	CODE REFERENCES
FBC, BUILDING	FLORIDA BUILDING CODE, BUILDING, 2023 EIGHTH EDITION
FBC, EXISTING BUILDING	FLORIDA BUILDING CODE, EXISTING BUILDING, 2023 EIGHTH EDITION
FBC, MECHANICAL	FLORIDA BUILDING CODE, MECHANICAL, 2023 EIGHTH EDITION
FBC, EXISTING BUILDING	FLORIDA BUILDING CODE, 2023 EIGHTH EDITION
FBC, ENERGY	FLORIDA BUILDING CODE, 2023 EIGHTH EDITION
FFPC	FLORIDA FIRE PREVENTION CODE, 2023 EIGHTH EDITION
NFPA 51B	STANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING, AND OTHER HOT WORK, 2019 EDITION
NFPA 70	NATIONAL ELECTRIC CODE, 2020 EDITION
NFPA 90A	STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS, 2021 EDITION
NFPA 101	LIFE SAFETY CODE, 2021 EDITION
NFPA 101A	GUIDE ON ALTERNATIVE APPROACHES TO LIFE SAFETY, 2019 EDITION

NFPA 101A	GUIDE ON ALTERNATIVE APPROACHES TO LIFE SAFETY, 2019 EDITION	STATION	
INFFA IUIA	COIDE ON ALTERNATIVE ALTROACHES TO EILE SALETT, 2019 EDITION	\/FD/4FD	
	DESIGN CRITERIA	VFD/AFD	OR VFD
BUILDING TYPE	GROUP B, BUSINESS - MIXED OCCUPANCY	DUCT MOUNTED SMOKE DETECTOR	OR —
CLIMATE ZONE	2A, LIBERTY COUNTY, FLORIDA	PREMIUM EFFICIENT	$\sim$
OUTDOOR DESIGN CONDITIONS (SUMMER)	96°F DB, 78°F WB	MOTOR, UNO	(M)
OUTDOOR DESIGN CONDITIONS (WINTER)	25°F DB		M
INTERIOR DESIGN TEMPERATURES	72°F HEATING, 75°F COOLING	MOTORIZED DAMPER	OR
ENERGY COMPLIANCE METHOD	ENERGY TRADE-OFF	THERMOSTAT/	
COMMISSIONING	COMMISSIONING IS NOT REQUIRED PER EXCEPTION #1 OF C408.2 OF FLORIDA BUILDING CODE - ENERGY, 2023 (EIGHTH EDITION)	TEMPERATURE SENSOR WITH CONTROL WIRING	T)
	THE HVAC SCOPE OF THIS PROJECT CONSIST OF PROVIDING A/C SYSTEMS,	CURRENT SENSOR	(CS)
SCOPE OF WORK	EXHAUST SYSTEMS, AND ALL ASSOCIATED COMPONENTS AS DETAILED HEREIN FOR THE LIBERTY COUNTY EMS FACILITY IN LIBERTY COUNTY FLORIDA.	CURRENT/CONTACT RELAY	CR
	T LONIDA.	ANALOG INPUT	(AI)
	<u>.                                    </u>	ANALOG OUTPUT	(AO)
		DIGITAL INPUT	(DI)
		DIGITAL OUTPUT	<b>₽</b>

- MAINTAIN A

MINIMUM OF 36"

**DUCT MOUNTED** 

FAN OR PUMP

AIRFLOW

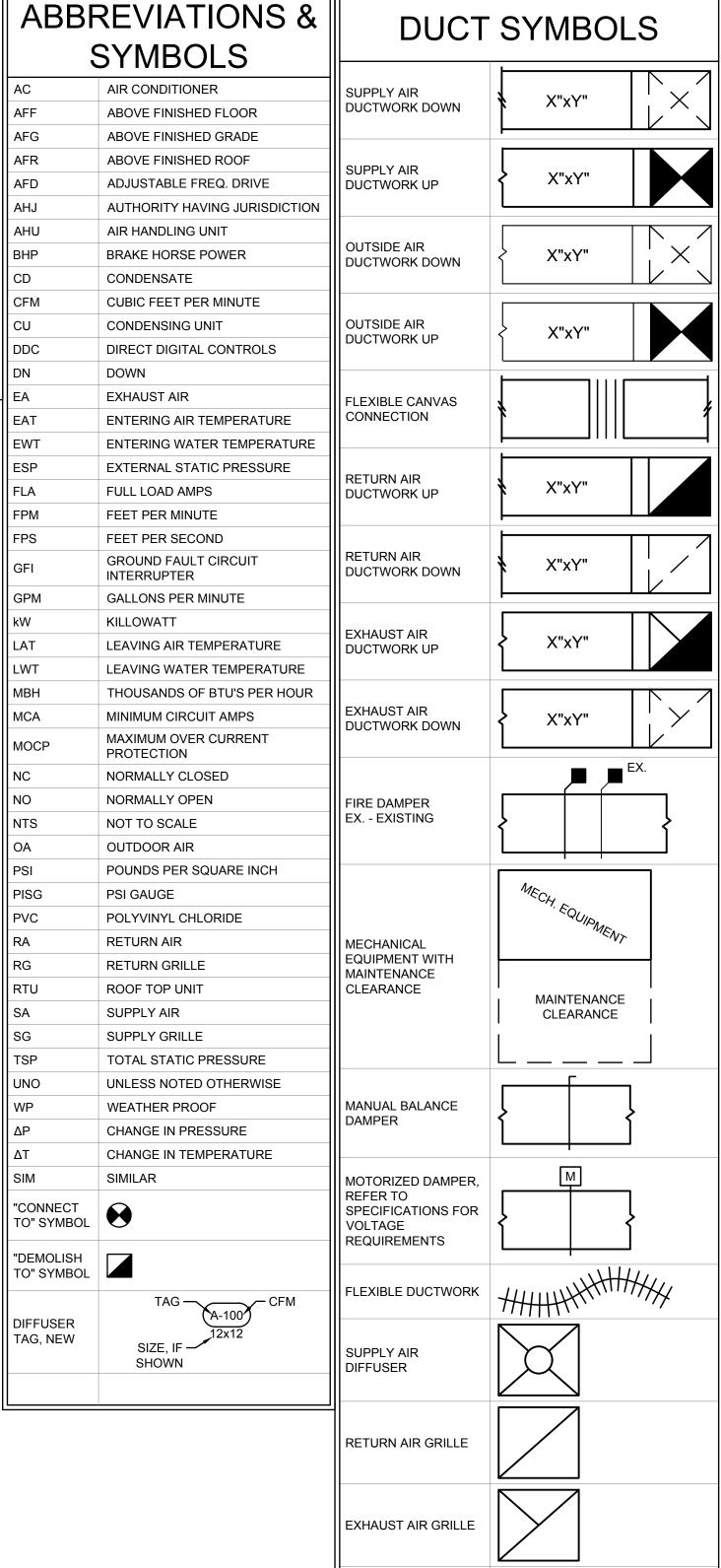
**MONITORING** 

SENSOR

CLEAR IN FRONT OF

DDC

## CONTROLS SYMBOLS PIPING SYMBOLS **CHECK VALVE** PIPING UP PIPING DOWN END CAP BUTTERFLY VALVE BALL VALVE **DIRECTION OF FLOW CONDENSATE &** PUMPED **CONDENSATE**



## **GENERAL HVAC NOTES**

TOMAHAWK ENGINEERING AND CONSULTING, INC. SHALL NOT BE HELD RESPONSIBLE FOR ANY MISUSE AND/OR MISREPRESENTATION OF THIS SET OF DOCUMENTS.

THE CONTRACTOR ASSUMES RESPONSIBILITY FOR USE OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL MAKE HIMSELF AWARE OF PROJECT CONDITIONS AND OWNER REQUIREMENTS PRIOR TO PROCUREMENT OF EQUIPMENT AND SERVICES. CHANGES IN PROJECT COST WILL NOT BE GRANTED DUE TO FIELD CONFLICTS AND/OR PROJECT CONDITIONS.

THIS SET OF DRAWINGS AND SPECIFICATIONS SHALL NOT BE CONSIDERED A SET OF CONSTRUCTION DOCUMENTS UNLESS A SIGNATURE AND DATE ARE AFFIXED TO THE DRAWINGS AND SPECIFICATIONS BY THE ENGINEER IN RESPONSIBLE CHARGE FOR THE GIVEN DISCIPLINE.

CONFLICTS BETWEEN THIS SET OF DRAWINGS AND THE CONTRACT SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER OF RECORD. THE CONTRACTOR DOES NOT HAVE THE AUTHORITY TO INTERPRET CONFLICTS AND RESOLVE ISSUES WITHOUT WRITTEN DIRECTION FROM THE ENGINEER OF RECORD.

ANY CONFLICTS IN THE FIELD OR WITHIN THESE DOCUMENTS SHALL BE RECORDED AND PROVIDED TO THE ENGINEER OF RECORD ON THE CONTRACTOR'S STANDARD LETTERHEAD. WRITTEN DIRECTION RESOLVING CONFLICT WILL BE ISSUED BY THE

ENGINEER OF RECORD.

GENERAL NOTES.

WHERE THE CONTRACTOR DEVIATES FROM THIS SET OF CONSTRUCTION DOCUMENTS AND RESUBMISSION OF REVISED DRAWINGS IS REQUIRED BY THE PERMITTING OFFICE/OFFICIAL, A MINIMUM CHARGE OF \$750.00 PER AFFECTED DRAWING SHEET WILL BE BILLED TO THE CONTRACTOR. THE REVISED DRAWINGS WILL NOT BE PROVIDED AND/OR SUBMITTED TO THE PERMIT OFFICE UNTIL A PURCHASE ORDER OR SIGNED AGREEMENT IS ISSUED BY THE CONTRACTOR TO THE DESIGN PROFESSIONAL FOR WORK REQUIRED. THIS SHALL NOT APPLY TO UNFORESEEN CONDITIONS OR CHANGES REQUIRED FOR THE PROJECT THAT ARE NOT INITIATED BY THE CONTRACTOR.

DRAWINGS ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND EXISTING EQUIPMENT (WHERE APPLICABLE) TO ENSURE EQUIPMENT FURNISHED WILL WORK FOR SPACES PROVIDED. FINAL DIMENSIONS OF DUCTWORK AND PIPING SHALL BE COORDINATED IN FIELD. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR PROVIDING OFFSETS AND TRANSITIONS IN DUCTWORK AND PIPING TO FIT IN SPACES PROVIDED AND THESE ADDITIONAL OFFSETS AND TRANSITIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA GUIDELINES AT TIME OF PROJECT PERMIT.

THERMOSTATS, HUMIDISTATS, TEMPERATURE SENSORS, HUMIDITY SENSORS, AND/OR OTHER DEVICES REQUIRING OCCUPANT ADJUSTMENT BUT LOCATED ON WALL SHALL BE MOUNTED 48" AFF, UNLESS NOTED OTHERWISE.

WHERE APPLICABLE AND AVAILABLE, ACTUAL EQUIPMENT DRAWINGS ARE USED FOR SYMBOLS ON PLAN VIEWS AND IN DETAILS. HOWEVER, SIMPLE BLOCK DIAGRAMS WITH ESTIMATED DIMENSIONS ARE ALSO USED FOR PLAN VIEWS. WHERE EQUIPMENT OR DEVICES ARE NOT LABELED, INDUSTRY STANDARD TERMINOLOGY AND SYMBOLOGY SHALL

THESE GENERAL NOTES WORK IN CONJUNCTION WITH NOTES SHOWN ON PLAN VIEWS. THESE NOTES DO NOT SUPERCEDE NOTES SHOWN ON PLAN VIEW DRAWINGS. CONVERSELY, NOTES SHOWN ON PLAN VIEW DRAWINGS DO NOT SUPERCEDE THESE

REFER TO EQUIPMENT SCHEDULES FOR AIR AND WATER PRESSURE DROPS ASSOCIATED

WITH COOLING AND HEATING COILS. PROVIDE ACCESS PANELS IN DUCTWORK AND/OR BUILDING CONSTRUCTION WHERE REQUIRED FOR EQUIPMENT ACCESS AND SERVICE. PANELS SHALL BE SIZED TO SUIT EQUIPMENT SERVICED. WHERE PANELS WILL BE LOCATED IN FIRE RATED WALLS AND/OR PARTITIONS, THE ACCESS PANEL SHALL MEET THE RATING OF THE WALL. REFER TO

ARCHITECTURAL DRAWINGS FOR RATINGS OF WALLS AND PARTITIONS. UNLESS NOTED OTHERWISE, DUCTWORK, PIPING, VALVES, DAMPERS, AND ALL ASSOCIATED ANCILLARY HVAC DEVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH MECHANICAL SPECIFICATIONS. ALL EQUIPMENT INSTALLED AS PART OF THIS PROJECT SHALL BE NEW, UNLESS NOTED OTHERWISE, NO EXCEPTIONS.

PAINT DUCTWORK AND DAMPERS VISIBLE THRU REGISTERS FLAT BLACK PRIOR TO OWNER OCCUPANCY.

HVAC EQUIPMENT PROVIDED FROM THIRD PARTY MANUFACTURER SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. WHERE CONFLICTS BETWEEN CONTRACT DOCUMENTS AND MANUFACTURER'S

INSTRUCTION ARISE, THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL PREVAIL THE CONTRACTOR SHALL MAKE HIS OR HERSELF AWARE OF THE OWNER'S SCHEDULE AND BE PREPARED TO WORK AT NIGHT OR ON WEEKENDS TO COMPLETE WORK SHOWN IN THESE DOCUMENTS. INTERRUPTIONS TO OWNER'S NORMAL WORK SCHEDULE SHALL NOT BE MADE WITHOUT WRITTEN INSTRUCTION TO DO SO FROM OWNER'S REPRESENTATIVE.

FOR EQUIPMENT DEMOLISHED UNDER THIS CONTRACT, THE CONTRACTOR SHALL ALLOW THE OWNER FIRST REFUSAL OF DEMOLISHED EQUIPMENT. IF EQUIPMENT IS REFUSED, THE CONTRACTOR SHALL DISPOSE OF DEMOLISHED EQUIPMENT IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION. IN ADDITION, FOR EQUIPMENT INDICATED TO BE DEMOLISHED, THE CONTRACTOR SHALL ASSUME THAT THIS ALSO REQUIRES DEMOLITION OF ALL ASSOCIATED APPURTENANCES INCLUDING ELECTRICAL CONNECTIONS, CONTROLS CONNECTIONS, ETC.

CONTROLS COMPONENTS INDICATED TO BE DEMOLISHED SHALL ALSO INCLUDE CONTROL WIRING AND CONDUITS, REGARDLESS OF VOLTAGE. WHERE CONTROLS WIRING IS 120V AND ABOVE, A LICENSED ELECTRICAL CONTRACTOR SHALL BE PROCURED BY THE CONTROLS VENDOR TO PERFORM WORK.

THE CONTROLS VENDOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING ALL CONTROL WIRING AND CONDUIT ASSOCIATED WITH THIS PROJECT, REGARDLESS OF VOLTAGE. WHERE CONTROL VOLTAGE IS 110V AND ABOVE, THE CONTROLS VENDOR SHALL PROCURE THE SERVICES OF A FLORIDA LICENSED ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL WIRING AND CONDUITS IN ACCORDANCE WITH NEC AND THE LOCAL AUTHORITY HAVING JURISDICTION.

WHERE THERE ARE CONFLICTS BETWEEN LIGHT SWITCHES AND THERMOSTAT/HUMIDISTAT LOCATIONS, THE LIGHT SWITCHES SHALL PREVAIL. MOUNT THERMOSTAT/HUMIDISTATS ADJACENT TO LIGHT SWITCHES.

AS REQUIRED BY BUILDING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE TRANSITIONS AND EQUIVALENT SQUARE DUCT SIZES NEEDED TO FIT THRU JOISTS AND/OR WALL 2x4 SPACING WHERE ROUND IS SHOWN ON PLANS. THE CONTRACTOR SHALL PROVIDE THESE TRANSITIONS AND SQUARE DUCTS AT NO ADDITIONAL COST TO THE OWNER. COORDINATE WITH THE GC IN FIELD FOR JOIST AND WALL 2x4 REQUIREMENTS. WHERE REQUIRED BY BUILDING CONSTRUCTION AND HEIGHT TO EQUIPMENT SERVED, THE CONTRACTOR SHALL PROVIDE HOISTING MECHANISMS AS WELL AS SCAFFOLDING WHERE REQUIRED TO INSTALL EQUIPMENT SHOWN WITHIN THESE CONTRACT DOCUMENTS.

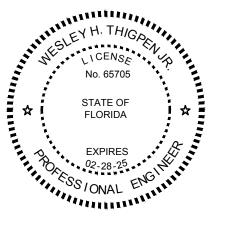
EQUIPMENT USED FOR THE INSTALLATION OF EQUIPMENT SHALL MEET ALL OSHA REQUIREMENTS. PROVIDE MANUAL BALANCE DAMPERS FOR SUPPLY, RETURN, AND EXHAUST TAKE-OFFS

TO REGISTERS WHETHER INDICATED OR NOT. WHERE DAMPERS WILL BE LOCATED ABOVE INACCESSIBLE CEILINGS, PROVIDE OPPOSED BLADE MANUAL BALANCE DAMPERS FROM REGISTER MANUFACTURER.



1940 Buford Blvd. - Tallahassee, FL 32302 Phone: 850-402-3040 Fax: 850-402-9659 Certificate of Authorization #: 29709 Tomahawk Project #: 24031

> RICHARD LINDBURG PE#: 62829 WESLEY THIGPEN, JR PE#: 65705



STAMP USING AN SHA CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



LIBERTY COUNTY **EMS** 

Drawn By: Checked By: WHT

30 AUGUST, 2024

100% CONTRACT **DOCUMENTS** 

Revisions

LEGEND & NOTES -**MECHANICAL** 

ENGINEERING & CONSULTING, INC.

1940 Buford Blvd. - Tallahassee, FL 32302 Phone: 850-402-3040

Fax: 850-402-9659

Certificate of Authorization #: 29709

Tomahawk Project #: 24031

RICHARD LINDBURG

PE#: 62829

WESLEY THIGPEN, JR

PE#: 65705

No. 65705

FLORIDA

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER INDICATED HEREIN WITH THE DATE AS INDICATED IN THE TIME STAMP USING AN SHA CODE.

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LIBERTY COUNTY

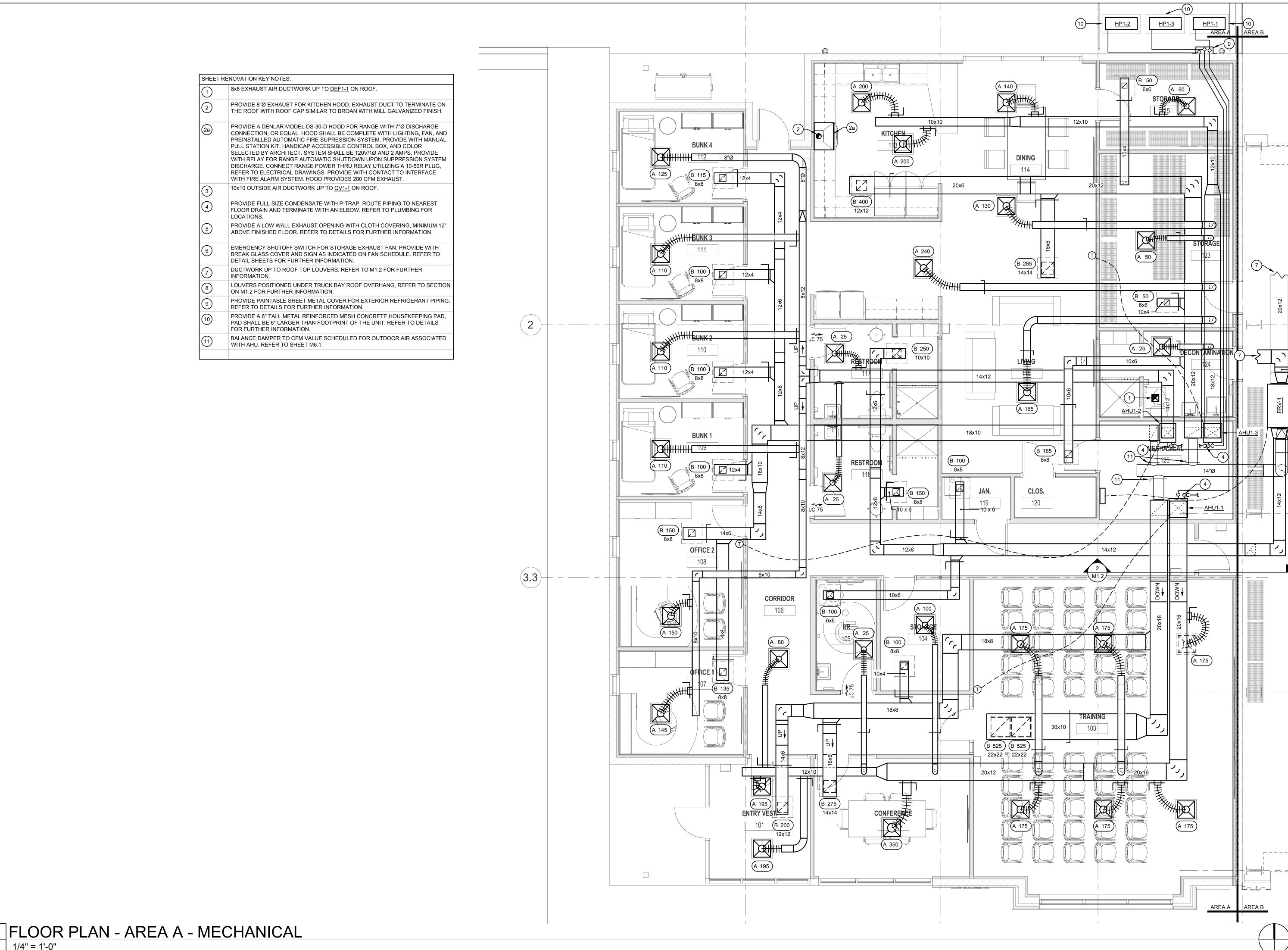
30 AUGUST, 2024

DOCUMENTS

**MECHANICAL** 

100% CONTRACT

**EMS** 

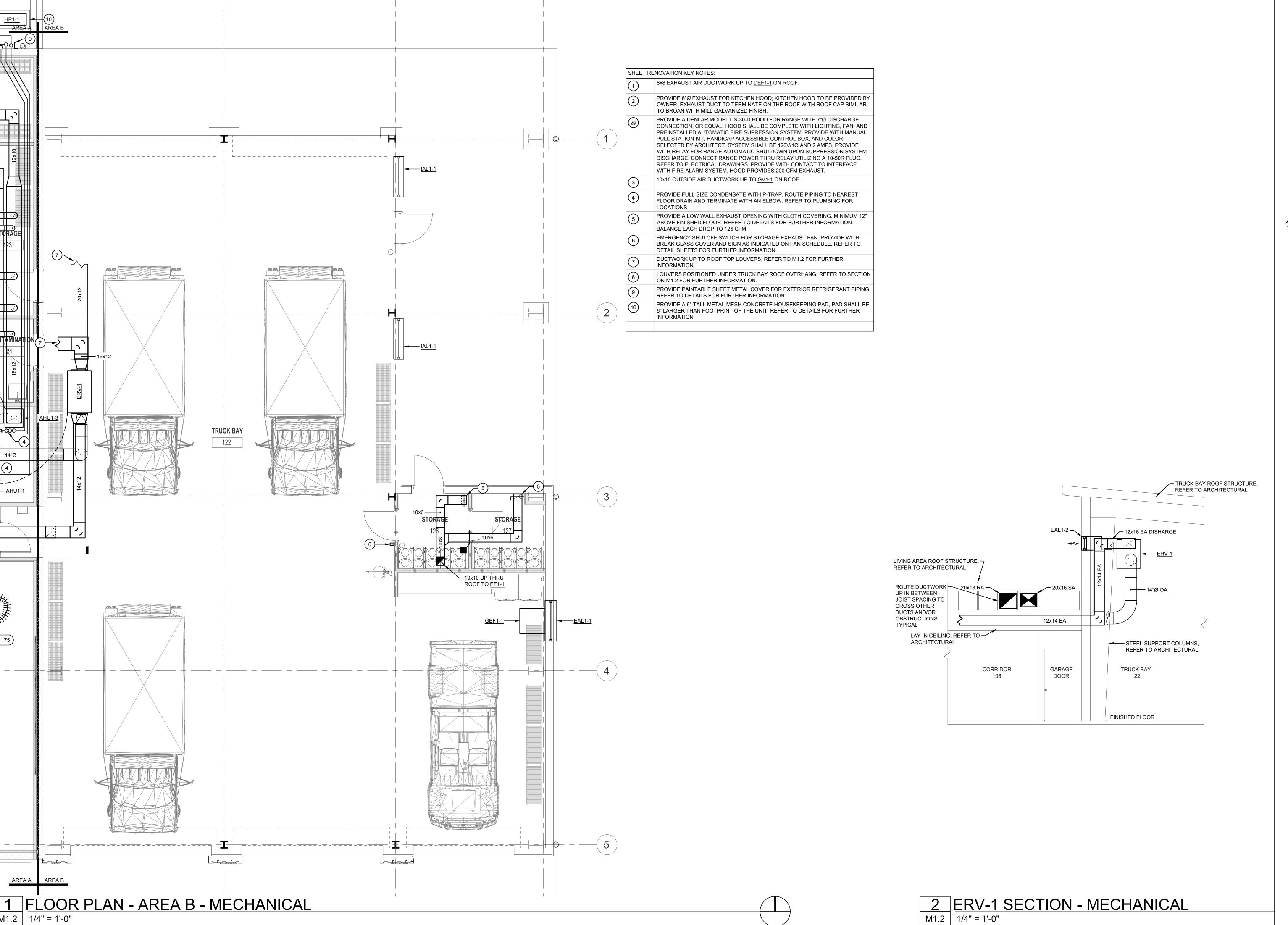


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FLOOR PLAN - AREA A -

M1.1 | 1/4" = 1'-0"

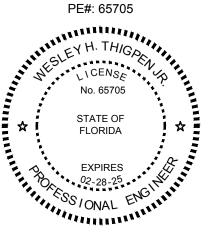






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> RICHARD LINDBURG PE#: 62829 WESLEY THIGPEN, JR



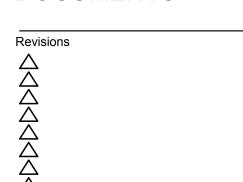
ENGINEER INDICATED HEREIN WITH THE DATE AS INDICATED IN THE TIME STAMP USING AN SHA CODE.



LIBERTY COUNTY **EMS** 

19610	Drawn By:	DMM
Project Code	Checked By:	WHT
30 AUGUST, 2	024	

100% CONTRACT DOCUMENTS



FLOOR PLAN - AREA B -**MECHANICAL** 

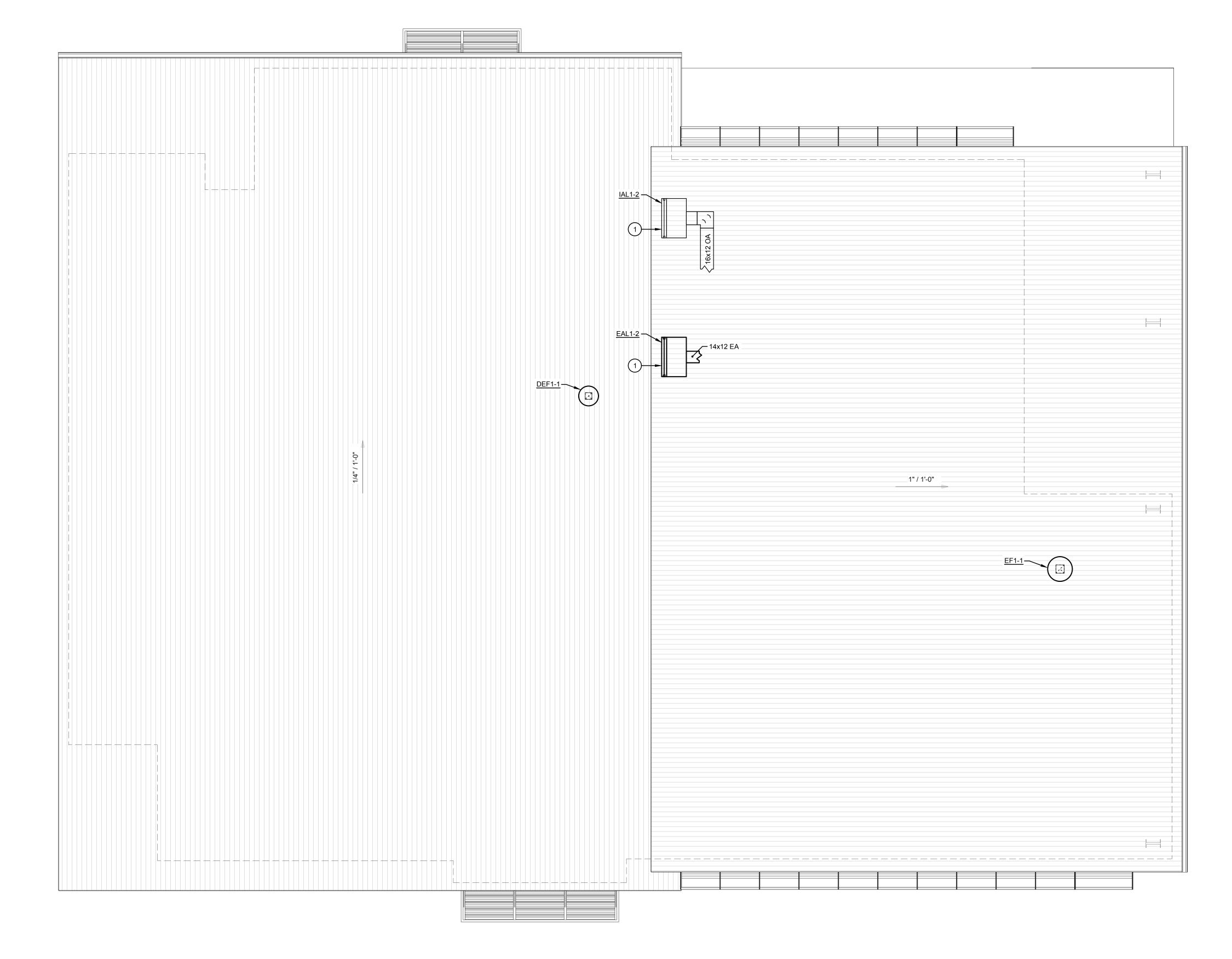
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M1.2 | 1/4" = 1'-0"

SHEET RENOVATION KEY NOTES:

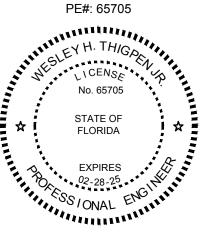
LOUVERS POSITIONED UNDER TRUCK BAY ROOF OVERHANG, REFER TO SECTION ON M1.2 FOR FURTHER INFORMATION.





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Phone: 850-402-3040
Fax: 850-402-9659
Certificate of Authorization #: 29709
Tomahawk Project #: 24031

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LIBERTY COUNTY EMS

19610 Drawn By: DM
Project Code Checked By: WH
30 AUGUST, 2024

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100% CONTRACT DOCUMENTS

Revisions

A
A
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A

ROOF PLAN -MECHANICAL

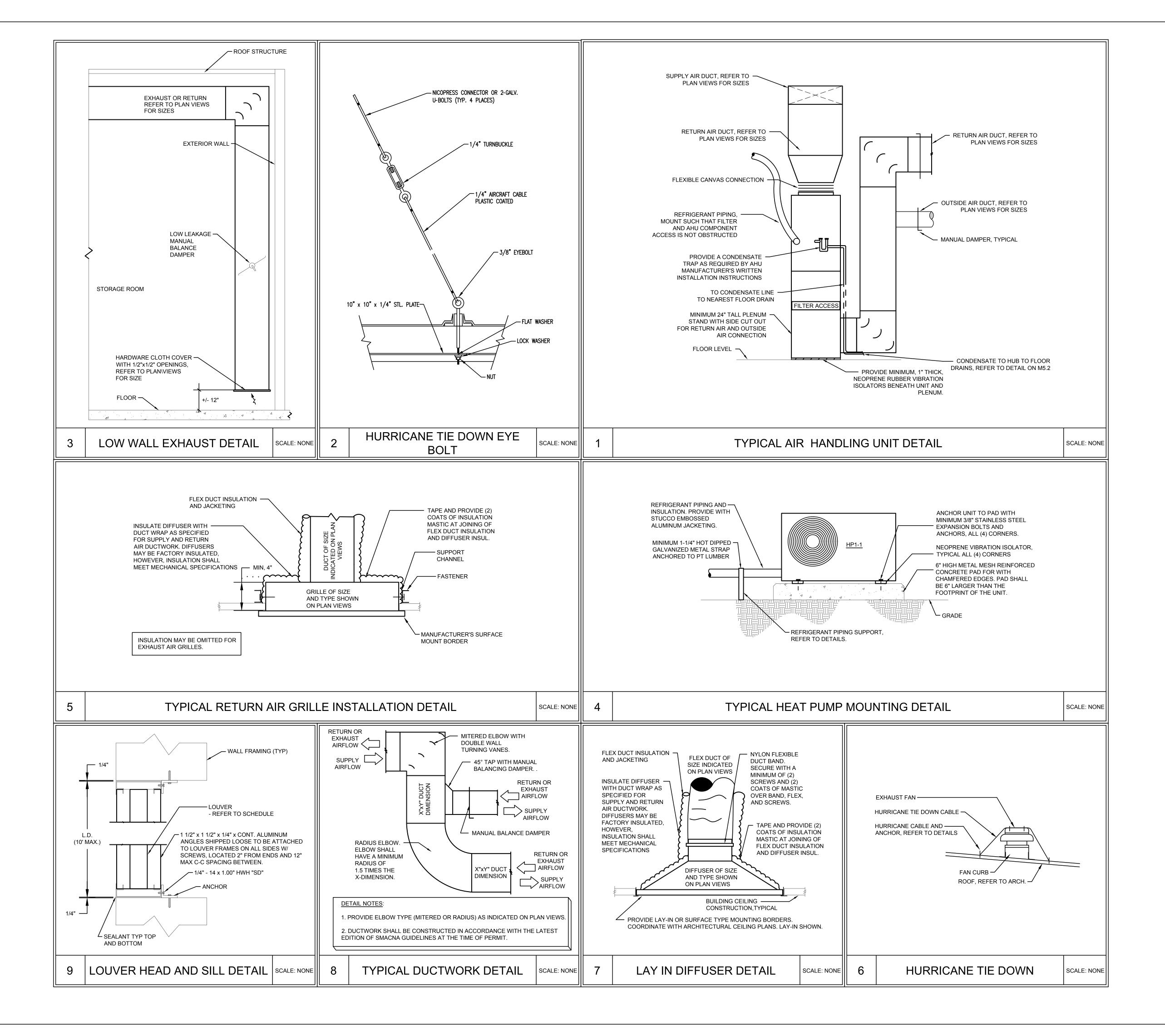
Tallahassee

M3.1

1 ROOF PLAN - MECHANICAL

M3.1 3/16" = 1'-0'

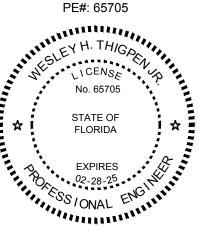
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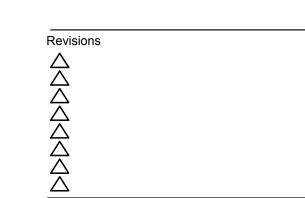
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



LIBERTY COUNTY EMS

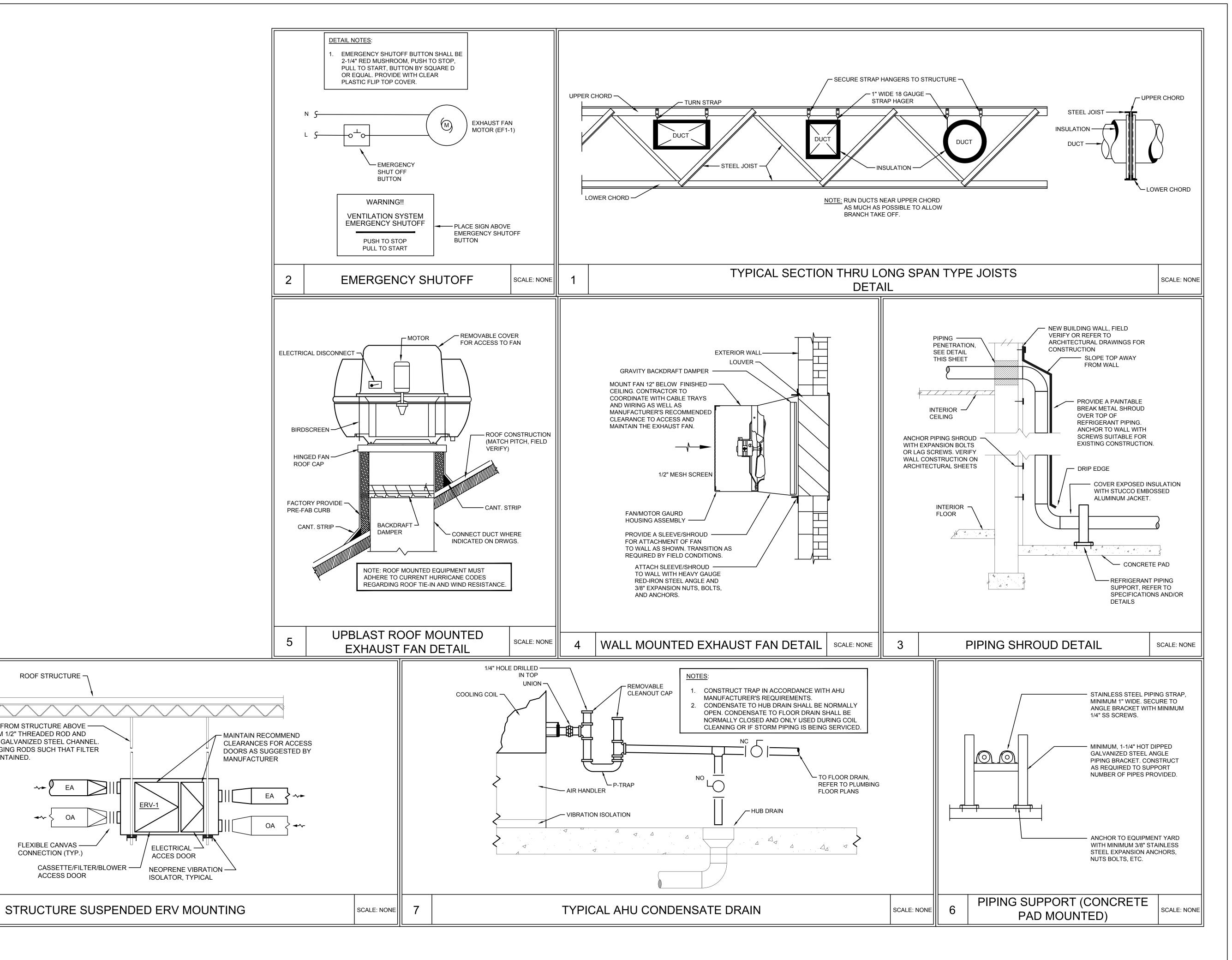
19610	Drawn By:	DM
Project Code	Checked By:	WH
30 AUGUST,	2024	

100% CONTRACT DOCUMENTS



**DETAILS - MECHANICAL** 

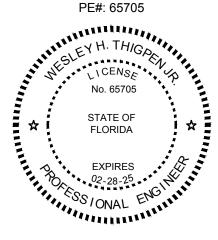
Tallahassee Florida





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LIBERTY COUNTY **EMS** 

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100% CONTRACT **DOCUMENTS** 

**DETAILS - MECHANICAL** 

2074 Centre Pointe Blvd, Suite #200, Tallahassee, FL 32308

Fax 850 561-6978

Phone 850 224-6301

ROOF STRUCTURE

FLEXIBLE CANVAS -

CONNECTION (TYP.)

ACCESS DOOR

CASSETTE/FILTER/BLOWER ——

ELECTRICAL —

ISOLATOR, TYPICAL

NEOPRENE VIBRATION —

ACCES DOOR

SUPPORT ERV FROM STRUCTURE ABOVE —

HEAVY GAUGE GALVANIZED STEEL CHANNEL.

POSITION HANGING RODS SUCH THAT FILTER

USING MINIMUM 1/2" THREADED ROD AND

ACCESS IS MAINTAINED.

## FAN SCHEDULE MOTOR EQUIPMENT NO. FAN TYPE FAN RPM DRIVE TYPE SONES MOTOR HP VOLTAGE/PHASE MODEL NO. RPM STATIC ROOF MOUNTED 1725 1/2 ROOF MOUNTED DEF1-1 BELT 8.9 1725 1/4 UPBLAST GEF1-1 WALL PROP 0.5" 1217 BELT 1725 115/1Ø

## NOTES:

BASIS OF DESIGN: COOK, OR EQUAL.

FLOOR PLANS FOR FURTHER INFORMATION.

- PROVIDE EXHAUST FANS EF1-1 WITH THE FOLLOWING: DISCONNECT SWITCH (REFER TO ELEC.), CLASS "A" SPARK RESISTANCE, ROOF CURB WITH DAMPER TRAY AND PITCH TO MATCH ROOF PITCH, BACKDRAFT DAMPER, BELT TENSIONER, AND TIE DOWN EYELETS. PROVIDE MANUAL SHUTOFF SWITCH LOCATED OUTSIDE OF ROOM AS INDICATED ON FLOOR PLANS. SWITCH SHALL BE LOCATED IN FLIP TOP, POLYCARBONATE ENCLOSURE AND SHALL BE LABELED AS "VENTILATION SYSTEM EMERGENCY SHUTOFF." REFER TO
- PROVIDE EXHAUST FANS DEF1-1 WITH THE FOLLOWING: DISCONNECT SWITCH (REFER TO ELEC.), ROOF CURB WITH DAMPER TRAY AND PITCH TO MATCH ROOF PITCH, BACKDRAFT DAMPER, BELT TENSIONER, AND TIE DOWN EYELETS.
- PROVIDE EXHAUST FANS GEF1-1 WITH THE FOLLOWING: DISCONNECT SWITCH (REFER TO ELEC.), GRAVITY DISCHARGE SHUTTER DAMPER, SLEEVE OR TRANSITION TO LOUVER SIZE INDICATED ON FLOOR PLANS, MOTOR SIDE FAN AND MOTOR GUARD, AND BELT TENSIONER.

	SPLIT SYSTEM AIR HANDLING UNIT SCHEDULE																
EQUIPMENT NO.	MODEL NO.	HP NO.	NOMINAL TONNAGE	TOTAL CFM	OUTSIDE AIR CFM	EXTERNAL STATIC	REFRIG. TYPE	COOLING COIL TOTAL COOLING	COOLING COIL SENS. COOLING	COOLING ENT. AIR DB/WB	COOLING LVG. AIR DB/WB	AUXILIARY ELECTRIC HEAT	BLOWER MOTOR HP	FLA	MCA	МОСР	VOLTAGE/ PHASE
AHU1-1	DFVE60	HP1-1	5.0	1995	450	1.0"	R-410A	54.1 MBH	40.6 MBH	80°F/67°F	55°F / 54.9°F	NOTE 9	3/4	5.2	6.5	15	208/230/1Ø
AHU1-2	DFVE24	HP1-2	2.0	800	100	1.0"	R-410A	22.2 MBH	17.3 MBH	80°F/67°F	55°F / 54.9°F	NOTE 9	1/2	3.9	4.9	15	208/230/1Ø
AHU1-3	DFVF36	HP1-3	3.0	1200	250	1.0"	R-410A	36 0 MBH	33 6 MBH	26 2 MBH	55°F / 54 9°F	NOTE 9	3/4	5.2	6.5	15	208/230/1Ø

## . BASIS OF DESIGN: DAIKIN, OR EQUAL.

- 2. PROVIDE UNIT WITH SINGLE POINT POWER CONNECTION, EXTERNALLY MOUNTED, FIELD PLACED DISCONNECT AND ALL CONTROLS REQUIRED FOR A FULLY FUNCTIONAL AIR CONDITIONING SYSTEM.
- 3. PROVIDE AIR HANDLERS WITH MERV-8 AIR FILTERS.
- 4. REFER TO SPECIFICATIONS FOR WARRANTY REQUIREMENTS.
- 5. PROVIDE THERMOSTAT WITH 7-DAY PROGRAMMABLE THERMOSTAT. UNIT SHALL HAVE BOTH COOLING AND RELATIVE HUMIDITY SET POINT AND CONTROL. FOR INITIAL SETUP USE THE FOLLOWING VALUES: COOLING 75°F; HEATING 70°F; HUMIDITY 55% (MAX).
- 6. PROVIDE WITH THERMOSTATIC EXPANSION VALVES SET TO A MAXIMUM OF 40°F SUCTION TEMPERATURE.
- 7. PROVIDE A MOTORIZED DAMPER FOR AHU1-1 THRU AHU1-3. DAMPER SHALL BE TIED TO AHU CONTROLS SUCH THAT WHEN HEAT PUMP IS OPEN AND WHEN HEAT PUMP IS OFF, DAMPER IS CLOSED. PROVIDE LOW VOLTAGE TRANSFORMER AND RELAYS AND WIRING AS REQUIRED TO PERFORM WORK.
- 8. PROVIDE UNITS WITH VARIABLE SPEED DIRECT DRIVE BLOWER MOTORS.
- 9. ELECTRIC HEATING IS NOT REQUIRED. HEAT PUMP OPERATES DOWN TO 0°F. REFER TO HEAT PUMP SCHEDULE. THIS SHEET. FOR FURTHER INFORMATION.

	LOUVER SCHEDULE										
EQUIPMENT NO.	QUANTITY	MODEL NO.	CFM	SIZE	% FREE AREA	VELOCITY	STATIC PRESS. LOSS	NOA # FLPA#	MATERIAL	FINISH	INTAKE OR EXHAUST
IAL1-1	2	EME6325D	2500	48x36	34%	608	0.03	12-0628.05 FL-14156.1	ALUMINUM	MILL	INTAKE
IAL1-2	1	EME6325D	800	36x16	19%	1045	0.08	12-0628.05 FL-14156.1	ALUMINUM	MILL	INTAKE
EAL1-1	1	EME6325D	5000	48x36	34%	1217	0.11	12-0628.05 FL-14156.1	ALUMINUM	MILL	EXHAUST
EAL1-2	1	EME6325D	500	36x16	19%	653	0.03	12-0628.05 FL-14156.1	ALUMINUM	MILL	EXHAUST

- BASIS OF DESIGN: RUSKIN OR EQUAL. REFER TO SPECIFICATIONS FOR MINIMUM CONTRACT REQUIREMENTS.
- LOUVER FINISH COLOR SHALL BE BRONZE FINISH UNLESS REQUIRED OTHERWISE BY ARCHITECT. VERIFY WITH ARCHITECT PRIOR TO PURCHASING
- FINAL DIMENSIONS OF LOUVERS SHALL BE FIELD VERIFIED PRIOR TO PROCUREMENT AND/OR INSTALLATION OF LOUVERS. FAILURE TO DO SO SHALL BE THE BURDEN OF THE INSTALLING CONTRACTOR.
- NOA: NOTICE OF ACCEPTANCE. FLPA: FLORIDA PRODUCT APPROVAL.
- PROVIDE EXTERIOR FACE OF LOUVER WITH FLANGE.

S	SPLIT	SYS	STEN	M HEAT	PUMP	SCHE	DUL	E		
	AMBIENT		СОР	000111100011		LIEATING	NO 05	# OF	COMP.	

EQUIPMENT NO.	MODEL NO.	AHU NO.	NOMINAL TONNAGE	REFRIG. TYPE	AMBIENT DESIGN TEMP.	SEER2	COP @ 47°F	COOLING COIL TOTAL COOLING	COOLING COIL SENS. COOLING	HEATING @ 20°F	NO. OF COMP.	# OF REFRIG. CIRCUITS	COMP. RLA EACH	COND. FAN HP	MCA	MOCP	VOLTAGE/ PHASE
HP1-1	DZ6VSA60	AHU1-1	5.0	R-410A	95°F	16.0	2.9	54.1 MBH	40.6 MBH	42.5 MBH	1	1	25.5	0.36	36.2	40	208/230V/1Ø
HP1-2	DZ6VSA24	AHU1-2	2.0	R-410A	95°F	16.0	3.4	22.2 MBH	17.3 MBH	18.1 MBH	1	1	13.4	0.09	18.8	20	208/230V/1Ø
HP1-3	DZ6VSA36	AHU1-3	3.0	R-410A	95°F	16.0	3.0	33.6 MBH	26.2 MBH	25.1 MBH	1	1	16.8	0.20	23.9	25	208/230V/1Ø

1. BASIS OF DESIGN: DAIKIN "FIT", OR EQUAL.

2. PROVIDE UNIT WITH WARRANTY AS INDICATED IN SPECIFICATIONS.

3. PROVIDE REFRIGERANT LINE SIZES AS DETERMINED BY EQUIPMENT MANUFACTURER. SIZES SHALL BE BASED ON LENGTHS OF RUN AND VERTICAL LIFT. PROVIDE WITH LONG RADIUS BENDS IN LIEU OF LONG AND SHORT RADIUS ELBOWS.

4. PROVIDE UNIT WITH SINGLE POINT POWER CONNECTION, EXTERNALLY MOUNTED, FIELD PLACED DISCONNECT IN NEMA 3R ENCLOSURE REFER TO ELECTRICAL DRAWINGS. PROVIDE ALL CONTROLS REQUIRED FOR A FULLY FUNCTIONAL AIR CONDITIONING SYSTEM.

5. PROVIDE HEAT PUMPS WITH MANUFACTURER'S STANDARD LOW AMBIENT HEAD PRESSURE CONTROLLER AND ASSOCIATED APPURTENANCES FOR COOLING DOWN TO 0°F.

5. PROVIDE UNITS WITH HIGH PRESSURE SWITCHES, LOW PRESSURE SWITCHES, ANTI SHORT CYCLE TIME DELAYS, AND HARD START KITS.

# ENERGY RECOVERY VENTILATOR SCHEDULE

EQUIPMENT NO.	MODEL NO.	OUTSIDE AIR (CFM)	OUTDOOR AIR TEMPERATURE (DB/WB) °F	EXHAUST AIR (CFM)	EXHAUST AIR TEMPERATURE (DB/WB) °F	EXHAUST SP (IN. W.G.)	SUPPLY SP (IN. W.G.)	SUMMER SUPPLY CONDITIONS	ERV EFF. SENSIBLE	ERV EFF. LATENT	FLA	МСА	MOCP	OA MOTOR SIZE (HP)	EXH MOTOR SIZE (HP)	VOLTS/ PHASE
ERV-1	ERV-1000	800	95°F/78°F	500	72.0°F/60.1°F	0.50"	0.50"	81.5°F/68.5°F	93.9%	91.8%	18.6	24.33	25	1	1	115V / 1Ø

- BASIS OF DESIGN: COOK, OR EQUAL.
- PROVIDE UNIT WITH SINGLE POINT ELECTRICAL CONNECTION.
- PROVIDE UNIT WITH 30% EFF. MERV 8 FILTERS ON BOTH EXHAUST AND OUTSIDE AIR STREAMS.
- PROVIDE DISCONNECT FOR EQUIPMENT AS REQUIRED BY EQUIPMENT MANUFACTURER.
- PROVIDE UNIT WITH THE FOLLOWING: LOOSE OR REMOVABLE, FIELD LOCATED MICROPROCESSOR CONTROLLER, MOTORIZED OUTSIDE AIR DAMPER, GRAVITY EXHAUST AIR BACK DRAFT DAMPER, FAN SPEED CONTROLLER FOR SUPPLY AIR AND EXHAUST AIR FAN MOTORS, VIBRATION ISOLATORS, COMPANION FLANGES, DIRTY FILTER SWITCH, AND WHEEL BELT BROKEN OR WHEEL FAULT ALARM TIED INTO CONTROLLER. CONTROLLER SHALL CONTROL MOTORIZED DAMPER VIA END SWITCH SUCH THAT WHEN PROOF THAT DAMPER HAS BEEN MADE OPEN, THE UNIT SHALL BE ALLOWED TO START. PROVIDE INSTRUCTION ON ERV OPERATION AND MAINTENANCE TO OWNER. REFER TO M7.1 FOR FURTHER INFORMATION.

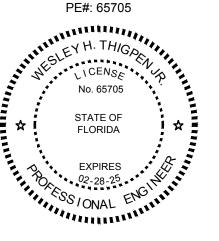
# DIFFUSER SCHEDULE

PLAN MARK	CFM	NECK SIZE	DESCRIPTION						
	0-100	6"Ø	MULTIPLE CONE SQUARE HIGH CAPACITY ROUND						
	101-245	8"Ø	MULTIPLE CONE, SQUARE, HIGH CAPACITY, ROUND INLET (OF SIZE INDICATED) POLYMER						
Α	246-350	10"Ø	CONSTRUCTION WITH 4-WAY DISCHARGE PATTERN. UNITS SHALL BE EQUAL TO AMERICAN						
	351-500	12"Ø	AIR LOUVER, MODEL STATUS, CONE PATTERN.						
	501-900	14"Ø							
В	REFER T VIEWS FO AND S	OR CFM	ALL ALUMINUM CONSTRUCTION RETURN AIR GRILLE, WITH LOUVERED FACE AND 3/4" BLADE SPACING ON 35° ANGLE. PROVIDE LAY-IN TYPE BORDER WHERE LOCATED IN LAY-IN TYPE CEILINGS. PROVIDE WITH SURFACE MOUNTED BORDER WHERE LOCATED IN GYPSUM CEILINGS OR ON WALLS.						
С	REFER T VIEWS FO AND S	OR CFM	ALL ALUMINUM CONSTRUCTION SUPPLY GRILLE, DOUBLE DEFLECTION TYPE WITH TWO SETS OF FULLY ADJUSTABLE DEFLECTION BLADES SPACED 3/4" ON CENTER. FRONT SET OF BLADES SHALL RUN PARALLEL TO THE LONG DIMENSION OF THE GRILLE. FINISH SHALL BE WHITE POWDER COAT AND MEET ASTM D1654, D610, AND D714.						

- 1. DIFFUSERS CONNECTED TO EXPOSED DUCTWORK IN DINING AREAS SHALL BE MILL FINISH. LAY-IN AND WALL MOUNTED DIFFUSERS AND GRILLES SHALL BE
- 2. WHERE REQUIRED BY GYPSUM CEILINGS, PROVIDE WITH PLASTER RINGS OR OTHER APPURTENANCES AS REQUIRED.
- 3. INTERIORS OF DIFFUSERS AND GRILLES VISIBLE FROM THE FINISHED SPACE SHALL BE PAINTED FLAT BLACK.

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> RICHARD LINDBURG PE#: 62829 WESLEY THIGPEN, JR





LIBERTY COUNTY **EMS** 

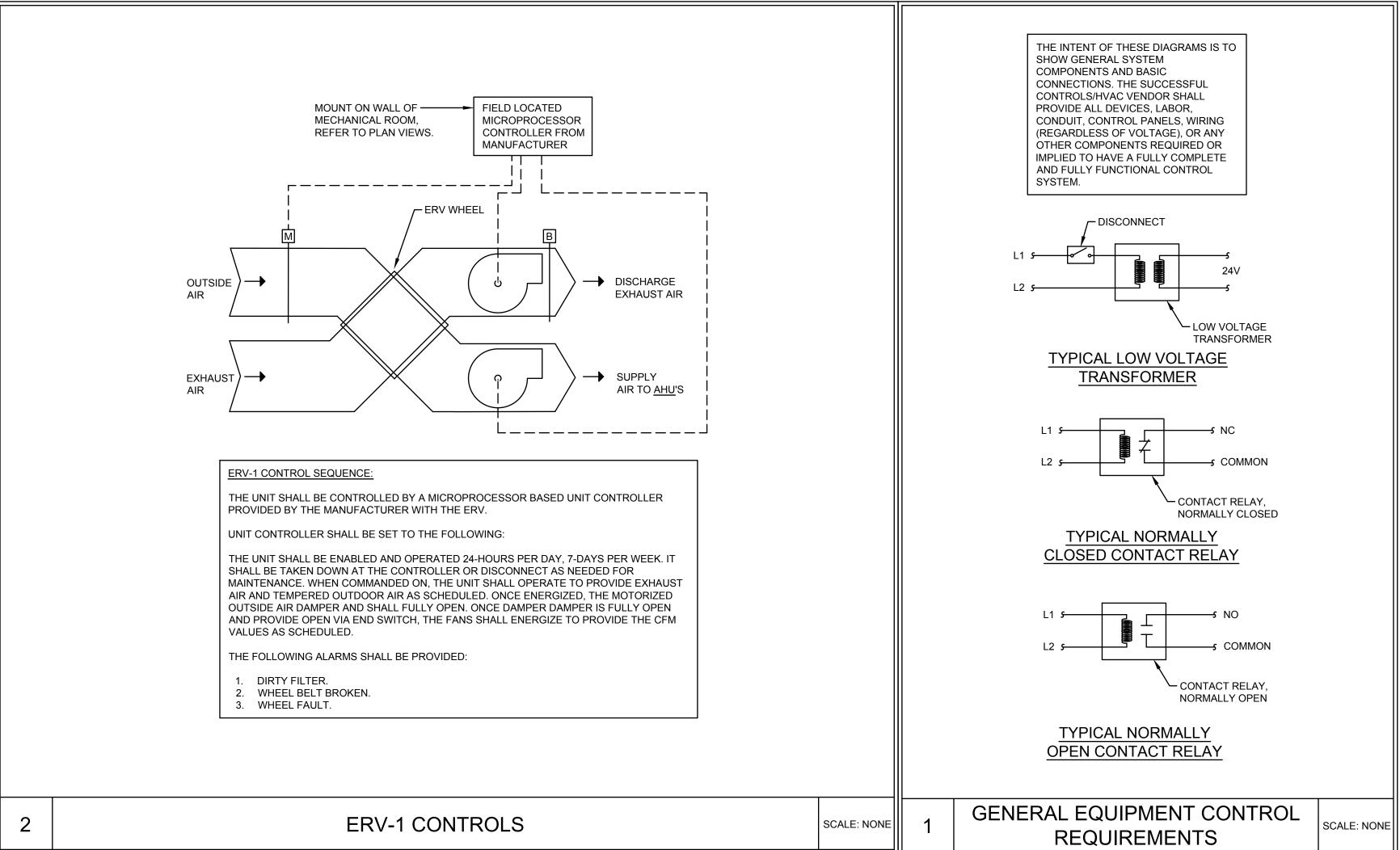
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Project Code	Checked By:	WH
30 AUGUST,	2024	

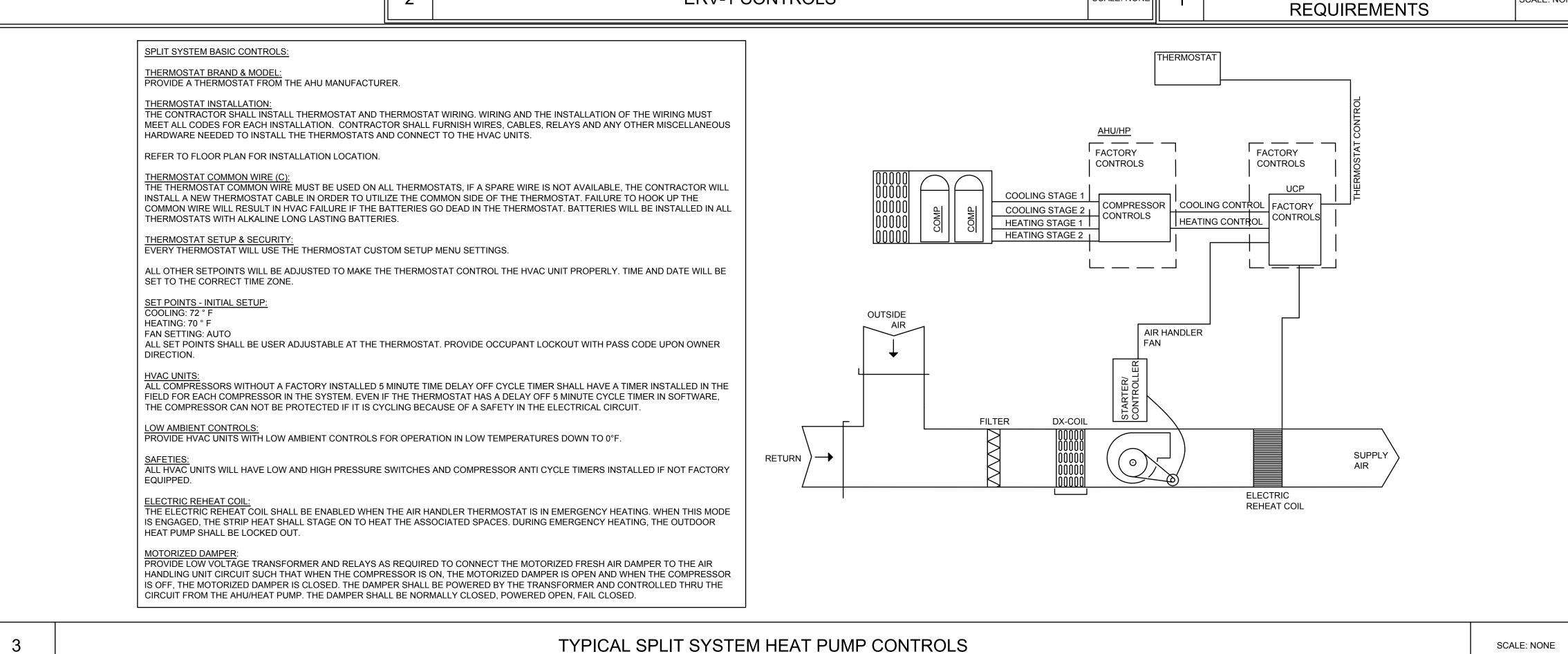
# 100% CONTRACT **DOCUMENTS**

SCHEDULES -MECHANICAL

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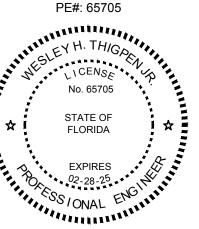




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Tomahawk Project #: 24031



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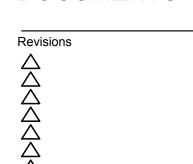
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