

WGCC - IMAGE BUILDERS

WINTER GARDEN COMMERCE CENTER 690 GARDEN COMMERCE PARKWAY WINTER GARDEN, FLORIDA 34787

OWNER:

LBI PROPERTIES, LLC

P.O. BOX 2094
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CONTACT: TOM HARVEY
EMAIL: TOM@IMAGEBUILDERS.COM

CIVIL ENGINEER:

UNROE ENGINEERING, INC.

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CONTACT: DARCY UNROE, PE
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ARCHITECTURE, MECHANICAL, PLUMBING AND ELECTRICAL:



C4 ARCHITECTURE, LLC

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FIRE PROTECTION ENGINEER:

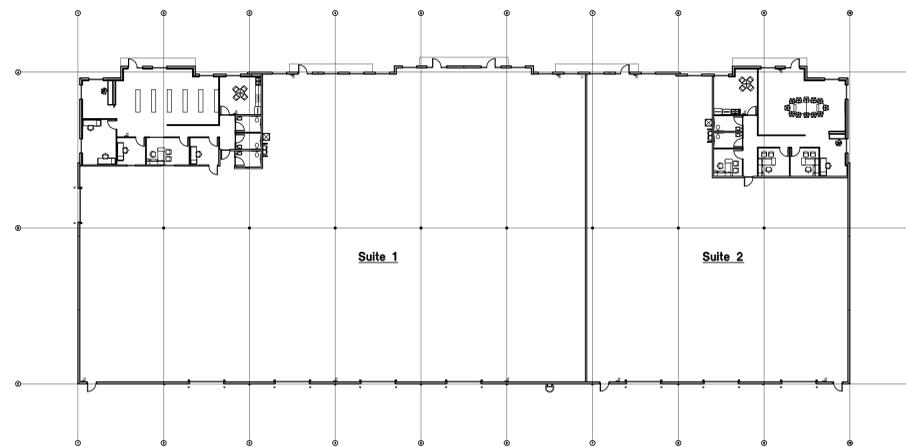
WIGINTON FIRE PROTECTION ENGINEERING, INC.

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WEST PALM BEACH, FLORIDA 33407
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CONTACT: RANDY ALMOND
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VICINITY MAP
SCALE: N.T.S.



KEY PLAN
SCALE: N.T.S.

CODE INFORMATION

PROJECT SQUARE FOOTAGE:	
BUSINESS (B)	3,861 SQ. FT.
STORAGE (S-1)	25,933 SQ. FT.
TOTAL BUILDING S.F.	29,794 SQ. FT.
CONSTRUCTION TYPE:	
TYPE II-B - UNPROTECTED, SPRINKLERED (FBC)	
TYPE III(000) - UNPROTECTED, SPRINKLERED (NFPA)	
OCCUPANCY:	
S-1, B, M - BUSINESS PER FLORIDA BUILDING CODE, SEVENTH EDITION (2020)	
NO SEPARATION REQUIRED PER SECTION 508.3.3, AND TABLE 508.4 OCCUPANCY SEPARATION.	
APPLICABLE BUILDING CODES:	
<ul style="list-style-type: none"> FLORIDA BUILDING CODE, SEVENTH EDITION (2020) FLORIDA ENERGY CODE, SEVENTH EDITION (2020) - 2016 ASHRAE 90.1 FLORIDA MECHANICAL CODE, SEVENTH EDITION (2020) FLORIDA PLUMBING CODE, SEVENTH EDITION (2020) EXISTING BLDG. FLORIDA BUILDING CODE, SEVENTH EDITION (2020) FLORIDA ACCESSIBILITY CODE, SEVENTH EDITION (2020) FLORIDA FIRE PREVENTION CODE, SEVENTH EDITION (2020) 2017 NATIONAL ELECTRIC CODE NFPA 101 LIFE SAFETY CODE, 2018 EDITION NFPA 10 STANDARD FOR PORTABLE FIRE EXTINGUISHERS, 2018 EDITION 	

PLUMBING FIXTURES

REQUIRED FIXTURES - BUSINESS 14 OCCUPANTS (PER FLORIDA BUILDING CODE - 7TH EDITION)					
WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS	OTHER
MALE	FEMALE	MALE	FEMALE		
1 PER 25 FOR FIRST 50/ 1 PER 50 EXCEEDING 50 14 PEOPLE = .56 FIXTURES		1 PER 40 FOR FIRST 80/ 1 PER 80 EXCEEDING 80 14 PEOPLE = .35 FIXTURES		1 PER 100	-
.28 MIN.	.28 MIN.	.175 MIN.	.175 MIN.	.14 MIN.	
REQUIRED FIXTURES - ASSEMBLY (A-2 = 17 OCCUPANTS) (A-3 = 24 OCCUPANTS)					
WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS	OTHER
MALE	FEMALE	MALE	FEMALE		
1 PER 75		1 PER 200		1 PER 500	1 SERVICE SINK
17 PEOPLE = .23 FIXTS.		17 PEOPLE = .085 FIXTS.			
.11 MIN.	.11 MIN.	.425 MIN.	.425 MIN.	.034 MIN.	
REQUIRED FIXTURES - MERCANTILE 13 OCCUPANTS					
WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS	OTHER
MALE	FEMALE	MALE	FEMALE		
1 PER 500		1 PER 750		1 PER 1000	-
13 PEOPLE = .026 FIXTURES		13 PEOPLE = .017 FIXTURES			
.013 MIN.	.013 MIN.	.008 MIN.	.008 MIN.	.013 MIN.	
REQUIRED FIXTURES - STORAGE 53 OCCUPANTS					
WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS	OTHER
MALE	FEMALE	MALE	FEMALE		
1 PER 100		1 PER 100		1 PER 1000	1 SERVICE SINK
53 PEOPLE = .53 FIXTS.		53 PEOPLE = .53 FIXTS.			
.265 MIN.	.265 MIN.	.265 MIN.	.265 MIN.	.053 MIN.	
TOTAL REQUIRED FIXTURES:					
WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS	OTHER
MALE	FEMALE	MALE	FEMALE		
1 MIN.	2 MIN.	1 MIN.	1 MIN.	2 MIN.	2 SERVICE SINK
TOTAL PROVIDED FIXTURES:					
WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS	OTHER
MALE	FEMALE	MALE	FEMALE		
2	3	2	3	4 MIN.	2 SERVICE SINK

LIFE SAFETY SUMMARY

OCCUPANT LOAD (PER FLORIDA BUILDING CODE - 7TH EDITION)	
SUITE 1:	
BUSINESS (B OCCUPANCY):	1,141 S.F. (BUSINESS USE) = 8 OCCUPANTS (1 PER 150 S.F.)
ASSEMBLY (A-2 OCCUPANCY):	219 S.F. (BUSINESS USE) = 8 OCCUPANTS (1 PER 30 S.F.)
MERCANTILE (M OCCUPANCY):	728 S.F. (BUSINESS USE) = 13 OCCUPANTS (1 PER 60 S.F.)
STORAGE (S-1 OCCUPANCY):	17,565 S.F. (STORAGE USE) = 36 OCCUPANTS (1 PER 500 S.F.)
TOTAL SUITE OCCUPANTS	= 65
SUITE 2:	
BUSINESS (B OCCUPANCY):	810 S.F. (BUSINESS USE) = 6 OCCUPANTS (1 PER 150 S.F.)
ASSEMBLY (A-2 OCCUPANCY):	252 S.F. (BUSINESS USE) = 9 OCCUPANTS (1 PER 30 S.F.)
ASSEMBLY (A-3 OCCUPANCY):	710 S.F. (BUSINESS USE) = 24 OCCUPANTS (1 PER 30 S.F.)
STORAGE (S-1 OCCUPANCY):	8,368 S.F. (STORAGE USE) = 17 OCCUPANTS (1 PER 500 S.F.)
TOTAL SUITE OCCUPANTS	= 56
TOTAL OCCUPANTS	= 121
MEANS OF EGRESS	
BUSINESS (B USE):	
MAXIMUM ALLOWABLE TRAVEL DISTANCE	= 300' FT. (FULLY SPRINKLERED)
MAXIMUM PROVIDED TRAVEL DISTANCE	= 105'-11" FT.
MAXIMUM ALLOWABLE DEAD END CORRIDOR LENGTH	= 50' FT.
MINIMUM ALLOWABLE AISLE WIDTH	= 44 IN.
EGRESS WIDTH PER PERSON SERVED	= .2 IN.
.2 INCHES x 68 OCCUPANTS = 13.6 IN. REQUIRED (xx IN. PROVIDED)	
MEANS OF EGRESS	
STORAGE (S-1 USE):	
MAXIMUM ALLOWABLE TRAVEL DISTANCE	= 400' FT. (FULLY SPRINKLERED)
MAXIMUM PROVIDED TRAVEL DISTANCE	= 125'-3" FT.
MAXIMUM ALLOWABLE COMMON TRAVEL PATH	= 100' FT. (FULLY SPRINKLERED)
MAXIMUM ALLOWABLE DEAD END CORRIDOR LENGTH	= 50' FT.
MINIMUM ALLOWABLE AISLE WIDTH	= 44 IN.
EGRESS WIDTH PER PERSON SERVED	= .2 IN.
.2 INCHES x 53 OCCUPANTS = 10.6 IN. REQUIRED (xx IN. PROVIDED)	
<p>TRAVEL DISTANCE</p> <p>● ———— →</p>	

SHEET INDEX

ARCHITECTURAL	
12-15-22	A000 COVER SHEET
12-15-22	A001 OVERALL SITE PLAN
12-15-22	A100 LIFE SAFETY PLAN
12-15-22	A200 OVERALL FLOOR PLAN
12-15-22	A201 ENLARGED FLOOR PLAN
12-15-22	A202 REFLECTED CEILING PLAN
12-15-22	A203 ENLARGED RESTROOM PLANS
12-15-22	A204 ENLARGED BREAK ROOM PLAN & MILLWORK
12-15-22	A300 EXTERIOR ELEVATIONS
12-15-22	A301 ROOF PLAN
12-15-22	A400 EXTERIOR WALL SECTIONS
12-15-22	A401 EXTERIOR WALL SECTIONS
12-15-22	A402 EXTERIOR WALL SECTIONS
12-15-22	A403 INTERIOR WALL SECTIONS
12-15-22	A500 SCHEDULE & DETAILS
12-15-22	A801 DUMPSTER SHEET
STRUCTURAL	
12-15-22	S001 GENERAL STRUCTURAL NOTES
12-15-22	S002 DESIGN LOADS
12-15-22	S101 FOUNDATION PLAN
12-15-22	S111 ROOF FRAMING PLAN
12-15-22	S401 TYPICAL TILT-UP WALL DETAILS
12-15-22	S402 TILT-UP PANEL ELEVATIONS
12-15-22	S501 SCHEDULES
12-15-22	S502 SCHEDULES
12-15-22	S601 FOUNDATION SECTIONS & DETAILS
12-15-22	S602 FOUNDATION SECTIONS & DETAILS
12-15-22	S603 DUMPSTER PAD PLAN & DETAILS
12-15-22	S611 FRAMING SECTIONS & DETAILS
12-15-22	S612 FRAMING SECTIONS & DETAILS
12-15-22	S613 FRAMING SECTIONS & DETAILS
MECHANICAL	
12-15-22	M001 MECHANICAL GENERAL NOTES
12-15-22	M100 MECHANICAL OVERALL PLAN
12-15-22	M300 MECHANICAL PLANS SUITE 1
12-15-22	M301 MECHANICAL PLANS SUITE 2
12-15-22	M600 MECHANICAL DETAILS
12-15-22	M700 MECHANICAL SCHEDULES
PLUMBING	
12-15-22	P001 PLUMBING GENERAL NOTES
12-15-22	P100 PLUMBING OVERALL PLAN
12-15-22	P300 PLUMBING PLANS, DETAILS & SCHEDULES
12-15-22	P600 PLUMBING RISERS
ELECTRICAL	
12-15-22	E100 ELECTRICAL NOTES, SPECIFICATIONS, SYMBOLS & ABBREVIATIONS
12-15-22	E101 POWER RISER DIAGRAM, NOTES & SPECIFICATIONS
12-15-22	E102 ELECTRICAL SCHEDULES
12-15-22	E200 ELECTRICAL SITE PLAN
12-15-22	E201 SITE PHOTOMETRICS PLAN
12-15-22	E202 SITE PHOTOMETRICS CUT SHEETS
12-15-22	E203 SITE PHOTOMETRICS CUT SHEETS
12-15-22	E204 SITE PHOTOMETRICS CUT SHEETS
12-15-22	E300 ELECTRICAL PLAN - AREA 'A'
12-15-22	E301 ELECTRICAL PLAN - AREA 'B'
12-15-22	E302 ELECTRICAL PLAN - AREA 'B'
12-15-22	E400 RISERS & DETAILS
12-15-22	E401 UL DETAILS

NOTES:

- ROOF STRUCTURE IS NOT LIGHT GAUGE METAL FRAMING.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH AND INSTALL ALL NECESSARY COMPONENTS FOR THE PROPER OPERATION OF ALL SPECIFIED SYSTEMS, REGARDLESS OF WHETHER THOSE COMPONENTS ARE SHOWN ON THE DRAWINGS OR NOT. CONTRACTOR SHALL ALSO VERIFY THAT SPECIFIED COMPONENTS ARE COMPATIBLE WITH OTHERS WITHIN THE SAME SYSTEM AND WITH THE SYSTEM ITSELF.
- *SEPARATE PERMITS REQUIRED FOR: DUMPSTER ENCLOSURE, SIGNS, SPRINKLERS, FIRE ALARM, AND BURGLAR ALARM.
- STRUCTURAL STEEL WORK SHALL BE INSPECTED AND CERTIFIED BY AN APPROVED 3RD PARTY PRIOR TO FRAMING INSPECTION.
- STRUCTURAL STEEL WORK CERTIFICATION, FROM 3RD PARTY INSPECTOR, DOCUMENTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT PRIOR TO CO APPLICATION.
- SUBMIT APPROVED SHOP DRAWINGS FOR ROOF JOISTS AND TILT-UP WALL CONSTRUCTION TO BUILDING DEPARTMENT PRIOR TO INSPECTION. (DETAILING FOR JOIST PLACEMENT AND SIZES ARE ON SUBMITTED PLANS AS ARE DETAILS OF TILT-UP WALLS).

MUNICIPALITY:

CITY OF WINTER GARDEN

PARCEL ID #:
24-22-27-9385-00-130

PROPERTY DESCRIPTION:
WINTER GARDEN COMMERCE CENTER PHASE 1 72/133 LOT 13

PROJECT NO.: 18406

DATE: SEPTEMBER 16, 2022

BID SET





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Revised:	By:	Date:	Drawn By:	Checked By:
	AS	12/16/2022	CEL	JCE

Block:	AS	NOTED
Date:	12/16/2022	
Drawn By:	CEL	
Checked By:	JCE	

WGCC - IMAGE BUILDERS
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690 GARDEN COMMERCE PKWY
WINTER GARDEN, FL 34787

MECHANICAL GENERAL NOTES

Professional Engineer
JOSE C. ZAMOT
No. 88872
STATE OF FLORIDA
Professional Engineer

Drawing Number:
M001
Of Sheets

Issuance:
18406

A/E Job Number:
18406

MECHANICAL LEGEND	MECHANICAL ABBREVIATIONS	MECHANICAL SYMBOLS LEGEND
<p>CHWS - CHILLED WATER SUPPLY CHWR - CHILLED WATER RETURN CD - CONDENSATE DRAIN RL - REFRIGERANT LIQUID RS - REFRIGERANT SUCTION GATE VALVE BALL VALVE CALIBRATE BALANCING VALVE BUTTERFLY VALVE GAS COCK UNION STRAINER PSI REG. CHECK VALVE CONNECTION, BOTTOM CONNECTION, TOP ELBOW, TURNED DOWN ELBOW, TURNED UP REDUCER, CONCENTRIC REDUCER, ECCENTRIC STRAIGHT CROWN REDUCER, ECCENTRIC STRAIGHT CROWN CAP</p>	<p>A AIR AAV AUTOMATIC AIR VENT AC AIR CONDITIONING ACU AIR CONDITIONING UNIT AD ACCESS DOOR, AIR DRYER AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AHU AIR HANDLING UNIT ALUM ALUMINUM AP ACCESS PANEL APD AIR PRESSURE DROP ATC AUTOMATIC TEMPERATURE CONTROL AV AIR VENT BDD BACK DRAFT DAMPER BOT BOTTOM BTP BACKFLOW PREVENTER BTU BRITISH THERMAL UNIT C CELSIUS, DEGREE CELSIUS CENT CENTRIFUGAL CFM CUBIC FEET PER MINUTE CHWS&R CHILLED WATER SUPPLY & RETURN CLS CEILING CF CEILING FAN CO CLEAN OUT COND CONDENSATE DB DRY BULB, DOWN BLOW DOW DOMESTIC COLD WATER DEG DEGREE DELV DELIVERY DHW DOMESTIC HOT WATER DISC DISCONNECT DN DOWN EA EXHAUST AIR, EACH EAT ENTERING AIR TEMPERATURE EDB ENTERING DRY BULB EF EXHAUST FAN EFF EFFICIENCY ELEV ELEVATION EMS ENERGY MANAGEMENT SYSTEM ENT ENTERING ERG EXISTING RETURN GRILLE EWB EXISTING WET BULB F FAHRENHEIT FD FIRE DAMPER, FLOOR DRAIN FPM FEET PER MINUTE FPS FEET PER SECOND F/SD FIRE/SMOKE DAMPER FT FEET GPH GALLONS PER HOUR GPM GALLONS PER MINUTE GLY GLYCOL GRV GRAVITY RELIEF VENTILATOR GWS GLYCOL WATER SUPPLY GWR GLYCOL WATER RETURN HHWS&R HEATING HOT WATER SUPPLY & RETURN HOA HAND-OFF-AUTOMATIC HP HORSEPOWER, HEAT PUMP</p> <p>HR HOUR HVAC HEATING VENTILATING AND AIR CONDITIONING HZ HERTZ (CYCLES PER SECOND) ID INSIDE DIAMETER IN INCH KEF KITCHEN EXHAUST FAN KW KILOWATT LDB LEAVING DRY BULB LWB LEAVING WET BULB LOR LIMIT OF REMOVAL MAX MAXIMUM MBC MASTER BUILDING CONTROLLER MHS THOUSAND BTU PER HOUR MD MINIMUM N NORTH NA NOT APPLICABLE NO OR # NUMBER, NORMALLY OPEN NOT TO SCALE OA OUTSIDE AIR OBD OPPOSED BLADE DAMPER OD OUTSIDE DIAMETER OPER OPERATING PSI POUNDS PER SQUARE INCH PSIG POUNDS PER SQUARE INCH GAUGE RA RETURN AIR REG REGISTER RF RETURN FAN RG RETURN GRILLE RH RELATIVE HUMIDITY RHC REHEAT COIL RM ROOM SA SUPPLY AIR SEF SMOKE EXHAUST FAN SF SMOKE/FIRE DAMPER S/FD SMOKE/FIRE DAMPER T THERMOSTAT TEC TERMINAL EQUIPMENT CONTROLLER TEMP TEMPERATURE T/D TRANSFER DUCT TYPICAL V VENT, VOLT VD VOLUME DAMPER VERT VERTICAL WB WET BULB WPD WATER PRESSURE DROP 1WB ONE WAY BLOW 2WB TWO WAY BLOW 3WB THREE WAY BLOW</p>	<p>PIPING ANGLE RELIEF VALVE (SET AS INDICATED) AIR ELIMINATOR AIR SEPARATOR AIR VENT, MANUAL W/CAP OR PLUG AIR VENT, AUTOMATIC, ROUTE DISCH. TO NEAREST FLOOR DRAIN BALANCING COCK BALL VALVE BLND FLANGE CALIBRATED BALANCING VALVE CHECK VALVE (SWING TYPE) COCK VALVE MOTORIZED CONTROL VALVE, 2-WAY MOTORIZED CONTROL VALVE, 3-WAY CONTROL VALVE, PILOT OPERATED GATE VALVE GATE VALVE W/ HOSE COUPLING & CAP GLOBE VALVE FLEXIBLE CONNECTION INSULATING FLANGE LOW POINT DRAIN PIPING PLUG PRESSURE REDUCING VALVE PUMP PRESSURE GAUGE W/ BALL OR COCK VALVE (RANGE AS INDICATED) PRESSURE REGULATING VALVE REDUCER, CONCENTRIC LINE SIZE SAMPLE CONNECTION SHUT-OFF VALVE (SOLENOID ACTUATED) SITE FLOW INDICATOR STRAINER, Y-TYPE STRAINER W/BLOWDOWN VALVE TEMPERATURE/PRESSURE RELIEF VALVE TEMPERATURE/PRESSURE TEST PLUG THERMOMETER WITH WELL THERMOMETER WITH WELL UNION VALVED PRESSURE GAGE CONNECTION REMOTE INDICATOR LIGHT AND TEST STATION</p> <p>DUCTWORK NEW WORK EXISTING DUCT TO REMAIN EXISTING DUCT TO BE DEMOLISHED SUPPLY AIR DUCT - SECTION RETURN AIR DUCT - SECTION EXHAUST AIR DUCT - SECTION SUPPLY DUCT UP THRU ROOF OR FLOOR/CEILING ASSEMBLY RETURN DUCT UP THRU ROOF OR FLOOR/CEILING ASSEMBLY ELBOW TURNED UP ELBOW TURNED DOWN OFFSET IN DUCTWORK - UP OFFSET IN DUCTWORK - DOWN TEE WITH DOUBLE THICKNESS MITERED ELBOW RADIUS ELBOW CEILING DIFFUSER - BOTTOM DUCT CONNECTION STANDARD BRANCH TAKEOFF MANUAL DAMPER</p> <p>PLAN-DETAIL IDENTIFICATION DETAIL NUMBER SHEET WHERE DETAIL IS TAKEN SHEET WHERE DETAIL IS SHOWN</p> <p>SECTION IDENTIFICATION SECTION NUMBER SHEET WHERE SECTION IS TAKEN SHEET WHERE SECTION IS SHOWN</p> <p>DUCTWORK 4-WAY DISCHARGE SQUARE SUPPLY AIR DIFFUSER RETURN AIR REGISTER/GRILLE EXHAUST AIR REGISTER/GRILLE SIDEWALL REGISTER OR GRILLE FLEXIBLE CONNECTION CEILING DIFFUSER - SIDE DUCT CONNECTION AIR DISTRIBUTION DESIGNATION FLEXIBLE ROUND DUCT FIRE DAMPER AND ACCESS DOOR. RECTANGULAR DUCT, FIRST FIGURE IS SIDE SHOWN COMBINATION FIRE AND SMOKE DAMPER, WITH ACCESS DOOR. BACKDRAFT DAMPER ROUND DUCT, DIAMETER SHOWN MOTORIZED DAMPER BAROMETRIC DAMPER SPIN-IN COLLAR WITH VOLUME DAMPER</p>

MECHANICAL GENERAL NOTES (AS APPLICABLE)

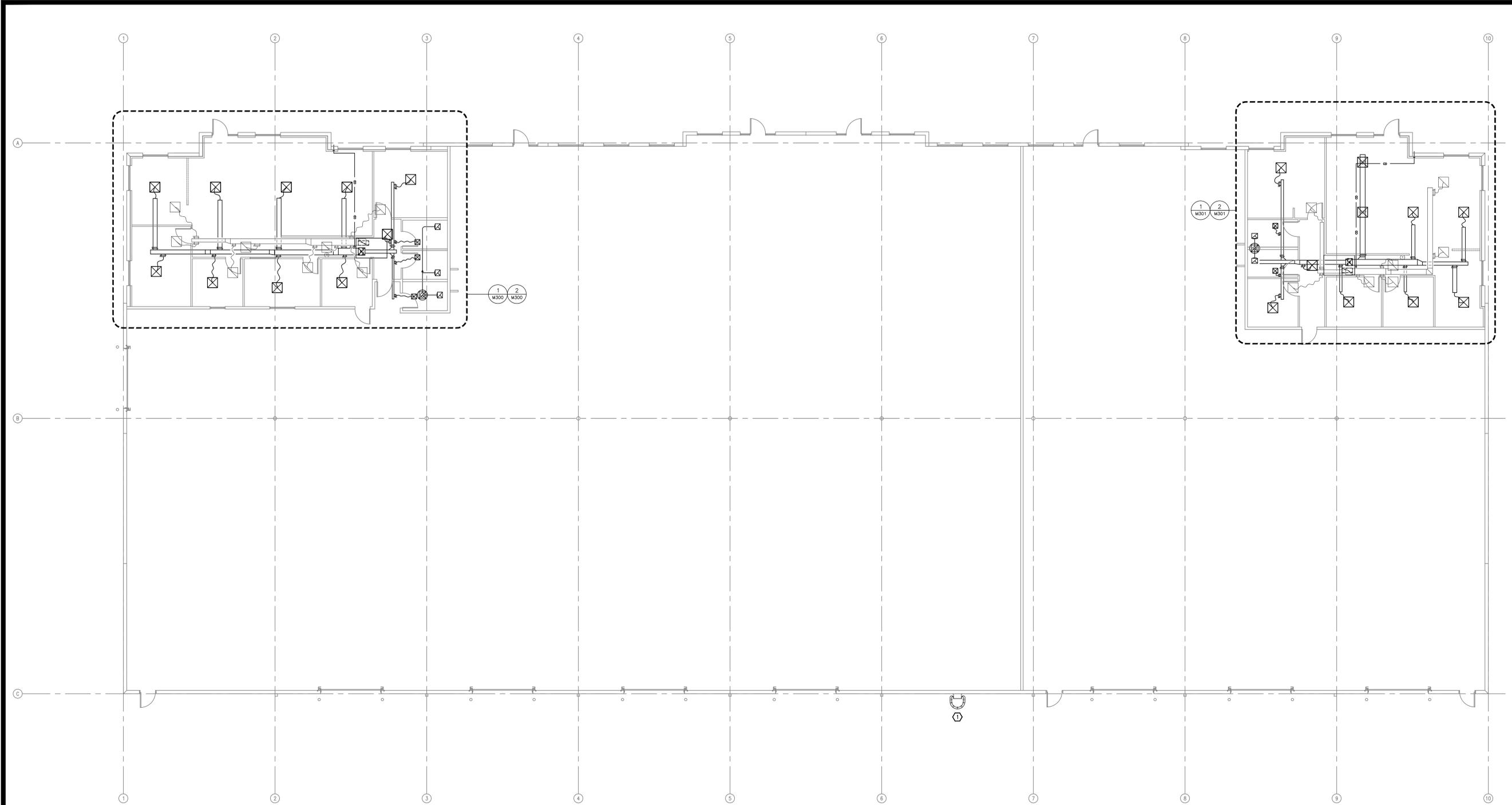
- THE PLANS ARE INTENDED AS A GENERAL DESCRIPTION OF THE WORK TO BE PERFORMED. ALL ITEMS NOT SPECIFICALLY MENTIONED OR SHOWN, BUT NECESSARY FOR THE COMPLETION OF THE INSTALLATION, SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. THIS CONTRACTOR SHALL THOROUGHLY ACQUANT THEMSELVES WITH THE MECHANICAL, ARCHITECTURAL, STRUCTURAL AND ELECTRICAL PLANS BEFORE SUBMITTING THEIR FINAL BID. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO FAMILIARIZE THEMSELVES WITH THE PLANS.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING AND MECHANICAL CODE.
- THE CONTRACTOR SHALL SUBMIT ALL REQUESTS FOR INFORMATION ON A COMPANY LETTERHEAD TO THE ENGINEER OF RECORD AND SHALL RECEIVE RESPONSE IN WRITING IN A MINIMUM OF THREE BUSINESS DAYS.
- THE CONTRACTOR SHALL SUBMIT SCHEDULED/SPECIFIED EQUIPMENT TO THE ENGINEER OF RECORD FOR REVIEW AND SHALL RECEIVE RESPONSE WITHIN SEVEN TO TEN BUSINESS DAYS.
- THE SIZE AND LOCATION OF EQUIPMENT INSTALLED UNDER MECHANICAL SHALL BE COORDINATED WITH OTHER TRADES. CONNECTION TO EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS. TRANSITIONS TO ALL EQUIPMENT SHALL BE VERIFIED AND PROVIDED FOR EQUIPMENT FURNISHED.
- DUCTWORK AND PIPING TO MECHANICAL EQUIPMENT SHALL BE INSTALLED SUCH THAT IT DOES NOT OBSTRUCT EQUIPMENT SERVICE CLEARANCES.
- COORDINATE WORK WITH ALL TRADES INCLUDING, BUT NOT LIMITED TO, ARCHITECTURAL, STRUCTURAL, LIGHTING, POWER SYSTEMS, PLUMBING, AND FIRE PROTECTION FOR BOTH EXISTING AND NEW WORK.
- INTERRUPTION OF EXISTING SERVICES SHALL BE MINIMAL AND SHALL BE FULLY COORDINATED WITH THE OWNER AND ALL TRADES IN ADVANCE TO SCHEDULE ALL INTERRUPTIONS DURING NON-CRITICAL TIMES.
- DISCONNECT SWITCHES REQUIRED FOR THE MECHANICAL EQUIPMENT SHALL BE PROVIDED BY DIVISION 26 ELECTRICAL EXCEPT WHEN INDICATED ON SCHEDULE.
- ALL EQUIPMENT, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION-FREE, RIGID INSTALLATION. SUPPORT ALL OBJECTS FROM STRUCTURE WITHOUT PENETRATING THE CEILING.
- ALL HVAC EQUIPMENT LOCATION & WEIGHT SHALL BE COORDINATED AND APPROVED BY THE ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR AND OWNER PRIOR TO PURCHASE AND INSTALLATION.
- REFER TO TYPICAL DETAILS FOR DUCTWORK, PIPING AND INSTALLATION OF EQUIPMENT.
- CONDENSATE DRAINS FROM ALL MECHANICAL EQUIPMENT SHALL BE COORDINATED FOR PROPER DRAINAGE TO SUIT THE EQUIPMENT FURNISHED. COORDINATE ROUTING TO DRAIN WITH PLUMBING DRAWINGS.
- ALL GRAVITY CONDENSATE PIPING SYSTEMS SHALL BE S-40 PVC WITH SOLVENT WELDED JOINTS. INSULATE ALL INTERIOR ABOVE GRADE CONDENSATE PIPING WITH 1" 25/50 RATED (PER ASTM E84) ARMSTRONG ARMAFLEX OR EQUAL CLOSED CELL INSULATION.
- ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH NFPA 90A AND 90B. ALL DUCTWORK SHALL BE FABRICATED IN ACCORDANCE WITH SMACNA.
- WHEN INSTALLED WITHIN THERMAL ENVELOPE OF CONDITIONED SPACE ALL NEW MEDIUM PRESSURE SUPPLY DUCTWORK SHALL BE SEALED GALVANIZED STEEL, STEEL SUPPLY/RETURN AIR DUCTWORK SHALL BE EXTERNALLY INSULATED WITH R-6 FIBERGLASS/FSK. ALL INSULATION IS TO BE SEALED WITH GLASS FAB AND MASTIC JOINTS. DUCT SIZES SHOWN ARE MINIMUM INSIDE DIMENSIONS. ALL DUCTWORK, MASTICS, AND OTHER RELATED ITEMS SHALL HAVE A MAXIMUM FLAME SPREAD = 25 AND A MAXIMUM SMOKE = 50 DEVELOPED RATINGS. OTHERWISE INSULATION SHALL BE R-12.
- WHEN INSTALLED WITHIN THERMAL ENVELOPE OF CONDITIONED SPACE ALL NEW LOW PRESSURE SUPPLY AND RETURN DUCTWORK SHALL BE 1 1/2" ANTIMICROBIAL FIBERGLASS DUCTBOARD OR SEALED GALVANIZED STEEL. STEEL SUPPLY/RETURN AIR DUCTWORK SHALL BE EXTERNALLY INSULATED WITH R-6 FIBERGLASS/FSK. ALL INSULATION AND DUCTBOARD IS TO BE SEALED WITH GLASS FAB AND MASTIC JOINTS. DUCT SIZES SHOWN ARE MINIMUM INSIDE DIMENSIONS. ALL FLEXIBLE DUCTWORK SHALL BE CONSTRUCTED UNDER SMACNA STANDARDS, WITH INTEGRAL VAPOR BARRIER AND MIN. R-6 INSULATION. ALL DUCTWORK, MASTICS, AND OTHER RELATED ITEMS SHALL HAVE A MAXIMUM FLAME SPREAD = 25 AND A MAXIMUM SMOKE = 50 DEVELOPED RATINGS. OTHERWISE DUCTBOARD/INSULATION SHALL BE R-12.
- WHEN INSTALLED WITHIN THERMAL ENVELOPE OF CONDITIONED SPACE ALL NEW EXHAUST DUCTWORK SHALL BE SEALED GALVANIZED STEEL.
- BEFORE FABRICATION, VERIFY AND COORDINATE ALL DIMENSIONS IN FIELD. DUCT SIZES AND ALL OPENINGS THRU BUILDING CONSTRUCTION SHALL SUIT EQUIPMENT FURNISHED.
- ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS AND PIPING (INCLUDING DIVIDING DUCTS) AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST.
- ALL DUCTWORK AND PIPING IS SHOWN SCHEMATICALLY. PROVIDE ALL TRANSITIONS, ELBOWS, FITTINGS, ETC., TO ALLOW SMOOTH FLOWS. ALL SPLIT DUCT FITTINGS SHALL TRANSITION TO FULL SIZE OF THE SUM OF BOTH BRANCHES, UPSTREAM OF SPLIT.
- ACCESS PANELS IN DUCTWORK AND CEILINGS SHALL BE PROVIDED WHERE REQUIRED FOR OPERATION, BALANCING, MAINTENANCE AND VISUAL INSPECTION OF ALL MECHANICAL EQUIPMENT INCLUDING CONTROL DAMPERS, TEMPERATURE CONTROL DEVICES, SMOKE DETECTORS, FIRE DAMPERS AND AIRFLOW MEASURING STATIONS.
- MAINTAIN CLEARANCE OF A MINIMUM OF 6" BETWEEN DUCTWORK, PIPING, EQUIPMENT, ETC., AND ALL FIRE RATED AND FIRE/SMOKE RATED PARTITIONS, TO ALLOW FOR INSPECTIONS OF RATED WALLS.
- PROVIDE FLEXIBLE DUCT CONNECTIONS ON ALL GALVANIZED STEEL DUCTS CONNECTING TO EACH FAN, RTU, AND AIR HANDLING UNIT.
- PROVIDE TRANSITIONS AT DIFFUSER NECKS AS REQUIRED TO MATCH SIZES OF FLEX DUCTS TO BE CONNECTED.
- PROVIDE VOLUME DAMPERS IN ALL BRANCH DUCTS FROM MAIN TRUNK LINES.
- COORDINATE DIFFUSER, GRILLE AND REGISTER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND EQUIPMENT OF ALL TRADES.
- COORDINATE WITH ARCHITECT BEFORE PURCHASING GRILLES, REGISTERS, DIFFUSERS, LOUVERS AND OTHER AIR DISTRIBUTION DEVICES TO VERIFY FINISH.
- SIDEWALL REGISTERS AND LINEAR TYPE DIFFUSERS SHALL BE INSTALLED LEVEL ALONG A COMMON ELEVATION IN THE SPACE SERVED.
- DAMPERS AND INSIDES OF DUCTS VISIBLE THROUGH GRILLES, REGISTERS AND DIFFUSERS SHALL BE PAINTED FLAT BLACK.
- ALL OPERABLE THERMOSTAT PARTS SHALL BE MOUNTED 48" ABOVE FINISHED FLOOR. ROOM THERMOSTATS DO NOT REQUIRE COVERS. VOLTAGE SHALL BE 24 VOLT UNLESS OTHERWISE INDICATED.
- COORDINATE COMBINATION THERMOSTAT/HUMIDISTAT LOCATIONS WITH FURNITURE/EQUIPMENT LAYOUTS, WINDOWS AND DOOR SWING AREAS.
- ALL CONTROL WIRING AND HARDWARE TO COMPLETE THE HVAC CONTROL SYSTEM SHALL BE FURNISHED AND INSTALLED UNDER MECHANICAL OF THESE CONTRACT DOCUMENTS UNLESS OTHERWISE SPECIFIED OR INDICATED ON DRAWINGS.
- INSTALLATION OF DUCT SMOKE DETECTORS SHALL BE BY MECHANICAL AND FURNISHED BY ELECTRICAL.
- CONVENIENCE OUTLETS (120V) SHALL BE PROVIDED WITHIN 25' OF AHU/CU/RTU, PER FMC 2020 BY ELECTRICAL.
- THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT AND ENGINEER FOR REVIEW, A TEST AND BALANCE REPORT OF ALL SYSTEMS. THE TESTING AND BALANCING SHALL BE PERFORMED BY A CERTIFIED TEST AND BALANCE COMPANY. TEST AND BALANCE SHALL BE UNDER CM CONTRACT AND BE COMPLETED AT SUBSTANTIAL COMPLETION DATE. BALANCE ALL MECHANICAL DEVICES TO BE WITHIN 10% OF SPECIFIED VALUES. PROVIDE ADDITIONAL TIME AND LABOR FOR A POST-CONSTRUCTION COMFORT TESTING AND BALANCE TO MEET THE TENANT OCCUPANT NEEDS. INCLUDE DP TESTS FOR SMOKE DETECTORS IN TAB REPORT.
- THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT AND ENGINEER FOR REVIEW, AS DICTATED BY THE ENERGY CODE, A COMMISSIONING REPORT OF ALL HVAC SYSTEMS. THE COMMISSIONING SHALL BE PERFORMED BY A CERTIFIED COMMISSIONING AUTHORITY. COMMISSIONING SHALL BE UNDER CM CONTRACT AND BE COMPLETED AT SUBSTANTIAL COMPLETION DATE.
- PROVIDE ALL MANUFACTURER INSTALLATION AND MAINTENANCE MANUALS FOR EQUIPMENT INSTALLED FOR ENGINEER REVIEW BEFORE RELEASE TO THE OWNER.
- PROVIDE PERMANENT LABELS ON EACH THERMOSTAT, CONDENSING UNIT, AIR HANDLING UNIT, ETC. TO IDENTIFY THE DEVICE AND ITS CONTROLS.
- SEAL ALL PENETRATIONS TO MOISTURE AND VERMIN. PENETRATIONS OF RATED ASSEMBLIES SHALL BE PROTECTED PER PROVIDED UL DETAILS.
- INSULATE ALL REFRIGERANT SUCTION PIPING WITH 1/2" 25/50 RATED ARMSTRONG ARMAFLEX. ALL EXPOSED EXTERIOR INSULATION AT THE CONDENSING UNITS SHALL RECEIVE 2 COATS OF ARMSTRONG AP FINISH.

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1 M100 MECHANICAL OVERALL PLAN
 SCALE: 1/8"=1'-0"



PLAN KEY NOTES: ①

- 1. EXISTING ROOF ACCESS LADDER.

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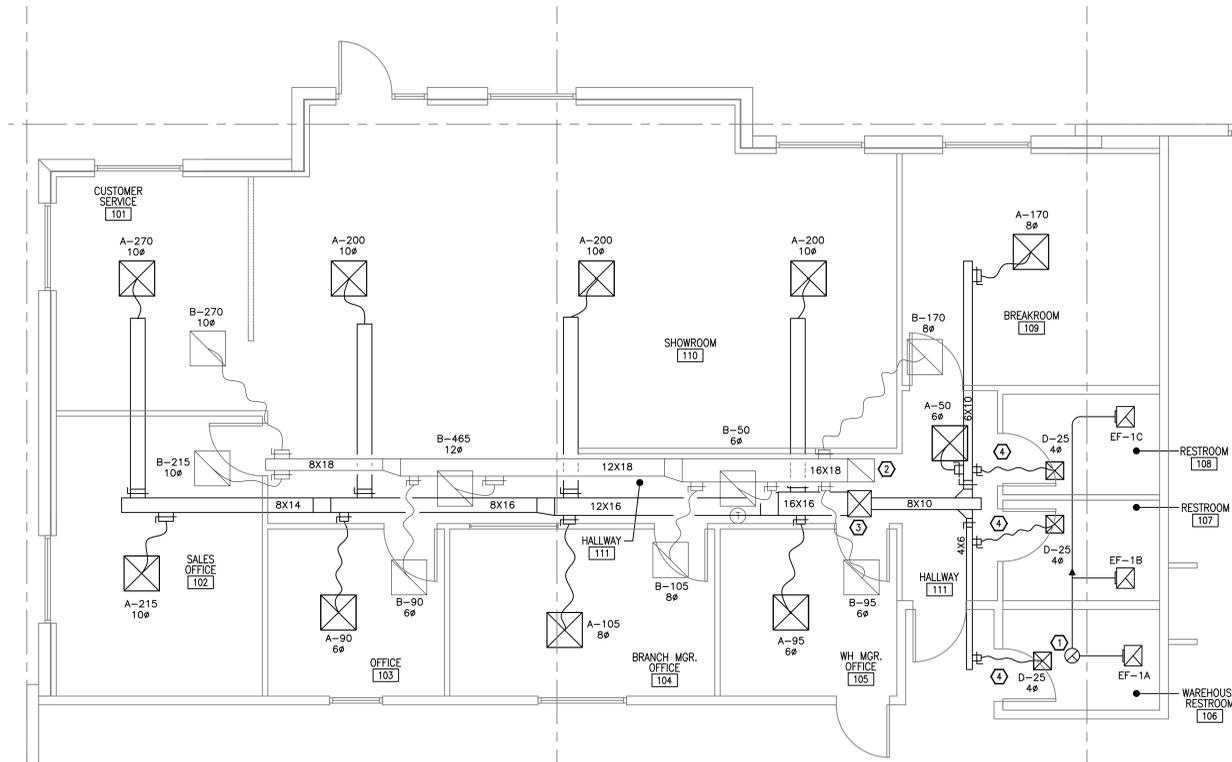
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 690 GARDEN COMMERCE PKWY
 WINTER GARDEN, FL 34787



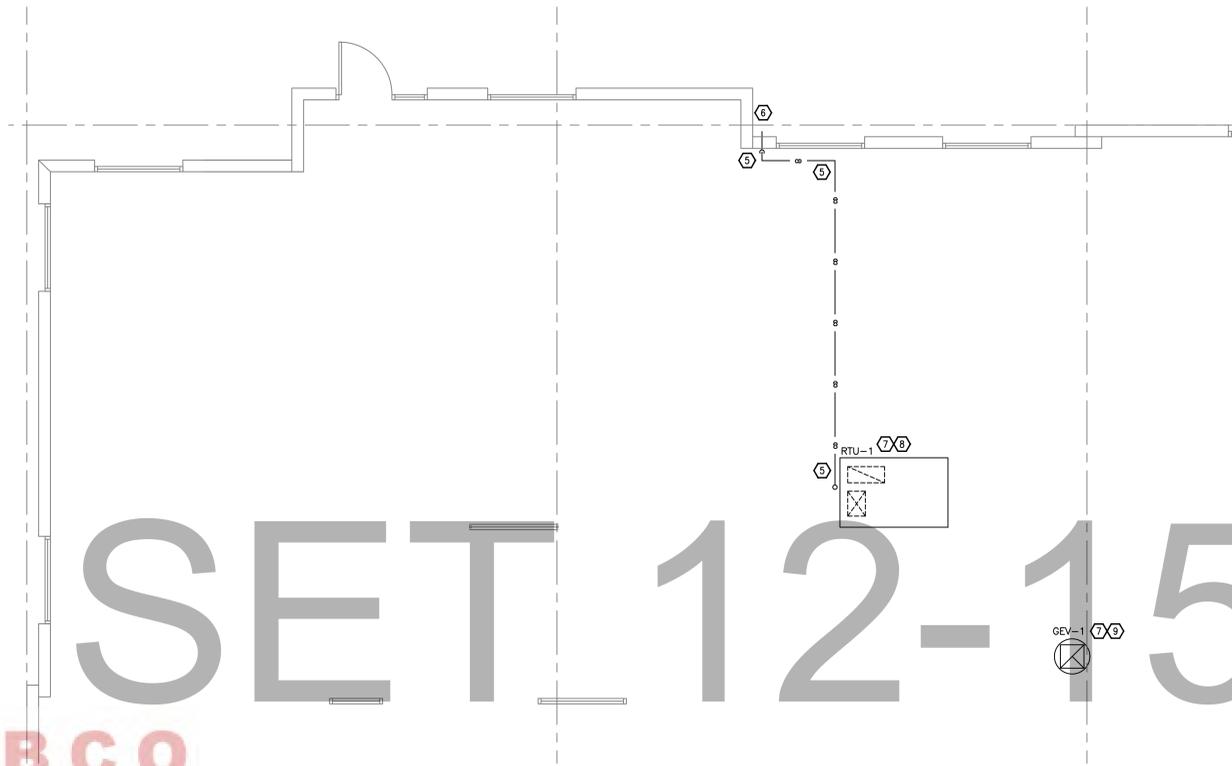
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1 MECHANICAL FLOOR PLAN
 M300 SCALE: 1/4"=1'-0"



2 MECHANICAL ROOF PLAN
 M300 SCALE: 1/4"=1'-0"

PLAN KEY NOTES:

1. NEW 10" RISER UP TO GEV-1 ON ROOF.
2. 18X16 RETURN DUCT RISER UP TO RTU-1. TRANSITION AT UNIT AS NEEDED.
3. 18X16 SUPPLY DUCT RISER UP TO RTU-1. TRANSITION AT UNIT AS NEEDED.
4. UNDERCUT DOOR 1" AFF.
5. CONDENSATE PIPE TO BE PVC WITH SOLVENT WELDED FITTINGS, INSTALLED AS DETAILED, ROUTED FULL SIZE, AND TO DISCHARGE TO DRYWELL. SEE DETAIL ON SHEET M600/G01.
6. APPROXIMATE LOCATION OF DRY WELL.
7. COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE FULL CRICKET ON HIGH SIDE OF EQUIPMENT.
8. COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE ADDITIONAL LAYER OF TPO, 24" WIDE, AROUND ALL SIDES OF EQUIPMENT.
9. GRAVITY EXHAUST VENT TO BE ROOF MOUNTED ON CURB. REFER TO DETAILS ON M600 FOR MOUNTING. COORDINATE WITH ALL TRADES.

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 MECHANICAL PLANS SUITE 1

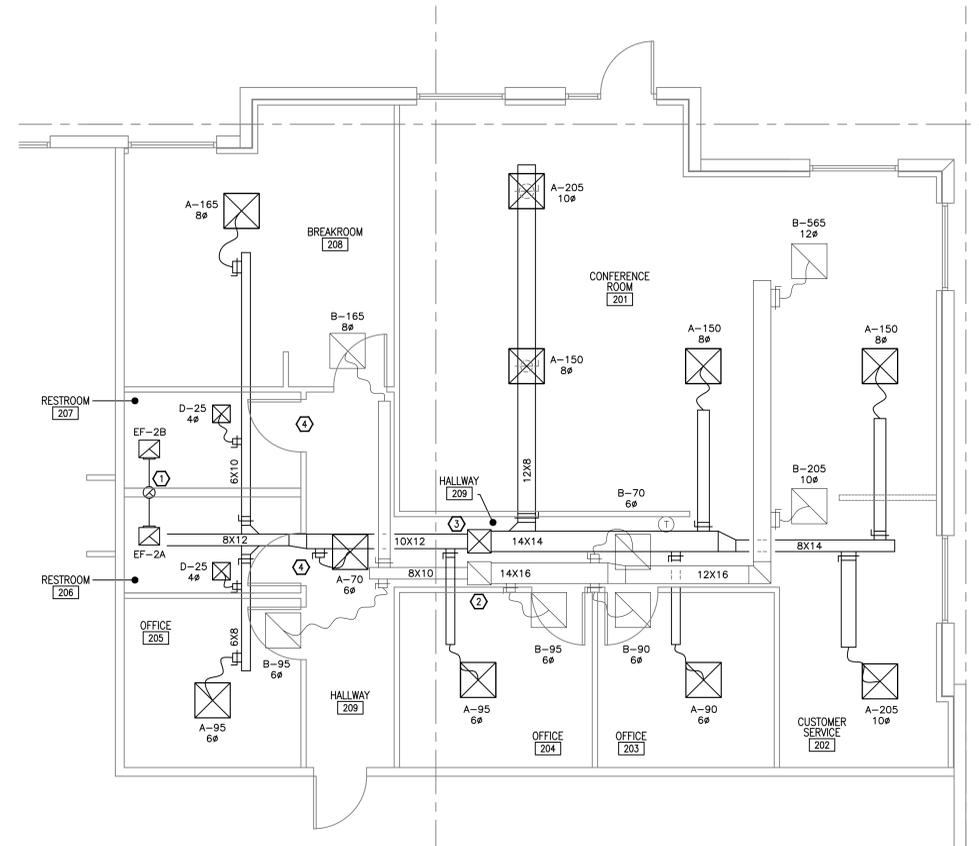


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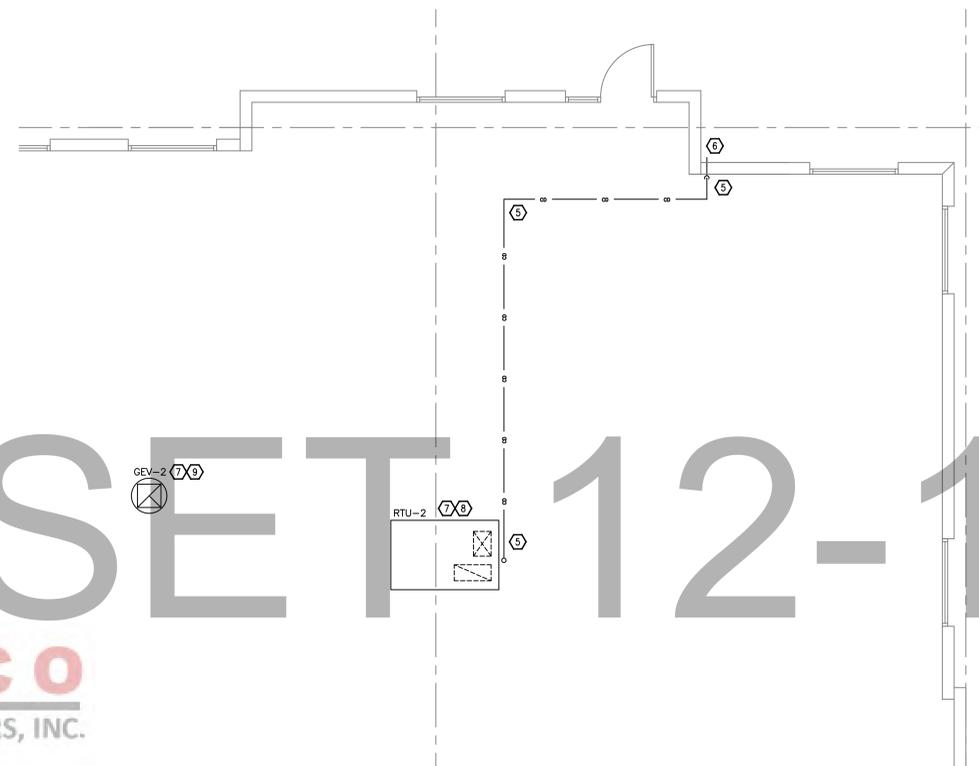
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1 MECHANICAL FLOOR PLAN
 SCALE: 1/4"=1'-0"



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

PLAN KEY NOTES:

1. NEW 8" RISER UP TO GEV-2 ON ROOF.
2. 16X16 RETURN DUCT RISER UP TO RTU-2. TRANSITION AT UNIT AS NEEDED.
3. 16X16 SUPPLY DUCT RISER UP TO RTU-2. TRANSITION AT UNIT AS NEEDED.
4. UNDERCUT DOOR 1" AFF.
5. CONDENSATE PIPE TO BE PVC WITH SOLVENT WELDED FITTINGS, INSTALLED AS DETAILED, ROUTED FULL SIZE, AND TO DISCHARGE TO DRYWELL. SEE DETAIL ON SHEET M600/G01.
6. APPROXIMATE LOCATION OF DRY WELL.
7. COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE FULL CRICKET ON HIGH SIDE OF EQUIPMENT.
8. COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE ADDITIONAL LAYER OF TPO, 24" WIDE, AROUND ALL SIDES OF EQUIPMENT.
9. GRAVITY EXHAUST VENT TO BE ROOF MOUNTED ON CURB. REFER TO DETAILS ON M600 FOR MOUNTING. COORDINATE WITH ALL TRADES.

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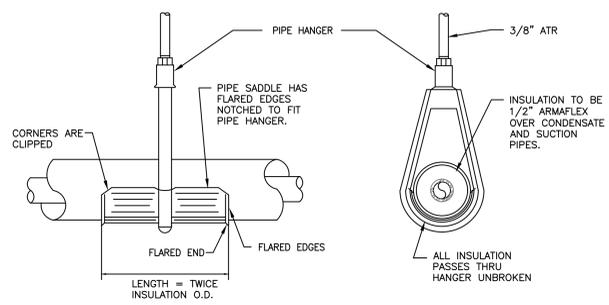


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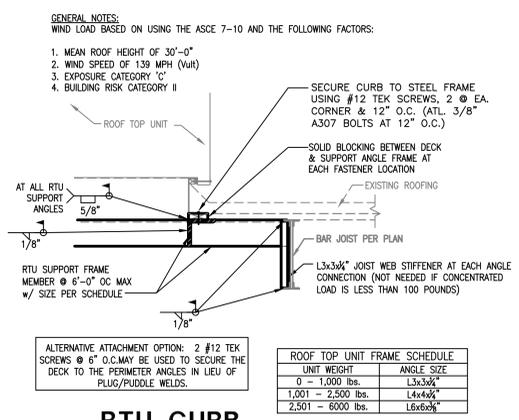
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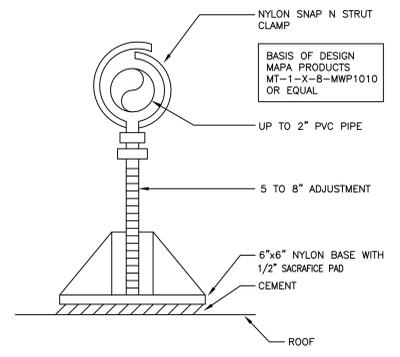
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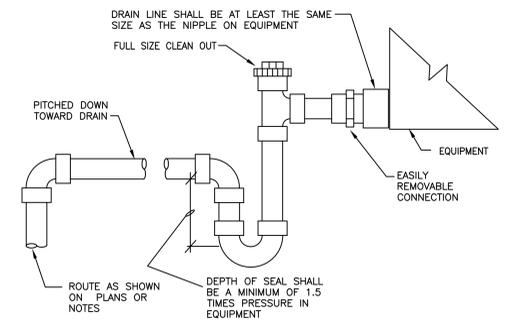
1 SUSPENDED PIPE SUPPORT DETAIL
M600 SCALE: N.T.S.



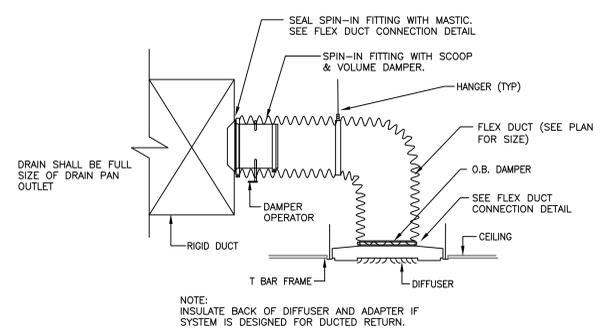
2 RTU CURB SUPPORT FRAMING DETAIL
M600 SCALE: N.T.S.



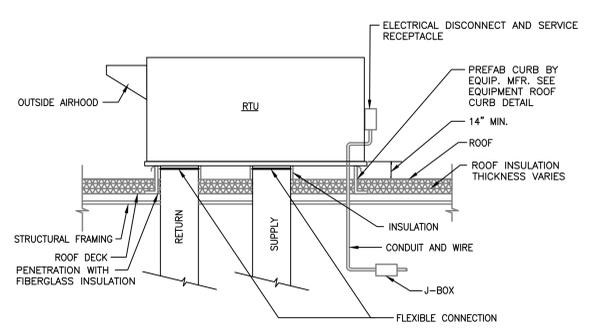
3 ROOF MOUNTED CONDENSATE PIPE SUPPORT DETAIL
M600 SCALE: N.T.S.



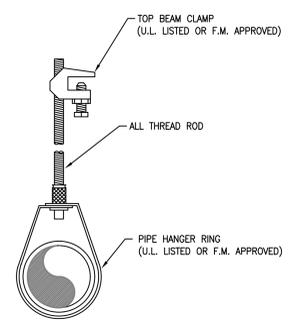
4 CONDENSATE DRAIN TRAP DETAIL
M600 SCALE: N.T.S.



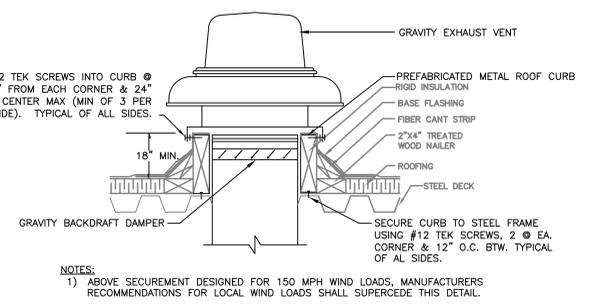
5 DIFFUSER DETAIL
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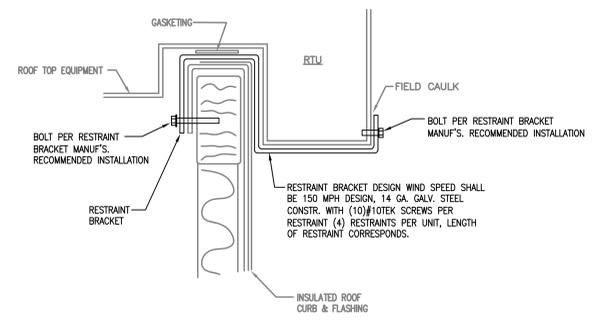
6 RTU INSTALLATION DETAIL
M600 SCALE: N.T.S.



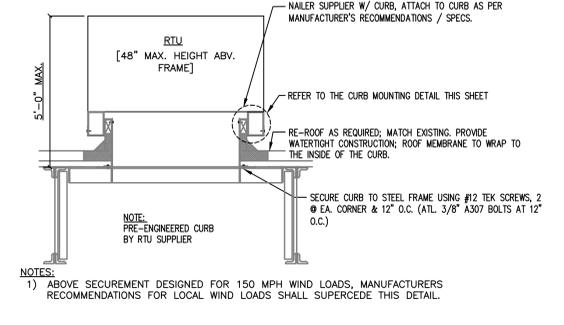
7 PIPE HANGER DETAIL
M600 SCALE: N.T.S.



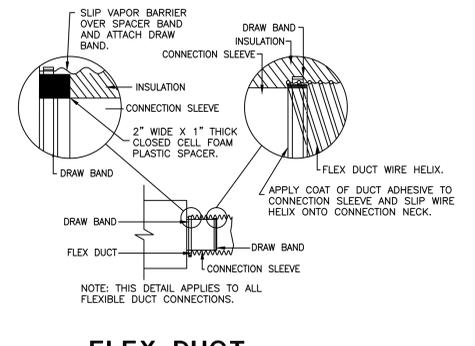
8 GEV CURB DETAIL
M600 SCALE: N.T.S.



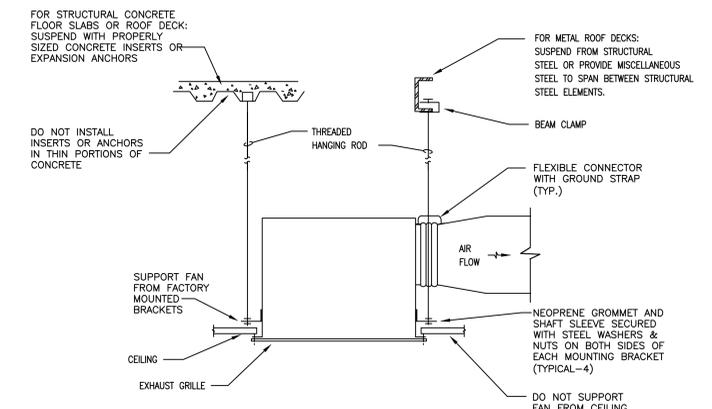
9 RTU CURB MOUNTING DETAIL
M600 SCALE: N.T.S.



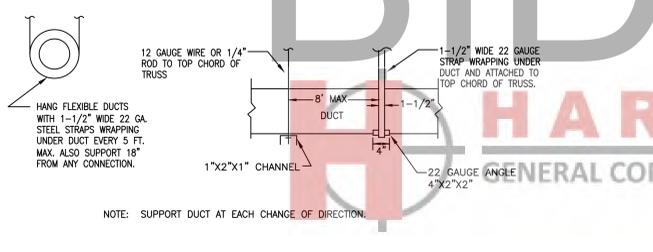
10 RTU TIE DOWN DETAIL
M600 SCALE: N.T.S.



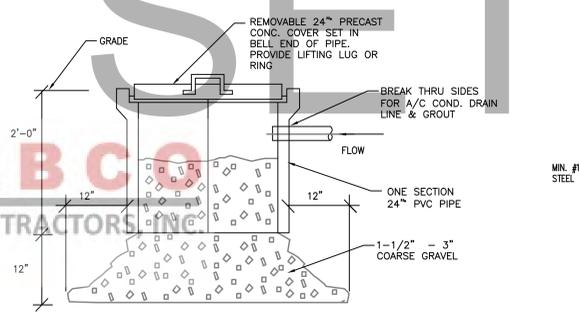
11 FLEX DUCT CONNECTION DETAIL
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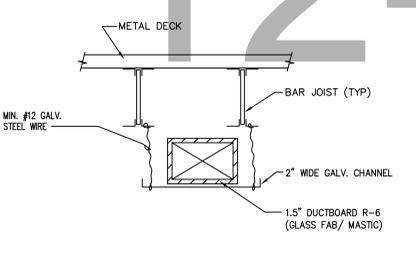
12 CEILING MOUNTED EXHAUST FAN DETAIL
M600 SCALE: N.T.S.



13 DUCT SUPPORT DETAIL
M600 SCALE: N.T.S.



14 DRYWELL DETAIL
M600 SCALE: N.T.S.



15 TRAPEZE DETAIL
M600 SCALE: N.T.S.

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ASHRAE 62.1 - Ventilation Sizing																
Project: WGCC IMAGE BUILDERS	Space Design Airflow	Zone Design Airflow	Space Minimum Supply Air	(Vsz) Zone Minimum Supply Air	(Az) Floor Area	(Ra) Area OA Rate	(Pt) Time Averaged Occupancy	Occupant with Diversity	(Rp) People OA Rate	(Ea) Air Distribution Effectiveness	Space Required OA	(Vsz) Zone Required OA	Space Uncorrected OA	(Vbz) Zone Uncorrected OA	(Zp) Zone Outdoor Air Fraction	(Ev) Zone Ventilation Efficiency
C4 Project #: 18406																
System: RTU-1 SUITE 1																
Zone Name / Space Name	(CFM)	(CFM)	(CFM)	(CFM)	(SF)	(CFM/SF)	(People)	(People)	(CFM/Person)		(CFM)	(CFM)	(CFM)	(CFM)		
Office	1670	1670		510								200		195	0.39	0.99
101 CUSTOMER SERVICE	270		82		146	0.06	3	3	5	1	24		24			
102 SALES OFFICE	215		66		187	0.06	1	1	5	1	16		16			
103 OFFICE	90		27		96	0.06	1	1	5	1	11		11			
104 BRANCH MGR. OFFICE	105		32		144	0.06	1	1	5	1	14		14			
105 WH MGR. OFFICE	95		29		96	0.06	1	1	5	1	11		11			
106 WH RESTROOM	25		8		51	0	0	0	0	1	0		0			
107 RESTROOM	25		8		51	0	0	0	0	1	0		0			
108 RESTROOM	25		8		51	0	0	0	0	1	0		0			
109 BREAKROOM	170		52		194	0.06	5	5	5	1	37		37			
110 SHOW ROOM	600		183		750	0.06	6	6	5	1	75		75			
111 HALLWAY	50		15		139	0.06	0	0	0	1	8		8			
	1670	1670	510	510	1905		18	18			195		195		0.39	0.99
Summary														0.88 CFM/SQFT	510 (Vps) System Primary Airflow	0.38 (Xa) Average Outdoor Air Fraction
Ventilation Sizing Method ASHRAE Std 62.1-2013																
Design Condition Minimum flow (heating)																
(D) Occupant Diversity 1.00																
(You) Uncorrected Outdoor Air 195 CFM																
(Ev) System Ventilation Efficiency 0.99															69.5% CFM Reduction During Heating	38.6% OA During Heating
(Vot) Design Ventilation Airflow Rate 197 CFM															11.8% OA During Normal	

ASHRAE 62.1 - Ventilation Sizing																
Project: WGCC IMAGE BUILDERS	Space Design Airflow	Zone Design Airflow	Space Minimum Supply Air	(Vsz) Zone Minimum Supply Air	(Az) Floor Area	(Ra) Area OA Rate	(Pt) Time Averaged Occupancy	Occupant with Diversity	(Rp) People OA Rate	(Ea) Air Distribution Effectiveness	Space Required OA	(Vsz) Zone Required OA	Space Uncorrected OA	(Vbz) Zone Uncorrected OA	(Zp) Zone Outdoor Air Fraction	(Ev) Zone Ventilation Efficiency
C4 Project #: 18406																
System: RTU-2 SUITE 2																
Zone Name / Space Name	(CFM)	(CFM)	(CFM)	(CFM)	(SF)	(CFM/SF)	(People)	(People)	(CFM/Person)		(CFM)	(CFM)	(CFM)	(CFM)		
Office	1430		430									210		201	0.49	0.98
201 CONFERENCE ROOM	655		197		664	0.06	12	12	5	1	100		100			
202 CUSTOMER SERVICE	205		62		138	0.06	3	3	5	1	23		23			
203 OFFICE	90		27		100	0.06	1	1	5	1	11		11			
204 OFFICE	95		29		110	0.06	1	1	5	1	12		12			
205 OFFICE	95		29		97	0.06	1	1	5	1	11		11			
206 RESTROOM	25		8		55	0	0	0	0	1	0		0			
207 RESTROOM	25		8		55	0	0	0	0	1	0		0			
208 BREAK ROOM	165		50		226	0.06	4	4	5	1	34		34			
209 HALLWAY	70		21		175	0.06	0	0	0	1	11		11			
	1425	1430	428	430	1420		22	22			201		201		0.49	0.98
Summary														0.88 CFM/SQFT	430 (Vps) System Primary Airflow	0.47 (Xa) Average Outdoor Air Fraction
Ventilation Sizing Method ASHRAE Std 62.1-2013																
Design Condition Minimum flow (heating)																
(D) Occupant Diversity 1.00																
(You) Uncorrected Outdoor Air 201 CFM																
(Ev) System Ventilation Efficiency 0.98															69.9% CFM Reduction During Heating	47.7% OA During Heating
(Vot) Design Ventilation Airflow Rate 205 CFM															14.3% OA During Normal	

GRILLE AND DIFFUSER SCHEDULE					
MARK	MANUFACTURER/MODEL	MOUNTING	COLOR	MATERIAL	REMARKS
A	TITUS/OMNI-AA	CEILING SUPPLY	WHITE	ALUMINUM	1
B	TITUS/50F	CEILING RETURN	WHITE	ALUMINUM	1
C	TITUS/50F	CEILING EXHAUST	WHITE	ALUMINUM	1
D	TITUS/OMNI-AA	CEILING SUPPLY	WHITE	ALUMINUM	2
E	TITUS/50F	CEILING RETURN	WHITE	ALUMINUM	2
F	TITUS/50F	CEILING EXHAUST	WHITE	ALUMINUM	2

NOTES:
1. SEE HVAC PLANS FOR NECK SIZES AND AIRFLOWS.
2. 4-WAY UNLESS NOTED OTHERWISE ON PLAN BY ARROWS.
3. MAXIMUM PRESSURE DROP OF .04 IN WC.
4. TRANSITION ROUND FLEXIBLE OR RECTANGULAR RIGID DUCTWORK TO DIFFUSERS AS REQUIRED.

REMARKS:
1. 24x24 LAY-IN.
2. 12x12 LAY-IN.

GRAVITY VENTILATOR							
MARK	MANUFACTURER/MODEL NUMBER	THROAT SIZE	THROAT AREA SQ.FT.	CFM	HOOD SIZE	SERVICE	REMARKS
GEV-1	GREENHECK\GRSR-8	-	0.37	210	-	RELIEF	1
GEV-2	GREENHECK\GRSR-8	-	0.37	140	-	RELIEF	1

NOTES:
1. PROVIDE MANUFACTURER ROOF CURB FOR ROOF PITCH.
2. PROVIDE GRAVITY RELIEF DAMPER.
3. PROVIDE WITH INSECT SCREEN.

REMARKS:
1. 7 LBS

OA CALCULATION SCHEDULE			
SPACE	CALCULATION	REQUIRED OA CFM	PROVIDED OA CFM
WAREHOUSE SUITE 1	(? SF. x 0.06 CFM/SF) + (? PEOPLE X 10 CFM/PERSON) = ? CFM 0.8	-	-

NOTE:
1. PER FMC-2020 SS402.1 AND 402.2 THIS SPACE IS CONSIDERED NATURALLY VENTILATED VIA THE X (9X10), X (10X12), AND X (12X14) EXTERIOR DOORS AND X (7X3) MAN DOORS WHICH PROVIDE AN OPENABLE AREA (X SQ FT) EQUAL TO X.X% OF THE FLOOR AREA.

OA CALCULATION SCHEDULE			
SPACE	CALCULATION	REQUIRED OA CFM	PROVIDED OA CFM
WAREHOUSE SUITE 2	(? SF. x 0.06 CFM/SF) + (? PEOPLE X 10 CFM/PERSON) = ? CFM 0.8	-	-

NOTE:
1. PER FMC-2020 SS402.1 AND 402.2 THIS SPACE IS CONSIDERED NATURALLY VENTILATED VIA THE X (9X10), X (10X12), AND X (12X14) EXTERIOR DOORS AND X (7X3) MAN DOORS WHICH PROVIDE AN OPENABLE AREA (X SQ FT) EQUAL TO X.X% OF THE FLOOR AREA.

FAN SCHEDULE												
MARK	SPACE SERVED	CFM	E.S.P. IN INCHES H2O	FAN RPM	MOTOR DATA			TYPE OF FAN	MAKE	MODEL	DRIVE	REMARKS
					HP/WATTS	RPM	VOLTS/PH					
EF-1A	REST ROOM	70	0.747	950	80 W	-	115/1	CEILING EXHAUST	GREENHECK	SP-B110	DIRECT	1,2,3
EF-1B	REST ROOM	70	0.747	950	80 W	-	115/1	CEILING EXHAUST	GREENHECK	SP-B110	DIRECT	1,2,3
EF-1C	REST ROOM	70	0.747	950	80 W	-	115/1	CEILING EXHAUST	GREENHECK	SP-B110	DIRECT	1,2,3
EF-2A	REST ROOM	70	0.747	950	80 W	-	115/1	CEILING EXHAUST	GREENHECK	SP-B110	DIRECT	1,2,3
EF-2B	REST ROOM	70	0.747	950	80 W	-	115/1	CEILING EXHAUST	GREENHECK	SP-B110	DIRECT	1,2,3

REMARKS:
1. INTERLOCK WITH OCCUPANCY SENSOR. ALLOW FAN TO RUN 15 MINUTES AFTER OCCUPANT LEAVES THE SPACE.
2. PROVIDE WITH DISCONNECT (DISCONNECT AND CONVENIENCE OUTLET TO BE INSTALLED BY ELECTRICAL).
3. PROVIDE FAN WITH BACK-DRAFT DAMPERS.
4. PROVIDE TIME CLOCK. FAN TO RUN CONTINUOUSLY DURING SCHEDULED BUSINESS HOURS.

PACKAGE ROOF TOP UNIT SCHEDULE			
MARK	RTU-1	RTU-2	
MANUFACTURER	DAIKIN	DAIKIN	
MODEL #	DRC048	DRC048	
TOTAL COOLING CAP- BTU/HR	47,125	46,619	
SENSIBLE COOLING CAP- BTU/HR	36,161	33,938	
TONS	4	4	
EER (SEER)	13(17)	13(17)	
AREA SERVED	SUITE 1	SUITE 2	
SUPPLY CFM	1670	1425	
OUTSIDE AIR CFM	340	270	
FAN HP	-	-	
ESP - IN.WG	.5	.5	
EAT (DB/WB) °F	76.3/64.8	76.1/64.6	
LAT (DB/WB) °F	56.5/55.4	55.9/54.4	
COIL FACE AREA (SQ.FT.)	-	-	
ROWS - FINS/INCH	-	-	
HEATER	TYPE KW - STAGES CAPACITY (BTU/HR) DISCHARGE TEMPERATURE °F	ELECTRIC 5- 17,060 64.5	ELECTRIC 5- 17,060 64.5
FILTER TYPE	THROW AWAY	THROW AWAY	
FILTER QTY. AND SIZE.	(4)14X20X2	(4)14X20X2	
REFRIGERANT	R410A	R410A	
COMPRESSOR QTY. - TYPE	-	-	
COMPRESSOR RLA/LRA	-	-	
CONDENSER FAN QTY. - HP	-	-	
CONDENSER FAN FLA	-	-	
VOLTI/PHASE/Hz	460/3/60	460/3/60	
MCA/MCOP	11/15	11/15	
WEIGHT (LBS)	590	590	
NOTES:	1,2,3,4,5,6,7,8,9,10	1,2,3,4,5,6,7,8,9,10	

NOTES:
1. NEW EQUIPMENT LISTED IS TO SERVE AS THE BASIS OF DESIGN, CONTRACTOR MAY SUBMIT OTHERS FOR REVIEW.
2. MOUNT UNIT ON 14" TALL PREFABRICATED ROOF CURB TO MEET 150 MPH WIND SPEEDS.
3. PROVIDE 7 DAY PROGRAMMABLE T-STAT.
4. PROVIDE 5 MINUTE TIME DELAY TO PREVENT COMPRESSOR SHORT CYCLING.
5. PROVIDE WITH A MOTORIZED OUTSIDE AIR DAMPER AND BAROMETRIC RELIEF.
6. PROVIDE WITH SINGLE POINT POWER CONNECTION.
7. PROVIDE WITH DISCONNECT (DISCONNECT AND CONVENIENCE OUTLET TO BE INSTALLED BY ELECTRICAL).
8. COORDINATE WITH ARCHITECT AND PROVIDE SCREENING IF UNITS ARE VISIBLE FROM THE GROUND AS VIEWED FROM ANY PUBLIC OR PRIVATE RIGHT OF WAY OR FROM THE ADJUTING PROPERTY.
9. PROVIDE WITH HINGED ACCESS PANELS AND HAIL GUARDS.
10. PROVIDE WITH VARIABLE SPEED ECM FAN MOTOR.

BID SET 12-15-22



135 West Central Blvd., Suite 400
Orlando, Florida 32801
TEL: 407.365.6136
A91246
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WGCC - IMAGE BUILDERS

MECHANICAL SCHEDULES

DATE: 12/15/2022

CHECKED BY: JCE

WGCC - IMAGE BUILDERS

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690 GARDEN COMMERCE PKWY
WINTER GARDEN, FL 34787

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