

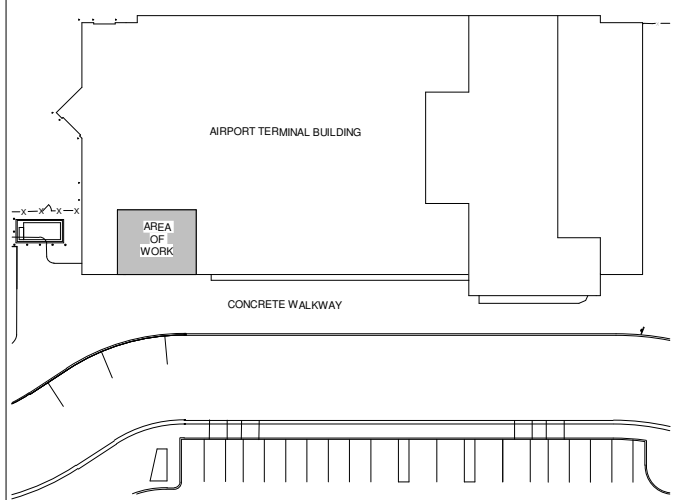
OIL FIRED BOILER SCHEDULE																																	
TAG	HEATING PERFORMANCE													WATER SIDE										PHYSICAL CHARACTERISTICS									
	ENERGY TYPE	INPUT		MIN. OUTPUT		COMB. EFF (%)	THERMAL EFF. (%)	# OF SECTIONS	HTG SURFACE FLUE GAS SIDE		HTG SURFACE WATER SIDE		BURNER CONTROL	FLOW RATE		PRESS. DROP		INLET CONN.		OUTLET CONN.		FLUID VOLUME		OVERALL WEIGHT		WIDTH		LENGTH		HEIGHT		FLUE CONN.	
		(kW)	(MBH)	(kW)	(MBH)				(m2)	(ft2)	(m2)	(ft2)		(L/s)	(GPM)	(Pa)	(ft.WC)	(mm)	(in.)	(mm)	(in.)	(Litres)	(U.S.Gal.)	(kg)	(lbs.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)
B-2	#2 OIL	643.6	2,196	568.9	1,941	87.8	88.0	13	23.6	254	13.2	142	MODULATING	12.05	191.0	14.9	5.0	101.6	4.0	101.6	4.0	359.6	95.0	2,425	5,335	1,251	49 1/4	2,000	78 3/4	1,289	50 3/4	305	12
NOTES: 1. OIL FIRED BOILER WITH STAINLESS STEEL HEAT EXCHANGER. 2. PROVIDE MANUFACTURED CATEGORY IV VENTING. 3. BOILER TO BE INTERLOCKED WITH RESECTIVE BOILER PUMP ANDOPERATION. 4. PROVIDE A BOILER MANAGEMENT SYSTEM TO CONTROL BOILER AND START/STOP OF RESPECTIVE PUMP. SYSTEM TO BE INTERFACED WITH EMCS. REFER ALSO TO SEQUENCE OF OPERATIONS 5. PIPE RELIEF TO DRAIN AND PROVIDE LOW WATER CUT OFF.																																	

ELECTRIC BOILER SCHEDULE																									
TAG	HEATING PERFORMANCE							WATER SIDE										PHYSICAL CHARACTERISTICS							
	ENERGY TYPE	RATED		ELEMENTS		NUMBER OF CONTACTORS	NUMBER AND KW OF STEPS	FLOW RATE		PRESS. DROP		INLET CONN.		OUTLET CONN.		FLUID VOLUME		OVERALL WEIGHT	WIDTH		LENGTH		HEIGHT		
		(KW)	(MBH)	QTD.	(KW)			(L/S)	(GPM)	(Pa)	(FT.WC)	(mm)	(in.)	(mm)	(in.)	(Litres)	(U.S.Gal.)		(kg)	(lbs.)	(mm)	(in.)	(mm)	(in.)	(mm)
B-1A	ELECTRIC	162.1	553	27.0	6	5	3@36, 1@54	3.50	55.5	7.5	2.5	76.2	3.0	76.2	3.0	94.6	25.0	457	1,005	914	36	864	34	1,727	68
B-1B	ELECTRIC	162.1	553	27.0	6	5	3@36, 1@54	3.50	55.5	7.5	2.5	76.2	3.0	76.2	3.0	94.6	25.0	457	1,005	914	36	864	34	1,727	68
B-1C	ELECTRIC	162.1	553	27.0	6	5	3@36, 1@54	3.50	55.5	7.5	2.5	76.2	3.0	76.2	3.0	94.6	25.0	457	1,005	914	36	864	34	1,727	68
NOTES: 1. BOILER TO BE INTERLOCKED WITH RESECTIVE BOILER PUMP AND OPERATION. 2. PROVIDE A BOILER MANAGEMENT SYSTEM TO CONTROL BOILER AND START/STOP OF RESPECTIVE PUMP. SYSTEM TO BE INTERFACED WITH EMCS. REFER ALSO TO SEQUENCE OF OPERATIONS																									

TAG	TYPE	SERVES	SUCTION		DISCHARGE		FLOW RATE		HEAD		DUTY POINT EFF. (%)	PART LOAD EFF. (%)	IMPELLER DIA		NPSHr		MOTOR			NOTES
			(mm)	(in.)	(mm)	(in.)	(L/s)	(gpm)	(kPa)	(ft.WC)			(mm)	(in.)	(kPa)	(ft.WC)	(kW)	(H.P.)	RPM	
P-1A	HIGH EFFICIENCY LARGE WET ROTOR CIRC WITH ECM MOTOR	PRIMARY - BOILER B-1A	51	2.00	51	2.00	3.53	56	18	6	57	N/A	N/A		N/A		1.49	2.00	1,309	1.2
P-1B	HIGH EFFICIENCY LARGE WET ROTOR CIRC WITH ECM MOTOR	PRIMARY - BOILER B-1B	51	2.00	51	2.00	3.53	56	18	6	57	N/A	N/A		N/A		1.49	2.00	1,309	1.2
P-1C	HIGH EFFICIENCY LARGE WET ROTOR CIRC WITH ECM MOTOR	PRIMARY - BOILER B-1C	51	2.00	51	2.00	3.53	56	18	6	57	N/A	N/A		N/A		1.49	2.00	1,309	1.2
P-1D	HIGH EFFICIENCY LARGE WET ROTOR CIRC WITH ECM MOTOR	PRIMARY - BOILER B-2	51	2.00	51	2.00	12.05	191	36	12	54	N/A	N/A		N/A		1.49	2.00	2,368	1.2
P-2A	SPLIT COUPLED IN-LINE CENTRIFUGAL PUMP	SECONDARY (DUTY 2 STAGE/STAND-BY)	76	3.00	76	3.00	10.09	160	158	53	67	61	197	7.75	21	7.2	3.73	5.00	1,703	1.3
P-2B	SPLIT COUPLED IN-LINE CENTRIFUGAL PUMP	SECONDARY (DUTY 2 STAGE/STAND-BY)	76	3.00	76	3.00	10.09	160	158	53	67	61	197	7.75	21	7.2	3.73	5.00	1,703	1.3
P-2C	SPLIT COUPLED IN-LINE CENTRIFUGAL PUMP	SECONDARY (DUTY 2 STAGE/STAND-BY)	76	3.00	76	3.00	10.09	160	158	53	67	61	197	7.75	21	7.2	3.73	5.00	1,703	1.3
NOTES: 1. FLUID: 100% WATER. 2. ECM WET ROTOR PUMP WITH BUILT IN CONTROL. 3. PROVIDE SUCTION DIFFUSER, TRIPLE DUTY VALVE, STAINLESS STEEL FLEXIBLE CONNECTIONS, INTEGRATED SENSORLESS VFD CONTROL SYSTEM WITH BUILT IN BACNET COMPATIBILITY.																				

EXPANSION TANK SCHEDULE																		
TAG	ARRANGEMENT	TANK VOLUME		ACCEPTANCE VOLUME		PRE-CHARGE PRESSURE		MAXIMUM RATED CHARACTERISTICS				TANK DIMENSIONS				SYSTEM CONNECTION		ASME RATED
		(Litres)	(U.S.Gal.)	(Litres)	(U.S.Gal.)	(kPa)	(PSIG)	TEMPERATURE		PRESSURE		DIAMETER		HEIGHT		(mm)	(in.)	
								(C)	(F)	(kPa)	(PSIG)	(mm)	(in.)	(mm)	(in.)			
ET-1	VERTICAL	416	110.0	129	34.0	83	12	115.6	240.0	862	125	609.60	24.00	1676.40	66.00	25	1.00	YES
NOTES:																		
1. REFER TO DETAILS FOR REQUIRED ACCESSORIES AND VALVING.																		

COMBINATION HYDRAULIC, AIR, DIRT AND MAGNETIC SEPARATOR																
TAG	ARRANGEMENT	VOLUME		WATERFLOW RATE		MAXIMUM RATED CHARACTERISTICS				OVERALL DIMENSIONS				SYSTEM CONNECTIONS		ASME RATED
						TEMPERATURE		PRESSURE		DIAMETER		HEIGHT				
		(Litres)	(U.S.Gal.)	(L/s)	(gpm)	(C)	(F)	(kPa)	(PSIG)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	
HS-1	VERTICAL	30	8.0	15.58	247	104.4	220.0	1034	150	469.90	18 1/2	1225.55	48 1/4	102	4.00	YES
NOTES: 1. INSTALL PER MANUFACTURERS INSTRUCTIONS.																



3	ISSUED FOR CONSTRUCTION	2022-05-17
2	99% CONSTRUCTION DOCUMENT	2021-08-06
1	50% DESIGN SUBMISSION	2021-05-28

revisions		date
project		projet

Wabush - ATB Boiler Upgrade	
Wabush Airport Terminal Building (ATB)	
drawing	dessin

MECHANICAL SCHEDULES

designed MG	conçu
drawn IS	dessiné
approved DH	approuvé
Tender	Soumission
PSPC Project Manager	Administrateur de projets TPSGC
project no.	no. du projet
R111141.001	
drawing no.	no. du dessin

M-4