FAN SCHEDULE SECTION 15E															
	T		T		AIR FLOW DATA						ELECTRICAL DATA				
TAG	MANUF.	MODEL	TYPE	SERVICE	CFM	ESP (IN WC)	ВНР	F A N R P M	DRIVE	SONES	HP/ WATTS	VOLT	PH.	RPM	REMARKS
EF-1	GREENHECK	CWB 101	CENTRI SIDEWALL	EXHAUST	600	0.25	0.05	950	BELT	3.0	1/4	115	1	1725	1,2,6,10,11,12,13
EF-2	GREENHECK	BSQ 180	INLINE CENTRI	EXHAUST	3000	0.80	1.21	1815	BELT	19.9	2	460	3	1725	1,2,6,7,8,9,11
EF-3	GREENHECK	CWB-121	CENTRI SIDEWALL	EXHAUST	1100	0.80	0.24	1367	BELT	11.9	1/3	115	1	1725	1,2,3,4,5,6,12

SIDEWALL EXHAUST 100 10.00 10.24 10.01 10.00 10.25 10.00 10.00 10.25 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.

12. = ALUMINUM BIRDSCREEN 13. = MANUFACTURER ALUMINUM WALL GRILLE

	ELECTRIC HEATER SCHEDULE														
			1		MOUNT.	AIR	DATA		ELE	CTRICAL	DATA	MC	TOR DATA	1	
TAG	MANUF.	MODEL	TYPE	OUTPUT (MBH)	HEIGHT (FT)	CFM	THROW (FT)	ΔŢ ( F )	ΚW	VOLT/*	AMP	HP	VOLT/*	RPM	REMARKS
EUH-1	MARLEY	JUW500	CORR UNIT	17.06	6′-5"	405		37	5.0	460/3	6.0	1/2		1725	1,2,3,4,5
EUH-2	MARLEY	JUW750	CORR UNIT	25.59	6'-5"	485		46	7.5	460/3	9.0	1/2	-	1725	1,2,3,4,5

1. = STAINLESS STEEL CORROSION RESISTANCE CONSTRUCTION.
2. = NEMA 4X DISCONNECT SWITCH AND INSTALLED IN ACCORDANCE WITH DIVISION
3. = CONTROLS AS SPECIFIED.
4. = MANUFACTURES MOUNTING ACCESSORIES.
5. = WALL MOUNTED THERMOSTAT.

	WALL LOUVER SCHEDULE											
TAG	MANUF.	MODEL	SERVICE	CFM	WIDTH (IN)	HEIGHT	DEPTH (IN)	MAX. APD (IN WC)	MAX. FREE AREA VEL. (FPM)	REMARKS		
OAL-1	GREENHECK	ESD-403	INTAKE	600	24	18	4	0.048	522	1,2,3,4,5		
OAL-2	GREENHECK	ESD-403	INTAKE	200	40	9	4			1,2,3,4,5		
OAL-3	GREENHECK	ESD-403	INTAKE	2800	42	24	4	0.088	854	1,2,3,4,5		
EAL-1	GREENHECK	ESD-403	EXHAUST	3000	42	24	4	0.092	915	1,2,5,6		

1. = ALUMINUM BIRDSCREEN.
2. = EXTENDED SILL.
3. = INSULATED BLADE MOTOR OPERATED DAMPER TO BE FURNISHED BY TEMPERATURE CONTROLS CONTRACTOR.
4. = EXTERNALLY MOUNTED STAINLESS STEEL REMOVABLE INSECT SCREEN.
5. = KYMAR FINISH.

6. = GRAVITY OPERATED DAMPER

	AIR INLET AND OUTLET SCHEDULE										
TAG	MANUF.	MODEL	SERVICE	MAX. APD. (IN.W.C)	MAX. NC	PATTERN	FINISH	MATERIAL	REMARKS		
EG-1	AJ MANUF	550 H	EXHAUST	0.10	30	SD	MATTE	SST			

SD = 34" BLADE SINGLE DEFLECTION.

	DAMPERS SCHEDULE										
	ACTUATOR					DEMARKS					
ITEM	SIZE	TYPE	VOLTAGE	РН	CONFIGURATION	REMARKS					
DM1	24"X18"	ELECTRIC MOTOR	115	1	SUPPLY	MOTOR OPERATED DAMPER ASSOCIATED WITH LOUVER OAL-1					
DM2	40"X9"	ELECTRIC MOTOR	115	1	SUPPLY	MOTOR OPERATED DAMPER ASSOCIATED WITH LOUVER OAL-2					
DM3	42"X24"	ELECTRIC MOTOR	115	1	SUPPLY	MOTOR OPERATED DAMPER ASSOCIATED WITH LOUVER OAL-3					
DM4	42"X24"	GRAVITY			EXHAUST	BACK DRAFT DAMPER ASSOCIATED WITH LOUVER EAL-1					
DM5	12"X12"	GRAVITY			EXHAUST	BACK DRAFT DAMPER ASSOCIATED WITH LOUVER EF-3					
DM6	12"X12"	GRAVITY			EXHAUST	BACK DRAFT DAMPER ASSOCIATED WITH LOUVER EF-1					

# ELECTRICAL ROOM VENTILATION CONTROL

EXHAUST FAN EF-1 WILL BE CONTROLLED BY THE H-O-A SWITCH WITH THE THERMOSTAT SET AT  $(80^{\circ}\ \text{F.}\ \text{ADJUSTABLE}).$ 

AUTO MODE: ON CALL FOR COOLING FROM THERMOSTAT THE STARTER WILL ENERGIZE EF-1 AND MOTOR OPERATED DAMPER (DMI) ASSOCIATED WITH OAL1 WILL OPEN.

OFF MODE: EF-1 STOP AND DM1 CLOSED.

HAND MODE: EF-1 RUN CONTINUOUSLY AND DM1 OPENED.

# PUMP ROOM VENTILATION

EXHAUST FAN EF-2 WILL BE CONTROLLED BY THE H-O-A SWITCH WITH THE THERMOSTAT SET AT (85° F, ADJUSTABLE).

AUTO MODE:
THE STARTER WILL ENERGIZE EF-2, FAN WILL RUN CONTINUOUSLY AND
MOTOR OPERATED DAMPERS (DMZ, DM3) WILL OPEN UNDER ANYONE OF THESE FOLLOWING CONDITIONS:

- WHEN THE THERMOSTAT SENSES A ROOM TEMPERATURE ABOVE THE THERMOSTAT SET POINT. WHEN THE GAS SENSOR DETECTS COMBUSTIBLE GAS ABOVE THE SETPOINT IN THE PUMP ROOM . WHEN THE PUMP ROOM LIGHTS ARE TURNED ON.

OFF MODE: EF-2 STOP AND DM2 AND DM3 CLOSED.

HAND MODE: EF-2 RUN CONTINUOUSLY, DM2 AND DM3 OPENED.

### WET WELL VENTILATION CONTROL

EXHAUST FAN EF-3 WILL BE CONTROLLED BY THE H-O-A SWITCH.

AUTO MODE: EF-3 WILL ENERGIZE, FAN WILL RUN CONTINUOUSLY UPON ANY ONE OF THE FOLLOWING CONDITIONS:

WHEN THE GAS SENSOR DETECTS COMBUSTIBLE GAS ABOVE SETPOINT IN PUMP ROOM OR WETWELL.
 WHEN THE WET WELL LIGHTS ARE TURNED ON.

OFF MODE; EF-3 STOP

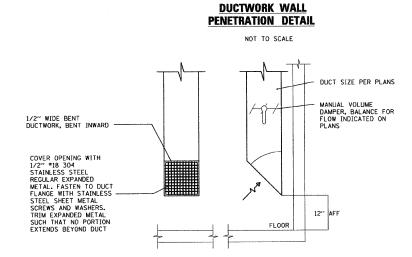
HAND MODE: EF-3 RUN CONTINUOUSLY.

ELECTRIC UNIT HEATERS

EUH-1 AND EUH-2 UNIT HEATERS WILL RUN IN RESPONSE TO SPACE THERMOSTATE, WHEN WALL MOUNTED THERMOSTAT DETECTS A TEMPERATURE BELOW THE SETPOINT TEMPERATURE, HEATING ELEMENTS SHALL ENERGIZE AND FAN SHALL RUN. UPON SATISFACTION OF SPACE TEMPERATURE UNIT HEATER FAN AND ELEMENTS SHALL DE-ENERGIZE AND STOP.

	DAMPERS SCHEDULE											
		AC	TUATOR		CONFICURATION	REMARKS						
ITEM	SIZE	TYPE	VOLTAGE	PH	CONFIGURATION	REMARKS						
DM1	24"X18"	ELECTRIC MOTOR	115	1	SUPPLY	MOTOR OPERATED DAMPER ASSOCIATED WITH LOUVER OAL-1						
DM2	40"X9"	ELECTRIC MOTOR	115	1	SUPPLY	MOTOR OPERATED DAMPER ASSOCIATED WITH LOUVER OAL-2						
DM3	42"X24"	ELECTRIC MOTOR	115	1	SUPPLY	MOTOR OPERATED DAMPER ASSOCIATED WITH LOUVER OAL-3						
DM4	42"X24"	GRAVITY			EXHAUST	BACK DRAFT DAMPER ASSOCIATED WITH LOUVER EAL-1						
DM5	12"X12"	GRAVITY			EXHAUST	BACK DRAFT DAMPER ASSOCIATED WITH LOUVER EF-3						
DM6	12"X12"	GRAVITY		w	EXHAUST	BACK DRAFT DAMPER ASSOCIATED WITH LOUVER EF-1						

NOTE: MOTOR OPERATED DAMPERS TO BE FURNISHED BY TEMPERATURE CONTROL CONTRACTOR.
GRAVITY OPERATED DAMPERS TO BE FURNISHED BY EQUIPMENT SUPPLIER



TREATED WOOD BEARING PAD -

PASSING DUCT-

FASTEN WITH STAINLESS STEEL - SECTION

365 59(SA, SB&SF)1 DUPAGE

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONCRETE CURB

2" GREATER THAN DUCT DIMENSION

**DUCTWORK FLOOR** PENETRATION DETAIL NOT TO SCALE

RECTANGULAR ALUMINUM FLANGE INTEGRAL TO DUCT ANCHOR TO WALL WITH CONCRETE ANCHORS AND SEAL WITH WEATHER RESITANT SEALANT

COUNTY

CAULK JOINTS, FULL PERIMETER

- 1/4" RECTANGULAR 304 SS ESCHUCHION PLATE, ANCHOR TO WALL SAW CUT OPENING AS REQUIRED

- PRECAST CONCRETE WALL PANEL

FILL ANNULAR SPACE WITH MINERAL WOOL INSULATION

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## **EXHAUST DUCT DROP DETAIL**

NOT TO SCALE

M5	ILLINOIS DEPARTMENT OF TRANSPORTATION
REVISIONS NAME DATE	PUMP STATION NO. 48 REHABILITATION
	HVAC SCHEDULE AND OPERATING SEQUENCE
	SCALE: N/A DRAWN BY: HFF DATE: 03-10-11 CHECKED BY: KHC

