	DIFF	USERS	, REG	ISTERS	, AND	GRILLES SCHEI	DULE
TAG	MOUNTING	DIFFUSER FACE	NECK SIZE	MAX CFM	MAX N.C.	<u>TYPE</u>	MANUFACTURER & MODEL NO.
Α	CEILING	11"Ø	6"Ø	AS NOTED	30	ROUND PLAQUE FACE	TITUS R-OMNI
В	CEILING	15"Ø	8"Ø	AS NOTED	30	ROUND PLAQUE FACE	TITUS R-OMNI
С	CEILING	18"Ø	10"Ø	AS NOTED	30	ROUND PLAQUE FACE	TITUS R-OMNI
D	CEILING	24x24	6"Ø	AS NOTED	30	PLAQUE FACE DIFFUSER	TITUS OMNI
E	CEILING	24x24	8"Ø	AS NOTED	30	PLAQUE FACE DIFFUSER	TITUS OMNI
F	CEILING	24x24	10"Ø	AS NOTED	30	PLAQUE FACE DIFFUSER	TITUS OMNI
G	CEILING	24x24	12"Ø	AS NOTED	30	PLAQUE FACE DIFFUSER	TITUS OMNI
Н	CEILING	48x6	8"Ø	AS NOTED	30	1 SLOT LINEAR SLOT DIFFUSER	TITUS ML-39
1	CEILING	48x6	10"Ø	AS NOTED	30	3 SLOT LINEAR SLOT DIFFUSER	TITUS ML-39
J	DUCT	12x6	12x6	AS NOTED	30	LOUVERED FACE SUPPLY REGISTER	TITUS S300
K	DUCT	18x4	18x4	AS NOTED	30	HIGH CAPACITY DRUM LOUVER	TITUS S-DL
L	DUCT	18x8	18x8	AS NOTED	30	HIGH CAPACITY DRUM LOUVER	TITUS S-DL
М	SIDEWALL	12x12	12x12	AS NOTED	30	EGGCRATE RETURN GRILLE	TITUS 50
N	SIDEWALL	24x16	24x16	AS NOTED	30	EGGCRATE RETURN GRILLE	TITUS 50
0	CEILING	24x24	24x24	AS NOTED	30	EGGCRATE RETURN GRILLE	TITUS 50
Р	SIDEWALL	42x18	42x18	AS NOTED	30	HEAVY DUTY RETURN	TITUS 33R
Q	SIDEWALL	6x6	6x6	AS NOTED	30	LOUVERED FACE EXHAUST GRILLE	TITUS 350
R	SIDEWALL	8x6	8x6	AS NOTED	30	LOUVERED FACE EXHAUST GRILLE	TITUS 350
S	SIDEWALL	12x8	12x8	AS NOTED	30	LOUVERED FACE EXHAUST GRILLE	TITUS 350
Т	CEILING	12x12	12x12	AS NOTED	30	LOUVERED FACE EXHAUST GRILLE	TITUS 350

<u>MARK</u>	LOCATION /SERVING	DESIGN CFM	SIZE (WxH,	MINIMUM FREE AREA (SQ. FT.)	MAX. PRESSUR E DROP (IN. H20)	FREE AREA MAX. VEOLCITY (FPM)	SCREEN TYPE	<u>NOTE</u>
L-1	MECH ROOM 177B INTAKE	7700	60"x54"	10.3	.09	750	BIRD	
L-2	MECH ROOM 177B INTAKE	7700	60"x54"	10.3	.09	750	BIRD	
L-3	MECH ROOM 235A INTAKE	20212	96"x78"	27	.09	750	BIRD	
L-4	MECH ROOM 235A INTAKE	20212	96"x78"	27	.09	750	BIRD	
L-5								
L-6								
L-7	RECEIVING/LO ADING B-119	450	24"x18"	0.6	.09	750	BIRD	
L-8								
L-9								
L-10 OUVER₁SCHI	EDULE NOTES:							

2. LOUVER SCHEDULED SIZE IS MINIMUM AREA TO BE DUCTED AS REQUIRED FOR DESIGN CRITERIA.

3. BLANK OFF UNUSED LOUVER AREA WITH S.M. AND RIGID BOARD INSULATION.

	GRAVITY ROOF VENTILATOR SCHEDULE												
MARK	AREA SERVED & PURPOSE	<u>CFM</u>	TOTAL PRESSURE DROP IN H2O	THROAT SIZE INCHES	HOOD SIZES INCHES	CURB CAP INCHES	WEIGHT	<u>NOTES</u>					
GIV-1	ELECTRICAL ROOM B-117A VENTILATION	400	0.028	12.5"Ø	28"Ø	20x20	20	1, 2					
GIV-2	OUTDOOR STORAGE VENTILATION	300	0.069	8.6"Ø	19"Ø	18x18	10	1, 2					
GRV-1	AHU-1 RELIEF	8400	0.089	48x36	63x61	54x42	312	1, 2					
GRV-2	AHU-2 RELIEF	6000	0.096	42x30	63x45	48x36	256	1, 2					
GRV-3	AHU-3 RELIEF	4700	0.092	30x30	51x43	36x36	210	1, 2					
GRV-4	AHU-4 RELIEF	8900	0.099	48x36	63x61	54x42	312	1, 2					
GRV-5	AHU-5 RELIEF	11300	0.117	42x48	51x43	48x54	339	1, 2					
GRV-6	AHU-6 RELIEF	15525	0.128	54x48	75x75	60x54	400	1, 2					

GRAVITY ROOF VENTILATOR SCHEDULE NOTES:

FURNISH WITH PREMANUFACTURED INSULATED ROOF CURB.
 FURNISH WITH BIRD SCREEN.

	PUMP SCHEDULE														
MARK	SERVICE	LOCATION	CAPACITY G.P.M.	<u>T.D.H.</u> <u>FT. H2O</u>	MOTOR HP	<u>TYPE</u>	SIZE	MIN FLOW G.P.M.	EFFICIENCY %	NPSH FT.	NOTES				
P-1	BUILDING HOT WATER	MECHANICAL B-117	313	45	5.0	FRAME MOUNTED	4x3	50	84	4	1, 2, 3, 4				
P-2	BUILDING HOT WATER	MECHANICAL B-117	313	45	5.0	FRAME MOUNTED	4x3	50	84	4	1, 2, 3, 4				
P-3	BOILER CIRCULATOR	MECHANICAL B-117	201	30	3.0	INLINE	3x3	201	78	4	1, 2, 3				
P-4	BOILER CIRCULATOR	MECHANICAL B-117	201	30	3.0	INLINE	3x3	201	78	3	1, 2, 3				
P-5	CHILLER CIRCULATOR	MECHANICAL B-117	394	35	5.0	INLINE	5x5	394	84	7	1, 2, 3				
P-6	BUILDING CHILLED WATER	MECHANICAL B-117	373	66	10.0	FRAME MOUNTED	4x3	123	81	7	1, 2, 3, 4				
P-7	BUILDING CHILLED WATER	MECHANICAL B-117	373	66	10.0	FRAME MOUNTED	4x3	123	81	7	1, 2, 3, 4				

PUMP SCHEDULE NOTES:

BASIS OF DESIGN IS TACO, REFER TO SPECIFICATIONS FOR ADDITIONAL MANUFACTURERS. HORSEPOWERS ARE TO BE NON-OVERLOADING THROUGHOUT THE PUMP CURVE. PUMP SIZE AT 100% FLOW, 100% HEAD LOSS.

4. FURNISH PUMP WITH VFD.

	EXPANSION TANK SCHEDULE													
MARK	LOCATION	SERVING	TANK TYPE	TANK VOLUME (GAL.)	TANK ACCEPTANCE VOLUME (GAL.)	DIAMETER (IN.)	HEIGHT (IN.)	DESIGN TEMP. (°F)	MIN PRESSURE (PSIG)	MAX PRESSURE (PSIG)	MANUFACTURER/ MODEL	NOTES		
CHEX-1	MECHANICAL ROOM A-117	CHILLED WATER SYSTEM	CA90-125	23	23	20	29	80	12	67.6	TACO	1		
HEX-1	MECHANICAL ROOM A-117	HYDRONIC HOT WATER SYSTEM	CA450-125	158	158	30	72	180	30	65.3	TACO	1		

EXPANSION TANK SCHEDULE NOTES:

1. MOUNT ON 6" HIGH CONCRETE PAD.

AIR SEPARATOR SCHEDULE												
<u>MARK</u>	SERVING	LOCATION	FLOW (GPM)	CONNECTION SIZE (IN.)	FLUID PRESSURE DROP (FT. H2O)	MANUFACTURER /MODEL	NOTES					
CHWADS-1	BUILDING CHILLED WATER	MECHANICAL ROOM A-117	369	6	1.98	TACO	1					
HWADS-1	BUILDING HOT WATER	MECHANICAL ROOM A-117	302	6	1.32	TACO	1					

AIR SEPERATOR SCHEDULE NOTES:

1. STANDARD VELOCITY AIR AND DIRT SEPERATOR.

	ELECTRIC UNIT HEATER SCHEDULE														
MARK TYPE LOCATION CFM VOLTAGE/ MOTOR HP M.B.H. HEATER TEMP STAGE WEIGHT NOTES															
EUH-1	HORIZONTAL UNIT HEATER	B-117B ELECTRICAL ROOM	350	208V / 3Ø	1/100	17.0	5.0	40	1 STAGE	50	1, 2, 3, 4, 5				

ELECTRIC UNIT HEATER SCHEDULE NOTES:

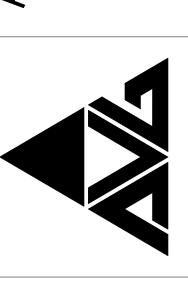
BASIS OF DESIGN IS MARKEL. REFER TO SPECIFICATIONS FOR ADDITIONAL MANUFACTRES.
FURNISH WITH MANUFACTURER MOUNTING BRACKET AND SUSPEND UNIT WITH SPRING VIBRATION ISOLATION.
FURNISH WITH LINE VOLTAGE DPST WALL MOUNTED THERMOSTAT.
FURNISH WITH DIRECTIONAL LOUVER ASSEMBLY.
FURNISH WITH DISCONNECT SWITCH.

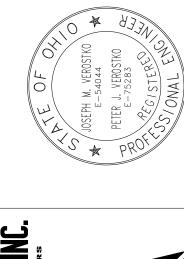
	BOILER SCHEDULE													
MARK TYPE LOCATION EWT LWT GPM PD (FT.) MBH INTAKE/VENT SIZE GAS PRESSURE (IN W.C) NOTES										<u>NOTES</u>				
B-1	CONDENSING	MECHANICAL B-117	155	180	209	4	3000	2610	10"	10"	4-14"	1, 2, 3, 4, 5		
B-2	CONDENSING	MECHANICAL B-117	155	180	209	4	3000	2610	10"	10"	4-14"	1, 2, 3, 4, 5		

BOILER SCHEDULE NOTES:

- BASIS OF DESIGN IS PK SOLIS. REFER TO SPECIFICATIONS FOR ADDITIONAL MANUFACTURES.
 BOILER SHALL BE FURNISHED FROM MANUFACTURE WITH PRESET GAS REGULATOR AND BOILER GAS TRAIN. INSTALL
 REGULATOR AND GAS TRAIN AS REQUIRED PER MANUFACTURES INSTALLATION RECOMMENDATIONS. ALL GAS PIPING SHALL BE
 SIZED AT FULL LINE SIZE AND TRANSITION AT CONNECTION BOILER.
 BOILER SHALL BE FURNISHED FROM MANUFACTURE WITH CONDENSATE TRAP, CONDENSATE PIPING, AND PH NEUTRALIZING
 KIT FOR DISPENSING CONDENSATE INTO THE PLUMBING SYSTEM. INSTALLATION OF SYSTEM SHALL BE BY MECHANICAL
 CONTRACTOR
- CONTRACTOR. BOILER TO BE MOUNTED ON 5-1/2" HIGH CONCRETE PAD.
 HEATING HOT WATER SYSTEM SHALL HAVE 30% PG WATER SOLUTION.

PROJECT NO 2203-1







				07/12/23 100% - BID / PERMIT SET	DESCRIPTION
				07/12/23	1ARK DATE
					1ARK

M N PROJECT NO 2203-1 DRAWN BY MAR CHECKED BY ARB

SCHEDULES

SHEET NO