastic piping per manufacturer's requirements.
29. Temperature Controls and Control Wiring
 - a. The mechanical contractor shall provide all control wiring necessary for the complete and proper operating temperature control system. Programmable thermostats shall be provided with equipment packages unless otherwise noted.
 - b. Exposed wiring: All wiring exposed to the space shall be run in conduit. Coordinate requirements with architectural drawings.
30. Testing, Balancing, and Adjusting
 - a. The individual performing the air balancing shall be a certified test and balancer and a member of NEBB or AABC, using calibrated equipment. The certified air balance contractor shall accurately balance the systems to provide air quantities as indicated on the drawings and in the schedules/specifications, operate automatic control systems, and verify set points during balancing.
31. Sequence of Operation
 - a. Split systems
 - i. Mini Split Systems
 - iv. AHU/HP-MS-1.5/2:
 - v. Heating mode - indoor air handler shall be controlled from a thermostat in the space. When the thermostat calls for heating the fan shall run and the heat pump in heating mode shall run to maintain temperature setpoint. If the heat pump cannot maintain temperature in the space, the electric heat kit shall energize until set point is reached. When the setpoint is reached the unit shall shut off.
 - vi. Cooling mode - when the thermostat calls for cooling the heat pump unit shall run in cooling mode, the air handler fan shall run, and the dx cooling coil shall cool the air to maintain temperature setpoint.
 - b. Exhaust Fan
 - i. E-2: Fan to run off a timedock (supplied by electrical contractor). Owner to set schedule on timedock.

INDOOR MINI SPLIT SYSTEM SCHEDULE									
TAG	AREA SERVED	MANUFACTURER	MODEL	CFM	ESP	VOLT/PHASE	WEIGHT	NOTE	
AHU-MS-1	REFER TO DRAWINGS	LG	LSN120HSV5	282/233/177	-	208-230/1	18	1,2	
AHU-MS-1.5	REFER TO DRAWINGS	LG	LSN181HSV5	558/438/353	-	208-230/1	25	1,2	

1. PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT
2. PROVIDE/INSTALL PRE-FABRICATED HONEYWELL JACKETED METAL CLAD MINI-SPLIT CABLE FOR INDOOR/OUTDOOR UNIT CONNECTION

OUTDOOR MINI SPLIT SYSTEM SCHEDULE																
TAG	AREA SERVED	MANUFACTURER	MODEL	CLG-MBH	NOMINAL TONS	MIN SEER	HEAT-MBH	MAX HEAT @ 5 DEGREES/MBH	COOLING OPERATING RANGE (F)	HEATING OPERATING RANGE (F)	VOLT/PHASE	MCA	MOCF	REFRIGERANT	WEIGHT	NOTES
HP-MMS-2.5	REFER TO DRAWINGS	LG	LMJ303HV	30	2.5	22	32	24	14-118	-4-64	208-230/1	18.4	25	R410A	139	1,2,4

1. PROVIDE EQUIPMENT STAND EQUAL TO DIMERSATECH MODEL QSMS1200
2. NO LOW TEMP CUT OUT OR RESTART.
3. LOW AMBIENT WIND BAFFLE
4. MULTIZONE HP

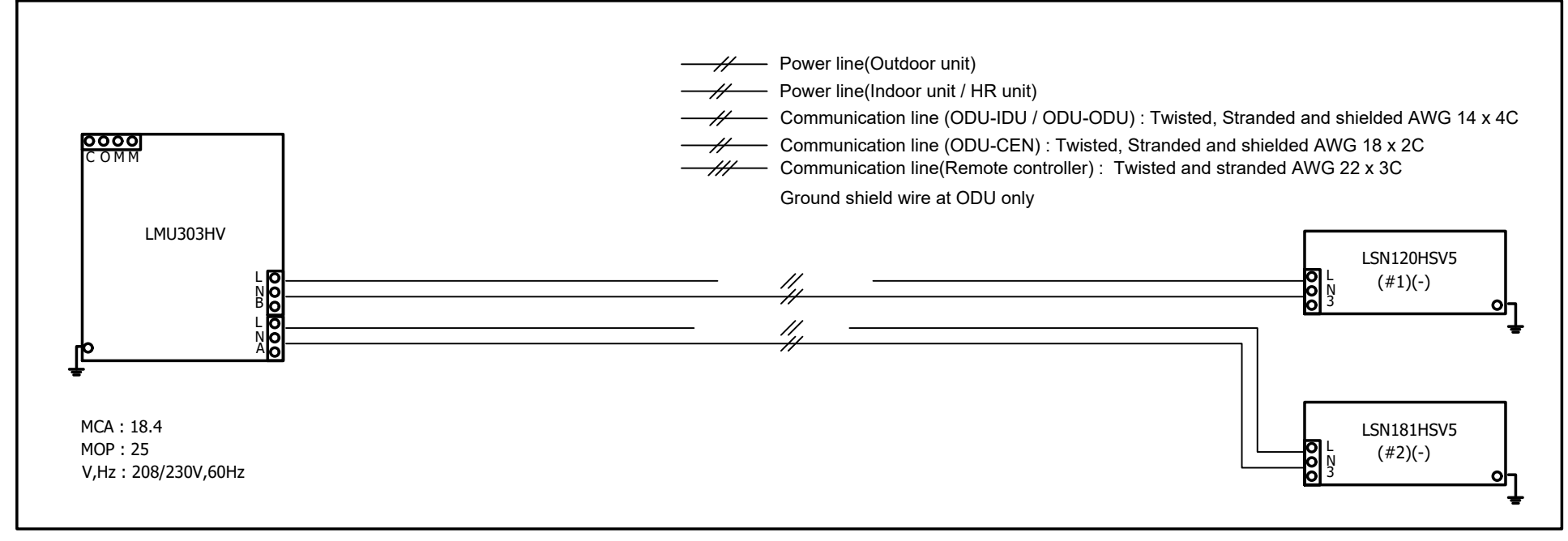
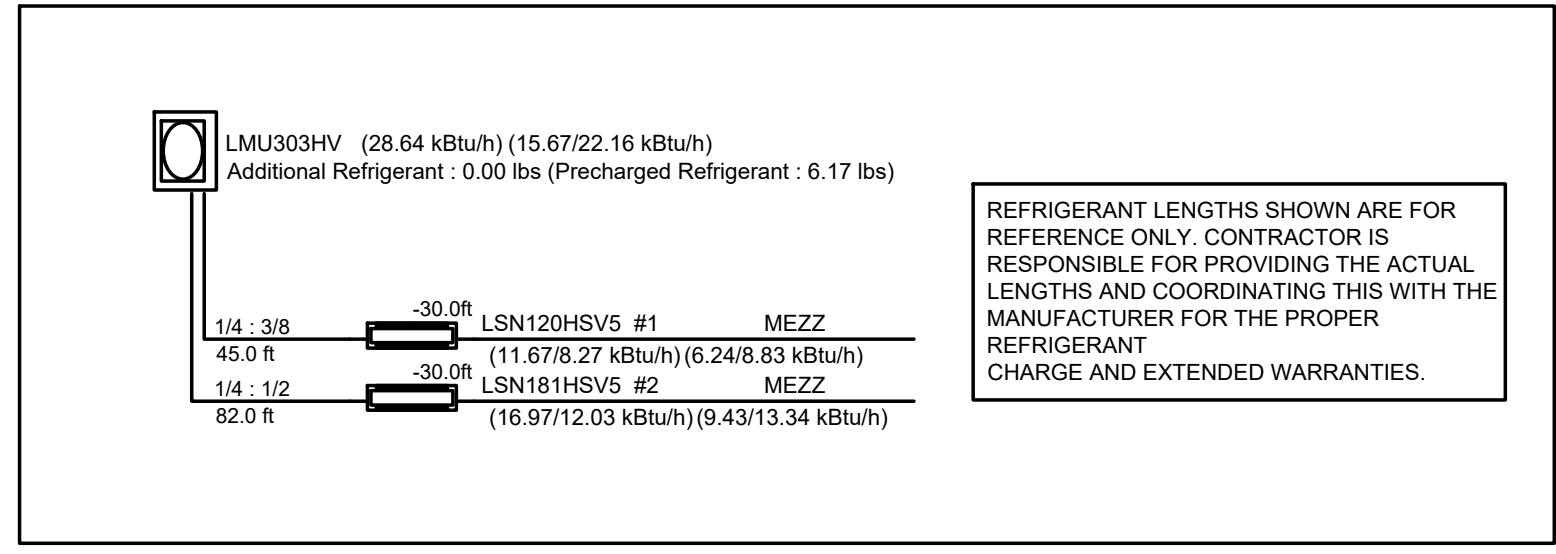
FAN SCHEDULE														
TAG	TYPE	AREA SERVED	MANUFACTURER	MODEL	DRME	CFM	ESP	WATTS	AMPS	RPM	VOLT/PHASE	MOUNTING	WEIGHT	NOTES
E-2	EXHAUST	KITCHEN	GREENHECK	SE1-8-440-VG	DIRECT	200	0.2	-	-	1565	115/60/1	WALL	16	1

1. FAN TO RUN OFF OF A TIMECLOCK.

EBS - RESIDENTIAL DIFFUSER, GRILLE, AND REGISTER SCHEDULE

CALLOUT	DESCRIPTION	FACE SIZE (IN)	INLET SIZE (IN)	MODEL	NOTE 1
CD 4W-1	4-WAY THREE CONE DIFFUSER	12x12	6Ø	TITUS TMS	REMOVABLE CORE FROM FACE OF DIFFUSER. INSULATE BACK OF DIFFUSER.
IWM-4	PLASTIC WALL VENT WITH FIXED LOUVERS.	6x6	4Ø	FAMCO AI	FIXED LOUVER INTAKE VENT. MOLDED SCREEN.
LD-1	ALUMINUM LINEAR DIFFUSER 2 SLOT 1"	36x4	36x4	TITUS / FL-10	FACTORY PAINTED WHITE BORDER
LD-2	ALUMINUM LINEAR DIFFUSER 2 SLOT 1"	24x4	24x4	TITUS / FL-10	FACTORY PAINTED WHITE BORDER
LD-3	ALUMINUM LINEAR DIFFUSER 2 SLOT 1"	48x6	8Ø	TITUS / FL-10	SUPPLY PLENUM WITH 8" INLET
LV-8	ALUMINUM STATIONARY LOUVER, 1.5 INCH DEEP, 45 DEGREE BLADE ANGLE, 50% FREE AREA	10x10	10x10	RUSKIN/ ELF15J	ALUMINUM BIRSCREEN
LV-9	ALUMINUM STATIONARY LOUVER, 1.5 INCH DEEP, 45 DEGREE BLADE ANGLE, 50% FREE AREA	12x12	12x12	RUSKIN/ ELF15J	ALUMINUM BIRSCREEN
RG-1	EGGORATE RETURN GRILLE	12x12	10x10	TITUS 50F	#26 WHITE FINISH.
RG-2S	EGGORATE RETURN GRILLE	24x12	22x10	TITUS 50F	#26 WHITE FINISH. PAINTABLE
RG-3S	EGGORATE RETURN GRILLE	24x24	22x22	TITUS 50F	#26 WHITE FINISH.
RR-1	STEEL RETURN GRILLE, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION	8x8	6x6	TITUS 350RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
RR-2	STEEL RETURN GRILLE, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION	14x8	12x6	TITUS 350RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
RR-4	STEEL RETURN GRILLE, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION	14x12	12x10	TITUS 350RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
RR-5	STEEL RETURN GRILLE, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION	20x20	18x18	TITUS 350RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
SDG-2	ALUMINUM SPIRAL DUCT MOUNTED DOUBLE DEFLECTION SUPPLY GRILLE WITH RADIUS END CAP, 3/4" SPACING WITH FRONT BLADES PARALLEL TO THE LONG DIMENSION.	12x6	10x4	TITUS S300FL	AIR SCOOP DAMPER
SR-1	STEEL DOUBLE DEFLECTION, 3/4" BLADE SPACING, FRONT BLADES PARALLEL TO LONG DIMENSION.	8x8	6x6	TITUS 300RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE. PAINTABLE FINISH
SR-1C	STEEL DOUBLE DEFLECTION, 3/4" BLADE SPACING, FRONT BLADES PARALLEL TO LONG DIMENSION.	8x8	6x6	TITUS 300RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
SR-2	STEEL DOUBLE DEFLECTION, 3/4" BLADE SPACING, FRONT BLADES PARALLEL TO LONG DIMENSION.	12x8	10x6	TITUS 300RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
SR-4	STEEL DOUBLE DEFLECTION, 3/4" BLADE SPACING, FRONT BLADES PARALLEL TO LONG DIMENSION.	20x8	18x6	TITUS 300RL	STEEL OPPOSED-BLADE DAMPER OPERABLE FROM THE FACE OF THE GRILLE.
TG-1	STEEL DOUBLE DEFLECTION, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION.	8x8	6x6	TITUS 350RL	
TG-2	STEEL DOUBLE DEFLECTION, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION.	12x8	10x6	TITUS 350RL	PAINTABLE GRILLE
TG-3	STEEL DOUBLE DEFLECTION, 3/4" BLADE SPACING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION.	24x12	20x10	TITUS 350RL	PAINTABLE GRILLE

- NOTES FOR ALL AIR DEVICES:
1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR MOUNTING TYPE
 2. DUCT RUN-OUT SAME SIZE AS NECK UNLESS NOTED OTHERWISE
 3. PLASTER FRAME WHERE LOCATED IN GYPSUM CEILING
 4. PAINT DUCTWORK THAT IS VISIBLE BEHIND AIR DEVICES MATTE BLACK
 5. AIR DEVICES SHALL BE ALUMINUM IN HIGH MOISTURE AREAS. (RESTROOMS)
 6. DO NOT CONNECT AIR DEVICE DIRECTLY TO DUCT. PROVIDE FULL SIZE TAKE-OFF WITH BALANCING DAMPER AND 45 DEGREE FLARED OUT CONNECTION TO MAIN OR BRANCH DUCT.
 7. WHERE AIR DEVICES ARE LOCATED IN A FIRE RATED ASSEMBLY, PROVIDE CEILING RADIATION DAMPERS, FIRE DAMPER, FIRE RATED INSULATION, AND REQUIRED PER CODE
 8. WHERE DAMPER IN DUCTWORK IS NOT ACCESSIBLE, PROVIDE METROPOLITAN AIR TRANSFER (MAT) MODEL RT-150 SERIES CABLE ACTUATED DAMPER DRIVE SYSTEM, OR APPROVED EQUAL.
 9. PROVIDE SAMPLE AIR DEVICES STYLE AND COLOR. FOR OWNER'S REPRESENTATIVE APPROVAL, BEFORE ORDERING FINAL AIR DEVICES.
 10. ADD INSULATION TO THE BACK OF ALL AIR DEVICES WHERE DUCTWORK ALSO REQUIRES INSULATION.



CITYSTUDIOS ARCHITECTURE
 1148 Main Street
 Cincinnati, OH 45202
 ph. 513.621.0750
 citystudiosarch.com

G.E.I. engineering
 5824 Yorkdale Rd, Suite 100
 Liberty Township, Ohio 45044
 513-549-1434
 www.gie-engineering.com

PR-07711
ENGINEERED BUILDING SYSTEMS INC.
 TEAMWORK • COLLABORATION SHARED SUCCESS
 515 Marwood Street, Suite 204
 Newport, KY 47071 (502) 281-0585
 MEP Consulting Services, Inc. in OH
 Copyright © 2015

THIS DOCUMENT IS THE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC. NEITHER THE DOCUMENT NOR THE INFORMATION IT CONTAINS MAY BE USED FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS PREPARED WITHOUT WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

DURNER BUILDING
 2453 GILBERT AVENUE
 CINCINNATI, OH 45206

modelgroup
 DEVELOPMENT • CONSTRUCTION • MANAGEMENT

ISSUE LOG:
 PERMIT SUBMITTAL 06.01.23
 ENGINEERING CHANGE 04.12.23

M2.0
 MECHANICAL
 DETAILS & SCHEDULES