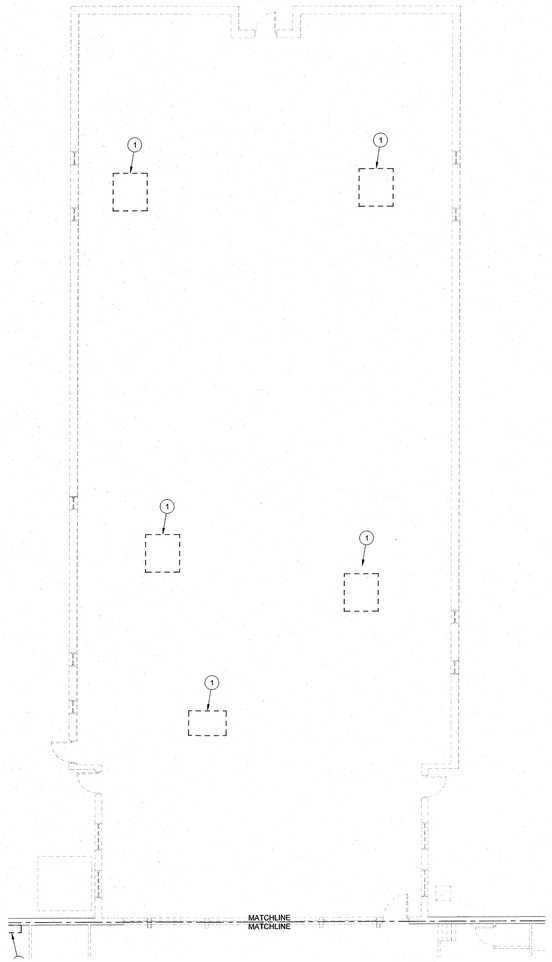
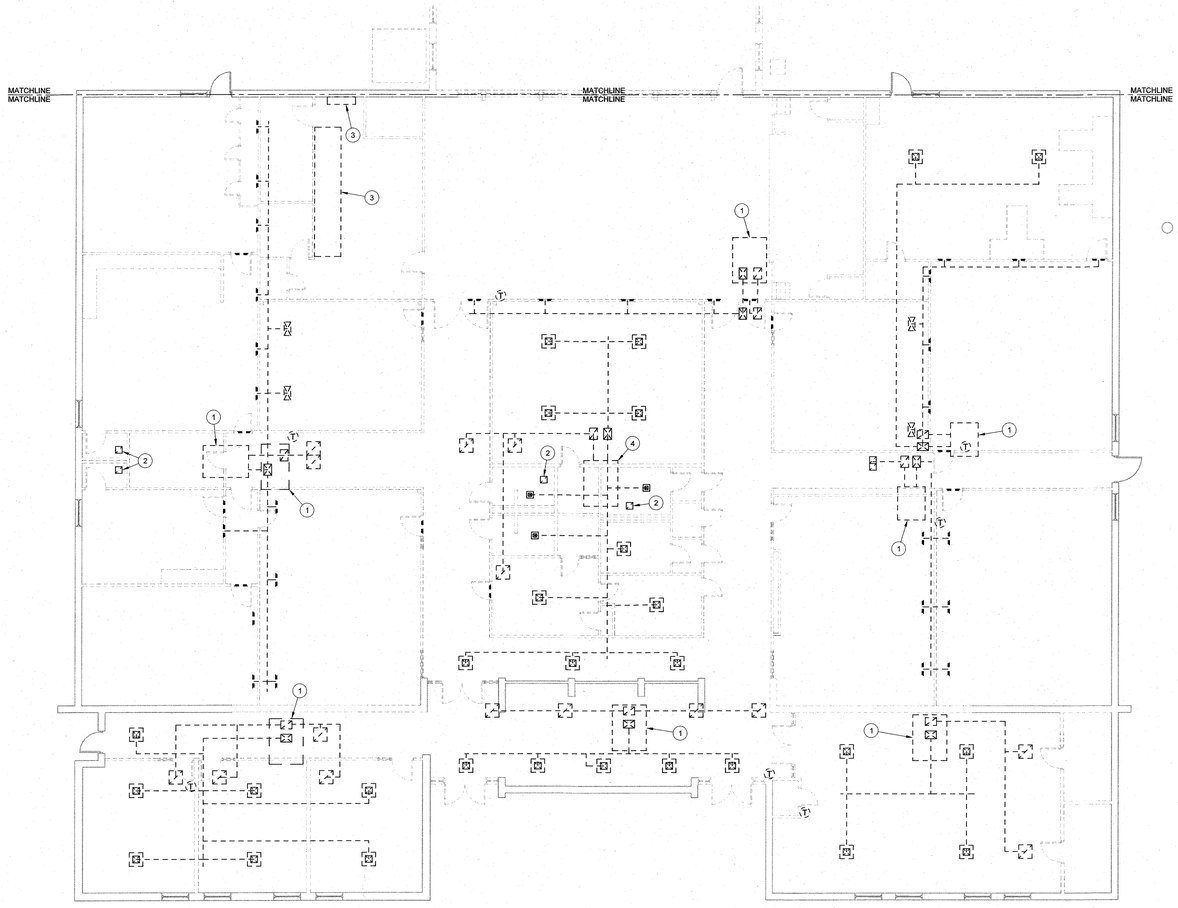


FLOOR PLAN - NORTH
MECHANICAL DEMOLITION
SCALE: 3/32" = 1'-0"



FLOOR PLAN - SOUTH - MECHANICAL DEMOLITION
SCALE: 3/32" = 1'-0"

KEYED NOTES

1. REMOVE EXISTING ROOFTOP UNIT AND ALL ASSOCIATED ITEMS, DUCTWORK, DIFFUSERS/GRILLES, PIPING, HANGERS, THERMOSTATS, WIRING, ETC. PATCH ROOF AS REQUIRED BY ARCHITECT.
2. REMOVE EXISTING EXHAUST FANS AND ALL ASSOCIATED ITEMS, SHOWN DASHED.
3. REMOVE EXISTING KITCHEN HOOD AND ALL ASSOCIATED ITEMS, SHOWN DASHED. REMOVE ALL ASSOCIATED FANS AND DUCT. PATCH ROOF AS REQUIRED BY ARCHITECT.
4. REMOVE EXISTING ROOFTOP UNIT AND ALL ASSOCIATED ITEMS. MODIFY ROOF OPENING TO ACCOMMODATE NEW ROOFTOP UNIT.

GENERAL NOTES

A. VERIFY EXACT LOCATION OF ALL EXISTING EQUIPMENT, DUCTWORK, DIFFUSERS, GRILLES, PIPING AND THERMOSTATS AT JOBSITE.

B. CONTRACTOR SHALL COORDINATE ALL MECHANICAL DISCONNECTIONS AND INTERRUPTIONS WITH ARCHITECT AND OWNER.

C. CONTRACTOR SHALL WALK THE SITE AND BECOME FAMILIAR WITH ALL EXISTING SYSTEMS AND INSTALLATIONS. CONTRACTOR SHALL TAKE CARE TO PROTECT ALL OPERATIONAL SYSTEMS. ANY EXISTING SYSTEMS THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR.

D. FOR ALL ITEMS NOTED TO BE REMOVED, REMOVE ALL ASSOCIATED ITEMS, INCLUDING ALL HANGERS, SUPPORTS, WIRING, ETC.

STATE OF TEXAS
JUSTIN M. FINCHER
98476
LICENSED PROFESSIONAL ENGINEER
7-28-2022

REGISTERED ARCHITECT
CLINTON W. FARRIS
28983
STATE OF TEXAS

CLINTON W. FARRIS #28983
DATE SIGNED: 7.28.22

HPA
ESTABLISHED 1962
ARCHITECTS · PROGRAMMERS · PLANNERS
4724 OLD JACKSBORO HIGHWAY
WICHITA FALLS, TEXAS 76302-3599
VOICE: 940.767.1421 FAX: 940.397.0273
WEB: www.hpa1962.com

FINCHER ENGINEERING, LLC
FINCHER ENGINEERING, LLC
TX FIRM #F-16408
5621 114TH ST., SUITE 100
LUBBOCK, TX 79424
PH: 806-701-5109
WWW.FINCHERENG.COM

ADDITIONS AND RENOVATIONS TO THE
GORDON I.S.D. CAMPUS
FOR GORDON I.S.D.
112 RUSK STREET
GORDON, TEXAS 76453

DRAWN BY: FINCHER

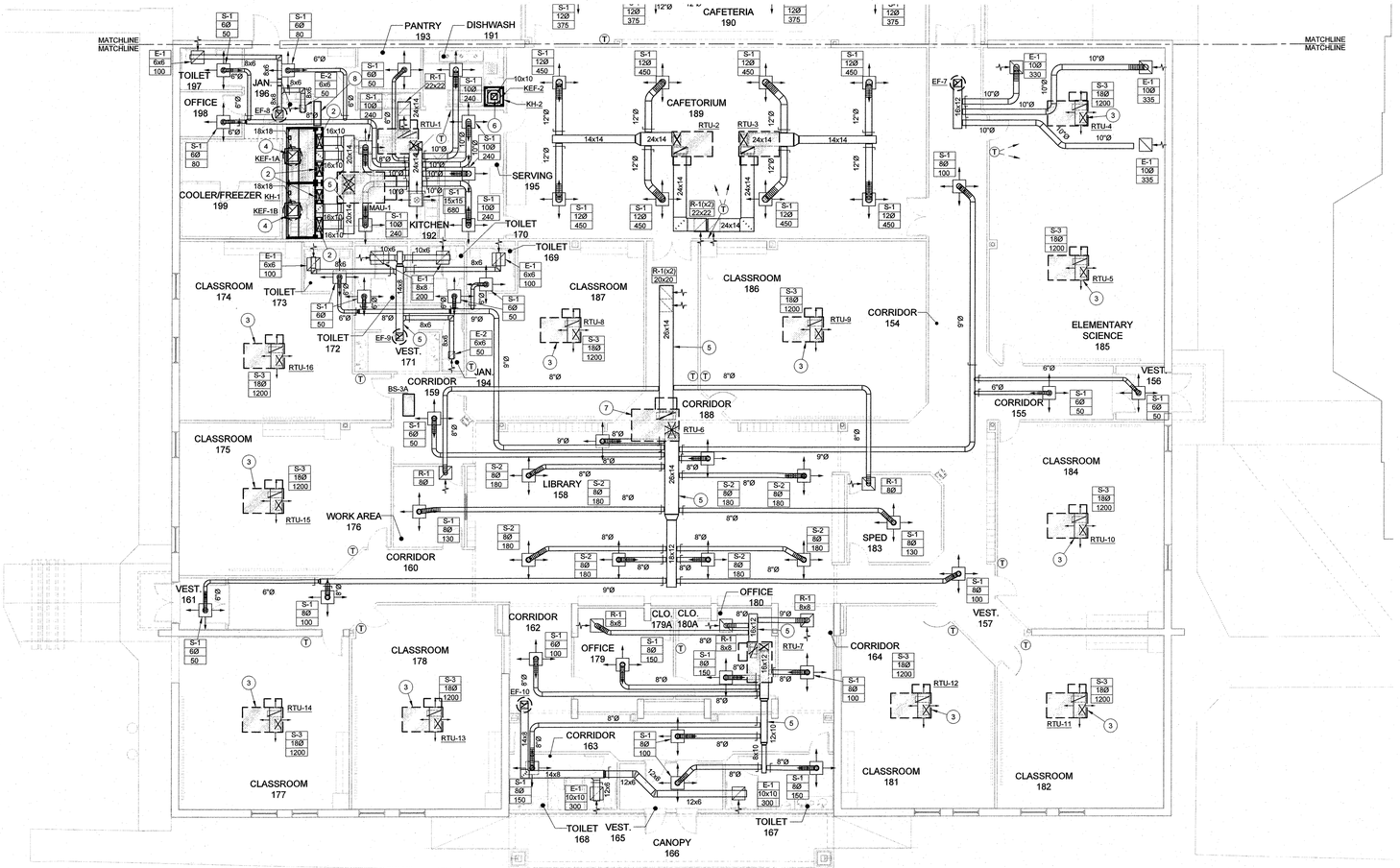
DATE: 28 JULY 2022

REVISIONS

NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

SHEET NO.
MD101



FLOOR PLAN - ELEMENTARY - MECHANICAL

SCALE: 3/32" = 1'-0"

NORTH

GENERAL NOTES

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES.

B. LOCATE ALL THERMOSTATS A MINIMUM OF SIX INCHES FROM WALL CORNERS, DOOR FRAMES AND OTHER DEVICES. MOUNT THERMOSTATS AT 48" A.F.F. COORDINATE THE LOCATION OF ALL THERMOSTATS WITH ARCHITECT PRIOR TO INSTALLATION.

C. COORDINATE AT JOBSITE EXACT DUCT ROUTING WITH ALL EQUIPMENT, CEILINGS, LIGHTS, AND PIPING PRIOR TO INSTALLATION.

D. THE CONTRACTOR SHALL VERIFY ALL STRUCTURAL CONDITIONS FOR CEILING SPACE AND EXACT DUCT ROUTE PRIOR TO FABRICATION. FIELD VERIFY EXACT ROUTING OF DUCTWORK TO ALLOW PROPER LOCATION OF LIGHTS AS SHOWN ON LIGHTING PLAN AND REQUIRED CEILING HEIGHTS.

E. WHEREVER THE MANUAL BALANCING DAMPERS ARE RENDERED INACCESSIBLE BEHIND NON REMOVABLE CEILINGS OR FURRINGS, OR OTHER CONSTRUCTION THAT IS NOT EASILY REMOVABLE TO PERMIT ACCESS TO THE DAMPERS, THE DAMPERS SHALL BE EQUAL TO YOUNG REGULATOR NO. 1200 RIGHT ANGLE WORM GEAR REGULATOR, FLEX SHAFT, AND 301-FS CONCEALED DAMPER REGULATOR WITH PRIMER COVER PLATE FOR FIELD PAINTING TO MATCH CEILING.

KEYED NOTES

1. TURN OUTSIDE AIR DUCT UP THRU ROOF TO GOOSENECK. PROVIDE MBD AND MOTORIZED DAMPER IN THE VERTICAL. INTERLOCK MOTORIZED DAMPER WITH CORRESPONDING FC. REFER TO GOOSENECK AND CEILING CASSETTE DETAIL.
2. TURN MAKE UP AIR DUCT DOWN TO CONNECT TO KITCHEN HOOD SUPPLY COLLARS. TRANSITION AS REQUIRED.
3. S.A. AND R.A. DUCTS DOWN TO PLENUM ON CONCENTRIC DIFFUSER. S.A. AND R.A. DUCTS SIZED TO MATCH OPENING IN ROOFTOP UNIT THEN TRANSITION AT CONNECTION TO PLENUM. LOCATE UNIT ON EXISTING ROOF BY REMOVING EXISTING ROOF OUT TO EXTENTS OF CURB AND TRANSITION IN CURB AS REQUIRED, REFER TO DETAIL.
4. KITCHEN EXHAUST GREASE DUCT DOWN TO EXHAUST COLLAR OF KITCHEN HOOD, TRANSITION AS REQUIRED. REFER TO KITCHEN FAN AND HOOD DETAILS.
5. ROUTE RECTANGULAR DUCT MAINS IN JOIST SPACE. ROUTE DUCT RUNOUTS THRU JOISTS. COORDINATE DUCT ROUTING WITH STRUCTURE PRIOR TO INSTALLATION.
6. DISHWASHER EXHAUST DUCT DOWN TO CONNECT TO EXHAUST COLLAR OF DISHWASHER HOOD. TRANSITION AS REQUIRED. REFER TO DISHWASHER HOOD DETAIL.
7. NEW ROOFTOP LOCATED ON EXISTING ROOF OPENING. MODIFY ROOF OPENING AND INSTALL NEW CURB AS REQUIRED TO ACCOMMODATE NEW UNIT.
8. KH-1 ANSUL CABINET, REFER TO SHEET M404.

STATE OF TEXAS
JUSTIN M. FINCHER
98476
LICENSED
PROFESSIONAL ENGINEER
7-28-2022

REGISTERED ARCHITECT
CLINTON W. FARRIS
28983
STATE OF TEXAS

CLINTON W. FARRIS #28983
DATE SIGNED: 7.28.22

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ESTABLISHED 1962
ARCHITECTS · PROGRAMMERS · PLANNERS
4724 OLD JACKSBORO HIGHWAY
WICHITA FALLS, TEXAS 76302-3599
VOICE: 940.767.1421 FAX: 940.397.0273
WEB: www.hpa1962.com

FINCHER ENGINEERING, LLC
FINCHER ENGINEERING, LLC
TX FIRM #F-16408
5621 114TH ST., SUITE 100
LUBBOCK, TX 79424
PH: 806-701-5109
WWW.FINCHERENG.COM

ADDITIONS AND RENOVATIONS TO THE
GORDON I.S.D. CAMPUS
FOR GORDON I.S.D.
112 RUSK STREET
GORDON, TEXAS 76453

DRAWN BY: FINCHER

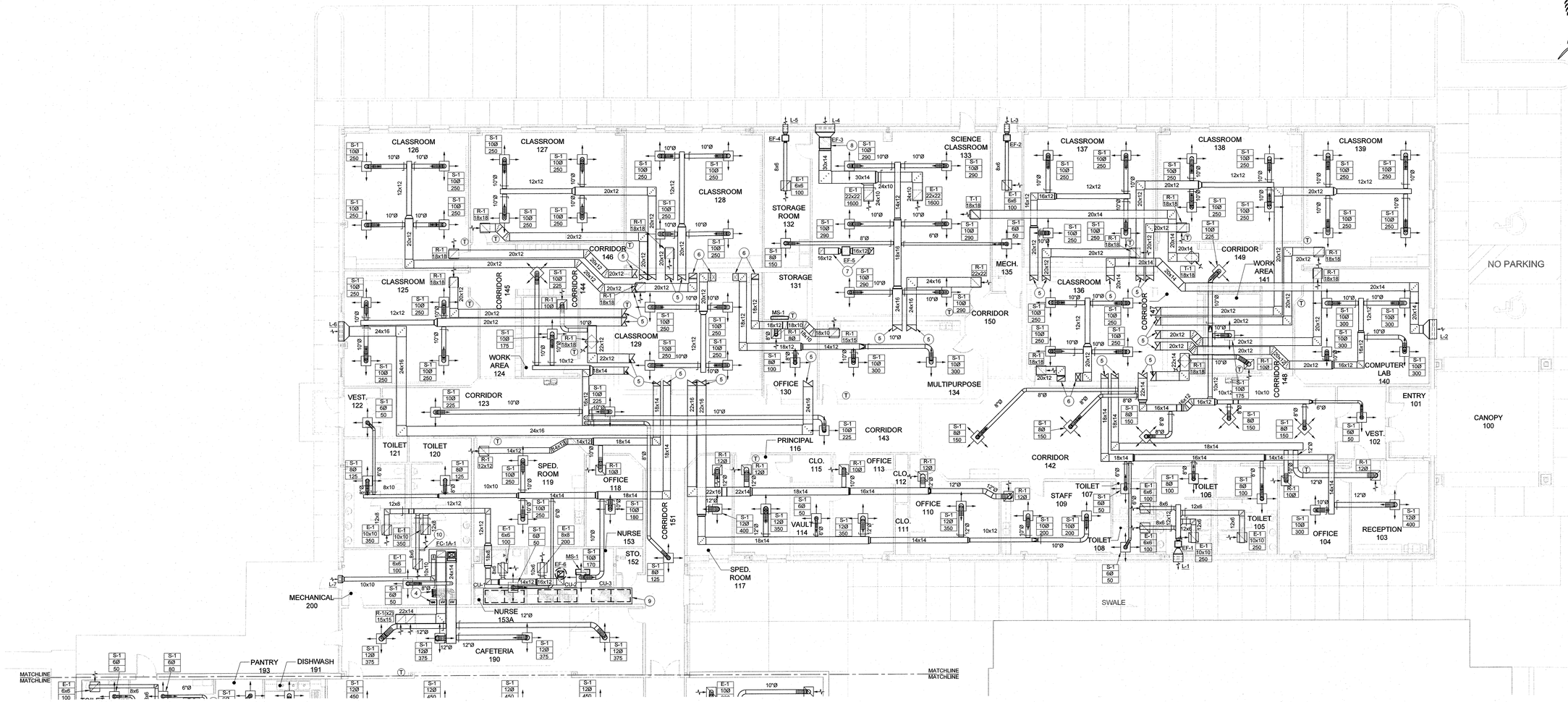
DATE: 28 JULY 2022

REVISIONS

NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

SHEET NO.
M101



FLOOR PLAN - SECONDARY - MECHANICAL

SCALE: 3/32" = 1'-0"

NORTH

FLOOR PLAN - MEZZANINE- MECHANICAL

SCALE: 3/32" = 1'-0"

NORTH

GENERAL NOTES

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES.

B. LOCATE ALL THERMOSTATS A MINIMUM OF SIX INCHES FROM WALL CORNERS, DOOR FRAMES AND OTHER DEVICES. MOUNT THERMOSTATS AT 48" A.F.F. COORDINATE THE LOCATION OF ALL THERMOSTATS WITH ARCHITECT PRIOR TO INSTALLATION.

C. COORDINATE AT JOBSITE EXACT DUCT ROUTING WITH ALL EQUIPMENT, CEILINGS, LIGHTS, AND PIPING PRIOR TO INSTALLATION.

D. THE CONTRACTOR SHALL VERIFY ALL STRUCTURAL CONDITIONS FOR CEILING SPACE AND EXACT DUCT ROUTE PRIOR TO FABRICATION. FIELD VERIFY EXACT ROUTING OF DUCTWORK TO ALLOW PROPER LOCATION OF LIGHTS AS SHOWN ON LIGHTING PLAN AND REQUIRED CEILING HEIGHTS.

E. ALL DUCT PENETRATIONS TO ALL SHELTER WALLS AND CEILING/DECK ABOVE SHALL BE PROTECTED WITH BURGLAR BARS EQUAL TO TITUS SG-BG-FM AND INSTALLED PER MANUFACTURER REQUIREMENTS.

KEYED NOTES

1. MECHANICAL MEZZANINE. INSTALL ALL UNITS AND DUCTWORK IN EQUIPMENT PLATFORM IN AN ORDERLY MANNER TO MAINTAIN MAINTENANCE CLEARANCE THROUGHOUT ENTIRE AREA. MAINTAIN A 3' DEEP AND 6' TALL AREA CLEAR IN FRONT OF ALL UNITS AND A 3' WIDE AND 6' TALL WALK PATH BETWEEN ATTIC ACCESS DOOR AND ALL UNITS. INSTALL RUNOUTS SERVING ROOMS BELOW IN THE CEILING SPACE BELOW.
2. DUCT CONTINUATION. REFER TO FLOOR PLAN PLAN FOR CONTINUATION.
3. TURN DUCT DOWN THRU EQUIPMENT PLATFORM FLOOR/SHELTER CEILING AND INSTALL BURGLAR BARS. REFER TO GENERAL NOTE E. REFER TO FLOOR PLAN FOR CONTINUATION.
4. 4" CPVC COMBUSTION AIR & FLUE PIPES FROM WATER HEATER UP THRU ROOF IN CONCENTRIC ADAPTER. FLUE SHALL TERMINATE 36" ABOVE ANY OUTSIDE AIR OR COMBUSTION AIR INTAKE. PROVIDE CONCENTRIC ADAPTER AS MANUFACTURED BY EQUIPMENT MANUFACTURER.
5. DUCT CONTINUATION. REFER TO MEZZANINE PLAN FOR CONTINUATION.
6. TURN DUCT UP THRU MEZZANINE FLOOR TO MEZZANINE LEVEL. REFER TO MEZZANINE PLAN FOR CONTINUATION.
7. TURN EXHAUST DUCT DOWN TO CONNECT TO FUME HOOD. ALL DUCTS FROM HOOD UP TO FAN SHALL BE STAINLESS STEEL DUCTS WITH WELDED JOINTS. TURN DUCT UP THRU ROOF TO GOOSENECK. EXHAUST FAN SHALL BE SUSPENDED ABOVE CEILING WITH SPRING ISOLATORS.
8. EF-3 TO BE CONTROLLED BY LAB UTILITY CONTROLLER. REFER TO PLUMBING.
9. MOUNT CONDENSING UNITS ON RAISED CURB PLATFORM, REFER TO DETAIL.
10. VRV SYSTEM CENTRAL CONTROLLER. ALSO MOUNT OAU CONTROLLER AT THIS LOCATION.
11. SUSPEND OAU 36" ABOVE FLOOR OF MEZZANINE. TURN OUTSIDE AIR DUCT UP HIGH IN MEZZANINE TO MINIMUM OF 6' ABOVE FLOOR OF MEZZANINE.

STATE OF TEXAS
JUSTIN M. FINCHER
98476
LICENSED PROFESSIONAL ENGINEER
7-28-2022

REGISTERED ARCHITECT
CLINTON W. FARRIS
83983
STATE OF TEXAS
CLINTON W. FARRIS #28983
DATE SIGNED: 1.28.22

HPA
ESTABLISHED 1962
ARCHITECTS · PROGRAMMERS · PLANNERS
4724 OLD JACKSBORO HIGHWAY
WICHITA FALLS, TEXAS 76302-3599
VOICE: 940.767.1421 FAX: 940.397.0273
WEB: www.hpa1962.com

FINCHER ENGINEERING, LLC
FINCHER ENGINEERING, LLC
TX FIRM #F-16408
5621 114TH ST., SUITE 100
LUBBOCK, TX 79424
PH: 806-701-5109
WWW.FINCHERENG.COM

ADDITIONS AND RENOVATIONS TO THE

GORDON I.S.D. CAMPUS

FOR GORDON I.S.D.

112 RUSK STREET

GORDON, TEXAS 76453

DRAWN BY: FINCHER

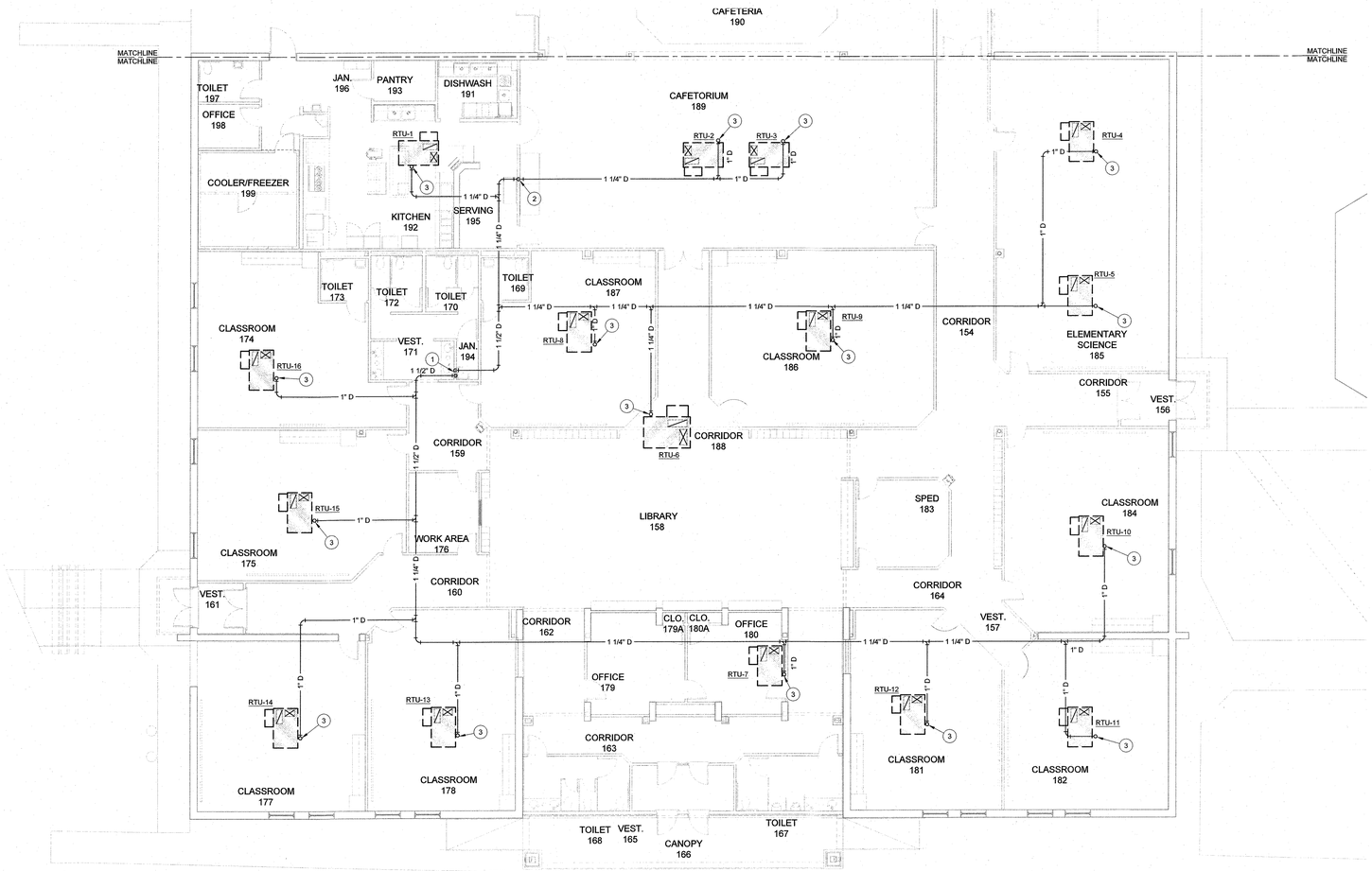
DATE: 28 JULY 2022

REVISIONS

NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

SHEET NO.
M102



FLOOR PLAN - ELEMENTARY - MECHANICAL PIPING

SCALE: 3/32" = 1'-0"

NORTH

GENERAL NOTES

A. THE CONTRACTOR SHALL VERIFY ALL STRUCTURAL CONDITIONS FOR CEILING SPACE AND EXACT DUCT ROUTE PRIOR TO FABRICATION. FIELD VERIFY EXACT ROUTING OF DUCTWORK TO ALLOW PROPER LOCATION OF LIGHTS AS SHOWN ON LIGHTING PLAN AND REQUIRED CEILING HEIGHTS.

B. PROVIDE P-TRAP ON ALL DRAIN LINES FROM EACH COOLING COIL; REFER TO DETAIL.

C. PROVIDE P-TRAP AND CONDENSATE DRAIN LINE AT ALL ROOFTOP UNITS. REFER TO DETAIL. ALL CONDENSATE DRAIN LINES SHALL BE TYPE L COPPER WITH SOLDERED JOINTS.

KEYED NOTES

1. TURN TWO 1-1/2" CONDENSATE DRAIN LINES DOWN IN WALL TO 16" AFF. TURN LINE OUT WALL AND DOWN TO SPILL TO MOP BASIN WITH 1" AIR GAP. PROVIDE ESCUTCHEON AT WALL PENETRATION.
2. TURN CONDENSATE DRAIN LINE DOWN FROM HIGH ROOF LEVER, VERIFY EXACT ROUTING WITH EXISTING CONDITIONS.
3. TURN CONDENSATE DRAIN LINE UP TO THRU ROOF TO CONNECT TO ROOFTOP UNIT, REFER TO DETAIL.

STATE OF TEXAS
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98476
LICENSED
PROFESSIONAL ENGINEER
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#28983
STATE OF TEXAS

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TX FIRM #F-16408
5621 114TH ST., SUITE 100
LUBBOCK, TX 79424
PH: 806-701-5109
WWW.FINCHERENG.COM

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FOR GORDON I.S.D.

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PROJECT NO.
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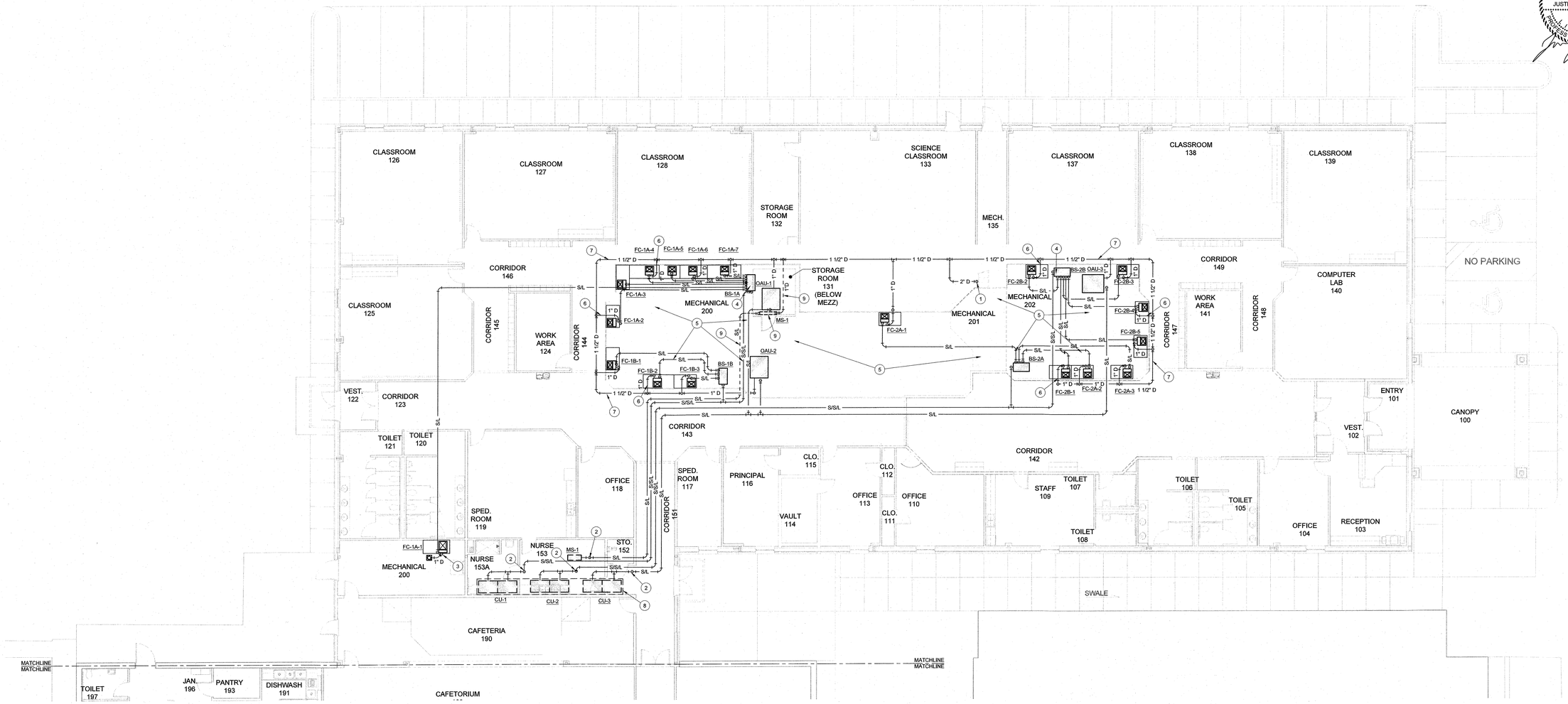
M201



FLOOR PLAN AND MEZZANINE PLAN - SECONDARY - MECHANICAL PIPING

SCALE: 3/32" = 1'-0"

NORTH

GENERAL NOTES

A. THE CONTRACTOR SHALL VERIFY ALL STRUCTURAL CONDITIONS FOR CEILING SPACE AND EXACT DUCT ROUTE PRIOR TO FABRICATION. FIELD VERIFY EXACT ROUTING OF DUCTWORK TO ALLOW PROPER LOCATION OF LIGHTS AS SHOWN ON LIGHTING PLAN AND REQUIRED CEILING HEIGHTS.

B. PROVIDE P-TRAP ON ALL DRAIN LINES FROM EACH COOLING COIL; REFER TO DETAIL.

C. REFRIGERANT PIPING IS SHOWN FOR DIAGRAMMATIC PURPOSES ONLY. CONTRACTOR SHALL COORDINATE EXACT ROUTING OF PIPING AT JOBSITE. PROVIDE ALL REQUIRED OFFSETS AND ELBOWS AS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM.

KEYED NOTES

1. TURN 2" CONDENSATE DRAIN LINE DOWN IN WALL TO 16" AFF. TURN LINE OUT WALL AND DOWN TO SPILL TO MOP BASIN WITH 1" AIR GAP. PROVIDE ESCUTCHEON AT WALL PENETRATION.
2. TURN REFRIGERANT LINES DOWN THRU ROOF. REFER TO DETAIL.
3. TURN CONDENSATE DRAIN LINE DOWN FROM UNIT TO 6" A.F.F. AND ROUTE ALONG FLOOR TO SPILL TO FLOOR DRAIN. SECURE TO FLOOR USING PIPE CLAMPS AND UNISTRUT.
4. TURN THE S/S/L AND ALL UNIT S/L REFRIGERANT LINES DOWN TO CONNECT TO BRANCH SELECTOR.
5. MECHANICAL MEZZANINE. INSTALL ALL UNITS AND PIPING IN MEZZANINE IN AN ORDERLY MANNER TO MAINTAIN MAINTENANCE CLEARANCE THROUGHOUT ENTIRE AREA. MAINTAIN A 3' DEEP AND 6' TALL AREA CLEAR IN FRONT OF ALL UNITS AND A 5' WIDE AND 6' TALL WALK PATH BETWEEN MEZZANINE ACCESS LADDER AND ALL UNITS. INSTALL ALL REFRIGERANT PIPING SHOWN ABOVE THE 6' ABOVE MEZZANINE FLOOR AND TURN UP AND DOWN FROM UNITS AND BS UNIT AS REQUIRED TO MAINTAIN THAT CLEARANCE.
6. 1" CONDENSATE DRAIN UNIT TO SERVE INDOOR UNIT, TYPICAL OF ALL UNITS.
7. ROUTE CONDENSATE DRAIN LINE AROUND PERIMETER OF MEZZANINE TO KEEP MEZZANINE FLOOR CLEAR. ATTACH DRAIN LINE TO MEZZANINE WALL/HANDRAIL SUPPORTS AS IT WRAPS AROUND MEZZANINE AND MAINTAINS MINIMUM 1/8" PER FOOT DOWNWARD SLOPE TOWARDS THE TURN DOWN TO MOP SINK.
8. MOUNT CONDENSING UNITS ON NEW ADDITION ROOF WITH NEW CURB/PLATFORM, REFER TO DETAIL.
9. WALL MOUNTED MINI SPLIT LOCATED BELOW MEZZANINE IN STORAGE ROOM 131. REFRIGERANT LINES AND CONDENSATE DRAIN LINES SHOWN DASHED SHALL BE LOCATED IN CEILING SPACE BELOW MEZZANINE.

STATE OF TEXAS
JUSTIN M. FINCHER
98476
LICENSED
PROFESSIONAL ENGINEER
7-28-2022

REGISTERED ARCHITECT
CLINTON W. FARRIS
28983
STATE OF TEXAS

CLINTON W. FARRIS #28983
DATE SIGNED: 7.28.22

HPA
ESTABLISHED 1962
ARCHITECTS · PROGRAMMERS · PLANNERS
4724 OLD JACKSBORO HIGHWAY
WICHITA FALLS, TEXAS 76302-3599
VOICE: 940.767.1421 FAX: 940.397.0273
WEB: www.hpa1962.com

FINCHER ENGINEERING, LLC
FINCHER ENGINEERING, LLC
TX FIRM #F-16408
5621 114TH ST., SUITE 100
LUBBOCK, TX 79424
PH: 806-701-5109
WWW.FINCHERENG.COM

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FOR GORDON I.S.D.
112 RUSK STREET
GORDON, TEXAS 76453

DRAWN BY: FINCHER

DATE: 28 JULY 2022

REVISIONS

NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

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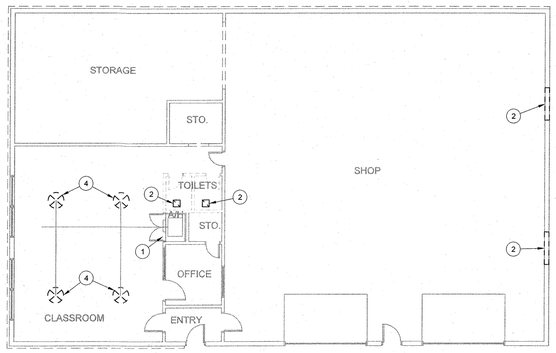
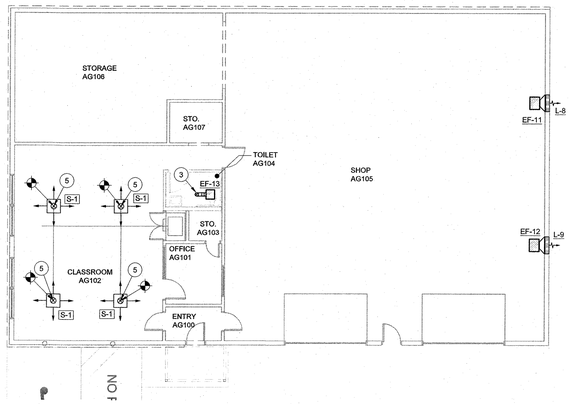
M202



FLOOR PLAN - AG BUILDING - MECHANICAL DEMOLITION

SCALE: 3/32" = 1'-0"

NORTH



FLOOR PLAN - AG BUILDING - MECHANICAL

SCALE: 3/32" = 1'-0"

NORTH

GENERAL NOTES

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES.

B. LOCATE ALL THERMOSTATS A MINIMUM OF SIX INCHES FROM WALL CORNERS, DOOR FRAMES AND OTHER DEVICES. MOUNT THERMOSTATS AT 48" A.F.F. COORDINATE THE LOCATION OF ALL THERMOSTATS WITH ARCHITECT PRIOR TO INSTALLATION.

C. COORDINATE AT JOBSITE EXACT DUCT ROUTING WITH ALL EQUIPMENT, CEILINGS, LIGHTS, AND PIPING PRIOR TO INSTALLATION.

D. THE CONTRACTOR SHALL VERIFY ALL STRUCTURAL CONDITIONS FOR CEILING SPACE AND EXACT DUCT ROUTE PRIOR TO FABRICATION. FIELD VERIFY EXACT ROUTING OF DUCTWORK TO ALLOW PROPER LOCATION OF LIGHTS AS SHOWN ON LIGHTING PLAN AND REQUIRED CEILING HEIGHTS.

KEYED NOTES

1. EXISTING UNIT TO REMAIN.
2. REMOVE EXISTING EXHAUST FAN, SHOWN DASHED AND ASSOCIATED LOUVER. MODIFY OPENING AS REQUIRED TO ACCOMMODATE NEW LOUVER.
3. EXHAUST DUCT UP THRU ROOF TO ROOF CAP EQUAL TO GREENHECK GRS-6.
4. REMOVE EXISTING SUPPLY DIFFUSERS, SHOWN DASHED.
5. CONNECT NEW SUPPLY DIFFUSERS TO EXISTING SUPPLY DUCT RUNOUTS, TRANSITION AS REQUIRED. FIELD VERIFY AND MATCH NECKSIZE OF EXISTING DIFFUSER AND BALANCE AIRFLOW TO MATCH EXISTING.

STATE OF TEXAS
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98476
LICENSED
PROFESSIONAL ENGINEER
7-28-2022

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STATE OF TEXAS
CLINTON W. FARRIS #28983
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HPA
ESTABLISHED 1962
ARCHITECTS · PROGRAMMERS · PLANNERS
4724 OLD JACKSBORO HIGHWAY
WICHITA FALLS, TEXAS 76302-5599
VOICE: 940.767.1421 FAX: 940.397.0273
WEB: www.hpa1962.com

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TX FIRM #F-16408
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PH: 806-701-5109
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NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

SHEET NO.
M301

VRV SYSTEMS SCHEDULE

CONDENSING UNITS

MARK	TYPE	SERVES	CAPACITY (BTUH)		DESIGN CONDITIONS		ELECTRICAL DATA	EFFICIENCY (NON DUCTED/DUCTED)				EXAMPLE: DAIKIN
			COOLING	HEATING	COOLING DRY BULB	HEATING DRY BULB		EER	IEER	COP 47	COP 17	
CU-1	HEAT RECOVERY	CLASSROOMS	318,908	301,894	102 DEG F	0 DEG F	208V, 3 PH, 60 Hz	9.9/9.5	20/17.3	3.53/3.2	2.12/2.05	REYQ336XATJA
CU-2	HEAT RECOVERY	CLASSROOMS	265,542	281,779	102 DEG F	0 DEG F	208V, 3 PH, 60 Hz	11/10.3	21/17.9	3.51/3.2	2.2/2.08	REYQ288XATJA
CU-3	HEAT PUMP	OUTDOOR AIR UNITS	270,937	241,272	102 DEG F	0 DEG F	208V, 3 PH, 60 Hz	10.5/10.1	20.1/19.6	3.25/3.3	2.07/2.13	RXYQ288XATJA

NOTES:

1. MANUFACTURER MUST BE CERTIFIED, LISTED, AND LABELED PER AHRI 1230
2. SYSTEM RATING DATA BASED ON DESIGN AMBIENT CONDTIONS FOR COOLING AND FOR HEATING
3. SYSTEM MUST PROVIDE CONTINUOUS HEATING DURING DEFROST AND OIL RETURN. SYSTEMS WITHOUT THIS CAPABILITY MUST BE DE-RATED TO ACCOUNT FOR HEATING LOST DURING DEFROST CYCLE AND UNIT
4. MANUFACTURER MUST HAVE PUBLISHED CONTINUOUS PERFORMANCE RATING DATA AT LEAST 120F AND -4F TO ENSURE PERFORMANCE DURING EXTREME CONDITIONS
5. CONDENSING UNITS MUST HAVE FULLY MODULATING INVERTER COMPRESSORS
6. CONDENSING UNITS MUST HAVE AUTO CHANGEOVER FUNCTIONS
7. ALL MODE CHANGEOVER DEVICES AND FCU REFRIGERANT CONTROLS SHALL BE VIA ELECTRONIC EXPANSION VALVES (EEVS) WITH 2000:1 THROTTLING RANGE
8. EEV ACTUATORS MUST BE REMOVABLE FROM VALVE BODY WITHOUT DISTURBING THE REFRIGERANT SYSTEM
9. SYSTEMS USING SOLENOID CONTROL VALVES MUST INCLUDE FULL PORT ISOLATION VALVES AND AFTER REFRIGERATION CONTROL BOX AND ACOUSTIC TREATMENT TO PROVIDE NO GREATER THAN NC20 IN THE OCCUPIED MODE
10. CONDENSING UNITS MUST BE FURNISHED WITH PROTECTIVE COIL COATING TO WITHSTAND ASTM B117 SALT SPRAY TEST FOR A MINIMUM OF 2500 HOURS. PERFORMANCE OF SYSTEM MUST BE DE-RATED FOR COIL COATING
11. SYSTEM SHALL BE PROVIDED WITH i-TOUCH MANAGER CONTROLLER WITH WEB BASED SOFTWARE FOR DISPLAYING UP TO 8 D111 -NET SSTEMS WITH 128 INDOOR UNITS PER SYSTEM. PC BY OTHERS. REFER TO SPECIFICATIONS.
12. MANUFACTURERS SUBMITTAL MUST INCLUDE REFRIGERANT PIPING DIAGRAM WITH PIPE DIAMETERS, LENGTHS AND REFRIGERANT VOLUME
13. SUBSTITUE MANUFACTURERS SHALL BE RESPONSIBLE FOR ADDITIONAL PIPING AND REFRIGERANT
14. CONTRACTOR TO VERIFY PIPING DIMENSIONS
15. INSTALLING CONTRACTOR MUST HAVE SUCCESSFULLY COMPLETED MANUFACTURERS CERTIFIED INSTALLATION CLASS WITHIN PAST 36 MONTHS
16. CONTRACTOR TO FURNISH AND INSTALL INSUALTION ON REFRIGERANT PIPING
17. CONDENSING UNIT SHALL PROVIDE AUTO CHARGING AND INDOOR UNIT AUTO ADDRESSING CAPABILITY
18. MANUFACTURER MUST PROVIDE 10 YEARS PARTS WARRANTS ON ALL FCU'S, CONDENSING UNITS, MODE CHANGEOVER DOVICES AND ZONE CONTROLS. WARRANTY CONDITIONS MUST BE CLARIFIED DURING SUBMITTAL PHASE

INDOOR UNITS

MARK	SERVES	TYPE	FAN DATA			ELECTRICAL DATA	COOLING CAPACITY		HEATING CAPACITY	EXAMPLE (DAIKIN)
			CFM	O.A CFM	ESP		TOTAL (BTUH)	SENSIBLE (BTUH)	(BTUH)	
FC-1A-1	CAFETERIA 190	MULTI POSITION AIR HANDLER	1600	200	0.5"	208V, 1 PH, 60 Hz	45470	31184	56000	FXTQ48TAVJUA
FC-1A-2	CLASSROOM 125	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28331	20310	35300	FXTQ30TAVJUA
FC-1A-3	CLASSROOM 126	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28331	20310	35300	FXTQ30TAVJUA
FC-1A-4	CLASSROOM 127	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28331	20310	35300	FXTQ30TAVJUA
FC-1A-5	CLASSROOM 128	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28331	20310	35300	FXTQ30TAVJUA
FC-1A-6	CLASSROOM 129	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28331	20310	35300	FXTQ30TAVJUA
FC-1A-7	MULTIPURPOSE 134	MULTI POSITION AIR HANDLER	750	200	0.5"	208V, 1 PH, 60 Hz	22735	16136	28000	FXTQ24TAVJUA
FC-1B-1	CORRIDOR/WORK AREA 124	MULTI POSITION AIR HANDLER	1200	125	0.5"	208V, 1 PH, 60 Hz	34077	23096	41500	FXTQ36TAVJUA
FC-1B-2	OFFICE/NURSE 153	MULTI POSITION AIR HANDLER	1200	125	0.5"	208V, 1 PH, 60 Hz	34077	23096	41500	FXTQ36TAVJUA
FC-1B-3	OFFICES/PRINCIPAL 116	MULTI POSITION AIR HANDLER	1900	150	0.5"	208V, 1 PH, 60 Hz	56761	39422	70600	FXTQ60TAVJUA
FC-2A-1	SCIENCE CLASSROOM 133	MULTI POSITION AIR HANDLER	1940	400	0.5"	208V, 1 PH, 60 Hz	56761	39422	70600	FXTQ60TAVJUA
FC-2A-2	OFFICES/RECEPTION 103	MULTI POSITION AIR HANDLER	1200	100	0.5"	208V, 1 PH, 60 Hz	34077	23096	41500	FXTQ36TAVJUA
FC-2A-3	CORRIDOR/WORK AREA 141	MULTI POSITION AIR HANDLER	1200	100	0.5"	208V, 1 PH, 60 Hz	34077	23096	41500	FXTQ36TAVJUA
FC-2B-1	CLASSROOM 136	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28404	21052	35300	FXTQ30TAVJUA
FC-2B-2	CLASSROOM 137	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28404	21052	35300	FXTQ30TAVJUA
FC-2B-3	CLASSROOM 138	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28404	21052	35300	FXTQ30TAVJUA
FC-2B-4	CLASSROOM 139	MULTI POSITION AIR HANDLER	1000	200	0.5"	208V, 1 PH, 60 Hz	28404	21052	35300	FXTQ30TAVJUA
FC-2B-5	COMPUTER LAB 140	MULTI POSITION AIR HANDLER	1200	200	0.5"	208V, 1 PH, 60 Hz	34077	23096	41500	FXTQ36TAVJUA
OAU-1	FC UNITS	OA PROCESSING UNIT	1000	1000	0.5"	208V, 1 PH, 60 Hz	86000	52000	59000	FXMQ96MFVJU
OAU-2	FC UNITS	OA PROCESSING UNIT	1000	1000	0.5"	208V, 1 PH, 60 Hz	86000	52000	59000	FXMQ96MFVJU
OAU-3	FC UNITS	OA PROCESSING UNIT	1200	1200	0.5"	208V, 1 PH, 60 Hz	86000	52000	59000	FXMQ96MFVJU

NOTES:

1. PROVIDE ALL UNITS WITH THERMOSTAT EQUAL TO BRC1E73. INCLUDING OA UNITS. LOCATE OAU CONTROLLER IN MECH ROOM ADJACENT TO CENTRAL CONTROLLER
2. STANDARD LIMITED WARRANTY: 10 YEAR WARRANTY ON COMPRESSOR PARTS

BRANCH SELECTORS

MARK	SERVES	ELECTRICAL DATA	BRANCHES	EXAMPLE
BS-1A	CU-1	208V, 1 PH, 60 Hz	8	BS8Q54TVJ
BS-1B	CU-1	208V, 1 PH, 60 Hz	6	BS6Q54TVJ
BS-2A	CU-2	208V, 1 PH, 60 Hz	6	BS6Q54TVJ
BS-2B	CU-2	208V, 1 PH, 60 Hz	6	BS6Q54TVJ

NOTES:

1. NO DRAIN PIPING NEEDED
2. STANDARD LIMITED WARRANTY: 10-YEAR WARRANTY ON ALL PARTS
3. PROVIDE BRANCH SELECTOR WITH BRANCH SELECTOR 2-PORTS JOINT KITS EQUAL TO KHRP26A2ROT AS REQUIRED
4. PROVIDE ALL BRANCH SELECTORS WITH BRANCH SELECTOR CLOSED PIPE KIT EQUAL TO KHFP28A100C AS REQUIRED
5. PROVIDE FULL PORT ISOLATION VALVES AT ALL S/L AND S/S/L PIPING CONNECTIONS TO ALL BRANCH SELECTORS.

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
FC	FAN COIL UNIT
VRV	VARIABLE REFRIGERANT VOLUME
MAU	MAKEUP AIR UNIT
KH	KITCHEN HOOD
KEF	KITCHEN EXHAUST FAN
RTU	ROOF TOP UNIT
EF	EXHAUST FAN
CFM	CUBIC FEET PER MINUTE
RPM	REVOLUTIONS PER MINUTE
BTUH	BRITISH THERMAL UNITS PER HOUR
MBH	BTUH X 1000
EWT	ENTERING WATER TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
PD	PRESSURE DROP
SP	STATIC PRESSURE
ESP	EXTERNAL STATIC PRESSURE
HP	HORSEPOWER
EAT	ENTERING AIR TEMPERATURE
LAT	LEAVING AIR TEMPERATURE
DB	DRY BULB TEMPERATURE
WB	WET BULB TEMPERATURE
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
EA	EXHAUST AIR
	MANUAL BALANCING DAMPER
T	THERMOSTAT
	SUPPLY DIFFUSER WITH PATTERN
	EXHAUST REGISTER
	RETURN GRILLE
	SUPPLY DUCT - CROSS SECTION
	EXHAUST DUCT - CROSS SECTION
	RETURN DUCT - CROSS SECTION
	ELBOW TURNED DOWN
	ELBOW TURNED UP
	SLOPE DOWN IN DIRECTION OF ARROW
D	CONDENSATE DRAIN LINE
S/L	REFRIGERANT SUCTION AND LIQUID PIPING (TWO LINES WITH SINGLE LINE SHOWN FOR CLARITY)
S/S/L	VRF REFRIGERANT SUCTION, LIQUID, AND HOT GAS SUCTION LINES (SHOWN AS SINGLE LINE FOR CLARITY)
DIFFUSER/GRILLE LABEL: X-# / X" / ###	AIR DISTRIBUTION TYPE / NECK SIZE / AIRFLOW (CFM)

ROOF TOP UNIT SCHEDULE (GAS HEAT)

MARK	FAN DATA				COOLING DATA				HEATING DATA		ELECTRICAL DATA	EXAMPLE: DAIKIN
	CFM	MIN. O.A.	ESP	HP	SENSIBLE	TOTAL	EAT (DB/WB)	SEER/EER	OUTPUT	INPUT		
RTU-1	2300	500	0.7	1.2	48.1	67.3	80.0°F/67°F	—/12.1	112.0	150.0	208V, 3Ø, 60 Hz	DRG072
RTU-2	1800	350	0.7	1.0	41.0	55.5	80.0°F/67°F	16.5/—	105.0	140.0	208V, 3Ø, 60 Hz	DRG060
RTU-3	1800	350	0.7	1.0	41.0	55.5	80.0°F/67°F	16.5/—	105.0	140.0	208V, 3Ø, 60 Hz	DRG060
RTU-4	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-5	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-6	2400	500	0.7	1.2	48.1	67.3	80.0°F/67°F	—/12.1	112.0	150.0	208V, 3Ø, 60 Hz	DRG072
RTU-7	1000	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-8	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-9	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-10	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-11	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-12	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-13	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-14	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-15	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036
RTU-16	1200	200	0.7	0.75	25.1	33.7	80.0°F/67°F	17.0/—	86.3	115.0	208V, 3Ø, 60 Hz	DRG036

NOTES:

1. ALL SELECTIONS BASED ON ARI 210/240 RATINGS AT JOBSITE ELEVATION.
2. COOLING COIL VELOCITY SHALL BE 500 FPM OR LESS.
3. SENSIBLE AND TOTAL CAPACITIES ARE EXPRESSED IN MBTUH.
4. AMBIENT TEMPERATURE IS 100° F.
5. ROOFTOP UNIT SHALL BE SECURED TO ROOF CURB.
6. PROVIDE EACH UNIT WITH THE FOLLOWING:
   a. LOW AMBIENT KIT DOWN TO 0°F.
   b. BELT DRIVE MOTORS.
   c. HINGED ACCESS PANELS.
   d. PLEATED MERV 7 FILTERS.
   e. DUAL ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF.
   f. FIELD INSTALLED HAIL GUARD.

EXHAUST FAN SCHEDULE

MARK	CFM	SP	RPM	MOTOR	DRIVE	ELECTRICAL DATA	TYPE	EXAMPLE
EF-1	700	0.4	1211	149 W	DIRECT	115 V, 1 Ø, 60 Hz	INLINE	GREENHECK CSP-A700-VG
EF-2	100	0.4	1182	23 W	DIRECT	115 V, 1 Ø, 60 Hz	INLINE	GREENHECK CSP-A390-VG
EF-3	3200	0.4	909	1 HP	DIRECT	115 V, 1 Ø, 60 Hz	INLINE	GREENHECK SQ-18-M2-VG
EF-4	100	0.4	1182	23 W	DIRECT	115 V, 1 Ø, 60 Hz	INLINE	GREENHECK CSP-A390-VG
EF-5	1100	0.7	1233	1/3 HP	DIRECT	115 V, 1 Ø, 60 Hz	U.V.S	GREENHECK USF-13-B2
EF-6	1100	0.6	1033	1/2 HP	DIRECT	115 V, 1 Ø, 60 Hz	P.R.V.	GREENHECK G-140-VG
EF-7	1000	0.6	991	1/4 HP	DIRECT	115 V, 1 Ø, 60 Hz	P.R.V.	GREENHECK G-130-VG
EF-8	100	0.4	930	1/4 HP	DIRECT	115 V, 1 Ø, 60 Hz	P.R.V.	GREENHECK G-097-VG
EF-9	600	0.6	1646	1/6 HP	DIRECT	115 V, 1 Ø, 60 Hz	P.R.V.	GREENHECK G-095-VG
EF-10	600	0.6	1646	1/6 HP	DIRECT	115 V, 1 Ø, 60 Hz	P.R.V.	GREENHECK G-095-VG
EF-11	1200	0.1	817	1/2 HP	DIRECT	115 V, 1 Ø, 60 Hz	PROP	GREENHECK SE1-16-426-VG
EF-12	1200	0.1	817	1/2 HP	DIRECT	115 V, 1 Ø, 60 Hz	PROP	GREENHECK SE1-16-426-VG
EF-13	100	0.3	1184	26 W	DIRECT	115 V, 1 Ø, 60 Hz	CEILING	GREENHECK SP-A190

NOTES:

1. ALL SELECTIONS BASED ON JOBSITE ELEVATION.
2. SELECT ALL FAN WITH SPEED CONTROLLER.

AIR DISTRIBUTION SCHEDULE

MARK	TYPE	LOCATION	FRAME	FINISH	EXAMPLE
S-1	SUPPLY	CEILING	TB	WHITE	TITUS OMNI, 24x24
S-2	SUPPLY	CEILING	PF	WHITE	TITUS OMNI, 24x24
S-3	SUPPLY	CEILING	TB	WHITE	TITUS CSR-P, 48x24
R-1	RETURN	CEILING	TB	WHITE	TITUS PAR, 24x24
E-1	EXHAUST	CEILING	TB	WHITE	TITUS PAR, 24x24
E-2	EXHAUST	CEILING	TB	WHITE	TITUS PAR, 12x12
T-1	TRANSFER	CEILING	TB	WHITE	TITUS PAR, 24x24

NOTES:

1. OBD = OPPOSED BLADE DAMPER
2. EXT = EXTRACTOR
3. PF = PLASTER FRAME (EQUAL TO TITUS RAPID MOUNT)
4. TB = LAY-IN T-BAR
5. VERIFY FRAME TYPE WITH CEILING INSTALLER'S LAYOUT.

LOUVER SCHEDULE

MARK	FREE AREA	DIMENSION	SERVES	TYPE	FRAME	EXAMPLE
L-1	1.89 SQ. FT.	24" W X 24" H	E.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX
L-2	3.96 SQ. FT.	48" W X 24" H	O.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX
L-3	0.31 SQ. FT.	12" W X 12" H	E.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX
L-4	3.96 SQ. FT.	48" W X 24" H	E.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX
L-5	0.31 SQ. FT.	12" W X 12" H	E.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX
L-6	3.96 SQ. FT.	48" W X 24" H	O.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX
L-7	1.38 SQ. FT.	18" W X 24" H	O.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX
L-8	3.18 SQ. FT.	30" W X 30" H	E.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX
L-9	3.18 SQ. FT.	30" W X 30" H	E.A.	DRAINABLE	FLANGE	RUSKIN ELF6375DX

NOTES:

1. PROVIDE INSIDE BIRDSCREEN WITH ALL EXHAUST LOUVERS AND INSECT SCREEN ON ALL INTAKE LOUVERS.
2. LOUVER CONSTRUCTION SHALL BE ALUMINUM.
3. LOUVER SHALL BE FACTORY FINISHED WITH KYNAR. COLOR SHALL BE SELECTED FROM FACTORY STANDARD COLORS BY ARCHITECT.

MINI SPLIT SCHEDULE (COOLING ONLY)

MARK	INDOOR UNIT						OUTDOOR UNIT		
	FAN DATA	COOLING DATA		ELECTRICAL DATA	EXAMPLE:		CAPACITY	REFRIGERANT LINE SIZES	EXAMPLE:
	S.A. CFM	TOTAL	SEER						
MS-1	400	10.0	19.0	208 V, 1 Ø, 60 Hz	DAIKIN FTK12NMVJURK		10.0 MBTUH	3/8 S, 1/4 L	DAIKIN RK12NMVJU

NOTES:

1. ALL SELECTIONS BASED ON JOBSITE ELEVATION.
2. TOTAL CAPACITIES ARE EXPRESSED IN MBTUH.
3. AMBIENT TEMPERATURE IS 100°F.
4. PROVIDE WITH WALL MOUNTED THERMOSTAT.
5. PROVIDE UNIT WITH CONDENSATE PUMP.

STATE OF TEXAS — REGISTERED ARCHITECT — JUSTIN M. FINCHER — 98476 — LICENSED — 7-28-2022

REGISTERED ARCHITECT — CLINTON W. FARRIS — 28983 — STATE OF TEXAS

CLINTON W. FARRIS #28983
DATE SIGNED: 7-28-22

HPA
ESTABLISHED 1962
ARCHITECTS · PROGRAMMERS · PLANNERS
4724 OLD JACKSBORO HIGHWAY
WICHITA FALLS, TEXAS 76302-3599
VOICE: 940.767.1421 FAX: 940.397.0273
WEB: www.hpa1962.com

FINCHER ENGINEERING, LLC
FINCHER ENGINEERING, LLC
TX FIRM #F-16408
5621 114TH ST., SUITE 100
LUBBOCK, TX 79424
PH: 806-701-5109
WWW.FINCHERENG.COM

ADDITIONS AND RENOVATIONS TO THE
GORDON I.S.D. CAMPUS
FOR GORDON I.S.D.
112 RUSK STREET
GORDON, TEXAS 76453

DRAWN BY: FINCHER

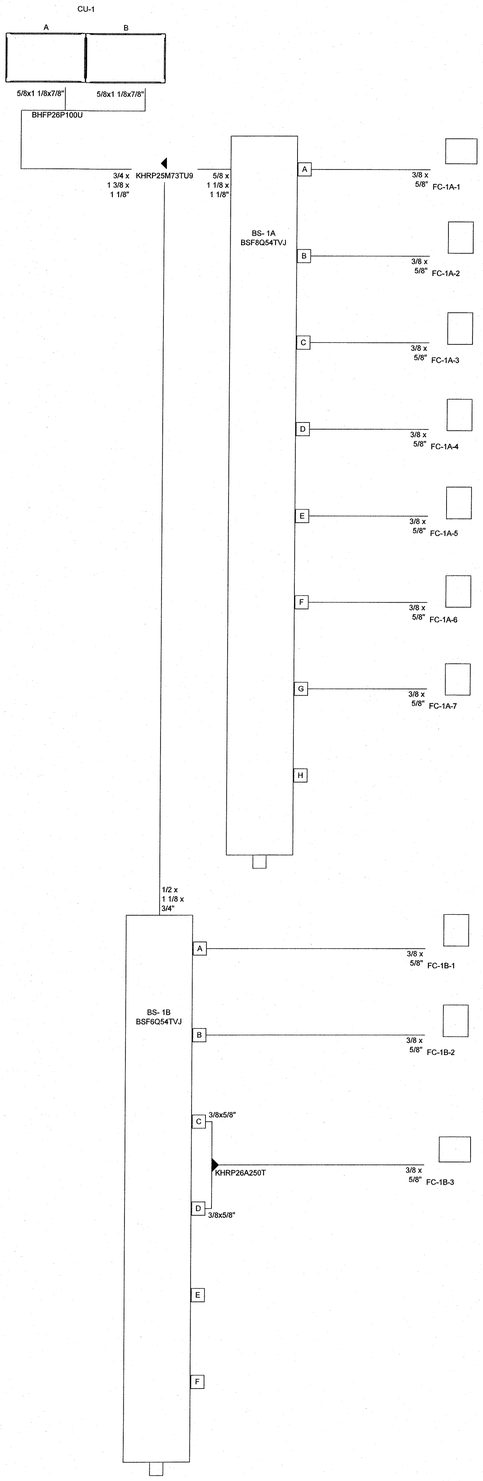
DATE: 28 JULY 2022

REVISIONS

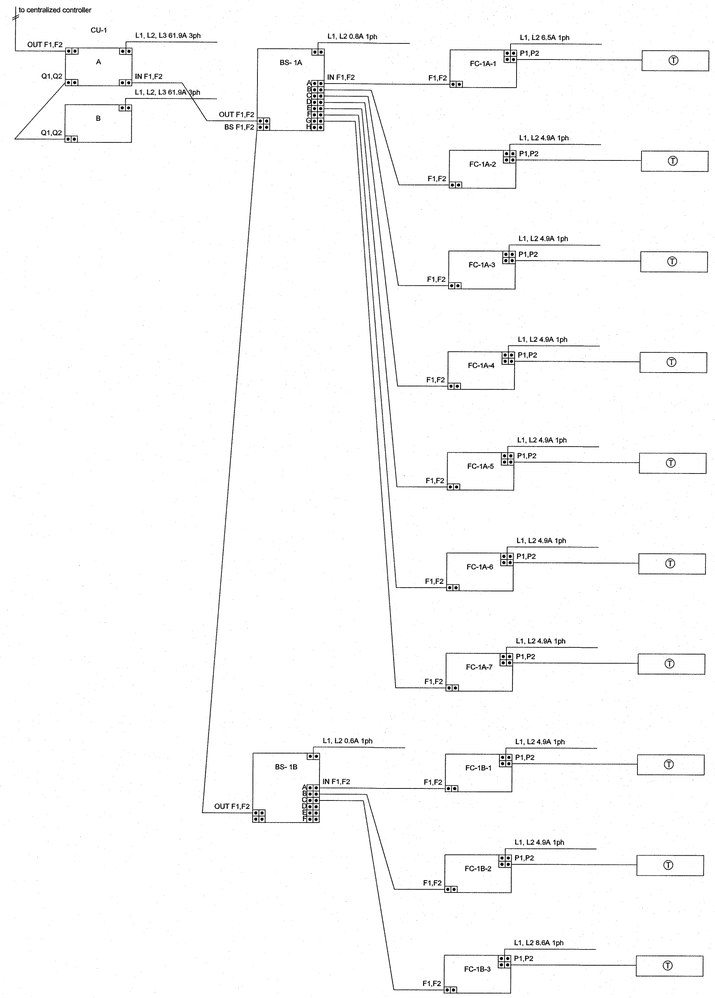
NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

SHEET NO.
M401



VRV CU-1 PIPING DIAGRAM



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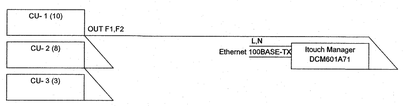

CONTROLLER WIRING

JUSTIN M. FINCHER
98476
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
7-28-2022

REGISTERED ARCHITECT
CLINTON W. FARRIS
#28983
STATE OF TEXAS

CLINTON W. FARRIS #28983
DATE SIGNED: 1.28.22

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ARCHITECTS · PROGRAMMERS · PLANNERS
4724 OLD JACKSBORO HIGHWAY
WICHITA FALLS, TEXAS 76302-3599
VOICE: 940.767.1421 FAX: 940.397.0273
WEB: www.hpa1962.com

FINCHER ENGINEERING, LLC
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TX FIRM #F-16408
5621 114TH ST., SUITE 100
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PH: 806-701-5109
WWW.FINCHERENG.COM

ADDITIONS AND RENOVATIONS TO THE

GORDON I.S.D. CAMPUS
FOR GORDON I.S.D.

112 RUSK STREET
GORDON, TEXAS 76453

DRAWN BY: FINCHER

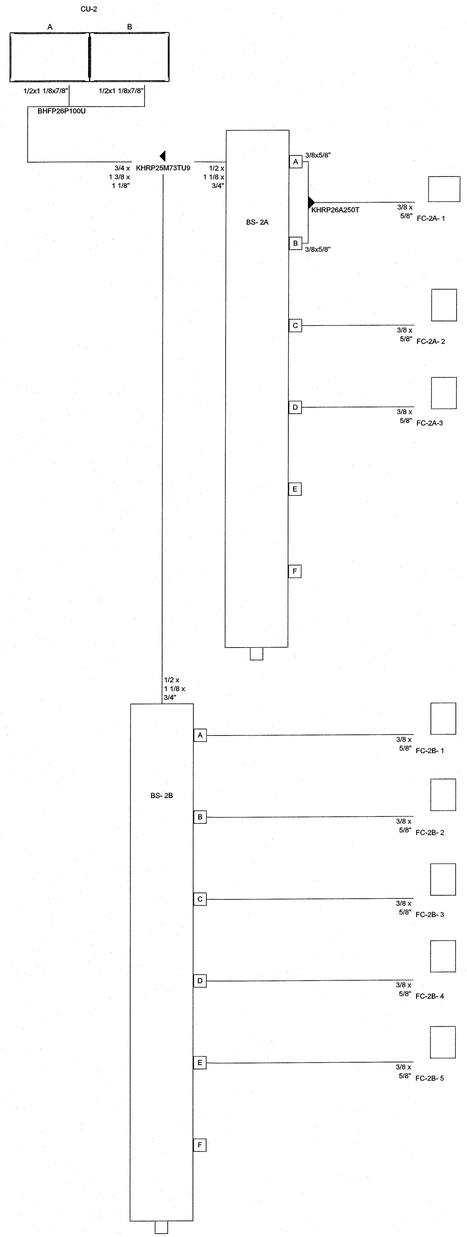
DATE: 28 JULY 2022

REVISIONS

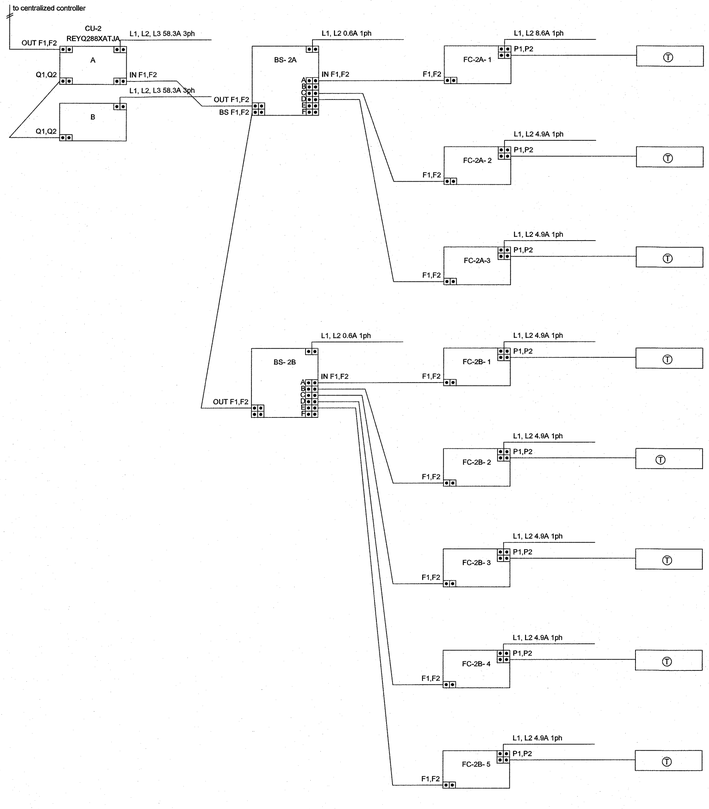
NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

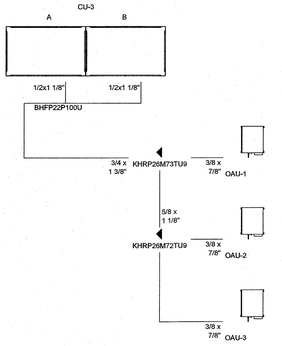
SHEET NO.
M402



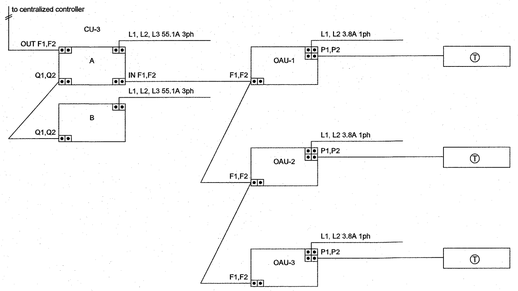
VRV CU-2 PIPING DIAGRAM



VRV CU-2 WIRING DIAGRAM



VRV CU-3 PIPING DIAGRAM



VRV CU-3 WIRING DIAGRAM

STATE OF TEXAS
JUSTIN M. FINCHER
98476
LICENSED
PROFESSIONAL ENGINEER
7-28-2022

REGISTERED ARCHITECT
CLINTON W. FARRIS
98983
STATE OF TEXAS

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FOR GORDON I.S.D.
112 RUSK STREEET
GORDON, TEXAS 76453

DRAWN BY: FINCHER
DATE: 28 JULY 2022

REVISIONS

NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

SHEET NO.
M403

KITCHEN VENTILATION SYSTEM (BASIS OF DESIGN-LARKIN)

HOOD INFORMATION

HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	EXHAUST						SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION
			LENGTH	WIDTH	HEIGHT			TOTAL CFM	COLLAR(S) WIDTH	LENGTH	Qty.	CFM	S.P.	MUA CFM	AC CFM		
1	KH-1	EO-FPSP	204	54	24	430 SS WHERE EXPOSED	HEAVY	4676	10 10	22 22	1 1	2338 2338	.472 .472	3740		600	DOUBLE

HOOD INFORMATION

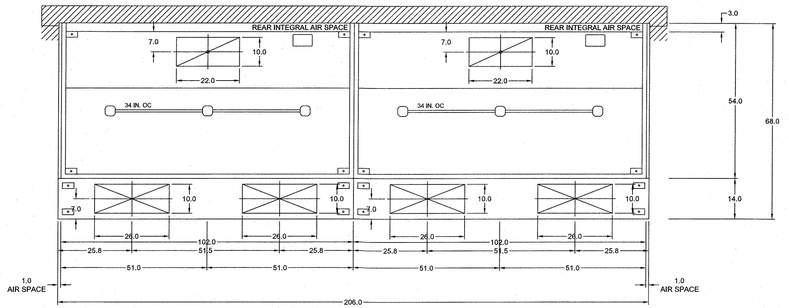
HOOD NO.	MARK	LIGHTING DETAILS			GREASE FILTRATION DETAILS				UTILITY CABINET(S)					
		FIXTURE TYPE BULB / LAMP INFO	QTY	FOOT CANDLES	TYPE / MODEL MATERIAL	QTY	SIZE (IN.) L	H	LOCATION	FIRE SYSTEM TYPE	SIZE	CONTROLS MODEL	INTERFACE	
1	KH-1	INCANDESCENT (GLOBE) 100W A19 (BULBS NOT INCL.)	6	45.61	BAFFLE STAINLESS STEEL	2 10	20 16	20	Remote	ANSUL R102	6	AFC	SWITCHES	

SUPPLY PLENUM INFORMATION

HOOD NO.	MARK	POS.	TYPE	SIZE (IN.) L	W	H	INSULATED	DAMPER(S)	LED LIGHT(S) SUPPLIED	QTY	TOTAL CFM	COLLARS TYPE	MOUNTING	QTY	W	L	DIA.	CFM	S.P.	VEL.
1	KH-1	FRONT	FPSP	103	12	6	NO	NO	NO		1870	MUA	FACTORY	2	10	26		935	0.2	499
1	KH-1	FRONT	FPSP	103	12	6	NO	NO	NO		1870	MUA	FACTORY	2	10	26		935	0.2	499

HOOD OPTIONS

UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER
FACTORY MOUNTED EXHAUST COLLAR(S)



MARK: KH-1 - SECTION 1
PLAN VIEW

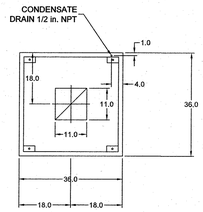
MARK: KH-1 - SECTION 2
PLAN VIEW

HOOD INFORMATION

HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	EXHAUST						SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION
			LENGTH	WIDTH	HEIGHT			TOTAL CFM	COLLAR(S) WIDTH	LENGTH	Qty.	CFM	S.P.	MUA CFM	AC CFM		
1	KH-2	CH	36	36	24	430 SS WHERE EXPOSED	Light	450	11	11	1	450	.032			150	Single

HOOD OPTIONS

UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER
FACTORY MOUNTED EXHAUST COLLAR(S)



MARK: KH-2 - SECTION 1
PLAN VIEW

KITCHEN MAKEUP AIR UNIT SCHEDULE

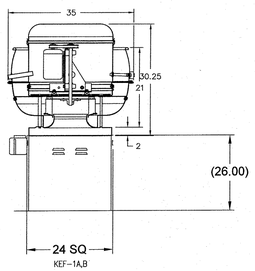
Mark	Manufacturer & Model No.	CFM	ESP	TSP	HP	RPM	Type	Gas	EAT	LAT	Input	Output	Elec. Data	FLA	MCA	MOP	Remarks
MAU-1	AAON RN0098000005G4	3,740	0.50	1.04	2	1170	Indirect	Natural	15	72.8	259.3	207.4	208V/3Ø/60Hz	9	11	15	1,2,3,4,5,6,7

Notes:
1. Weatherhood with Aluminum Mesh Filter
2. Outdoor Air Only, Down Discharge, End OA Intake
3. Double Wall Construction
4. Heat Inlet Sensor and Supply Air Discharge Sensor for Temperature Control
5. VCCX2 Microprocessor Controller
6. Stainless Steel Heat Exchanger
7. 4 Stage Heating

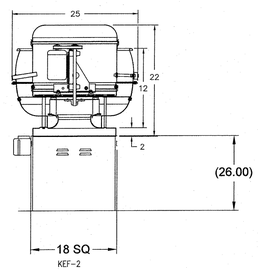
KITCHEN EXHAUST FAN SCHEDULE

Mark	Manufacturer & Model No.	CFM	ESP	HP	RPM	Motor RPM	Drive	Type	Elec. Data	Remarks
KEF-1A	Loren Cook 150V15D	2367	0.90	.75	1725	1725	Direct	Upblast	120V/1Ø/60Hz	1,2,3,4,5,6,7,8
KEF-1B	Loren Cook 150V15D	2367	0.90	.75	1725	1725	Direct	Upblast	120V/1Ø/60Hz	1,2,3,4,5,6,7,8
KEF-2	Loren Cook 101R15D	450	0.50	.125	1550	1725	Direct	Upblast	120V/1Ø/60Hz	2,3,8

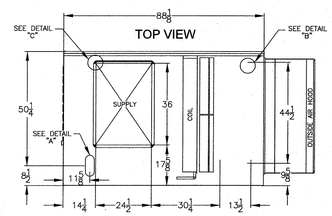
Notes:
1. UL/cUL 762 Listed - "Power Ventilators for Rest. Exh. Appliances"
2. Roof mounted fans shall have pre-wired disconnect switches.
3. Hinged Base
4. High Temp Curb Seal Rated for Continuous Duty
5. Grease Trap
6. Heat Baffle
7. Clean-out Port
8. Bearings with Grease Fittings, L10 life of 100,000 hours

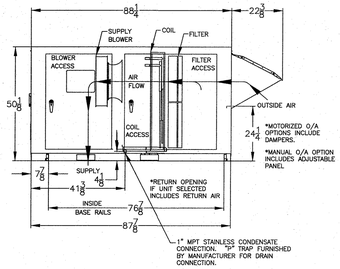


KEF-1A,B



KEF-2





FIRE SYSTEM INFORMATION

MARK	MODEL	LOCATION	FLOW POINTS	TANKS	SUPPLY LINE	DETECTION	MARK(S) PROTECTED BY FIRE SYSTEM
FSS-1	ANSUL R-102 WET CHEMICAL	Wall Mount	12UTILIZED 22 AVAILABLE	(2) 3.0 Tanks	CONTINUOUS	FUSIBLE LINK	KH-1 SECTION 1 and 2

FIRE SYSTEM OPTIONS AND ACCESSORIES

FULL INSTALLATION (INCLUDES PRE-PIPED HOOD(S) WITH DETECTION AND FACTORY COORDINATED INSTALL)
CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED
METAL BLOW-OFF CAPS - INCLUDED
GAS VALVE - INCLUDED - MECHANICAL SHUTOFF VALVE, 2", (ANSUL) - PART# ANSULMECHSHUTOFFVALVE200
REMOTE PULL STATION - STANDARD - INSTALLATION AT SINGLE POINT OF EGRESS

STATE OF TEXAS
JUSTIN M. FINCHER
98476
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7-28-2022

REGISTERED ARCHITECT
CLINTON W. FARRIS
STATE OF TEXAS

CLINTON W. FARRIS #28983
DATE SIGNED: 7.28.22

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WEB: www.hpa1962.com

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TX FIRM #F-16408
5621 114TH ST., SUITE 100
LUBBOCK, TX 79424
PH: 806-701-5109
WWW.FINCHERENG.COM

ADDITIONS AND RENOVATIONS TO THE
GORDON I.S.D. CAMPUS
FOR GORDON I.S.D.

112 RUSK STREET
GORDON, TEXAS 76453

DRAWN BY: FINCHER

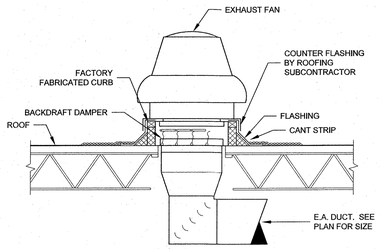
DATE: 28 JULY 2022

REVISIONS

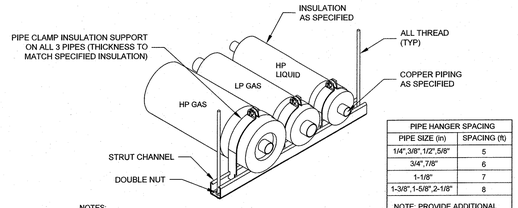
NO.	DESCRIPTION	DATE

PROJECT NO.
20864.00

SHEET NO.
M404



EXHAUST FAN MOUNTING DETAIL FLAT ROOF
NO SCALE

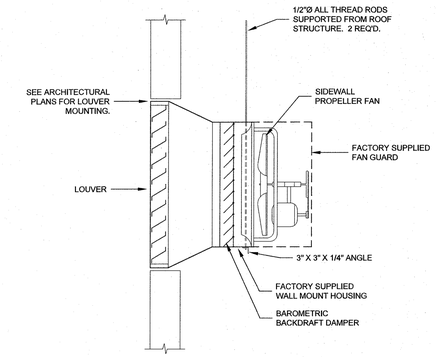


PIPE HANGER SPACING	
PIPE SIZE (in)	SPACING (ft)
1/4",3/8", 1/2",.5/8"	5
3/4",.7/8"	6
1-1/8"	7
1-3/8",1-5/8",.2-1/8"	8
NOTE: PROVIDE ADDITIONAL PIPE HANGERS AT ALL PIPE ELBOWS LOCATED WITHIN 12" OF ELBOW.	

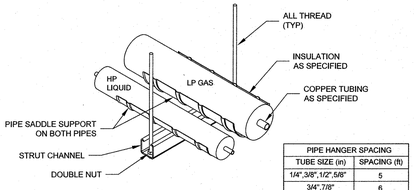
NOTES:
1. PIPE INSULATION AND PIPE SUPPORTS MUST BE INSTALLED STRICTLY IN ACCORDANCE WITH INSULATION MANUFACTURES INSTALLATION INSTRUCTIONS.
2. ALL BUTT JOINTS, LONGITUDINAL SEAMS AND INSULATION TERMINATIONS MUST BE GLUED AND SEALED PER INSULATION MANUFACTURERS INSTRUCTIONS.
3. INSULATION MUST BE INSTALLED UNDER SLIGHT COMPRESSION. DO NOT STRETCH INSULATION.
4. PROVIDE VAPOR DAM (2" LENGTH OF INSULATION GLUED TO PIPE) EVERY 12' TO 18', AND AT ALL INSULATION TERMINATIONS (EQUIPMENT CONNECTIONS, VALVES, REFRIGERATION SPECIALTIES).

REFRIGERANT PIPING SUPPORT DETAIL
NO SCALE

NOTES: APPLIES FOR ALL PIPING BETWEEN OUTDOOR UNIT AND BRANCH SELECTORS ON HEAT RECOVERY UNITS AND FOR ALL PIPING BETWEEN OUTDOOR UNITS AND OAU UNITS ON HEAT PUMP SYSTEM.



SIDEWALL EXHAUST FAN DETAIL
NO SCALE

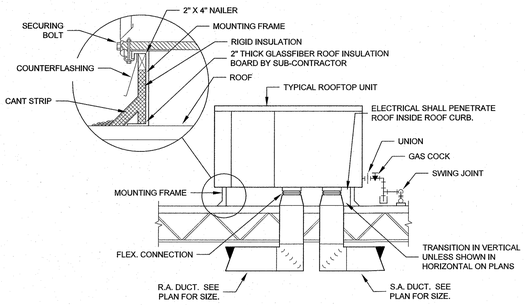


PIPE HANGER SPACING	
TUBE SIZE (in)	SPACING (ft)
1/4",3/8", 1/2",.5/8"	5
3/4",.7/8"	6
1-1/8"	7
1-3/8",1-5/8",.2-1/8"	8
NOTE: PROVIDE ADDITIONAL PIPE HANGERS AT ALL PIPE ELBOWS LOCATED WITHIN 12" OF ELBOW.	

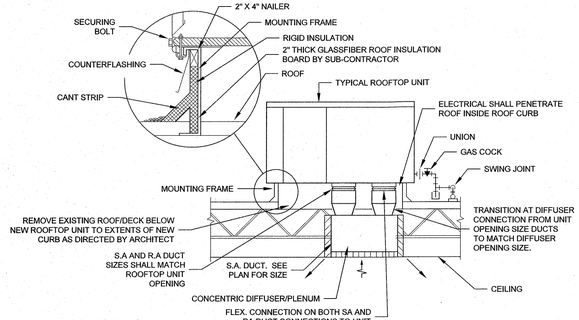
NOTES:
1. PIPE INSULATION AND PIPE SUPPORTS MUST BE INSTALLED STRICTLY IN ACCORDANCE WITH INSULATION MANUFACTURES INSTALLATION INSTRUCTIONS.
2. ALL BUTT JOINTS, LONGITUDINAL SEAMS AND INSULATION TERMINATIONS MUST BE GLUED AND SEALED PER INSULATION MANUFACTURERS INSTRUCTIONS.
3. INSULATION MUST BE INSTALLED UNDER SLIGHT COMPRESSION. DO NOT STRETCH INSULATION.
4. PROVIDE VAPOR DAM (2" LENGTH OF INSULATION GLUED TO PIPE) EVERY 12' TO 18', AND AT ALL INSULATION TERMINATIONS (EQUIPMENT CONNECTIONS, VALVES, REFRIGERATION SPECIALTIES).

REFRIGERANT TUBING SUPPORT DETAIL
NO SCALE

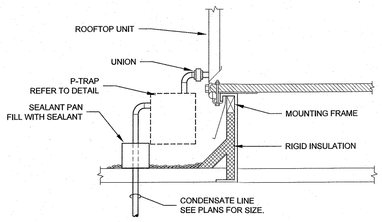
NOTE: DETAIL APPLIES FOR ALL PIPING BETWEEN BRANCH SELECTOR AND INDOOR UNITS OF HEAT RECOVERY SYSTEM



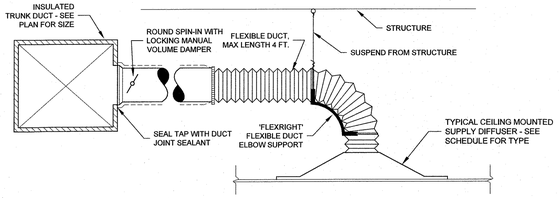
ROOFTOP UNIT MOUNTING DETAIL ON EXISTING ROOF
NO SCALE



ROOFTOP UNIT MOUNTING DETAIL W/ CONCENTRIC DIFFUSER
NO SCALE

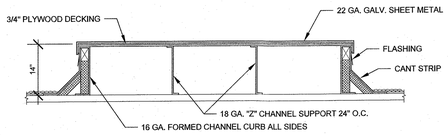


ROOFTOP UNIT DRAIN LINE DETAIL
NO SCALE

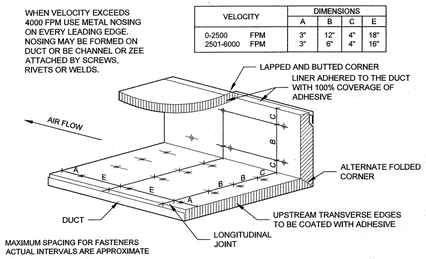


ROUND SUPPLY AIR DIFFUSER MOUNTING DETAIL
NO SCALE

NOTE: CONNECTIONS OF FLEX DUCT INNER CORE SHALL BE MADE WITH S.S. WORM DRIVE CLAMPS. OUTER INSULATION SHALL BE FITTED OVER CORE CONNECTION AND SECURED WITH S.S. CLAMP.

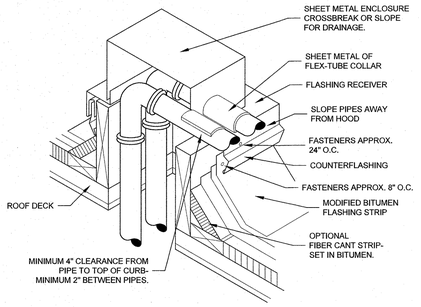


CONDENSING UNIT MOUNTING PLATFORM
NO SCALE



VELOCITY	DIMENSIONS			
	A	B	C	E
0-2500 FPM	3"	12"	4"	18"
2501-6000 FPM	3"	6"	4"	16"

DUCT LINER FASTENER SPACING DETAIL
NO SCALE



REFRIGERANT PIPING THROUGH ROOF DETAIL
NO SCALE

NOTE: THIS HOOD DETAIL DEPICTS JOB-SITE FABRICATED CONSTRUCTION. MANY MANUFACTURERS OFFER PREFABRICATED BOOTS AND OTHER MATERIALS FOR THIS PURPOSE. ONE TYPICAL CONFIGURATION IS SHOWN IN THE INSET. SPECIFICS ON THESE PROPRIETARY DESIGNS VARY GREATLY, AND INDIVIDUAL MANUFACTURERS SPECIFICATIONS SHOULD BE CONSULTED FOR THEIR USE.

STATE OF TEXAS
JUSTIN M. FINCHER
98476
LICENSED
PROFESSIONAL ENGINEER
1-28-2022

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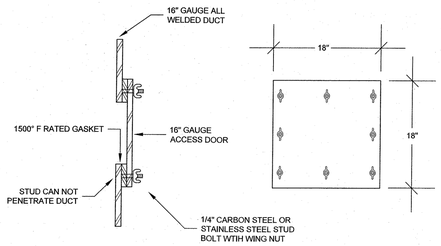
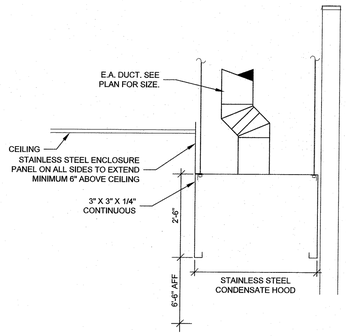


KITCHEN HOOD EXHAUST DUCT ACCESS DOOR DETAIL

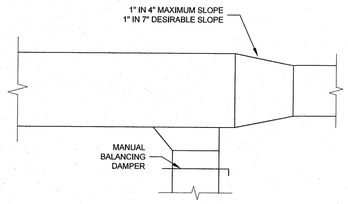
NO SCALE

NOTE: PROVIDE ACCESS DOOR AT EACH DUCT FITTING AND 10' O.C.



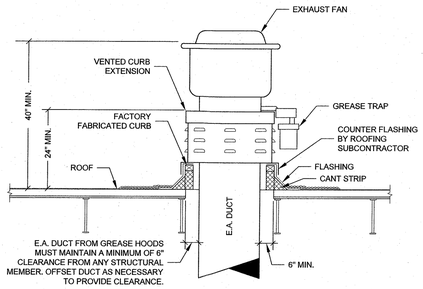
DISHWASHER HOOD DETAIL

NO SCALE



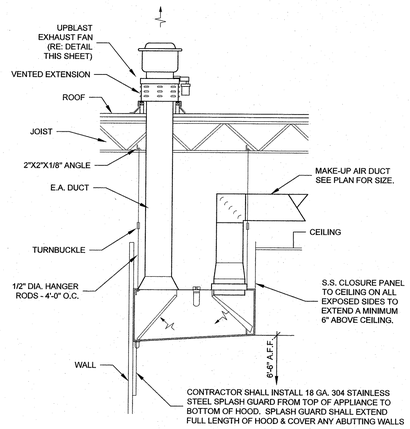
ANGLE TAP DETAIL

NO SCALE



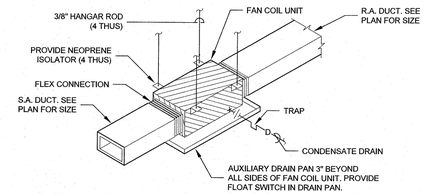
KITCHEN HOOD EXHAUST FAN MOUNTING DETAIL

NO SCALE



KITCHEN VENTILATION HOOD DETAIL

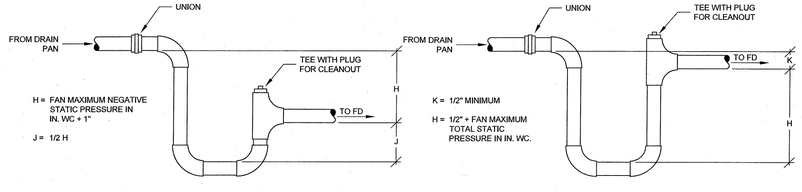
NO SCALE



DUCTED VRV (OAU) INDOOR UNIT DETAIL

NO SCALE

NOTE: AUXILIARY DRAIN PAN SHALL BE 1-1/2" DEEP, 22 GAUGE GALVANIZED SHEET METAL.



NEGATIVE PRESSURE P-TRAP

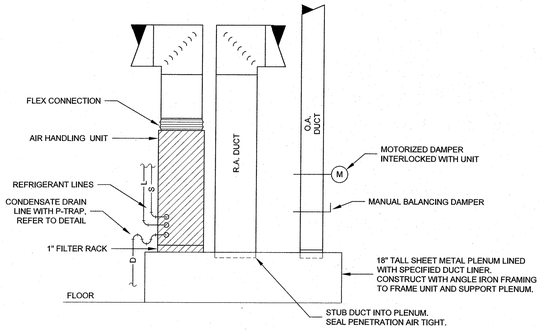
POSITIVE PRESSURE P-TRAP

DRAIN SIZE	HVAC EQUIP. TOTAL CFM
3/4"	0 - 800
1"	801 - 2,000
1-1/4"	2,001 - 12,000
1-1/2"	12,001 - 20,000
2"	20,001 - 68,000

CONDENSATE DRAIN DETAIL

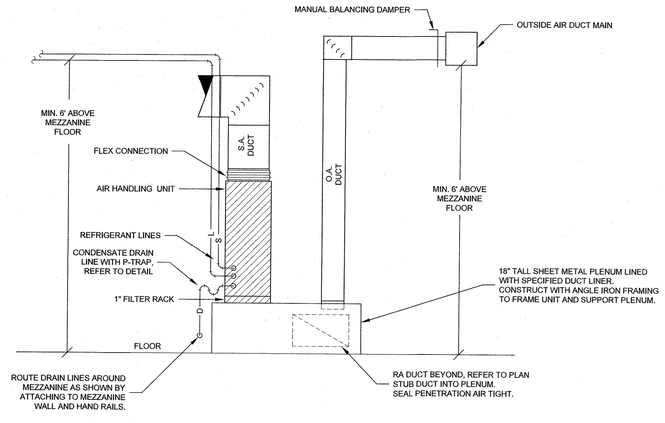
NO SCALE

NOTE: CONDENSATE DRAIN SHALL NOT BE SMALLER THAN UNIT CONNECTION. ALL CONDENSATE DRAIN LINES SHALL BE TYPE L COPPER WITH SOLDERED JOINTS AND FITTINGS.



INDOOR VERTICAL VRV AIR HANDLING DETAIL (FC-1A-1)

NO SCALE



INDOOR VERTICAL VRV AIR HANDLING DETAIL (ALL UNITS OTHER THAN FC-1A-1)

NO SCALE

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