30001	INSTALL NEW BOILERS IN PLACE OF EXISTING UNITS RESIZE
<u>/1</u>	EQUIPMENT PAD AS NECESSARY TO MAINTAIN 6" SPACE AROUND PERIMETER OF EQUIPMENT. REBALANCE EXISTING INLINE PUMPS.
30002	INSTALL NEW EXHAUST FAN IN PLACE OF EXISTING EXHAUST FAN. PROVIDE CURB ADAPTER AS NEEDED. CONNECT TO EXISTING DUCTWORK. INTERFACE WITH NEW BMS INTERFACE AS PER CONTROLS ON M7.1.
30004	INSTALL NEW SMOKE EXHAUST FAN IN PLACE OF EXISTING SMOKE EXHAUST FAN. PROVIDE CURB ADAPTER AS NEEDED. SYSTEM COMPONENTS, CONTROLS, AND WIRING TO MEET REQUIREMENT OF UL-864. CONNECT TO EXISTING DUCTWORK. INTERFACE WITH NEW BMS INTERFACE AS PER CONTROLS ON SHEETS M7.7 AND M7.8.
30005	INSTALL NEW AHU IN PLACE OF EXISTING AHU, CONNECT TO EXISTING DUC WORK AND PIPING AS SHOWN, RESIZE EQUIPMENT PAD AS NECESSARY TO MAINTAIN 6" SPACE AROUND PERIMETER OF EQUIPMENT, REFER TO M.4 SERIES FOR MORE INFORMATION:
30006	INSTALL NEW ERV IN PLACE OF EXISTING ERV. CONNECT TO EXISTING DUCTWORK AS SHOWN. INTERFACE WITH NEW BMS SYSTEM AS PER CONTROLS ON SHEET 4/M7.2.
30007	INSTALL NEW CHILLED WATER PUMP IN PLACE OF EXISTING PUMP. CONNECT PIPING AS SHOWN. PROVIDE VFD WITH PUMP. INTERFACE WITH NEW BMS SYSTEM AS PER CONTROLS ON DETAIL 1/M7.3.
30011	INSTALL NEW RETURN FAN IN PLACE OF EXISTING RETURN FAN. CONNECT TO EXISTING DUCTWORK AS SHOWN. INTERFACE WITH NEW BMS SYSTEM AS PER CONTROLS ON 1/M7.2.
30012	INSTALL NEW EXHAUST FAN AT EXISTING ROOF CURB. PROVIDE CURB ADAPTER.
30013	PROVIDE NEW HOUSING PAD FOR CHILLER. ADJUST CHILLER YARD FENCING AS REQUIRED TO FIT CHILLER LAYOUT.
0014	REUSE EXISTING PENETRATIONS FROM PREVIOUS BOILER FLUES FOR NEW FLUES / COMBUSTION AIR INTAKES.
80015	INSTALL NEW CONDENSING UNIT FOR NEW AHU-9 ON EXISTING EQUIPMENT SUPPORT. CONTRACTOR TO ADJUST SUPPORT AS NECESSARY TO MEET MANUFACTURER RECOMMENDATIONS.
0016	INSTALL NEW DUCT MOUNTED COILS IN PLACE OF EXISTING. CONNECT TO EXISTING PIPING AND DUCTWORK. PROVIDE DUCT TRANSITIONS AS NECESSARY TO CONNECT TO EQUIPMENT. PROVIDE NEW CONTROLS AS PER DETAIL 5/M7.2.
0017	CONNECT NEW VAV BOX TO EXISTING DUCTWORK AND PIPING. PROVIDE NEW CONTROLS FOR FAN POWERED TYPE VAV BOX AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 2/M7.1.
0018	CONNECT NEW DUCT MOUNTED COIL BOX TO EXISTING DUCTWOR AND PIPING. PROVIDE DUCT MOUNTED ACCESS DOOR UPSTREAM OF BOX. PROVIDE NEW CONTROLS FOR DUCT MOUNTED COILS AS PER CONTROLS SCHEMATIC 5/M7.2.
0019	CONNECT WATER HEATER EXHAUST FLUE AND INTAKE TO EXISTING EXHAUST/INTAKE DUCTWORK. REUSE EXISTING ROOF PENETRATIONS. SIZE AND INSTALL FLUE AND INTAKE AS PER MANUFACTURER RECOMMENDATIONS.
30701	CONNECT NEW GRILLE TO EXISTING EXHAUST DUCTWORK. LOCATI GRILLE TO ADJUST DUCTWORK AS MINIMALLY AS POSSIBLE.
0702	CONNECT NEW DIFFUSER TO EXISTING DUCTWORK. LOCATE DIFFUSER TO ADJUST DUCTWORK AS MINIMALLY AS POSSIBLE.
0703	PROVIDE ELBOW WITHOUT TURNING VANES FOR TRANSFER AIR DUCT.
0704	INSTALL NEW DUCTWORK FROM FPV TO EXISTING. VIELD VERIFY TO MATCH TO EXISTING DUCTWORK SIZE.
0705	REINSTALL EXISTING DIFFUSERS AND GRILLES AND CONNECT TO EXISTING DUCTWORK IN ENTIRE SPACE. ALTERNATE BID: CONNECT NEW DIFFUSERS AND GRILLES TO EXISTING DUCTWORK. PROVIDE DIFFUSER OR GRILLE AS INDICATED ON AIR TERMINAL SCHEDULE.
30901	PROVIDE NEW CONTROLS FOR THE FAN COIL UNIT AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM AS PER 3/M7.1.
30903	PROVIDE NEW CONTROLS FOR VAV AHU AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO SHEET M2/7.5.

PREVIOUSLY. RECONNECT TO EXISTING DUCTWORK.

<u>MECH</u>	IANICAL INSTALLATION KEYNOTES	MECH	IANICAL DEMOLITION KEYNOTES	MEC	HANICAL D	EMOLITION KEYNOTI
230904	PROVIDE NEW CONTROLS FOR THE SHUTOFF TYPE VAV BOX AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO	022301	REMOVE EXISTING EXHAUST FAN FOR REPLACEMENT. REMOVE DUCTWORK MINIMALLY AS NEEDED FOR	022313	REMOVE EXISTIN FROM EXHAUST	IG TEMPERATURE SENSOR AND WIRING DUCT.
230905	PROVIDE NEW CONTROLS FOR FAN POWERED TYPE VAV BOX AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO		FRONT END. REFER TO INSTALLATION PLANS FOR ADDITIONAL INFORMATION.	022314	DISCONNECT AN DUCTWORK. TEN	D REMOVE EXHAUST GRILLE FROM IPORARILY COVER DUCT OPENING.
230906	DETAIL 2/M7.1. PROVIDE NEW CONTROLS FOR CHILLED WATER PUMPS AND	022302	REMOVE EXISTING BOILER AND ALL ASSOCIATED ACCESSORIES INCLUDING PUMPS. REMOVE EXISTING FLUE AND INTAKE AS INDICATED. REMOVE PIPING AS INDICATED.	022315	REMOVE EXISTIN GRILLE. PATCH \	IG TRANSFER AIR DUCT AND ASSOCIATE VALL TO MATCH EXISTING CONDITIONS.
200000	INTERFACE WITH NEW BUILDING MANAGEMENT SYSTEM. REFER TO 1/M7.3 FOR ADDITIONAL INFORMATION.		REMOVED FROM CONTROLS FRONT END, EQUIPMENT PAD EXISTING TO REMAIN.	022316	DISCONNECT AN DUCTWORK. TEI	D REMOVE EXISTING VAV BOX FROM IPORARILY COVER DUCT OPENINGS.
230907	PROVIDE NEW CONTROLS FOR HYDRONIC HOT WATER SYSTEM AND INTERFACE WITH NEW BUILDING MANAGEMENT SYSTEM. REFER TO 1,2/M7.4 FOR ADDITIONAL INFORMATION.	022303	REMOVE EXISTING REMOTE EVAPORATOR AND ALL ASSOCIATED ACCESSORIES AND APPURTENANCES. REMOVE ASSOCIATED PIPING COMPLETE. REMOVE FROM CONTROLS FRONT END.	022317	REMOVE EXISTIN FROM RETURN D EXISTING TEMPE	IG TEMPERATURE SENSOR AND WIRING UCTWORK. CONTRACTOR TO FIELD VER RATURE SENSOR LOCATION.
230908	PROVIDE NEW CONTROLS FOR HYDRONIC UNIT HEATER AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 7/M7.1.	022304	REMOVE AIR HANDLING UNIT COMPLETE, INCLUDING DUCTWORK AS INDICATED, PIPING AS INDICATED CONTROLS, AND ACCESSORIES COMPLETE. EQUIPMENT PAD	022318	TEMPORARILY D FROM CEILING. S ALTERNATE BID: REDI ACEMENT	ISCONNECT AND REMOVE RETURN GRILI GALVAGE GRILLE FOR REINSTALLATION. REMOVE EXISTING RETURN GRILLE FOR
230909	PROVIDE NEW CONTROLS FOR FIN TUBE RADIATOR AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 8/M7.6.	022305	REMOVE EXISTING CONTROLS TO UNIT COMPLETE. REMOVE	022319	TEMPORARILY D	ISCONNECT AND REMOVE SUPPLY DIFFU
230911	PROVIDE NEW CONTROLS FOR CONSTANT VOLUME AHU AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 2/M7.2.	000006	ALL ASSOCIATED TUBING OR WIRING SERVING UNIT CONTROLS. REMOVE UNIT FROM CONTROLS FRONT END.		OPENING. SALVA ALTERNATE BID: REPLACEMENT.	GE DIFFUSER FOR REINSTALLATION. REMOVE EXISTING SUPPLY DIFFUSER FO TEMPORARILY COVER DUCT OPENING.
230912	PROVIDE NEW CONTROLS FOR CONSTANT VOLUME AHU AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 1/M7.2.	022306	REMOVE EXISTING CHILLER AND ALL ASSOCIATED ACCESSORIES, ASSOCIATED REFRIGERANT PIPING AS INDICATED, AND CONTROLS. REMOVE FROM CONTROLS FRONT END.	022320	EXISTING COND REMOVED INCLU EQUIPMENT STA	ENSING UNIT SERVING AHU-9 TO BE DING ANY ASSOCIATED PIPING AND WIR ND TO REMAIN.
230913	PROVIDE NEW CONTROLS FOR CONSTANT VOLUME AHU AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 1/M7.5.	022307	REMOVE EXISTING THERMOSTAT AND WIRING. CONTRACTOR TO FIELD VERIFY THERMOSTAT LOCATIONS.	022321	REMOVE FPV. RI COMPLETE. REM SERVING UNIT C FRONT END. TEM	MOVE EXISTING CONTROLS TO UNIT OVE ALL ASSOCIATED TUBING OR WIRIN ONTROLS. REMOVE UNIT FROM CONTRO IPORARILY COVER DUCT OPENING UNTIL
230914	PROVIDE NEW CONTROLS FOR VAV AHU AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 2/M7.5.	022306	ASSOCIATED ACCESSORIES, ASSOCIATED PIPING AS INDICATED, AND CONTROLS. REMOVE FROM CONTROLS FRONT END.	022322	FPV UNIT TO BE REMOVE EXISTI	ALLED. TEMPORARILY REMOVED AND RELOCATE IG CONTROLS TO UNIT COMPLETE. REMO
230915	PROVIDE TEMPERATURE SENSOR INSIDE RETURN DUCTWORK. SENSOR TO CONTROL THE UNITS INDICATED.	022309	REMOVE EXISTING RETURN FAN COMPLETE, INCLUDING DUCTWORK AS INDICATED, CONTROLS, AND ACCESSORIES COMPLETE.		ALL ASSOCIATED CONTROLS. REM REFER TO DRAV	OTUBING OR WIRING SERVING UNIT OVE UNIT FROM CONTROLS FRONT END. VING M2.1E FOR NEW INSTALL LOCATION.
230918	PROVIDE TEMPERATURE SENSOR INSIDE RETURN DUCTWORK. REPAIR OR REPLACE INSULATION AFFECTED BY TEMPERATURE SENSOR INSTALLATION. SENSOR TO CONTROL THE UNITS INDICATED.	022310	REMOVE EXISTING KITCHEN MAKE UP AIR UNIT, INCLUDING DUCTWORK TO HOOD AND CONTROLS. CURB TO REMAIN IN PLACE. TEMPORARILY COVER OPENINGS.	022323	DISCONNECT AN REPLACEMENT.	D REMOVE EXISTING SUPPLY DIFFUSER TEMPORARILY COVER DUCT OPENING.
230920	PROVIDE THERMOSTAT IN SAME LOCATION AS EXISTING. MATCH EXISTING WALL CONDITIONS AROUND THERMOSTAT IF	022311	REMOVE REFRIGERANT PIPING BETWEEN REMOTE	022324 022325	REMOVE EXISTIN	IG RETURN GRILLE FOR REPLACEMENT. ISCONNECT AND REMOVE EXHAUST GRII
230921	DIMENSIONS DO NOT MATCH. PROVIDE TEMPERATURE SENSOR IN EXISTING EXHAUST		SUPPORTS AND STANDS. TEMPORARILY COVER WALL PENETRATION.		FROM DUCTWOF SALVAGE GRILLI REMOVE EXISTII TEMPORABILY C	RK. TEMPORARILY COVER DUCT OPENING FOR REINSTALLATION. ALTERNATE BID: IG EXHAUST GRILLE FOR REPLACEMENT OVER DUCT OPENING
230922	DUCTWORK. PROVIDE THERMOSTAT WITH SECURITY COVER IN SAME LOCATION AS EXISTING. MATCH EXISTING WALL CONDITIONS AROUND THERMOSTAT IF DIMENSIONS DO NOT MATCH.	022312	REMOVE EXISTING ERV AND ASSOCIATED DUCTWORK AS INDICATED. REMOVE FROM CONTROLS FRONT END.	022326	DISCONNECT AN REMOVE PIPING REMOVE EXISTIN ALL ASSOCIATED	D REMOVE EXISTING DUCT MOUNTED CO AND DUCTWORK TRANSITIONS TO UNIT. IG CONTROLS TO UNIT COMPLETE. REMO WIRING SERVING CONTROLS. REMOVE
230923	PROVIDE NEW THERMOSTAT WITH SECURITY COVER. LOCATION INDICATED IS PLACEHOLDER. CONTRACTOR TO FIELD VERIFY THERMOSTAT LOCATION AND REPLACE EXISTING AT SAME LOCATION.			022327	UNIT FROM CON REMOVE EXHAU HEATERS AS INE PENETRATION F	TROLS FRONT END. ST FLUE AND INTAKE FROM EXISTING WA ICATED. CAP DUCTWORK AT ROOF OR RECONNECTION.
230924	PROVIDE NEW CONTROLS FOR THE ROOF HOOD UNIT. REFER TO M7.6 FOR CONTROLS.					
230925	PROVIDE NEW EMERGENCY BOILER SHUTOFF BUTTON NEAR EXIT. MOUNT BUTTON 4'-6" A.F.F. PER IFC SECTION 606. PROVIDE CONTROLS TO ALLOW FOR EMERGENCY SHUTOFF THROUGH CENTRAL WORKSTATION.					
230926	PROVIDE NEW CONTROLS FOR EXISTING LOUVERS. REFER TO M7.7/M7.8 FOR CONTROLS.	SYME	BOLS			
230927	PROVIDE NEW CONTROLS FOR EXISTING LOUVER. REFER TO 8/M7.1 FOR CONTROLS.				X	
230928	PROVIDE NEW FIREFIGHTER SMOKE CONTROL PANEL IN CENTRAL CONTROL. CONTRACTOR TO CONFIRM LOCATION WITH EXISTING EQUIPMENT.	AxB A/B AØ	RECTANGULAR DUCT DIMENSION FLAT-OVAL DUCT DIMENSION ROUND DUCT DIMENSION		T	THERMOSTAT TEMPERATURE SENSOR
231101	CONNECT EXISTING NATURAL GAS PIPE TO NEW MAKE UP AIR UNIT. PROVIDE DUCTWORK TO EXISTING HOOD FROM MAKE UP AIR UNIT. REUSE EXISTING ROOF CURB.		RECTANGULAR SUPPLY OR OUTSIDE AIR DUCT - UP	OR DOWN		— EQUIPMENT TYPE (SEE ABBREVIATIO — SCHEDULE #
232101	ROUTE CONDENSATE LINE DOWN TO MOP SINK.		RECTANGULAR RETURN AIR DUCT - UP OR DOWN		XXXXXX	KEYNOTE
232102	PROVIDE STUB-OUT WITH SHUTOFF VALVES FOR EMERGENCY CHILLED WATER CONNECTION. CAP OPEN ENDS.		RECTANGULAR EXHAUST AIR DUCT - UP OR DOWN		TMV	THERMOSTATIC MIXING VALVE OUTLET TEMPERATURE SENSOR
232103	PROVIDE STUB-OUT WITH SHUTOFF VALVES FOR EMERGENCY HEATING HOT WATER CONNECTION. CAP OPEN ENDS.		ROUND SUPPLY OR OUTSIDE AIR DUCT - UP OR DO	WN.	BPS	BUILDING PRESSURE SENSOR
232104	REBALANCE PUMPS AFTER INSTALLATION OF NEW BOILERS AND AIR HANDLING UNITS.		ROUND RETURN AIR DUCT - UP OR DOWN.		СО	CARBON MONOXIDE SENSOR
232105	PROVIDE MANUAL SHUTOFF VALVES FOR PIPING CROSSOVER.		ROUND EXHAUST AIR DUCT - UP OR DOWN.		NO2	NITROGEN DIOXIDE SENSOR
232106	SHUTOFF VALVE.	-			CO2	CARBON DIOXIDE SENSOR
233301	PROVIDE NEW SMOKE DAMPER ON DUCT UPSTREAM OF VAV BOX. REFER TO M7.7/M7.8 FOR CONTROLS.				RL	REFRIGERANT LIQUID
233302	PROVIDE SMOKE DAMPER ON DUCTWORK FROM RETURN GRILLE. REFER TO M7.7/M7.8 FOR CONTROLS.				R0	REFRIGERANT GAS
233701	REINSTALL EXISTING RETURN GRILLE IN SAME LOCATION AS PREVIOUSLY.			angular)	НМ	S HYDRONIC WATER SUPPLY
233702	INSTALL NEW SUPPLY DIFFUSER IN SAME LOCATION AS		EXHAUST GRILLE (SQUARE)		—————HW	к — — HYDRONIC WATER RETUR

NOTE: NOT EVERY KEYNOTE IS APPLICABLE TO EVERY SHEET.

3	RECTANGULAR DUCT DIMENSION FLAT-OVAL DUCT DIMENSION ROUND DUCT DIMENSION	T	THERMOSTAT TEMPERATURE
	RECTANGULAR SUPPLY OR OUTSIDE AIR DUCT - UP OR DOWN		- EQUIPMENT T` - SCHEDULE #
	RECTANGULAR RETURN AIR DUCT - UP OR DOWN	XXXXXX	KEYNOTE
X	RECTANGULAR EXHAUST AIR DUCT - UP OR DOWN	TMV	THERMOSTATI OUTLET TEMPI
\otimes	ROUND SUPPLY OR OUTSIDE AIR DUCT - UP OR DOWN.	BPS	BUILDING PRES
	ROUND RETURN AIR DUCT - UP OR DOWN.	CO	CARBON MONO
	ROUND EXHAUST AIR DUCT - UP OR DOWN.	NO2	NITROGEN DIOX
	SUPPLY AIR DIFFUSER (SQUARE)	CO2	CARBON DIOXIE
	RETURN AIR GRILLE (SQUARE)	RL-	
	RETURN AIR GRILLE OR EXHAUST REGISTER (RECTANGULAR)	RG - HWS	 6
	EXHAUST GRILLE (SQUARE)	HWF	k— — ŀ
<s></s>	DUCT SMOKE DETECTOR	CWS	; (
D BD	BACKDRAFT DAMPER	CONI) (
	CONTROL DAMPER		
	VOLUME DAMPER		
	ROUND DIFFUSER		
	SLOT DIFFUSER		
	BALL VALVE		
\swarrow	BUTTERFLY VALVE		
\square	GATE VALVE		
	DISCONNECT FROM EXISTING		
$igodoldsymbol{\Theta}$	CONNECT TO EXISTING		

ON KEYNOTES

RE SENSOR AND WIRING

IR DUCT AND ASSOCIATED EXISTING CONDITIONS.

STING VAV BOX FROM /ER DUCT OPENINGS.

NTRACTOR TO FIELD VERIFY OR LOCATION.

D REMOVE RETURN GRILLE E FOR REINSTALLATION. ING RETURN GRILLE FOR

D REMOVE SUPPLY DIFFUSER . TEMPORARILY COVER DUCT OR REINSTALLATION. ING SUPPLY DIFFUSER FOR COVER DUCT OPENING.

RVING AHU-9 TO BE DCIATED PIPING AND WIRING.

G CONTROLS TO UNIT CIATED TUBING OR WIRING OVE UNIT FROM CONTROLS /ER DUCT OPENING UNTIL

REMOVED AND RELOCATED. O UNIT COMPLETE. REMOVE RING SERVING UNIT I CONTROLS FRONT END. NEW INSTALL LOCATION.

TING SUPPLY DIFFUSER FOR COVER DUCT OPENING.

D REMOVE EXHAUST GRILLE LY COVER DUCT OPENING. LATION. ALTERNATE BID: RILLE FOR REPLACEMENT. ENING.

TING DUCT MOUNTED COIL. TRANSITIONS TO UNIT. TO UNIT COMPLETE. REMOVE NG CONTROLS. REMOVE

TAKE FROM EXISTING WATER JCTWORK AT ROOF

TYPE (SEE ABBREVIATIONS)

FIC MIXING VALVE PERATURE SENSOR

XIDE SENSOR

HYDRONIC WATER RETURN

CHILLED WATER SUPPLY

CHILLED WATER RETURN

CONDENSATE LINE

AMPS ADJ. ADJUSTABLE AUTOMATIC TEMPERATURE CONTROL AIR PRESSURE DROP APD A.F.F. ABOVE FINISHED FLOOR CUBIC FEET PER MINUTE CFM COMPANY COND. CONDENSATE DUCT STATIC PRESSURE DSP EXHAUST AIR ENTERING AIR TEMPERATURE EDB ENTERING DRY BULB EXHAUST FAN EFFICIENCY ELECT ELECTRICAL EXTERNAL STATIC PRESSURE ENTERING WET BULB EWB EWC ELECTRIC WATER COOLER FIRE DAMPER FEET PER MINUTE FPM FLOOR DRAIN GAL GALLON GPM GALLONS PER MINUTE GENERAL CONTRACTOR HEATING COI HORSE POWER HOUR HEATING HTG. IDENTIFICATION INTAKE HOOD INCH LOUVER LEAVING AIR TEMPERATURE LEAVING DRY BULB POUNDS LEAVING WET BULB MAXIMUM MAX 1000 BRITISH THERMAL UNITS PER HOUR MBH MIN. MINIMUM NUMBER OUTSIDE AIR PLUMBING CONTRACTOR PHASE POUNDS PER SQUARE INCH RETURN AIR **RELIEF AIR FAN** RELIEF AIR HOOD ROOM ROOF TOP UNIT RTU SUPPLY AIR SMOKE EXHAUST SMOKE DAMPER SENS SENSIBLE TOTAL STATIC PRESSURE TSP VENT VARIABLE AIR VOLUME BOX VOLTS VOLTAGE VARIABLE FREQUENCY DRIVE

ABBREVIATIONS

ATC

CO.

EA

FAT

FFF

HR

I.D.

LWB

OA

PSI.

RF

VAV

VFD

W.C

WPD

AMPERES

PIPE ABBREVIATIONS

WATER PRESSURE DROP

WATER COLUMN

WALL OPENING

CWF
CWS
CF
CI
С
CTR
CTS
HWF
HWS
LPC
HPR
HPS
LPS

BASI	HVAC S OF DESIGN	
(NEW DUCTLESS SPLITS/FPV 6-5)		
	SUMMER	
OUTDOOR	91°FDB, 75°F WB	
INDOOR	75°FDB, 63°F WB	
	WINTER	
OUTDOOR	-3°F DB	
INDOOR	70°F DB	

GENERAL NOTES

- 1. ALL MECHANICAL WORK SHALL BE IN ACCORDANCE WITH STATE OF INDIANA MECHANICAL CODE. LATEST APPLICABLE EDITION, THE AUTHORITY HAVING JURISDICTION AND AS SPECIFIED (WHICHEVER IS MORE STRINGENT).
- 2. IF NON-DESIGN BASE EQUIPMENT IS SELECTED, THIS CONTRACTOR SHALL BEAR ANY ADDITIONAL COSTS FOR MODIFICATION TO THE PROPOSED BUILDING SYSTEM CAUSED BY SELECTION OF THE NON-DESIGN BASE EQUIPMENT INCLUDING COSTS FOR ARCHITECT/ENGINEER REVIEW. DEVIATIONS FROM BASIS OF DESIGN THAT AFFECT OTHER TRADES ARE THE RESPONSIBILITY OF THIS CONTRACTOR. ADDITIONAL COSTS TO PROVIDE LARGER ELECTRICAL CIRCUITS, MORE FLOOR SPACE, ADDITIONAL SUPPORTS, ADDITIONAL MATERIALS, ETC. SHALL BE BORNE BY THIS CONTRACTOR. COORDINATE ALL WORK WITH OTHER TRADES.
- 3. DO NOT SCALE DRAWINGS FOR DIMENSIONS. REFER TO DIMENSIONED DRAWINGS. IF DIMENSIONS CANNOT BE ACCURATELY DETERMINED, REQUEST THE INFORMATION FROM THE ARCHITECT/ENGINEER.
- 4. KEY NOTES ARE MEANT AS A GENERAL GUIDE FOR TYPICAL LOCATIONS. CONTRACTOR TO PERFORM FULL EXTENT OF WORK REQUIRED TO ACCOMPLISH DESIGN INTENT.
- 5. CONTRACTOR IS RESPONSIBLE FOR ALL WORK IDENTIFIED ON ALL DRAWINGS AND INFORMATION IN THE PROJECT MANUAL, AS A COMPLETE PROJECT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE SPECIFIC SCOPE OF WORK FOR ANY SUBCONTRACTORS FOR THIS PROJECT EXCEPT AS SPECIFICALLY NOTED.
- 6. CONTRACTOR SHALL PROVIDE ACCESS DOORS IN ALL WALLS AND CEILINGS WHERE SERVICE OR ADJUSTMENT TO MECHANICAL, PLUMBING, OR FIRE PROTECTION ITEMS MAY BE REQUIRED, WHETHER INDICATED ON THE PLANS OR NOT. ACCESS DOORS SHALL BE OF AN APPROPRIATE SIZE REQUIRED FOR EACH APPLICATION. WHERE APPLICABLE, ACCESS DOORS SHALL MATCH THE FIRE/SECURITY RATING OF THE WALL/CEILING ASSEMBLY.
- 7. DUCT AND PIPING LAYOUTS ARE SCHEMATIC IN NATURE. PROVIDE ADDITIONAL TRANSITIONS, ELBOWS, OFFSETS, AS NECESSARY AND COORDINATE ANY STRUCTURAL SUPPORTS FOR OPENINGS WITH STRUCTURAL TRADES.
- 8. DUCTWORK: A. ALL LISTED DUCTWORK DIMENSIONS ARE CLEAR AIR FLOW DIMENSIONS.
 - B. ALL DUCTS IN FINISHED ROOMS AND SPACES SHALL BE CONCEALED IN CHASES OR ABOVE THE CEILINGS, UNLESS OTHERWISE NOTED. C. FIELD VERIFY LOCATION OF BEAMS, GENERAL STRUCTURE, LIGHTING, PIPING, ETC., BEFORE
 - FABRICATION AND INSTALLATION OF DUCTWORK COORDINATE ELEVATIONS, OFFSETS, AND TRANSITIONS AS REQUIRED. D. MAXIMUM LENGTH OF FLEX DUCT SHALL BE 5'-0". FLEX DUCT SHALL NOT BE USED WHERE
 - DUCTWORK IS EXPOSED. THE LAST ELBOW BEFORE CONNECTION TO AN AIR DEVICE SHALL BE A HARD DUCT. E. VOLUME DAMPERS SHALL BE INSTALLED IN ALL BRANCH DUCTS.

 - F. THE ELBOWS FOR DUCTWORK SHALL HAVE TURNING VANES UNLESS NOTED OTHERWISE. G. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR AIR DEVICE LOCATIONS.
 - H. ALL AIR DEVICES IN CMU WALLS SHALL MATCH BLOCK COURSING. I. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR LOCATIONS OF FIRE RATED WALLS, FLOORS AND SMOKE BARRIERS. CONTRACTOR SHALL PROVIDE FIRE DAMPERS, SMOKE DAMPERS IN ALL DUCTS PENETRATING SAID WALLS/FLOOR, WHETHER INDICATED ON THE MECHANICAL PLANS OR NOT.
- 9. ALL STRUCTURAL OPENINGS SHALL BE COORDINATED WITH THE STRUCTURAL DRAWING. COORDINATE ANY STRUCTURAL SUPPORTS FOR OPENINGS WITH STRUCTURAL TRADES.
- 10. ALL HANGER SYSTEMS FOR PIPING, DIFFUSERS, GRILLES AND EQUIPMENT SHALL BE SECURED TO BUILDING STRUCTURAL SYSTEM.
- 11. COORDINATE ALL WORK WITH EXISTING WORK TO PERMIT ACCESS AND SERVICE CLEARANCES TO ALL SYSTEMS. COORDINATE DUCT WITH ELECTRICAL J-BOXES TO PREVENT OBSTRUCTIONS.
- 12. CONNECTION TO EQUIPMENT SHALL CONFORM TO MANUFACTURER'S SPECIFICATION.
- 13. ALL MECHANICAL EQUIPMENT REQUIRING NATURAL GAS SHALL BE FURNISHED WITH PRESSURE REGULATOR. THE GAS PRESSURE REGULATOR SHALL REGULATE THE GAS PRESSURE BETWEEN THE INLET AND OPERATING PRESSURE OF THE EQUIPMENT. PROVIDE VENT TO OUTDOOR FROM EACH REGULATOR.
- 14. HVAC EQUIPMENT SHALL BE CONNECTED TO BUILDING MANAGEMENT SYSTEM.
- 15. REFER TO DETAIL SHEETS FOR ADDITIONAL INFORMATION ON INSTALLMENT METHODS.
- 16. ALL CONTROL SETPOINTS AND SETTINGS SHALL BE USER ADJUSTABLE. 17. ALL EXISTING CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES SHALL BE REMOVED AND REPLACED ACCORDING TO SCHEMATICS ON
- CONTROL DRAWINGS. PROVIDE NEW CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S AND OTHER APPURTENANCES ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS. 18. FOR VARIABLE AIR VOLUME BOXES, DIVISION 23 CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING
- 277 V TRANSFORMERS AND CONTROL WIRIING DOWNSTREAM OF 277:24V STEP DOWN TRANSFORMER. PROVIDE NEW TRANSFORMERS IN PLACE OF EXISTING. DIVISION 26 CONTRACTOR SHALL BE RESPONSIBLE FOR ANY POWER WIRING UPSTREAM OF THE TRANSFORMER. ANY NEW TRANSFORMERS SHALL BE INSTALLED IN NEMA-1 ENCLOSURE.
- 19. ALL HVAC CONTROL WIRING SHALL BE PROVIDED WITH DIVISION 23 CONTRACTOR UNLESS OTHERWISE NOTED. EXPOSED CONTROL WIRING SHALL BE IN CONDUIT. TEMPERATURE CONTROL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND LOCATING ANY 24V TRANSFORMERS REQUIRED FOR CONTROL COMPONENTS. DIV 26 CONTRACTOR SHALL PROVIDE POWER WIRING UPSTREAM OF THE TRANSFORMER.

GENERAL DEMOLITON NOTES

- 1. REFER TO DRAWINGS OF ALL OTHER DISCIPLINES FOR ADDITIONAL REMOVALS AND SELECTIVE DEMOLITION ACTIVITIES.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO SELECTIVE DEMOLITION ACTIVITIES. ANY ITEMS NOT INDICATED ON THE DRAWINGS OR SPECIFICATIONS THAT ARE IN CONFLICT WITH CONTRACT WORK SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID FOR CLARIFICATION.
- 3. FOR THE DURATION OF THE PROJECT, IF ANY EXISTING ITEM IS DAMAGED DURING CONSTRUCTION, IT SHALL BE REPAIRED AND RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED, INCLUDING ASSOCIATED REPAIR AND FINISHING TO MATCH ADJACENT SURFACES.
- 5. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY ENVIRONMENTAL CONTROL MEASURES INCLUDING ACCEPTABLE AIR QUALITY CONTROL MEASURES, DUST CONTROL, EROSION CONTROL AND OTHER MEASURES REQUIRED FOR PROTECTION OF THE PROPERTY DURING SELECTIVE DEMOLITON AND CONSTRUCTION ACTIVITIES.
- 6. CONTRACTOR IS SOLELY RESPONSIBLE FOR COORDINATING CONTRACT DRAWINGS WITH FIELD CONDITIONS AND WORK ASSOCIATED WITH EACH TRADE.
- 7. CONTRACTOR SHALL COORDINATE DEMOLITION ACTIVITIES WITH NEW WORK TO VERIFY DIMENSIONS AND EXTENT OF REMOVALS PRIOR TO BEGINING OF WORK.
- 8. CONTRACTOR IS RESPONSIBLE FOR REMOVAL, STORAGE AND REINSTALLATION OF REMAINING WALL MOUNTED DEVICES INTENDED FOR REUSE.
- 9. ALL DEMOLITION WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE STATE OF INDIANA, LOCAL BUILDING CODES, OSHA AND NFPA
- 10. OWNER RESERVES THE RIGHT TO SALVAGE ANY EQUIPMENT OR MATERIAL INDICATED TO BE DEMOLISHED.
- 11. PLANS ARE FOR DIAGRAMMATIC PURPOSES ONLY. BASED ON LIMITED SITE OBSERVATIONS. CONTRACTOR TO REMOVE ANY UNUSED / ABANDONED DUCTWORK, EQUIPMENT, PIPING (GAS, REFRIGERANT ETC.). ASSOCIATED ACCESORIES WHETHER INDICATED ON THE PLANS OR NOT. CONTRACTOR TO VERIFY EXTENT OF DEMOLITION ON THE FIELD AND COORDINATE WITH THE ENGINEER (AT NO ADDITIONAL COST TO THE OWNER). PATCH WALLS AND/OR FLOOR TO MATCH ADJACENT CONDITIONS.

2/5/2025 $\overline{}$ $\overline{}$ 2363-A SS ≥ ∞ νШ SSI SSI ÉЩЬ COMM 'S OFI EMEN' NO ₩ ORMA⁻ RD OF IERIFF PROVE



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G	<u>ENERA</u>	L NOTES
A.	REFER TO S NOTES AND	HEETS G1.1 AND M0.1 FOR ADDITIONAL GENERAL INFORMATION.
B.	DUCT AND P ADDITIONAL REQUIRED.	IPING LAYOUT ARE SCHEMATIC IN NATURE. PROVID TRANSITIONS, ELBOWS, OFFSETS AND FITTINGS A
C.	COORDINAT REQUIRED C	E ANY STRUCTURAL SUPPORTS FOR OPENING AS ON SITE.
D.	COORDINAT ACCESS AND COORDINAT OBSTRUCTIO	E ALL WORK WITH OTHER TRADES TO PERMIT O SERVICE CLEARANCES TO ALL SYSTEMS. E DUCT WITH ELECTRICAL J-BOXES TO PREVENT ONS.
E.	DO NOT SCA	LE DRAWINGS FOR DIMENSIONS.
F.	REFER TO D	ETAILS SHEETS FOR ADDITIONAL INFORMATION ON NN METHODS.
G.	ALL EXISTING VALVES, ACT APPURTENA ACCORDING	G CONTROLS INCLUDING SENSORS, CONTROL FUATORS, PANELS, VFD'S, AND OTHER NCES SHALL BE REMOVED AND REPLACED TO SCHEMATICS ON CONTROL DRAWINGS.
H.	PROVIDE NE VALVES, ACT APPURTENA DRAWINGS.	W CONTROLS INCLUDING SENSORS, CONTROL FUATORS, PANELS, VFD'S, AND OTHER NCES ACCORDING TO SCHEMATICS ON CONTROL
<u>K</u>	EYNOT	<u>ES</u>
0223	304 RE 1 CC EC M	EMOVE AIR HANDLING UNIT COMPLETE, INCLUDING JCTWORK AS INDICATED, PIPING AS INDICATED, ONTROLS, AND ACCESSORIES COMPLETE. QUIPMENT PAD EXISTING TO REMAIN REFER TO DEX SERIES FOR MORE INFORMATION.
0223	805 RE RE SE CO	EMOVE EXISTING CONTROLS TO UNIT COMPLETE. EMOVE ALL ASSOCIATED TUBING OR WIRING ERVING UNIT CONTROLS. REMOVE UNIT FROM ONTROLS FRONT END.
0223	807 RE CO LC	EMOVE EXISTING THERMOSTAT AND WIRING. ONTRACTOR TO FIELD VERIFY THERMOSTAT OCATIONS.
0223	B14 DI DU	SCONNECT AND REMOVE EXHAUST GRILLE FROM JCTWORK. TEMPORARILY COVER DUCT OPENING.
0223	318 TE GI RE RE	EMPORARILY DISCONNECT AND REMOVE RETURN RILLE FROM CEILING. SALVAGE GRILLE FOR EINSTALLATION. ALTERNATE BID: REMOVE EXISTING ETURN GRILLE FOR REPLACEMENT.
0223	819 TE DI TE DI RE RE	EMPORARILY DISCONNECT AND REMOVE SUPPLY FFUSER FROM DUCTWORK AND CEILING. EMPORARILY COVER DUCT OPENING. SALVAGE FFUSER FOR REINSTALLATION. ALTERNATE BID: EMOVE EXISTING SUPPLY DIFFUSER FOR EPLACEMENT. TEMPORARILY COVER DUCT OPENING
0223	821 RE CC W FF DI	EMOVE FPV. REMOVE EXISTING CONTROLS TO UNIT DMPLETE. REMOVE ALL ASSOCIATED TUBING OR IRING SERVING UNIT CONTROLS. REMOVE UNIT ROM CONTROLS FRONT END. TEMPORARILY COVER JCT OPENING UNTIL NEW FPV IS INSTALLED.
0223	322 FF RE CC W FF M:	V UNIT TO BE TEMPORARILY REMOVED AND ELOCATED. REMOVE EXISTING CONTROLS TO UNIT OMPLETE. REMOVE ALL ASSOCIATED TUBING OR IRING SERVING UNIT CONTROLS. REMOVE UNIT ROM CONTROLS FRONT END. REFER TO DRAWING 2.1E FOR NEW INSTALL LOCATION.
0223	325 TE GI OI AL FC OI	MPORARILY DISCONNECT AND REMOVE EXHAUST RILLE FROM DUCTWORK. TEMPORARILY COVER DUC PENING. SALVAGE GRILLE FOR REINSTALLATION. TERNATE BID: REMOVE EXISTING EXHAUST GRILLE OR REPLACEMENT. TEMPORARILY COVER DUCT PENING.





NOTE: ELEMENTS ON THIS DRAWING ARE IED BY VARIOUS COLORS; IF THIS

MATIC IN NATURE. PROVIDE OFFSETS AND FITTINGS AS

T AND REMOVE RETURN VAGE GRILLE FOR TE BID: REMOVE EXISTING ACEMENT.

T AND REMOVE SUPPLY RK AND CEILING. CT OPENING. SALVAGE ATION. ALTERNATE BID: DIFFUSER FOR ILY COVER DUCT OPENING.

ISTING CONTROLS TO UNIT ASSOCIATED TUBING OR NTROLS. REMOVE UNIT ND. TEMPORARILY COVER FPV IS INSTALLED.

CT AND REMOVE EXHAUST . TEMPORARILY COVER DUCT E FOR REINSTALLATION. EXISTING EXHAUST GRILLE PORARILY COVER DUCT





BOARD OF COMMISSIC SHERIFF'S OFFICE IMPROVEMENTS S5 STATE ROAD 49 CHANIC/ PORTER COUN PORTER COUN FACIL FLOOR ME FIRST SHEET NUMBER MD2.1E





GENERAL NOTES

- A. REFER TO SHEETS G1.1 AND M0.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.
- ADDITIONAL TRANSITIONS, ELBOWS, OFFSETS AND FITTINGS AS REQUIRED.
- C. COORDINATE ANY STRUCTURAL SUPPORTS FOR OPENING AS REQUIRED ON SITE.
- D. COORDINATE ALL WORK WITH OTHER TRADES TO PERMIT ACCESS AND SERVICE CLEARANCES TO ALL SYSTEMS. COORDINATE DUCT WITH ELECTRICAL J-BOXES TO PREVENT
- OBSTRUCTIONS. E. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- F. REFER TO DETAILS SHEETS FOR ADDITIONAL INFORMATION ON INSTALLATION METHODS.
- G. ALL EXISTING CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES SHALL BE REMOVED AND REPLACED ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS.
- H. PROVIDE NEW CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS.

KEYNOTES

022304	REMOVE AIR HANDLING U DUCTWORK AS INDICATE CONTROLS AND ACCESS EQUIPMENT PAD EXISTIN MD4.2 SERIES FOR MORE
022305	REMOVE EXISTING CONT REMOVE ALL ASSOCIATE SERVING UNIT CONTROLS CONTROLS FRONT END.
022307	REMOVE EXISTING THERI CONTRACTOR TO FIELD \ LOCATIONS.
022309	REMOVE EXISTING RETU INCLUDING DUCTWORK A AND ACCESSORIES COM
022312	REMOVE EXISTING ERV A AS INDICATED. REMOVE F
022327	REMOVE EXHAUST FLUE WATER HEATERS AS INDI ROOF PENETRATION FOR

NOTE: ELEMENTS ON THIS DRAWING ARE IDENTIFIED BY VARIOUS COLORS; IF THIS NOTE IS NOT RED, THIS DRAWING IS NOT IN COLOR AND NEEDS TO BE REPRINTED IN COLOR.

B. DUCT AND PIPING LAYOUT ARE SCHEMATIC IN NATURE. PROVIDE

UNIT COMPLETE, INCLUDING ED, PIPING AS INDICATED, SORIES COMPLETE. NG TO REMAIN REFER TO LE INFORMATION.

ITROLS TO UNIT COMPLETE. ED TUBING OR WIRING LS. REMOVE UNIT FROM

RMOSTAT AND WIRING. VERIFY THERMOSTAT

JRN FAN COMPLETE, AS INDICATED, CONTROLS, MPLETE.

/ AND ASSOCIATED DUCTWORK E FROM CONTROLS FRONT END. JE AND INTAKE FROM EXISTING IDICATED. CAP DUCTWORK AT R RECONNECTION.







COLOR AND NEEDS TO BE REPRINTED IN COLOR.



SECOND FLOOR 13' - 9" PRECAST BEARING 13' - 4"













3 ERV-1 REMOVAL SECTION SCALE: N.T.S.

2 AHU-9 REMOVAL SECTION SCALE: N.T.S.



GENERAL NOTES

- A. REFER TO SHEETS G1.1 AND M0.1 FOR ADDITIONAL GENERAL
- NOTES AND INFORMATION.
- B. DUCT AND PIPING LAYOUT ARE SCHEMATIC IN NATURE. PROVIDE ADDITIONAL TRANSITIONS, ELBOWS, OFFSETS AND FITTINGS AS
- REQUIRED. COORDINATE ANY STRUCTURAL SUPPORTS FOR OPENING AS REQUIRED ON SITE.
- D. COORDINATE ALL WORK WITH OTHER TRADES TO PERMIT ACCESS AND SERVICE CLEARANCES TO ALL SYSTEMS. COORDINATE DUCT WITH ELECTRICAL J-BOXES TO PREVENT
- OBSTRUCTIONS. E. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- REFER TO DETAILS SHEETS FOR ADDITIONAL INFORMATION ON INSTALLATION METHODS.
- G. ALL EXISTING CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES SHALL BE REMOVED AND REPLACED ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS.
- H. PROVIDE NEW CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS.

KEYNOTES

022326

022302	REMOVE EXISTING BOILER ACCESSORIES INCLUDING FLUE AND INTAKE AS INDIO
<u>_1</u>	
022305	REMOVE EXISTING CONTR REMOVE ALL ASSOCIATED SERVING UNIT CONTROLS CONTROLS FRONT END.
022307	REMOVE EXISTING THERM CONTRACTOR TO FIELD VE LOCATIONS.

FRONT END.

NOTE: ELEMENTS ON THIS DRAWING ARE IDENTIFIED BY VARIOUS COLORS; IF THIS NOTE IS NOT RED, THIS DRAWING IS NOT IN COLOR AND NEEDS TO BE REPRINTED IN COLOR.

R AND ALL ASSOCIATED G PUMPS. REMOVE EXISTING ICATED. REMOVE PIPING AS ROM CONTROLS FRONT END. مىبىر

TROLS TO UNIT COMPLETE. S. REMOVE UNIT FROM

MOSTAT AND WIRING. VERIFY THERMOSTAT

DISCONNECT AND REMOVE EXISTING DUCT MOUNTED COIL. REMOVE PIPING AND DUCTWORK TRANSITIONS TO UNIT. REMOVE EXISTING CONTROLS TO UNIT COMPLETE. REMOVE ALL ASSOCIATED WIRING SERVING CONTROLS. REMOVE UNIT FROM CONTROLS





- REQUIRED.

- INSTALLATION METHODS.
- DRAWINGS.

0701	CONNECT NEW GRILLE TO DUCTWORK. LOCATE GRILI AS MINIMALLY AS POSSIBL
0702	CONNECT NEW DIFFUSER LOCATE DIFFUSER TO ADJU MINIMALLY AS POSSIBLE.
0703	PROVIDE ELBOW WITHOUT TRANSFER AIR DUCT.
0705	REINSTALL EXISTING DIFFU CONNECT TO EXISTING DU ALTERNATE BID: CONNECT GRILLES TO EXISTING DUC OR GRILLE AS INDICATED O SCHEDULE.
0901	PROVIDE NEW CONTROLS INTERFACE WITH BUILDING PER 3/M7.1.
0904	PROVIDE NEW CONTROLS VAV BOX AND INTERFACE N MANAGEMENT SYSTEM. RE
0905	PROVIDE NEW CONTROLS VAV BOX AND INTERFACE N MANAGEMENT SYSTEM. RE
0908	PROVIDE NEW CONTROLS HEATER AND INTERFACE V MANAGEMENT SYSTEM. RE
0915	PROVIDE TEMPERATURE S DUCTWORK. SENSOR TO C INDICATED.
0920	PROVIDE THERMOSTAT IN EXISTING. MATCH EXISTING AROUND THERMOSTAT IF I
0923	PROVIDE NEW THERMOST LOCATION INDICATED IS PL TO FIELD VERIFY THERMOS REPLACE EXISTING AT SAM
0928	PROVIDE NEW FIREFIGHTE IN CENTRAL CONTROL. CO LOCATION WITH EXISTING

NOTE:





GENERAL NOTES

- B. DUCT AND PIPING LAYOUT ARE SCHEMATIC IN NATURE. PROVIDE ADDITIONAL TRANSITIONS, ELBOWS, OFFSETS AND FITTINGS AS
- COORDINATE ANY STRUCTURAL SUPPORTS FOR OPENING AS
- D. COORDINATE ALL WORK WITH OTHER TRADES TO PERMIT ACCESS AND SERVICE CLEARANCES TO ALL SYSTEMS. COORDINATE DUCT WITH ELECTRICAL J-BOXES TO PREVENT
- E. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- REFER TO DETAILS SHEETS FOR ADDITIONAL INFORMATION ON G. ALL EXISTING CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER
- ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS. I. PROVIDE NEW CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES ACCORDING TO SCHEMATICS ON CONTROL

004	INSTALL NEW SMOKE EXHA EXISTING SMOKE EXHAUST ADAPTER AS NEEDED. SYS CONTROLS, AND WIRING TO UL-864. CONNECT TO EXIST INTERFACE WITH NEW BMS CONTROLS ON SHEETS M7
018	CONNECT NEW DUCT MOU DUCTWORK AND PIPING. PI ACCESS DOOR UPSTREAM CONTROLS FOR DUCT MOU CONTROLS SCHEMATIC 5/M
904	PROVIDE NEW CONTROLS VAV BOX AND INTERFACE V MANAGEMENT SYSTEM. RE
908	PROVIDE NEW CONTROLS HEATER AND INTERFACE W MANAGEMENT SYSTEM. RE
918	PROVIDE TEMPERATURE S DUCTWORK. REPAIR OR RE AFFECTED BY TEMPERATU SENSOR TO CONTROL THE
920	PROVIDE THERMOSTAT IN S EXISTING. MATCH EXISTING AROUND THERMOSTAT IF E
926	PROVIDE NEW CONTROLS REFER TO M7.7/M7.8 FOR C
301	PROVIDE NEW SMOKE DAM OF VAV BOX. REFER TO M7

NORTH MECH INSTALLATION PLAN - MECH ROOM A152 SCALE: 1/2" = 1'-0"

GENERAL NOTES

- NOTES AND INFORMATION. B. DUCT AND PIPING LAYOUT ARE SCHEMATIC IN NATURE. PROVIDE
- REQUIRED. . COORDINATE ANY STRUCTURAL SUPPORTS FOR OPENING AS REQUIRED ON SITE.
- . COORDINATE ALL WORK WITH OTHER TRADES TO PERMIT ACCESS AND SERVICE CLEARANCES TO ALL SYSTEMS. COORDINATE DUCT WITH ELECTRICAL J-BOXES TO PREVENT OBSTRUCTIONS.
- E. DO NOT SCALE DRAWINGS FOR DIMENSIONS. REFER TO DETAILS SHEETS FOR ADDITIONAL INFORMATION ON
- INSTALLATION METHODS. G. ALL EXISTING CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES SHALL BE REMOVED AND REPLACED
- ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS. H. PROVIDE NEW CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS.

KEYNOTES

230001	INSTALL NEW BOILERS IN P RESIZE EQUIPMENT PAD AS 6" SPACE AROUND PERIME REBALANCE EXISTING INLI
230004	INSTALL NEW SMOKE EXHA EXISTING SMOKE EXHAUST ADAPTER AS NEEDED. SYS CONTROLS, AND WIRING TO UL-864. CONNECT TO EXIST INTERFACE WITH NEW BMS CONTROLS ON SHEETS M7.
230005	INSTALL NEW AHU IN PLACE CONNECT TO EXISTING DU SHOWN: RESIZE EQUIPMEN MAINTAIN 6" SPACE AROUN EQUIPMENT. REFER TO M.4 INFORMATION.
230014	REUSE EXISTING PENETRA BOILER FLUES FOR NEW FL INTAKES.
230016	INSTALL NEW DUCT MOUNT EXISTING. CONNECT TO EX DUCTWORK. PROVIDE DUC NECESSARY TO CONNECT NEW CONTROLS AS PER DE
230907	PROVIDE NEW CONTROLS I SYSTEM AND INTERFACE W MANAGEMENT SYSTEM. RE ADDITIONAL INFORMATION.
230908	PROVIDE NEW CONTROLS I HEATER AND INTERFACE W MANAGEMENT SYSTEM. RE
230913	PROVIDE NEW CONTROLS I AHU AND INTERFACE WITH SYSTEM. REFER TO DETAIL
230914	PROVIDE NEW CONTROLS I INTERFACE WITH BUILDING REFER TO DETAIL 2/M7.5.
230925	PROVIDE NEW EMERGENC NEAR EXIT. MOUNT BUTTO SECTION 606. PROVIDE CO EMERGENCY SHUTOFF THF WORKSTATION.
232103	PROVIDE STUB-OUT WITH S EMERGENCY HEATING HOT OPEN ENDS.
232104	REBALANCE PUMPS AFTER BOILERS AND AIR HANDLIN
232106	SHUTOFF VALVE.

NOTE: ELEMENTS ON THIS DRAWING ARE IDENTIFIED BY VARIOUS COLORS; IF THIS NOTE IS NOT RED, THIS DRAWING IS NOT IN COLOR AND NEEDS TO BE REPRINTED IN COLOR.

ENLARGED MECHANICAL INSTALLATION PLAN - MECHANICAL ROOM

GENERAL NOTES

- A. REFER TO SHEETS G1.1 AND M0.1 FOR ADDITIONAL GENERAL NOTES AND INFORMATION.
- B. DUCT AND PIPING LAYOUT ARE SCHEMATIC IN NATURE. PROVIDE
- REQUIRED. C. COORDINATE ANY STRUCTURAL SUPPORTS FOR OPENING AS REQUIRED ON SITE.
- D. COORDINATE ALL WORK WITH OTHER TRADES TO PERMIT ACCESS AND SERVICE CLEARANCES TO ALL SYSTEMS. COORDINATE DUCT WITH ELECTRICAL J-BOXES TO PREVENT OBSTRUCTIONS.
- E. DO NOT SCALE DRAWINGS FOR DIMENSIONS.
- F. REFER TO DETAILS SHEETS FOR ADDITIONAL INFORMATION ON INSTALLATION METHODS.
- G. ALL EXISTING CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES SHALL BE REMOVED AND REPLACED ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS.
- H. PROVIDE NEW CONTROLS INCLUDING SENSORS, CONTROL VALVES, ACTUATORS, PANELS, VFD'S, AND OTHER APPURTENANCES ACCORDING TO SCHEMATICS ON CONTROL DRAWINGS.

KEYNOTES

0005	INSTALL NEW AHU IN PLACE OF EXISTING AHU.
	SHOWN RESIZE EQUIPMENT PAD AS NECESSARY TO MAINTAIN 6" SPACE AROUND PERIMETERIOF EQUIPMENT: REFER TO M:4-SERIES FOR MORE INFORMATION.
0006	INSTALL NEW ERV IN PLACE OF EXISTING ERV. CONNECT TO EXISTING DUCTWORK AS SHOWN. INTERFACE WITH NEW BMS SYSTEM AS PER CONTROLS ON SHEET 4/M7.2.
0011	INSTALL NEW RETURN FAN IN PLACE OF EXISTING RETURN FAN. CONNECT TO EXISTING DUCTWORK AS SHOWN. INTERFACE WITH NEW BMS SYSTEM AS PER CONTROLS ON 1/M7.2.
0016	INSTALL NEW DUCT MOUNTED COILS IN PLACE OF EXISTING. CONNECT TO EXISTING PIPING AND DUCTWORK. PROVIDE DUCT TRANSITIONS AS NECESSARY TO CONNECT TO EQUIPMENT. PROVIDE NEW CONTROLS AS PER DETAIL 5/M7.2.
0018	CONNECT NEW DUCT MOUNTED COIL BOX TO EXISTIN DUCTWORK AND PIPING. PROVIDE DUCT MOUNTED ACCESS DOOR UPSTREAM OF BOX. PROVIDE NEW CONTROLS FOR DUCT MOUNTED COILS AS PER CONTROLS SCHEMATIC 5/M7.2.
0019	CONNECT WATER HEATER EXHAUST FLUE AND INTAK TO EXISTING EXHAUST/INTAKE DUCTWORK. REUSE EXISTING ROOF PENETRATIONS. SIZE AND INSTALL FLUE AND INTAKE AS PER MANUFACTURER RECOMMENDATIONS.
0908	PROVIDE NEW CONTROLS FOR HYDRONIC UNIT HEATER AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 7/M7.1.
0912	PROVIDE NEW CONTROLS FOR CONSTANT VOLUME AHU AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 1/M7.2.
0914	PROVIDE NEW CONTROLS FOR VAV AHU AND INTERFACE WITH BUILDING MANAGEMENT SYSTEM. REFER TO DETAIL 2/M7.5.

NOTE: ELEMENTS ON THIS DRAWING ARE IDENTIFIED BY VARIOUS COLORS; IF THIS NOTE IS NOT RED, THIS DRAWING IS NOT IN COLOR AND NEEDS TO BE REPRINTED IN COLOR.

ADDITIONAL TRANSITIONS, ELBOWS, OFFSETS AND FITTINGS AS

NTED COIL BOX TO EXISTING ROVIDE DUCT MOUNTED OF BOX. PROVIDE NEW UNTED COILS AS PER

EXHAUST FLUE AND INTAKE AKE DUCTWORK. REUSE IONS. SIZE AND INSTALL MANUFACTURER

		ARCHITECTURE • ENGINEERING • PLANNING SURVEYING • CONSTRUCTION SERVICES DLZ INDIANA, LLC
		SOLAN AND S
SECOND FLOOR 13' - 9" DECAST BEARING 13' - 4"	DRAWN: CSH CHKD: SJS NO. REVISION DATE DESIGNED: CSH 1 ADDENDUM #01 02-05-2025 02-05-2025 APPRVD: JRADENDUM #01 02-05-2025 02-05-2025 DATE: JANUARY 8, 2025 I ADDENDUM #01	PROJECT NUMBER 2363-1104-90
	PORTER COUNTY BOARD OF COMMISSIONERS PORTER COUNTY SHERIFF'S OFFICE & JAIL FACILITY IMPROVEMENTS 2755 STATE ROAD 49	AHU SECTIONS
DRAWING ARE OUS COLORS; IF THIS HIS DRAWING IS NOT IN	DRAWING NU	^{мвек}
TO BE REPRINTED IN	MECHANI	CAL

5 AHU-9 SECTION SCALE: N.T.S.

NOTE: ELEMENTS ON THIS DRAWING ARE IDENTIFIED BY VARIOUS COLORS; IF THIS NOTE IS NOT RED, THIS DRAWING IS NOT IN COLOR AND NEEDS TO BE REPRINTED IN COLOR.

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2 HYDRONIC PIPING DIAGRAM COMPLETE SCALE: N.T.S.

NOTE: HALFTONED LINES INDICATE EXISTING PIPING AND ACCESSORIES TO REMAIN. DETAIL IS FOR DIAGRAMMATIC PURPOSES ONLY. CONTRACTOR TO COORDINATE NECESSARY AMOUNT OF DEMOLITION AND INSTALLATION OF NEW PIPING AND ASSOCIATED ACCESSORIES AS NEEDED ON THE FIELD

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BOARD OF COMMISSION SHERIFF'S OFFICE & IMPROVEMENTS 55 STATE ROAD 49

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												AIR	COOLE		R SCHEDUL	Ξ											
TAG	ì							FLOW RA	ATE (GPM)	WATER PI	D (FT H2O)	WATER TEM (°F	IPERATURE ⁼)		NUMBER OF				ELECT	RICAL DATA			DI	MENSIONS	(IN)		
	MA	NUFACTURER	MODEL	NOMINAL TONS	EER	IPLV	FLUID TYPE	MINIMUM	DESIGN	TOTAL PD	EVAPORA TOR PD	A ENTERING	LEAVING	REFRIGERANT TYPE	REFRIGERANT CIRCUITS	NO. OF COMPRESSORS	VOLTAGE	PHASE	FREQUENCY (HZ)	STARTER TYPE	MCA	MOCP	LENGTH	WIDTH	HEIGHT	WEIGHT (LBS)	NOTES
СН	1	YORK	YLAA0136SJ46XFB	122.6	9.815	17.68	30% PROPYLENE GLYCOL	115	305.1	23.3	15.1	55	45	R454B	2	6	460	3	60	ACROSS THE LINE	290	300	187	88	94	7165	1,2,3,4,5,6,7,8,9,10
CH	2	YORK	YLAA0136SJ46XFB	122.6	9.815	17.68	30% PROPYLENE GLYCOL	115	305.1	23.3	15.1	55	45	R454B	2	6	460	3	60	ACROSS THE LINE	290	300	187	88	94	7165	1,2,3,4,5,6,7,8,9,10
СН	3	YORK	YLAA0136SJ46XFB	122.6	9.815	17.68	30% PROPYLENE GLYCOL	115	305.1	23.3	15.1	55	45	R454B	2	6	460	3	60	ACROSS THE LINE	290	300	187	88	94	7165	1,2,3,4,5,6,7,8,9,10

NOTES: 1. PROVIDE STARTER/DISCONNECT PER DIVISION 26 SPECIFICATIONS AND MECHANICAL EQUIPMENT - ELECTRICAL CONNECTIONS SCHEDULE ON ELECTRICAL DRAWINGS. PROVIDE DISCONNECT IN NEMA 3R RATED ENCLOSURE AS PER DIVISION 26 SPECIFICATIONS.

 INIT SHALL BE RATED FOR 30% PROPYLENE GLYCOL.
UNIT SHALL BE RATED FOR 30% PROPYLENE GLYCOL.
PROVIDE ACCESSORIES AS NEEDED FOR LOW AMBIENT OPERATION. UNITS SHALL BE PROVIDED WITH HIGH EFFICIENCY FANS TO ALLOW FOR UNITS TO OPERATE VIA SOUND REDUCTION MODE. PROVIDE FACTORY INSTALLED ACOUSTICAL BLANKETS ON EACH COMPRESSOR FOR SOUND REDUCTION.
UNIT SHALL HAVE A SINGLE POWER POINT ELECTRICAL CONNECTION. PROVIDE 10A, 115 V GFCI OUTLET IN CONTROL PANEL FOR SERVICING THE UNIT. OUTLET SHALL BE POWERED VIA SINGLE POWER POINT CONNECTION.
UNIT SHALL HAVE A SINGLE POWER POINT ELECTRICAL CONNECTION. PROVIDE 10A, 115 V GFCI OUTLET IN CONTROL PANEL FOR SERVICING THE UNIT. OUTLET SHALL BE POWERED VIA SINGLE POWER POINT CONNECTION.
UNIT SHALL HAVE A SINGLE POWER POINT ELECTRICAL CONNECTION. PROVIDE 10A, 115 V GFCI OUTLET IN CONTROL PANEL FOR SERVICING THE UNIT. OUTLET SHALL BE POWERED VIA SINGLE POWER POINT CONNECTION.
UNIT SHALL HAVE A SINGLE POWER POINT ELECTRICAL CONNECTION OF EVAPORATOR FOR COLL. EVAPORATOR FOR SERVICING THE UNIT. OUTLET SHALL BE POWERED VIA SINGLE POWER POINT CONNECTION.
PROVIDE EVAPORATOR HEATER AND INSULATION FOR PORTATION OF EVAPORATOR FOR FOR COLL. EVAPORATOR FOR SERVICING THE UNIT. OUTLET SHALL BE POWERED TO 115 V CIRCUIT IN CONTROL BOX. PROVIDE EVAPORATOR TEATER AND INSULATION FOR PROTECTION OF EVAPORATOR COLL. EVAPORATOR TEATOR TEATER CIRCUT SHALL BE 17
PROVIDE FACTORY INSTALLED WATER FLOW SWITCH TO PREVENT EVAPORATOR FREEZEUP DURING LOW OR NO FLOW CONDITIONS.
UNIT SHALL BE PROVIDED WITH LOUVERS TO PROTECT AGAINST HAIL GUARD.
REFER TO DETAIL 1/M5.2 AND 16/M5.1 FOR ADDITIONAL INFORMATION.
REFER TO M7.3 FOR CONTROLS.

							FAN P	OWERED V	AV SCHE	EDULE								
TAG				INLET	AI	R FLOW (CF	M)		COIL	MAX COIL	WATER PRESSURE	WATER	WA1 TEMPERA	TER TURE (°F)		FAN		
				DIAMETER		MAX	MIN	DOWNSTREAM	CAPACITY	APD (IN	DROP (FT	FLOW						
	MANUFACTURER	MODEL	SIZE	(IN)	FAN FLOW	PRIMARY	PRIMARY	SP (IN WG)	(MBH)	WG)	WG)	(GPM)	ENTERING	LEAVING	HP	VOLTAGE	PHASE	NOTES
FPV 4-2	PRICE	FDC	30	8	1100	1100	90	0.5	41.6	0.32	1.54	2.26	180	150	1/2	277	1	1,2,3,4
FPV 4-5	PRICE	FDC	20	8	690	690	60	0.55	26.1	0.14	0.41	1.07	180	150	1/3	277	1	1,2,3,4
FPV 4-7	PRICE	FDC	10	8	590	590	270	0.5	22.3	0.34	0.27	1.09	180	150	1/3	277	1	1,2,3,4
FPV 6-5	PRICE	FDC	60	14	2180	2180	1080	0.6	45.6	0.24	0.27	1.11	180	150	2@3/4	277	1	1,2,3,4
FPV 8-19	PRICE	FDC	50	12	1625	1625	150	0.7	61.4	0.33	1.27	3.17	180	150	1	277	1	1,2,3,4
FPV 8-25	PRICE	FDC	10	4	160	160	15	0.5	6	0.04	0.01	0.2	180	150	1/3	277	1	1,2,3,4
FPV 8-28	PRICE	FDC	10	5	370	370	180	0.5	14	0.15	0.07	0.51	180	150	1/3	277	1	1,2,3,4

NOTES: 1. PROVIDE STARTER/DISCONNECT PER DIVISION 26 SPECIFICATIONS AND MECHANICAL EQUIPMENT - ELECTRICAL CONNECTIONS SCHEDULE ON ELECTRICAL DRAWINGS. 2. REFER TO DETAIL 11/M5.1. 3. REFER TO 2/M7.1 FOR CONTROLS. 4. PROVIDE 2-WAY VALVE FOR HEATING COIL.

				DUCI	LESS S	PLIT INC	OOR UN	NIT SCHE	EDULE			
TAC	3				RATED	RATED		ELECTRIC	CAL DATA			
				AIRFLOW	CAPACITY	CAPACITY					WEIGHT	
		MANUFACTURER	MODEL	(CFM)	(MBH)	(MBH)	VOLTAGE	PHASE	MCA	MOCP	(LBS)	NOTES
DS	1	TRANE	PLA-AE12NL	530	12	10.1	208	1	1.0	15	225	1,2,3,4
DS	2	TRANE	PLA-AE12NL	530	12	10.1	208	1	1.0	15	225	1,2,3,4
DS	3	TRANE	PLA-AE12NL	530	12	10.1	208	1	1.0	15	225	1,2,3,4
DS	4	TRANE	PLA-AE24NL	810	24	13	208	1	1.0	25	225	1,2,3,4

<u>NOTES:</u> 1. REFER TO DETAIL 8/M5.1.

2. PROVIDE CONDENSATE PUMP WITH BUILT-IN CHECK VALVE. 3. INDOOR UNIT IS POWERED BY OUTDOOR UNIT. 4. UNIT IS INTENDED TO BACK-UP FOR EXISTING SYSTEM. REFER TO M7.7 AND M7.8 FOR CONTROLS. PROVIDE CONTROLS FOR UNITS TO TURN ON WHEN PRIMARY VAV SYSTEM TURNS OFF.

												DU		NTED C	OIL SCHE	EDULE														
TAG								COOLING	COIL										HEATING	COIL										
				TOTAL	SENSIBLE							F A T	1 A T		TOTAL	MAX AIR														
			CEM			PD (IN H20)	WATER PD		DOWS		\ \/ T (°E)					PD (IN H20)			DOWS									WEIGHT		NOTES
50 44			CFIVI			1120)			RUVS		(Г)			VALVE		1120)			RUV3				(Г)	VALVE		LENGIN			SERVED	NOTES
DC 1-1	YORK	X11-33X39	1985	46	45	0.65	6.4	12.0	8	45	55	75/60.4	53.3/52.0	2-WAY	102	0.11	0.4	7.0	2	180	150	55.0	102.6	2-WAY	48	33	39	706	BLOCK A7	1,2
DC 1-2	YORK	X11-33X39	2065	46	46	0.68	6.4	12.0	8	45	55	75/60.4	53.6/52.1	2-WAY	104	104	0.4	7.0	2	180	150	55.0	101.7	2-VVAY	48	33	39	706	BLOCK A8	1,2
DC 1-3	YORK	X11-33X39	1775	37	37	0.34	4.7	10.0	8	45	55	75/60.4	55.0/52.8	2-VVAY	93	0.09	0.3	6.0	2	180	150	55.0	103.5	2-VVAY	48	33	39	645	BLOCK A6	1,2
DC 1-4	YORK	X11-33X39	1720	31	31	0.24	3.0	9.0	0	45	55	75/00.4	51.0/53.8	2-WAY	92	0.09	0.3	6.0	2	180	150	55.0	104.4	2-0041	40	33	39	615		1,2
DC 1-5		XTI 33X36	1755	33	32	0.33	4.7	0.0	8	45	55	75.0/60.4	55.0/52.7	2-WAT	93	0.09	0.3	5.0	2	180	150	55.0	103.0	2-WAT	40	33	39	644	BLOCK A1	1,2
DC 1-0	VORK	XTI-36X30	2465	52	52	0.52	3.8	9.0	8	45	55	75.0/60.4	55.0/52.7	2-WAT 3-W/AY	120	0.12	0.1	8.0	2	180	150	55.0	100.3	2-WAT 3-W/AY	40	36	30	747		1,2
DC 1-8	YORK	XTI-36X42	2400	58	58	0.4	0.0 4 4	17.0	8	45	55	75.0/60.4	55 2/52 8	3-WAY	120	0.12	0.2	9.0	2	180	150	55.0	100.1	3-W/AY	48	36	42	785		1,2
DC 2-1	YORK	XTI-33X39	2000	41	39	0.45	4.4	12.0	6	45	55	75.0/62.7	57 4/55 9	2-WAY	103	0.12	0.0	7.0	2	180	150	55.0	100.5	2-WAY	46	33	39	627	BLOCK B2	1.2
DC 2-2	YORK	XTI-33X39	2055	42	39	0.5	4.9	12.0	6	45	55	75 0/62 7	57 0/55 6	2-WAY	102	0.13	0.2	7.0	2	180	150	55.0	101.0	2-WAY	46	33	39	630	BLOCK B1	1.2
DC 2-3	YORK	XTI-33X39	1725	36	33	0.34	3.6	10.0	6	45	55	75.0/62.7	56.8/55.6	2-WAY	85	0.09	0.1	6.0	2	180	150	55.0	100.4	2-WAY	46	33	39	626	BLOCK B3	1,2
DC 2-4	YORK	XTI-33X36	1535	31	29	0.34	2.9	9.0	6	45	55	75.0/62.7	56.9/55.7	3-WAY	75	0.11	0.1	5.0	2	180	150	55.0	100.0	3-WAY	46	33	36	593	BLOCK B4	1.2
DC 2-5	YORK	XTI-33X39	1725	36	33	0.34	3.6	10.0	6	45	55	75.0/62.7	56.8/55.6	2-WAY	85	0.09	0.1	6.0	2	180	150	55.0	100.4	2-WAY	46	33	39	626	BLOCK B8	1,2
DC 2-6	YORK	XTI-33X36	1545	31	29	0.34	2.9	9.0	6	45	55	75.0/62.7	57.0/55.7	3-WAY	75	0.11	0.1	5.0	2	180	150	55.0	99.8	2-WAY	46	33	36	593	BLOCK B7	1,2
DC 3-1	YORK	XTI-33X39	2085	42	40	0.49	4.9	12.0	6	45	55	75.0/62.3	56.8/55.3	2-WAY	103	0.13	0.2	7.0	2	180	150	55.0	100.7	2-WAY	46	33	39	630	BLOCK C3	1,2
DC 3-2	YORK	XTI-33X39	1985	40	38	0.41	4.9	12.0	6	45	55	75.0/62.3	56.8/55.2	2-WAY	101	0.12	0.2	7.0	2	180	150	55.0	102.0	2-WAY	46	33	39	627	BLOCK C4	1,2
DC 3-3	YORK	XTI-33X39	1800	36	34	0.35	3.6	10.0	6	45	55	75.0/62.3	56.9/55.3	2-WAY	90	0.1	0.1	6.0	2	180	150	55.0	101.1	2-WAY	46	33	39	627	BLOCK C5	1,2
DC 3-4	YORK	XTI-30X36	1590	34	32	0.6	4.9	11.0	6	45	55	75.0/62.3	56.0/54.8	2-WAY	78	0.11	0.3	5.0	2	180	150	55.0	100.3	2-WAY	46	30	36	565	BLOCK C6	1,2
DC 3-5	YORK	XTI-33X36	1480	32	30	0.41	2.9	9.0	6	45	55	75.0/62.3	55.7/54.7	2-WAY	71	0.09	0.1	5.0	2	180	150	55.0	99.6	2-WAY	46	33	36	606	BLOCK C2	1,2
DC 3-6	YORK	XTI-27X30	960	26	22	0.52	4.1	10.0	6	45	55	75.0/62.3	53.4/52.5	2-WAY	48	0.16	0.1	3.5	2	180	150	55.0	101.2	2-WAY	46	27	30	476	BLOCK C1	1,2
DC 3-7	YORK	XTI-39X42	2850	68	60	0.56	6.0	17.0	6	45	55	75.0/62.3	55.2/53.9	2-WAY	141	0.18	0.3	10.0	2	180	150	55.0	100.8	3-WAY	46	39	42	767	BLOCK C7	1,2
DC 3-8	YORK	XTI-42X42	3120	75	66	0.53	5.8	18.0	6	45	55	75.0/62.3	55.1/53.8	3-WAY	158	0.17	0.6	10.0	2	180	150	55.0	101.9	3-WAY	46	42	42	813	BLOCK C8	1,2

<u>NOTES:</u> 1. REFER TO 5/M7.2 FOR CONTROLS. 2. COOLING COILS RATED FOR 30% PROPYLENE GLYCOL.

						EXPANSI	JN TANK S	SCHEDULE					
TA	G				TANK FILL	TANK MAX	TANK FILL	TANK MAX	REQUIRED	REQUIRED			
	-			SYSTEM	TEMPERATURE	TEMPERATURE	PRESSURE	PRESSURE	TANK VOLUME	ACCEPTANCE		TANK	
		MANUFACTURER	MODEL	SERVED	(°F)	(°F)	(PSI)	(PSI)	(GAL)	VOLUME (GAL)	TANK ORIENTATION	TYPE	NOTES
ET	1	BELL & GOSSETT	D280	CW	40	100	60	80	190	40	VERTICAL	DIAPHRAGM	1,2,3

<u>NOTES</u>: 1. TANK TO BE ASME RATED. 2. EQUIPMENT SHALL BE RATED FOR 30% PROPYLENE GLYCOL. 3. REFER TO DETAIL 1/M5.2 FOR ADDITIONAL INFORMATION

					EXHA	JST FAN	I SCHEDULI	Ε						
TA	G				DRIVE	AIRFLOW	EXTERNAL SP	MOTOR	MOTOR	ELEC	TRICAL DA	TA	WEIGHT	
		MANUFACTURER	MODEL	ROOM SERVED	TYPE	(CFM)	(IN WG)	(RPM)	(HP)	VOLTAGE	PHASE	FLA	(LBS)	NOTES
EF	1	GREENHECK	G-090-VG	KITCHEN TOILETS	DIRECT	585	0.46	1680	1/10	115	1	1.5	41	1,2,3,4
EF	2	GREENHECK	GB-160	BOOKING CELLS	BELT	1535	0.45	828	1/3	115	1	7.2	90	1,2,3,4
EF	3	GREENHECK	G-095-VG	AMMO	DIRECT	685	0.52	1640	1/6	115	1	2.8	43	1,2,3,4
EF	4	GREENHECK	G-090-VG	LOBBY TOILETS	DIRECT	460	0.41	1459	1/10	115	1	1.5	41	1,2,3,4
EF	5	GREENHECK	G-120-VG	BOOKING BULLPENS	DIRECT	1015	0.44	1127	1/4	115	1	3.8	67	1,2,3,4
EF	6	GREENHECK	GB-160	SALLYPORT	BELT	2000	0.34	868	1/3	115	1	7.2	90	1,2,3,4
EF	7	GREENHECK	GB-160	SALLYPORT	BELT	2000	0.34	969	1/3	115	1	7.2	90	1,2,3,4
EF	8	GREENHECK	G-095-VG	EXERCISE TOILETS	DIRECT	660	0.5	1600	1/6	115	1	2.8	43	1,2,3,4
EF	9	GREENHECK	GB-200	KITCHEN CART WASH	BELT	2625	0.41	680	1/2	115	1	9.8	120	1,2,3,4
EF	10	GREENHECK	G-095-VG	DISPATCH TOILETS	DIRECT	575	0.45	1474	1/6	115	1	2.8	43	1,2,3,4
EF	11	GREENHECK	G-095-VG	ADMIN TOILETS	DIRECT	475	0.41	1347	1/6	115	1	2.8	43	1,2,3,4
EF	12	GREENHECK	GB-160	REC	BELT	2000	0.34	868	1/3	115	1	7.2	90	1,2,3,4
EF	13	GREENHECK	GB-160	REC	BELT	2000	0.34	868	1/3	115	1	7.2	90	1,2,3,4
EF	14	GREENHECK	GB-160	REC	BELT	2000	0.34	868	1/3	115	1	7.2	90	1,2,3,4
EF	15	GREENHECK	GB-160	REC	BELT	2000	0.34	868	1/3	115	1	7.2	90	1,2,3,4
EF	16	GREENHECK	G-095-VG	LAUNDRY TOILETS	DIRECT	700	0.53	1664	1/6	115	1	2.8	43	1,2,3,4
EF	17	GREENHECK	GB-130	ISOLATION CELLS	BELT	1335	0.53	1225	1/4	115	1	5.8	70	1,2,3,4
EF	18	GREENHECK	G-140-B	EVIDENCE	DIRECT	1400	0.62	1140	1/3	115	1	7.2	83	1,2,3,4
EF	19	GREENHECK	G-140-B	SMALL EVIDENCE	DIRECT	1400	0.62	1140	1/3	115	1	7.2	83	1,2,3,4
EF	20	GREENHECK	GB-160	MECHANICAL	BELT	1980	0.58	988	1/2	115	1	9.8	87	1,2,3,4
EF	21	GREENHECK	G-080-VG	RADIO/TRANS	DIRECT	200	0.31	1262	1/10	115	1	1.5	40	1,2,3,4
EF	22	GREENHECK	G-095-VG	MAINT OFFICE	DIRECT	300	0.48	1326	1/6	115	1	2.8	43	1,2,3,4
EF	23	GREENHECK	G-140-VG	LONG TERM EVIDENCE STORAGE	DIRECT	2180	0.59	1407	1	480	3	1.8	93	1,2,3,4
EF	24	CAPTIVEAIRE	DU180HFA	KITCHEN HOOD	DIRECT	2708	1.5	1268	2	480	3	3.3	215	4,5,6,7
EF	25	CAPTIVEAIRE	DU180HFA	KITCHEN HOOD	DIRECT	2708	1.5	1268	2	480	3	3.3	215	4,5,6,7
EF	26	CAPTIVEAIRE	DU180HFA	KITCHEN HOOD	DIRECT	2708	1.5	1268	2	480	3	3.3	215	4,5,6,7
EF	27	GREENHECK	CUBE-200-VGD	DISHWASHER EXHAUST	DIRECT	750	0.5	1032	0.25	115	1	3.8	71	1,2,3,4

NOTES: 1. PROVIDE STARTER AND DISCONNECT AS PER DIVISION 26 SPECIFICATIONS AND MECHANICAL EQUIPMENT - ELECTRICAL CONNECTIONS SCHEDULE. 2. REFER TO DETAIL 9/M5.1 FOR ADDITIONAL INFORMATION. 3. REFER TO CONTROLS ON DRAWING M7.1. REUSE EXISTING ROOF CURB.
PROVIDE GREASE CUP WITH DRAIN.

PROVIDE VFD/DISCONNECT AS PER DIVISION 26 SPECIFCATIONS AND MECHANICAL EQUIPMENT - ELECTRICAL CONNECTIONS SCHEDULE.
UNIT SHALL BE PROVIDED WITH MANUFACTURER CONTROLS VIA A PROGRAMMABLE CONTROLLER. UNIT AND CONTROLS SHALL BE BACNET COMPATIBLE.

					AIR COO	OLED CC	NDEN	ISING UN	IT SCHE	DULE				
TA	G					DESIGN				E	LECTRICAL DAT	A		
		MANUFACTURER	MODEL	EQUIPMENT SERVED	NOMINAL TONS	AMBIENT TEMP. (°F)	SEER	REF. TYPE	VOLTAGE	PHASE	FREQUENCY (HZ)	MCA	МОСР	WE (I
ACC	1	TRANE	PUZ-AK12NL	DS-1	1	95	27.0	R-454B	208	1	60	11.0	28	
ACC	2	TRANE	PUZ-AK12NL	DS-2	1	95	27.0	R-454B	208	1	60	11.0	28	
ACC	3	TRANE	PUZ-AK12NL	DS-3	1	95	27.0	R-454B	208	1	60	11.0	28	
ACC	4	TRANE	PUZ-AK24NL	DS-4	2	95	24.2	R-454B	208	1	60	19.0	26	
ACC	9	YORK	KC120C00A4GLB1	AHU-9	10	95	15.5	R-454B	460	3	60	20.5	30	
<u>NOTE</u> 1. P 2. P 3. S 4. R 5. U 6. A	<u>S:</u> ROVID ROVID ZE AN EFER NIT IS _TERN	E STARTER/DISCONNECT E CRANKCASE HEATER, H ID INSTALL REFRIGERANT TO DETAIL 8/M5.1 FOR AD INTENDED TO BACK-UP F IATE BID ITEM.	AS PER DIVISION 26 S HAIL GUARD, LOW-AM PIPING AS PER MANU DITIONAL INFORMATIO OR EXISTING SYSTEM	SPECIFICATIONS AN BIENT KIT, WINTER JFACTURER'S RECO DN. I. REFER TO M7.7 AI	ID MECHANICAI START KIT AND OMMENDATION ND M7.8 FOR CO	L EQUIPMENT - E WIND BAFFLE. S. ONTROLS.	ELECTRICAL	CONNECTIONS	SCHEDULE ON I	ELECTRICAL D	RAWINGS.			

					A	IR TERMINAL SCI	HEDULE					
			CFM	PANEL	NECK SIZE				PRESSUR	Ξ		
TAG	MANUFACTURER	MODEL	RANGE	SIZE (IN)	(IN)	STYLE	INSTALLATION	FINISH	(IN.)	NC	THROW	NOTES
EA-1	PRICE	MSRRP	0-150	8x8	-	MAXIMUM SECURITY	CEILING	BRUSHED ALUMINUM	0.124	25	-	3
EA-2	PRICE	80 SERIES	0-720	12X12	-	EGGCRATE	DUCT	WHITE POWDER COAT	0.085	20	-	-
EA-3	PRICE	80 SERIES	0-720	12X12	-	EGGCRATE	CEILING	BRUSHED ALUMINUM	0.085	20	-	-
EA-4	PRICE	80 SERIES	0-2625	24X24	-	EGGCRATE	CEILING	BRUSHED ALUMINUM	0.085	20	-	-
EA-5	PRICE	MSRRP	0-250	14X14	-	MAXIMUM SECURITY	CEILING	BRUSHED ALUMINUM	0.124	25	-	2,3
RA-1	PRICE	80 SERIES	0-2500	24X24	-	EGGCRATE	CEILING	BRUSHED ALUMINUM	0.085	20	-	-
SA-1	PRICE	RCD	0-550	12 Ø	8	ROUND CONE	DUCT	WHITE POWDER COAT	0.085	23	7	-
SA-2	PRICE	SCD	0-175	24X24	6	SQUARE CONE	CEILING	WHITE POWDER COAT	0.076	19	7	-
SA-3	PRICE	SCD	0-620	24X24	12	SQUARE CONE	CEILING	BRUSHED ALUMINUM	0.091	24	8	-
SA-4	PRICE	SCD	0-275	24X24	8	SQUARE CONE	CEILING	WHITE POWDER COAT	0.065	19	9	-
EG-1	PRICE	80 SERIES	0-720	12X12	-	EGGCRATE	CEILING	WHITE POWDER COAT	0.085	20	-	1
EG-2	PRICE	80 SERIES	0-2625	24X24	-	EGGCRATE	CEILING	BRUSHED ALUMINUM	0.085	20	-	1
EG-4	PRICE	MSRRP	0-250	14X14	-	MAXIMUM SECURITY	CEILING	BRUSHED ALUMINUM	0.124	25	-	1
EG-5	PRICE	MSRRP	0-250	12X12	-	EGGCRATE	CEILING	WHITE POWDER COAT	0.124	25	-	1
RG-2	PRICE	80 SERIES	0-2500	24X24	-	EGGCRATE	CEILING	WHITE POWDER COAT	0.085	20	-	1
RG-6	PRICE	MSRRP	0-250	14X14	-	MAXIMUM SECURITY	CEILING	WHITE POWDER COAT	0.124	25	-	1
SD-1	PRICE	SCD	0-150	24X24	6	SQUARE CONE	CEILING	WHITE POWDER COAT	0.076	19	7	1
SD-2	PRICE	SCD	0-225	24X24	8	SQUARE CONE	CEILING	WHITE POWDER COAT	0.065	19	7	1
SD-3	PRICE	SCD	0-380	24X24	10	SQUARE CONE	CEILING	WHITE POWDER COAT	0.091	24	8	1
SD-9	PRICE	MSRRCD	0-195	16X16	8	MAXIMUM SECURITY	CEILING	WHITE POWDER COAT	0.022	-	11	1,2
SD-16	PRICE	SCD	0-575	24X24	12	SQUARE CONE	CEILING	WHITE POWDER COAT	0 091	24	9	1

NOTES: MINAL REPLACEMENT PART OF ALTERNATE BID.

AIR TERMINAL REPLACEMENT PART OF
PROVIDE WITH SECURITY BARS.
PROVIDE FRONT OPERATED DAMPER.

				S	MOKE E	XHAUST FA	AN SCHE	EDULE					
TA	G				AIRFLOW	EXTERNAL SP	MOTOR	MOTOR	ELE	CTRICAL DA	TA	WEIGHT	
		MANUFACTURER	MODEL	AREA SERVED	(CFM)	(IN WG)	(RPM)	(HP)	VOLTAGE	PHASE	FLA	(LBS)	NOTES
SEF	1	GREENHECK	CUBE-130	CELLBLOCK A1	1295	0.125	1022	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	2	GREENHECK	CUBE-130	CELLBLOCK A2	1200	0.125	957	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	3	GREENHECK	QEI-27	CELLBLOCK A3	10130	0.875	887	3	460	3	4.8	674	1, 2, 3, 4
SEF	4	GREENHECK	QEI-27	CELLBLOCK A4	10315	0.875	897	3	460	3	4.8	674	1, 2, 3, 4
SEF	5	GREENHECK	CUBE-130	CELLBLOCK A5	1180	0.125	944	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	6	GREENHECK	CUBE-130	CELLBLOCK A6	965	0.125	802	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	7	GREENHECK	QEID-18-95	CELLBLOCK B1	3805	0.875	1170	1	460	3	2.1	244	1, 2, 3, 4
SEF	8	GREENHECK	QEID-18-95	CELLBLOCK B2	3805	0.875	1170	1	460	3	2.1	244	1, 2, 3, 4
SEF	9	GREENHECK	CUBE-130	CELLBLOCK B3	1070	0.125	871	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	10	GREENHECK	CUBE-130	CELLBLOCK B4	1300	0.125	1025	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	11	GREENHECK	CUBE-130	CELLBLOCK B7	1180	0.125	944	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	12	GREENHECK	CUBE-130	CELLBLOCK B8	955	0.125	796	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	13	GREENHECK	CUBE-130	CELLBLOCK C1	890	0.125	755	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	14	GREENHECK	GB-099	CELLBLOCK C2	370	0.125	692	0.25	115	1	5.8	69	1, 2, 3, 4
SEF	15	GREENHECK	QEI-27	CELLBLOCKS C3/C8	10545	0.875	910	3	460	3	4.8	674	1, 2, 3, 4
SEF	16	GREENHECK	QEI-27	CELLBLOCKS C4/C7	10470	0.875	906	3	460	3	4.8	674	1, 2, 3, 4
SEF	17	GREENHECK	CUBE-130	CELLBLOCK C5	830	0.125	717	0.25	115	1	5.8	75	1, 2, 3, 4
SEF	18	GREENHECK	CUBE-130	CELLBLOCK C6	1135	0.125	914	0.25	115	1	5.8	75	1, 2, 3, 4

NOTES: 1. PROVIDE STARTER/DISCONNECT AS PER DIVISION 26 SPECIFICATIONS AND REFER TO MECHANICAL EQUIPMENT - ELECTRICAL CONNECTIONS SCHEDULE ON ELECTRICAL DRAWINGS. 2. REFER TO CONTROLS ON DRAWINGS M7.7 AND M7.8. 3. REFER TO DETAIL 10/M5.1 FOR ADDITIONAL INFORMATION. 4. FANS SHALL BE UL LISTED FOR SMOKE CONTROL.

GLYCOL FEED TANK SCHEDULE									
TAG				SYSTEM	DIAMETER	HEIGHT	TANK VOLUME	HORSE POWER	NOTEO
		MANUFACTURER	MODEL	SERVED	(IN)	(IN)	(GAL)	(HP)	NOTES
GFT	1	WESSELS	GMP-15050	CW	34	45	50	1/2	1,2,3,4,5
NOTES: 1. EQUIPMENT SHALL BE RATED FOR PROPYLENE GLYCOL.									

2. PROVIDE LOW WATER CUT-OFF ALARM, HIGH LEVEL ALARM, HOA CONTROLS, MAGNETIC STARTER, PRESSURE GAUGE AND SYSTEM ISOLATION VALVE. 3. PROVIDE 120V CIRCUIT FOR GLYCOL PUMP. UNIT SHALL BE ACCOMPANIED WITH A REMOTE ALARM (LIGHT AND HORN). UNIT SHALL HAVE A SINGLE POWER POINT CONNECTION. REMOTE ALARMS SHALL BE POWERED THROUGH THE SAME ELECTRICAL CONNECTION. COORDINATE LOCATION OF REMOTE ALARM WITH THE OWNER. 4. REFER TO DETAIL 12/M5.1 FOR ADDITIONAL INFORMATION. 5. REFER TO DETAIL 1/M5.2 FOR ADDITIONAL INFORMATION.

