GRILLE, REGISTER, AND DIFFUSER SCHEDULE

MARK	DESCRIPTION	PANEL SIZE (IN)	NECK (IN)	CFM RANGE	FRAME	STYLE	FINISH	MATERIAL	DAMPER	MAX NC	BASED ON MAKE / MODEL
CDA	SUPPLY DIFFUSER	12X12	8	0-240	CUT-IN	LOUVER (4-WAY)	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / TDCA-AA
CDB	SUPPLY DIFFUSER	24X24	8	0-240	LAY-IN	LOUVER (4-WAY)	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / TDCA-AA
CDC	SUPPLY DIFFUSER	24X24	10	245-325	LAY-IN	LOUVER (4-WAY)	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / TDCA-AA
CDD	SUPPLY DIFFUSER	6X6	6	0-110	CUT-IN	LOUVER (4-WAY)	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / TDCA-AA
CDE	SUPPLY DIFFUSER	24X24	12	330-440	LAY-IN	LOUVER (4-WAY)	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / TDCA-AA
SRA	SUPPLY REGISTER	6X6	6X6	0-130	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	30	TITUS / 300FL
SRB	SUPPLY REGISTER	10X6	10X6	135-250	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	30	TITUS / 300FL
SRC	SUPPLY REGISTER	24X20	24X20	1000-1500	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	30	TITUS / 300FL
SRD	SUPPLY REGISTER	18X10	18X10	300-550	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / 300FL
RRA/TRA	RETURN/TRANSFER GRILLE	12X12	12X12	0-640	LAY-IN	EGGCRATE	WHITE	ALUMINUM	OPPOSED BLADE	30	TITUS / 50F
RRB	RETURN GRILLE	24X24	24X24	50-2625	LAY-IN	EGGCRATE	WHITE	ALUMINUM	OPPOSED BLADE	30	TITUS / 50F
RRC	RETURN/EXHAUST GRILLE	6X6	6X6	0-135	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / 350FL
RRD	RETURN/EXHAUST GRILLE	10X6	10X6	120-230	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / 350FL
RRE	RETURN/EXHAUST GRILLE	12X10	12X10	235-510	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / 350FL
RRF	RETURN/EXHAUST GRILLE	24X12	24X12	515-1100	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / 350FL
RRG	RETURN/EXHAUST GRILLE	24X20	24X20	1150-1500	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / 350FL
RRH	RETURN/EXHAUST GRILLE	30X24	30X24	1550-2800	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / 350FL
RRI	RETURN/EXHAUST GRILLE	12X8	12X8	350	CUT-IN	ADJUSTABLE BLADE	WHITE	ALUMINUM	OPPOSED BLADE	20	TITUS / 350FL
ERA	EXHAUST GRILLE	12X12	12X12	0-640	LAY-IN	EGGCRATE	WHITE	ALUMINUM	OPPOSED BLADE	30	TITUS / 50F

NOTES:
1. COORDINATE WITH ARCHITECTURAL.
2. ALL EGGCRATE RRA/RRB TO BE INSTALLED WITH A LINED DUCT ELBOW IN THE PLENUM. SEE DETAIL.

NEW LOUVER SCHEDULE

MARK	BUILDING	LOCATION	TYPE	MOUNTING	MATERIAL	AIR FLOW (CFM)	SIZE (W X H)	FREE AREA (SQ. FT)	AIR PRESSURE DROP (IN. W.C.)	FREE AREA VELOCITY (FT/MIN)	INSULATED BLANK-OFF	MANUFACTURER	MODEL	NOTES
L-2-1	OPERATIONS	GENERATOR M112	EXHAUST	WALL	ALUMINUM	1,400	36 X 18	1.79	0.095	782	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,4,9,11
L-2-2	OPERATIONS	GENERATOR M112	OA INTAKE	WALL	ALUMINUM	1,400	36 X 26	2.95	0.038	475	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-2-3	OPERATIONS	MAINT. STORAGE M111	OA INTAKE	WALL	ALUMINUM	1,000	30 X 22	2.0	0.041	494	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-2-4	OPERATIONS	MAINT. STORAGE M111	EXHAUST	WALL	ALUMINUM	1,000	17 X 26	1.3	0.106	792	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,4,9,11
L-2-5	OPERATIONS	MAINTENANCE M109	EXHAUST	WALL	ALUMINUM	4,000	54X30	5.0	0.098	794	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,4,9,11
L-2-6	OPERATIONS	MAINTENANCE M109	OA INTAKE	WALL	ALUMINUM	4,000	36 X 58	7.9	0.043	507	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-2-7	OPERATIONS	FLUORIDE PUMPS C102	OA INTAKE	WALL	ALUMINUM	550	21 X 21	1.2	0.033	445	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-2-8	OPERATIONS	POLYMER C104	OA INTAKE	WALL	ALUMINUM	1,400	29 X 29	2.8	0.041	494	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-2-9	OPERATIONS	BLOWER ROOM P100	OA INTAKE	WALL	ALUMINUM	3,800	46 X 46	7.9	0.039	480	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-3-1	GAC/BAC	GAC MEDIA BASINS	OA INTAKE	WALL	ALUMINUM	5,000	52 X 52	10.0	0.042	498	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-3-2	GAC/BAC	GAC MEDIA BASINS	OA INTAKE	WALL	ALUMINUM	5,000	52 X 52	10.0	0.042	498	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-4-1	FINISHED WATER	PUMP ROOM	OA INTAKE	WALL	ALUMINUM	9,800	72 X 72	19.9	0.041	495	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-4-2	FINISHED WATER	PUMP ROOM	OA INTAKE	WALL	ALUMINUM	9,800	72 X 72	19.9	0.041	495	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-4-3	FINISHED WATER	PUMP ROOM	OA INTAKE	WALL	ALUMINUM	9,800	72 X 72	19.9	0.041	495	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-4-4	FINISHED WATER	PUMP ROOM	OA INTAKE	WALL	ALUMINUM	9,800	72 X 72	19.9	0.041	495	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-4-5	FINISHED WATER	PUMP ROOM	OA INTAKE	WALL	ALUMINUM	9,800	72 X 72	19.9	0.041	495	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-4-6	FINISHED WATER	ELECTRICAL ROOM	RELIEF	WALL	ALUMINUM	5,000	40 X 60	8.9	0.049	561	N/A	GREENHECK	ESD-603	SEE NOTES 7,9,11
L-4-7	FINISHED WATER	ELECTRICAL ROOM	RELIEF	WALL	ALUMINUM	5,000	40 X 60	8.9	0.049	561	N/A	GREENHECK	ESD-603	SEE NOTES 7,9,11
L-4-8	FINISHED WATER	ELECTRICAL ROOM	RELIEF	WALL	ALUMINUM	5,000	40 X 60	8.9	0.049	561	UNTIL PHASE 2	GREENHECK	ESD-603	SEE NOTES 8,9,11
L-5-1	THICK. SLUDGE	PUMP ROOM	OA INTAKE	WALL	ALUMINUM	1,500	22 X 44	3.3	0.035	458	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-5-2	THICK. SLUDGE	PUMP ROOM	OA INTAKE	WALL	ALUMINUM	1,500	22 X 44	3.3	0.035	458	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11
L-8-1	GENERATOR	GENERATOR ROOM	OA INTAKE	WALL	ALUMINUM	56,300	168 X 168	113.5	0.040	488	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,10,11
L-8-2	GENERATOR	GENERATOR ROOM	OA INTAKE	WALL	ALUMINUM	56,300	168 X 168	113.5	0.040	488	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,10,11
L-8-3	GENERATOR	GENERATOR ROOM	OA INTAKE	WALL	ALUMINUM	56,300	168 X 168	113.5	0.040	488	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,10,11
L-8-4	GENERATOR	GENERATOR ROOM	OA INTAKE	WALL	ALUMINUM	56,300	168 X 168	113.5	0.040	488	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,10,11
L-8-5	GENERATOR	GARAGE	OA INTAKE	WALL	ALUMINUM	1,500	31 X 31	3.1	0.040	484	N/A	GREENHECK	ESD-603	SEE NOTES 1,2,3,9,11

NOTES:
1. PROVIDE INTERNAL ALUMINUM INSECT SCREEN.
2. PROVIDE FLAT EXPANDED BIRD SCREEN.
3. PROVIDE LOW-LEAKAGE MOTORIZED DAMPER.
4. PROVIDE GRAVITY DAMPER.
5. FOR OA INTAKE LOUVERS WITH INSULATED BLANK-OFFS, PROVIDE MOTORIZED DAMPERS, ALUMINUM INSECT SCREENS, AND FLAT EXPANDED BIRD SCREENS WHEN BLANK-OFF IS REMOVED.
6. FOR EXHAUST LOUVERS WITH INSULATED BLANK-OFFS, PROVIDE GRAVITY DAMPERS, FLAT EXPANDED BIRD SCREENS, AND ALUMINUM INSECT SCREENS WHEN BLANK-OFF IS REMOVED.
7. PROVIDE BAROMETRIC BACKDRAFT DAMPER SET TO 0.05 IN WC, FLAT EXPANDED BIRDSCREEN, AND ALUMINUM INSECT SCREEN.
8. WHEN INSULATED BLANK-OFF IS REMOVED, PROVIDE BAROMETRIC BACKDRAFT DAMPER SET TO 0.05 IN WC, FLAT EXPANDED BIRDSCREEN, AND ALUMINUM INSECT SCREEN.
9. PROVIDE KYNAR COATING. COORDINATE WITH ARCHITECTURAL FOR FINISH COLOR.
10. LOUVER SIZE INDICATED IS THE ROUGH OPENING SIZE.
11. COORDINATE VOLTAGE WITH CONTROL SYSTEM AND PROVIDE APPROPRIATE INTERLOCKS HOLD DISCONNECT SWITCHES. SEE SHEETS M-9907, M-9908 AND ASSOCIATED E - SHEETS.

DEHUMIDIFIER SCHEDULE

MARK	BUILDING	LOCATION	TYPE	SUPPLY FAN				DEHUMIDIFICATION			REFRIG.	COMPRESSOR SIZE (TON)	AUXILIARY ELECTRIC HEAT (KW)	FILTERS	ELECTRICAL V/PH/HZ	MANUFACTURER	MODEL	NOTES
				AIR FLOW (CFM)	OA FLOW (CFM)	E.S.P. (IN WG)	FAN HP	TOTAL CAPACITY (MBH)	SENS CAPACITY (MBH)	DEHUMIDIFICATION CAPACITY (LB/HR)								
DH-2-1	OPERATIONS	PIPE GALLERY	PACKAGED	2,300	0	0.5	1	60.6	46.3	13.5	R-410A	5	18.0	MERV 8	460 / 3 / 60	DESERT AIRE	LC05	SEE NOTES
DH-2-2	OPERATIONS	PIPE GALLERY	PACKAGED	2,300	0	0.5	1	60.6	46.3	13.5	R-410A	5	18.0	MERV 8	460 / 3 / 60	DESERT AIRE	LC05	SEE NOTES
DH-2-3	OPERATIONS	PIPE GALLERY	PACKAGED	2,300	0	0.5	1	60.6	46.3	13.5	R-410A	5	18.0	MERV 8	460 / 3 / 60	DESERT AIRE	LC05	SEE NOTES
DH-3-1	GAC/BAC	PIPE GALLERY	PACKAGED	3,000	0	0.5	1-1/2	79.2	60.9	17.2	R-410A	6	23.0	MERV 8	460 / 3 / 60	DESERT AIRE	LC06	SEE NOTES
DH-3-2	GAC/BAC	PIPE GALLERY	PACKAGED	3,000	0	0.5	1-1/2	79.2	60.9	17.2	R-410A	6	23.0	MERV 8	460 / 3 / 60	DESERT AIRE	LC06	SEE NOTES
DH-3-3	GAC/BAC	PIPE GALLERY	PACKAGED	3,000	0	0.5	1-1/2	79.2	60.9	17.2	R-410A	6	23.0	MERV 8	460 / 3 / 60	DESERT AIRE	LC06	SEE NOTES

NOTES:
1. PROVIDE HOT GAS BYPASS, HOT GAS REHEAT, FULL SIZED RECEIVER WITH FLOODING VALVE, STAINLESS STEEL CONDENSATE DRAIN PAN, AND 3 SETS OF EXTRA FILTERS.
2. PROVIDE ELECTRICAL CONTROL PANEL AND TEMPERATURE AND HUMIDITY SENSORS.
3. NON-DUCTED, FREE-BLOWING UNIT WITH ZERO STATIC PRESSURE. PROVIDE MANUFACTURER STANDARD SUPPLY AND RETURN SCREEN.
4. PROVIDE SUPPORT RAILS HUNG FROM STRUCTURE ABOVE WITH VIBRATION ISOLATION.

VENT SILENCER SCHEDULE

MARK	BUILDING	LOCATION	EXHAUST FLOW (CFM)	EXHAUST TEMP (DEG. F)	BACKPRESSURE (IN WG)	ATTENUATION (DBA)	MANUFACTURER	MODEL	NOTES
VS-8-1	GENERATOR	GENERATOR BAY	17761	893	7.63	25-35	GT EXHAUST	A201-5120	SEE NOTE

NOTES:
1. SILENCER IS SELECTED FOR A CATERPILLAR 2055 EKW GAS GENERATOR WITH A DM8650 ENGINE. CONTRACTOR IS RESPONSIBLE FOR UTILIZING THE APPROPRIATE SILENCER AND VENT SIZING FOR THE INSTALLED GENERATOR.

FUTURE VENT SILENCER SCHEDULE

MARK	BUILDING	LOCATION	EXHAUST FLOW (CFM)	EXHAUST TEMP (DEG. F)	BACKPRESSURE (IN WG)	ATTENUATION (DBA)	MANUFACTURER	MODEL	NOTES
VS-8-2	GENERATOR	GENERATOR BAY	17761	893	7.63	25-35	GT EXHAUST	A201-5120	SEE NOTES
VS-8-3	GENERATOR	GENERATOR BAY	17761	893	7.63	25-35	GT EXHAUST	A201-5120	SEE NOTES
VS-8-4	GENERATOR	GENERATOR BAY	17761	893	7.63	25-35	GT EXHAUST	A201-5120	SEE NOTES

NOTES:
1. SILENCER IS SELECTED FOR A CATERPILLAR 2055 EKW GAS GENERATOR WITH A DM8650 ENGINE. CONTRACTOR IS RESPONSIBLE FOR UTILIZING THE APPROPRIATE SILENCER FOR THE INSTALLED GENERATOR.
2. TO BE INSTALLED WHEN ASSOCIATED GENERATOR IS INSTALLED. SEE ELECTRICAL DRAWINGS.

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BID SET

ALABAMA REGISTERED No. 16533 PROFESSIONAL ENGINEER DONALD S. BOYD
11/24/2014

MARK	DATE	DESCRIPTION	BY

HUNTSVILLE UTILITIES
SOUTHEAST WATER TREATMENT PLANT
MECHANICAL HVAC SCHEDULES

Project No.: 200-11740-10003
Designed By: SBR
Drawn By: SBR
Checked By: DSB

M-9602

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Bar Measures 1 inch

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