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SITE INSTRUCTION

PROJECT: HAMPTON MANOR
25 BAKER HILL BLVD
STOUFFVILLE, ONTARIO

PROJECT NO: 14-016

CONTRACT: Mechanical

DATE July 06, 2018

SITE INSTRUCTION: M-21

THIS SITE INSTRUCTION IS NOT TO BE CONSTRUED AS A CHANGE IN THE CONTRACT PRICE, BUT IS ISSUED FOR CLARIFICATION ONLY. IF A CHANGE IN CONTRACT PRICE IS PERCEIVED, PROVIDE AN ITEMIZED BREAKDOWN OF ANY EXTRAS OR CREDITS WITHIN SEVEN (7) WORKING DAYS.

Purpose: To clarify storm pump P-9.

1.0 Reference Drawing M-39 (Schedule) Issued

1.1 Revised: Storm pump P-9.

PREPARED BY:

Leon Bai
Mechanical Department

ISSUED TO ROYAL PINE HOMES,
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FOR DISTRIBUTION TO ALL AFFECTED PARTIES.

NOTE: ALL SUITE FANS SHOULD BE FM (2000) PERFORMANCE CERTIFIED
NOTE: SPRINK PANS AND CONTROL DEVICES SHOULD BE UL APPROVED FOR SPRINKER OPERATIONS
* NOTE: MOTORS FOR SPECIFIED EQUIPMENT TO BE HIGH EFFICIENCY, TO ASHRA 90.1 STANDARDS (A11.1/1192 EFFICIENCY LEVELS)

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CONDENSATE NEUTRALIZATION KIT

BOILER ROOM EQUIPMENT SCHEDULE									
NO.	TYPE	LOCATION	HEATING OUTPUT	CAPACITY	QUANTITY	R.P.	MAKE	MODEL	REMARKS
1	HEATING BOILER	BOILER ROOM-1	1990 FEM		4		RAYPAK	H-2005	RAYPAK H-2005
2	DOY HOT WATER HEATING BOILER	BOILER ROOM			2		RAYPAK	H-1005	RAYPAK H-1005
3	DOY HOT WATER HEATING BOILER	BOILER ROOM			1		CLIFFER		CLIFFER
4	COMBUSTION AIR	BOILER ROOM		2000 & X 2200 H					LOCATED 300mm (6") BELOW SLAB ON GROUND AND 1200mm (30") LEVEL C/V INSULATION
5	RELIEF AIR	BOILER ROOM		1000 V X 600 D					LOCATED IN UNIFORM OF BOILER ROOM ROOM 1005
6	EMERGENCY GAS SHUT-OFF VALVE	BOILER ROOM		487 U.S. GALLONS					LOCATED AS HIGH AS POSSIBLE
7	HEATING SYSTEM EXPANSION TANK	BOILER ROOM-1		400 & X 3000 L			CLIFFER		WEIGHT 5000 LBS
8	REVERSE ACTING THERMOSTAT	ELV MACH RM & ELV RM							INTERLOCK WITH RY & C/V
9	ELECTRIC UNIT HEATER	ELV MACH RM & ELV RM		5 KW					INTERLOCK WITH RY & C/V

HEATING UNIT SCHEDULE									
UNIT NO.	DESCRIPTION	LOCATION	HEATING	COOLING TOTAL	EXTERNAL SPT POWER	ELECTRICAL	MAKE	MODEL	REMARKS
1	RV-2A	VENTILATES & PAVING ROOM	36.7	0.360	1/8 H.P.	120/1/60	ENGINEER-AR	QJH-8	C/V THERMOSTAT, SPEED SWITCH & LOCKABLE TAMPERPROOF GUARD
2	RV-2A	STAIRS & CORRIDORS	8.8	0.086	1/8 H.P.	120/1/60	ENGINEER-AR	QJH-4	C/V THERMOSTAT, SPEED SWITCH & LOCKABLE TAMPERPROOF GUARD
3	MODEL H	GARAGE ROOM	16.7	0.086	1/25 H.P.	120/1/60	ENGINEER-AR	H-1	C/V THERMOSTAT & STARTER
4	BASEMENT	BASEMENT	0.95	.02					TO RUN CONTINUOUSLY
5	BASEMENT	BASEMENT	0.95	.02			ENGINEER-AR	VF-4	100% HIGH FINE SPRINKLING (STAINLESS STEEL) 2" X 1/2" ALL FLOOR FAN SPRINKLING
6	BASEMENT	BASEMENT	0.95	.02			ENGINEER-AR	VF-4	100% HIGH FINE SPRINKLING (STAINLESS STEEL) 2" X 1/2" ALL FLOOR FAN SPRINKLING

NOTE: FOR SUPPLEMENTAL HEATING IN COMMON AREAS AND SUITES REFER TO CORRESPONDING ELECTRICAL DRAWINGS

FAN COIL UNIT SCHEDULE									
UNIT NO.	TYPE	LOCATION	HEATING	COOLING TOTAL	EXTERNAL SPT POWER	ELECTRICAL	MAKE	MODEL	REMARKS
A	VERTICAL FANCOIL	TYPICAL SUITES	4.01	0.113	2.48	1/8 H.P.	UNILUX	L-300	SUITER
B	VERTICAL FANCOIL	TYPICAL SUITES	18000	1.85	8500	360	1.8	2.8	120/1/60
C	VERTICAL FANCOIL	TYPICAL SUITES	5.71	0.182	3.31	225	2.4	3.33	120/1/60
D	VERTICAL FANCOIL	TYPICAL SUITES	12.81	0.301	6.85	400	4.8	5.5	120/1/60
E	HORIZONTAL FANCOIL	GROUND FLOOR	1.80	0.05	0.80	1/8 H.P.	CARRIER	4200R	ENTERING WATER 48°F (70°F)
F	HORIZONTAL FANCOIL	GROUND FLOOR	3600	4.8	24000	800	2	1/8 H.P.	120/1/60

NOTE: ALL FANCOIL UNITS SHALL BE C/V ELECTRIC HEATERS - SUITES WITH ONE FANCOIL UNIT SHALL BE C/V 1000 WATT ELECTRIC HEATERS - SUITES WITH MULTIPLE FANCOIL UNITS SHALL BE C/V 750 WATT ELECTRIC HEATERS EACH

* NOTE: MOTORS FOR SPECIFIED EQUIPMENT TO BE HIGH EFFICIENCY, TO ASHRA 90.1 STANDARDS (A11.1/1192 EFFICIENCY LEVELS)

EQUIPMENT SCHEDULE									
UNIT NO.	DESCRIPTION	LOCATION	HEATING	COOLING TOTAL	EXTERNAL SPT POWER	ELECTRICAL	MAKE	MODEL	REMARKS
1	CHILLER	ROOF		230 TONS	480 HP	245 KW	ENG AR	FCU285/24000	6000
2	MAKE-UP AIR UNIT	ROOF		240 FEM	8320	1.07	PPA 70.78	150 HP	360
3	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE RM		24.0 FEM	800	0.57	1/4 HP	208/1/60	LENNOX
4	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL COMMON ROOMS		24.0 FEM	800	0.57	1/4 HP	208/1/60	LENNOX
5	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE		18.0 FEM	600	0.57	1/4 HP	208/1/60	LENNOX
6	SPLIT SYSTEM CONDENSING UNIT	GROUND FLOOR APARTMENT/LOBBY		24.0 FEM	800	0.57	1/4 HP	208/1/60	LENNOX
7	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE		24.0 FEM	800	0.57	1/4 HP	208/1/60	LENNOX
8	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE		24.0 FEM	800	0.57	1/4 HP	208/1/60	LENNOX
9	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE		24.0 FEM	800	0.57	1/4 HP	208/1/60	LENNOX
10	SPLIT SYSTEM CONDENSING UNIT	P-1 LEVEL GARAGE		24.0 FEM	800	0.57	1/4 HP	208/1/60	LENNOX

BRANCH SIZES SCHEDULE									
UNIT	DESCRIPTION	LOCATION	HEATING	COOLING TOTAL	EXTERNAL SPT POWER	ELECTRICAL	MAKE	MODEL	REMARKS
1	SINGLE KITCHEN								
2	DOUBLE KITCHEN								
3	SINGLE BATHROOM								
4	SINGLE BATHROOM/SINGLE KITCHEN								
5	INDIVIDUAL WASHER								
6	DOUBLE BATHROOM								
7	DOUBLE BATHROOM/DOUBLE KITCHEN								
8	THREE OR MORE BATHROOMS								

GRILLE SCHEDULE					
GRILLE NO.	DESCRIPTION	DAMPER	MAKE	TYPE	NOTES
1	CORRIDOR FRESH AIR SUPPLY	YES	H & C	A47-2	NOTE: FIXED FRONT BLADES AT 40°
2	EXHAUST/RETURN	YES	H & C	A700	
3	SUPPLY	YES	H & C	A847	
4	TRANSFER	NO	H & C	T84TV	
5	PRESSURIZATION/SUPPLY	NO (SEE NOTES)	H & C	GR 300	(NO DAMPER EXCEPT AS NOTED ON FLOOR PLANS & NOTES)
6	DIFFUSER	YES	H & C	DAE	
7	LOUVER	NO	—	MIN. 60% FREE AREA	C/W BROADSIDE
8	DOOR GRILLE	NO	H & C	T 980	
9	LINEAR DIFFUSER	YES	H & C	4000	
10	FANCOIL SUPPLY AIR GRILLE	YES	BY FANCOIL UNIT MANUFACTURER		

SPRINKLER PIPE									
NO. OF HEADS	PIPE SIZE	PIPE SIZE	PIPE SIZE	PIPE SIZE	PIPE SIZE	PIPE SIZE	PIPE SIZE	PIPE SIZE	PIPE SIZE
1-2	25mm (1")								
3-	30mm (1-1/4")								
4-5	40mm (1-1/2")								
6-10	50mm (2")								

NOTE: WHEN THERE ARE NINE HEADS IN A BRANCH, THE TWO END BRANCHES ARE TO BE 25mm (1") & 30mm (1-1/4") & THE SEVEN OTHERS AS PER STANDARD SYSTEM

PUMP SCHEDULE									
NO.	TYPE	LOCATION	CAPACITY	PRESSURE	HP	R.P.	MAKE	MODEL	REMARKS
1	FIRE PUMP	SPRINKLER ROOM	500	180	3000	60 HP			REVERSE ACTING LINE VOLT THERMOSTAT
2	DOCKET PUMP	SPRINKLER ROOM	5	170	3000	15 HP			
3	DOCKET BOOSTER PUMP PACKAGE	SPRINKLER ROOM	50/100/100	105	3000	3/7/7			
4	FAN COIL HW/COOLING PUMPS	BOILER ROOM	430	80	1790	15 HP			
5	DOCKET PUMP	BOILER ROOM	80	80	1790	3 HP			
6	DOCKET PUMP	BOILER ROOM	30	20	1790	1/2 HP			
7	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
8	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
9	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
10	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
11	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
12	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
13	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
14	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
15	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
16	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
17	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
18	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
19	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			
20	DOCKET PUMP	BOILER ROOM	20	20	1790	1/2 HP			

NOTES:
-MECHANICAL CONTRACTOR MUST ASSUME COST FOR ANY INCREASE IN ELECTRICAL POWER REQUIREMENTS DUE TO SUBSTITUTION OF EQUIPMENT SPECIFIED
-ALL PUMP/FAN STARTERS & DISCONNECTS LOCATED IN PUBLIC AREAS SHALL BE C/V LOCKABLE TAMPERPROOF GUARDS SUPPLIED & INSTALLED BY PLUMBING & VENTILATION CONTRACTORS

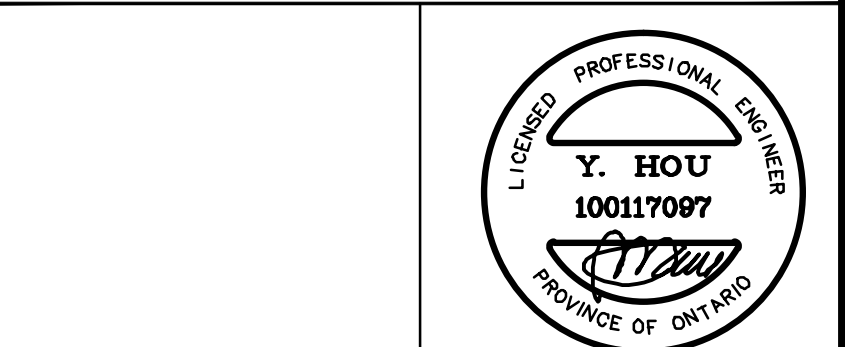
ELECTRICALLY SUPERVISED VALVE SCHEDULE		
SYSTEM	LOCATION	
(SVB1)	SPRINKLER SYSTEM ISOLATION	SPRINKLER ROOF
(SVB2)	STANPEPPE SYSTEM ISOLATION	SPRINKLER ROOF
(SVB3)	STANPEPPE SYSTEM ISOLATION	SPRINKLER ROOF
(SVB4)	FREE PUMP ALERT ISOLATION	SPRINKLER ROOF
(SVB5)	FREE PUMP ALERT ISOLATION	SPRINKLER ROOF
(SVB6)	FREE PUMP BYPASS CHECK VALVE ISOLATION	SPRINKLER ROOF
(SVB7)	FREE PUMP BYPASS CHECK VALVE ISOLATION	SPRINKLER ROOF
(SVB8)	PARKING GARAGE LEVEL-1 SPRINKLER ISOLATION	SPRINKLER ROOF
(SVB9)	PARKING GARAGE LEVEL-1 SPRINKLER ISOLATION	SPRINKLER ROOF
(SVB10)	SPRINKLER ISOLATION	SPRINKLER ROOF
(SVB11)	P-1 GARAGE ROOF SPRINKLER ISOLATION	SPRINKLER ROOF
(SVB12)	SPRINKLER ISOLATION	SPRINKLER ROOF
(SVB13)	BLADING SPRINKLER ISOLATION	SPRINKLER ROOF
(SVB14)	GROUND FLOOR SPRINKLER ISOLATION	1ST FLOOR PEED. CLOSET
(SVB15)	SECOND FLOOR SPRINKLER ISOLATION	2ND FLOOR PEED. CLOSET
(SVB16)	THIRD FLOOR SPRINKLER(S) ISOLATION	3RD FLOOR PEED. CLOSET
(SVB17)	4TH FLOOR SPRINKLER(S) ISOLATION	4TH FLOOR PEED. CLOSET
(SVB18)	5TH FLOOR SPRINKLER(S) ISOLATION	5TH FLOOR PEED. CLOSET
(SVB19)	6TH FLOOR SPRINKLER(S) ISOLATION	6TH FLOOR PEED. CLOSET
(SVB20)	7TH FLOOR SPRINKLER(S) ISOLATION	7TH FLOOR PEED. CLOSET
(SVB21)	8TH FLOOR SPRINKLER(S) ISOLATION	8TH FLOOR PEED. CLOSET
(SVB22)	PEED. ROOM ROOF(SPRINKLER(S) ISOLATION	PEED. ROOM PEED. CLOSET
(SVB23)	STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB24)	STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB25)	STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB26)	STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB27)	GARAGE STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB28)	GARAGE STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB29)	GARAGE STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB30)	GARAGE STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB31)	GARAGE STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB32)	GARAGE STANPEPPE RISER ISOLATION	P-1 LEVEL, PARKING GARAGE
(SVB33)	GARAGE CHUTE SPRINKLER ISOLATION	PARKAGE ROOF GROUND FLOOR
(SVB34)	INCOMING WATER ISOLATION	
(SVB35)		
(SVB36)		

6	LD	REVISED AS PER SITE INSTRUCTION P-21	JUL/06/2018
4	LD	REVISED AS PER SITE INSTRUCTION P-11	DEC/11/2017
4	LD	REVISED AS PER SITE INSTRUCTION P-5	AUG/09/2017
3	LD	PROGRESS FOR CONSTRUCTION	JUL/18/2017
2	LD	ISSUED FOR PERMIT	DEC/28/2016
1	LD	ISSUED FOR TENDER	MAR/21/2016

NO. BY DESCRIPTION DATE

REVISIONS

This drawing, is an instrument of service, is provided by and is the property of United Engineering Inc. The contractor must verify and accept responsibility for all dimensions and conditions on site and must notify United Engineering Inc. of any discrepancy before proceeding with any work. Installation must conform to all applicable codes and requirements of the authorities having jurisdiction. This drawing is not to be scaled, all symbols are graphic representations only.



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TITLE
**EQUIPMENT SCHEDULE
MECHANICAL**

PROJECT
**25 BAKER HILL BLVD.
ROYAL PINE HOMES**

STOUFFVILLE, ONTARIO
PROPOSED RESIDENTIAL DEVELOPMENT

DRAWN	GC	CHECKED	BT	SCALE	N/TS
DATE	JUNE 2015	PROJECT	14-016	DRAWING	M-39
				OF	42