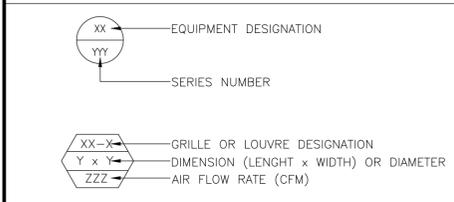


DESCRIPTION	SYMBOL
BALL VALVE	
BUTTERFLY VALVE	
BACKFLOW PREVENTER	
PIPE ELBOW	
PIPE ELBOW DOWN	
PIPE ELBOW UP	
HOT WATER SUPPLY	
HOT WATER RETURN	
GLYCOL HEATING SUPPLY	
GLYCOL HEATING RETURN	
SANITARY DRAIN	
STORM DRAIN	
SPRINKLER PIPING	
UPRIGHT PENDANT HEAD	
MOTORIZED DAMPER	
FIRE DAMPER	
CARBON DIOXIDE SENSOR	
PUMP	
FIRE EXTINGUISHER	

GENERAL NOTES

- DIMENSIONS AND BUILDING ORIENTATION SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE TO VERIFY EQUIPMENT/BUILDING LOCATIONS AND DIMENSIONS ON SITE.
- PATCH ALL OPENINGS REMAINING AFTER EQUIPMENT, DUCT OR PIPING INSTALLATION/REMOVALS. PATCHING TO ACHIEVE COLOUR MATCHED FINISH OF LIKE MATERIALS TO THE ADJACENT SURFACES.
- CUT ALL NEW OPENINGS REQUIRED FOR NEW INTALLATIONS OR DEMOLITION WORK USING DUE CARE AND APPROPRIATE TOOLS AND METHODS TO MAINTAIN THE INTEGRITY OF THE STRUCTURE AND ASSEMBLIES IN WHICH THE OPENING IS BEING CUT.
- ELECTRICALLY ISOLATE ALL DISSIMILAR METALS.
- PROVIDE ADDITIONAL FRAMING AT ALL WALL PENETRATIONS.
- PERFORM ALL WORK IN COORDINATION WITH ALL OTHER TRADES AND CONTRACTORS. PROVIDE COMPLETE FUNCTIONAL AND CODE COMPLIANT SYSTEMS.
- DEMOLITION/MODIFICATION/DISPOSAL/INSTALLATION OF MECHANICAL WHICH INVOLVES NATURAL GAS PIPING AND EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANITOBA FIRE CODE, MANITOBA REGULATIONS, INDUSTRY STANDARDS AND LOCAL BYLAWS.
- USED SKILLED AND LICENSED LABOURERS AND JOURNEYMEN TO PERFORM ALL WORK.
- ALL WASTE IS TO BE DISPOSED OFF SITE IN AN APPROVED FACILITY LICENSED TO ACCEPT SUCH WASTE.
- CONTRACTOR IS RESPONSIBLE TO REMOVE ANY CONTAMINATED OR HAZARDOUS WASTE/REFUSE, WHICH IS CAUSED BY THE WORK AND TO DISPOSE OFF THE WASTE IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION.
- CONTRACTOR TO PROVIDE PROTECTION TO OWNER EQUIPMENT DURING CONSTRUCTION. WORK WITH EXTREME CARE AROUND OPERATING EQUIPMENT.
- COORDINATE THE TIMING, DURATION AND SAFETY REQUIREMENTS FOR SHUTDOWNS TO ALLOW PIPING TIE-INS WITH THE CITY.
- LOCATE UNDERGROUND SERVICES AND PROTECT THEM AT ALL TIMES DURING CONSTRUCTION.
- DETAILS SHOWING THE COMPLETED INSTALLATION DO NOT INDICATE COMPONENTS WHICH MAY BE NECESSARY FOR SAFETY DURING CONSTRUCTION.
- DO PLUMBING WORK IN ACCORDANCE WITH CANADIAN NPC AND THE MANITOBA AMENDMENTS AND CSA A23.3-04.
- ALL PIPE WORK TO BE LEAK TESTED PRIOR TO INSULATING.
- ALL NEW PIPE SUPPORTS FOR FERROUS PIPING ARE TO BE GALVANIZED OR STEEL PAINTED WITH A ZINC RICH PAINT AFTER WELDING.

MECHANICAL EQUIPMENT IDENTIFICATION



ASBESTOS

- EVERY EFFORT HAS BEEN MADE TO IDENTIFY KNOWN ASBESTOS CONTAINING MATERIALS WITHIN THE AREAS OF THE PROPOSED WORK. AS A PRECAUTIONARY MEASURE, WHERE MATERIAL IS ENCOUNTERED THAT IS SUSPECT OR SUSPICIOUS, THE CONTRACTOR IS TO CONTACT THE CONTRACT ADMINISTRATOR AND THE CITY WHO WILL HAVE SAMPLES TAKEN AND TESTED TO CONFIRM ITS COMPOSITION.
- MANITOBA REG. 53-88 (WORKPLACE HEALTH HAZARD REGULATION), MANITOBA REG. 100-88R (FIBROSIS AND SILICOSIS REGULATION) AND ASSOCIATED GUIDELINES APPLY TO ALL MAINTENANCE AND RENOVATION WORK THAT MAY DISTURB ASBESTOS OR SUSPECT ASBESTOS-CONTAINING MATERIALS IN THE WORKPLACE. SUCH REGULATIONS AND GUIDELINES STATE THAT ANY DISTURBANCE OF ASBESTOS-CONTAINING MATERIALS MAY ONLY BE PERFORMED BY WORKERS OR BY AN OUTSIDE CONTRACTOR WHO HAVE FIRST RECEIVED THE REQUIRED TRAINING IN ASBESTOS-RELATED PRECAUTIONS.
- WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBRES CAN CAUSE VARIOUS TYPES OF LUNG DISEASE INCLUDING CANCER. SMOKING INCREASES THE RISK OF LUNG CANCER FROM ASBESTOS EXPOSURE.
- ACKNOWLEDGEMENT
 - IN UNDERTAKING THE WORK OF THIS PROJECT, WE THE CONTRACTOR AGREE TO PERFORM OUR WORK IN SUCH A MANNER SO AS NOT TO DISTURB ANY ASBESTOS-CONTAINING MATERIALS WITHOUT:
 - GIVING NOTICE TO THE CONTRACT ADMINISTRATOR THAT KNOWN OR SUSPECTED ASBESTOS-CONTAINING MATERIAL(S) WILL BE/NEEDS TO BE DISTURBED, OR HALTING WORK AND GIVING NOTICE TO THE CONTRACT ADMINISTRATOR WHEN UNFORESEEN SUSPECTED ASBESTOS-CONTAINING MATERIALS ARE UNCOVERED DURING THE PROVISIONS OF SERVICES/MATERIALS.

MECHANICAL EQUIPMENT SCHEDULES

EXHAUST FAN SCHEDULE												
TAG	MANUFACTURER MODEL NUMBER	LOCATION	APPLICATION	AIRFLOW (cfm)	POWER (HP)	STATIC PRESS. (in. wg)	FAN SPEED (rpm)	VOLT.	PHASE	MOTOR SPEED RPM	ACCESSORIES	NOTES
EF-1	COOK ACW-D 70W17DEC	EXTERIOR	ELECTRICAL EXHAUST	95	1/4	3/8	1725	120	1Ø	1725	ALUMINUM BIRD SCREEN	WALL MOUNTED
EF-2	COOK ACW-D 90W15DL	EXTERIOR	CO2 ROOM EXHAUST	300	1/8	1/2	1710	120	1Ø	1725	ALUMINUM BIRD SCREEN	WALL MOUNTED
SF-1	COOK 70SQN-B	ELECTRICAL ROOM	CO2 ROOM SUPPLY	100	0.041	3/8	1258	120	1Ø	1725	BELT GUARD, SPRING ISOLATORS	

HYDRONIC FORCE FLOW SCHEDULE													
TAG	LOCATION	MANUFACTURER	MODEL NO. AND SIZE	HOT WATER CAPACITIES			AIR CFM	MOTOR			WEIGHT kg (lbs)	OPTIONS	NOTES
				ΔT °F	HEAT MBH	FLOW GPM		HP	RPM	Amps @ 115V			
FF-1	CO2 STORAGE	RITTLING	MODEL RF SIZE 04	11 (20)	33,066	2.0	550	-	-	-	-	CONTACTOR AND THERMOSTAT	

ELECTRIC UNIT HEATER SCHEDULE													
TAG	LOCATION	MANUFACTURER	MODEL NO. AND SIZE	HEATER			AIR CFM	MOTOR			WEIGHT kg (lbs)	OPTIONS	NOTES
				VOLTAGE	HEAT (MBH)	PHASE		VOLT	RPM	Amps @ 115V			
UH-1	ELECTRICAL ROOM	RUFFNECK	RGE048CT	600	13,648	3	475	208	-	-	-	B.I.T.	

GRILLES, REGISTERS AND DIFFUSERS								
TAG	APPLICATION	MANUFACTURER	MODEL NO.	SIZE	FRAME	FASTENING	FINISH	ACCESSORIES
SA-A	SUPPLY REGISTER	NAILOR	51RC-0	SEE DRWG.	SURFACE MOUNT	COUNTERSUNK SCREW HOLES	ALUMINUM	
EA-A	EXHAUST REGISTER	NAILOR	51RC-0	SEE DRWG.	SURFACE MOUNT	COUNTERSUNK SCREW HOLES	ALUMINUM	

GRILLES, REGISTERS AND DIFFUSERS								
TAG	APPLICATION	MANUFACTURER	MODEL NO.	SIZE	FRAME	FASTENING	FINISH	ACCESSORIES
LV-A	SUPPLY AIR	VENTEX	2435	14x12	FLANGE MOUNT	STAINLESS STEEL FASTENERS	CLEAR ANODIZED	1/2" X 1/2" BIRDSCREEN W/FRAME
LV-B	SUPPLY AIR	VENTEX	2435	12x12	FLANGE MOUNT	STAINLESS STEEL FASTENERS	CLEAR ANODIZED	1/2" X 1/2" BIRDSCREEN W/FRAME

PUMP SCHEDULE											
TAG	MANUFACTURER MODEL NUMBER	LOCATION	APPLICATION	FLOW (USGPM)	POWER (HP)	HEAD (FT. WG)	VOLT.	PHASE	MOTOR SPEED RPM	Accessories	NOTES
SP-1	GRUNDFOS UNILIFT KP150	SUMP PIT	WEeping TILE	22	1/4	12	120	1Ø	--	FLOAT SWITCH CABLE 25 FEET	

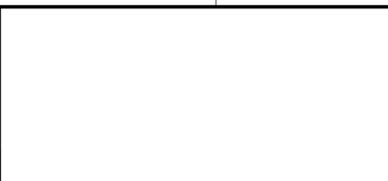
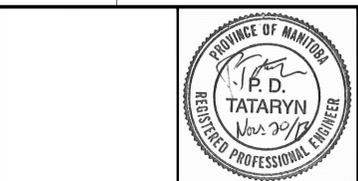
SPLIT SYSTEM SCHEDULE										NOTES
PERFORMANCE DATA										
MANUFACTURER:					DAIKIN AC					
INDOOR UNIT	MODEL NO.:	FTXS36LVJU			OUTDOOR UNIT	MODEL NO.:	RKS36LVJU			
TAG:		FC-1			TAG:		CU-1			
TYPE:		WALL MOUNTED			TYPE:		COOLING ONLY			
AIRFLOW (CFM):		770/519/473			AIR FLOW (CFM):		2627			
SOUND PRESSURE (dBA)		47			SOUND PRESSURE (dBA)		54			
SOUND POWER (dBA)		37			SOUND POWER (dBA)		68			
DIMENSIONS (IN)		13-3/8x47-1/4x12-5/8			DIMENSIONS (IN)		38-1/16x37-1/2x12-5/8			
WEIGHT (LBS)		38			WEIGHT (LBS)		179			
POWER SUPPLY		208-230/1Ø/60			POWER SUPPLY		208-230/1Ø/60			
REFRIGERANT		R-410A			MCA/RLA		19.5/18.9			
RATED COOLING CAPACITY (BTU/HR)		36,000			RATED COOLING CONDITIONS:		INDOOR: 80°F DB/67°F WB			
SENSIBLE COOLING CAPACITY (BTU/HR)		22,890			INDOOR UNIT		OUTDOOR: 95°F DB/75°F WB			
COOLING INPUT POWER (KW)		2.09			RATED PIPE LENGTH (FT):		25			
SEER		17.9			RATED PIPE LENGTH (FT):		25			

Conditions of Use

Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.

Do not scale dimensions from drawing.

Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.



DESIGN	JDB	REVIEWED BY	PDT
DRAWN	JV	CHECKED BY	JDB
DATE	JUNE 6, 2013		
SCALE	N.T.S.		
ISSUED FOR	ISSUED FOR BID OPPORTUNITY NUMBER 850-2013	DATE	13-11-20
BY	SCK	DATE	

PAN AM POOL ELECTRICAL UPGRADE		PROJECT NO. 137300
MECHANICAL LEGEND, GENERAL NOTES AND SCHEDULES		SHEET NO. M101