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Architecture / Interiors

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POOL HOUSE  
WISTERIA RIDGE

Will-O-War IIc  
75 north Main Street  
Watkinsville, GA 30677

Issue & Revisions:

No.	Date	Description

MECHANICAL  
FLOOR PLAN  
& SPECS

Drawn: \_\_\_\_\_  
Checked: \_\_\_\_\_  
Contract No. 07-03  
Scale: \_\_\_\_\_

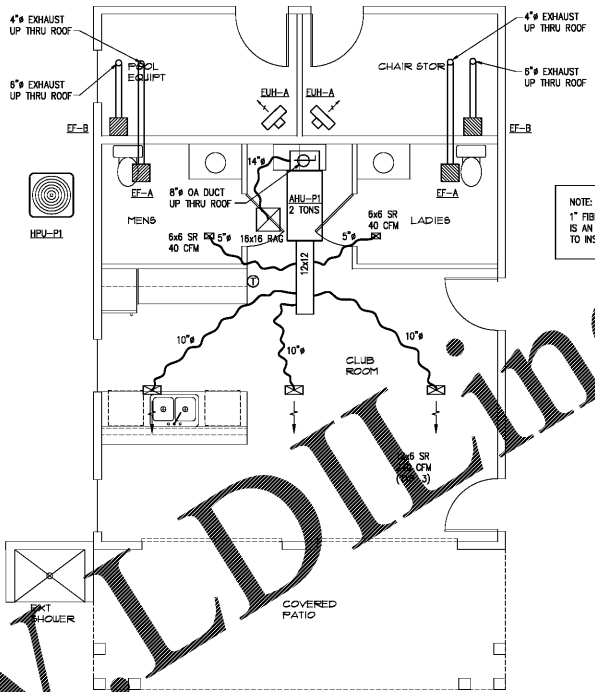
P-M.1

of sheets

MECHANICAL NOTES AND SPECIFICATIONS

- THE CONTRACTOR SHALL PROVIDE A COMPLETE HVAC SYSTEM TO INCLUDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR A COMPLETE AND FUNCTIONAL SYSTEM INCLUDING ALL NECESSARY APPLIANCE/CUSTOMER-SPECIFIC EQUIPMENT IF NOT SPECIFICALLY CALLED OUT.
- DEVIATION FROM MATERIALS, METHODS AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING. APPROVAL WILL NOT BE GIVEN UNLESS THE PROPOSED SYSTEM IS EQUAL IN PERFORMANCE, DURABILITY, LONGEVITY, AND RELIABILITY TO THAT SPECIFIED.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES, LAWS, AND ORDINANCES.
- THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND THE CONDITIONS AND SHALL VERIFY DIMENSIONS AND CLEARANCES AND BE ASSURED THAT THE EQUIPMENT PURCHASED WILL FIT INTO THE AVAILABLE SPACE.
- SUBMISSION OF A BID OR PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS, SPECIFICATIONS, AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO BIDS FOR MATERIALS AND/OR LABOR DUE TO DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, UNLESS DIFFICULTIES COULD NOT HAVE BEEN FORESEEN EVEN THOUGH PROPER EXAMINATION HAD BEEN MADE.
- THE CONTRACTOR SHALL REVIEW STRUCTURAL DRAWINGS BEFORE FABRICATING OR INSTALLING DUCTWORK OR EQUIPMENT TO AVOID ANY CONFLICTS.
- ALL HARD DUCTWORK SHALL BE FABRICATED OF GALVANIZED STEEL OF THICKNESS AND GAUGES TO CONFORM TO SMOGNA DUCT CONSTRUCTION STANDARDS. (RECTANGULAR OR EQUIVALENT ROUND)
- ALL DUCT SHALL BE AIRTIGHT, FREE OF LEAKS, AND SHALL BE INSPECTED FOR LEAKS PRIOR TO INSTALLATION OF FINISHED CEILING SYSTEM.
- DUCTWORK, DAMPERS, LOUVERS, DIFFUSERS, AND OTHER DISTRIBUTION EQUIPMENT AND MATERIALS SHALL CONFORM TO THE FOLLOWING:
 

A. ASHRAE/ANSI	E. ASHRAE STANDARD HANDBOOK 99
B. SBCCI/ASME	F. AIR DIFFUSION COUNCIL TEST
C. SMOGNA	G. CODE 106283
D. NFPA	H. ANY LOCAL CODES NOT COVERED ABOVE
- ALL DUCT SIZES ARE CLEAR NET INSIDE DIMENSIONS.
- ALL LOW PRESSURE ROUND DUCT AND FLEXIBLE DUCT SHALL BE CONNECTED TO LOW PRESSURE DUCT WITH SPIN-IN FITTINGS AND MANUAL DAMPERS.
- LOW PRESSURE INSULATED FLEXIBLE DUCT SHALL BE SIZED AS SHOWN. USE R-6 IN CONDITIONED AREAS AND R-8 IN UNCONDITIONED AREAS.
- ALL SUPPLY AND RETURN DUCTWORK NOT LINED SHALL BE INSULATED WITH 1-1/2", 3/4" DENSITY FOIL BACKED EXTERNAL INSULATION.
- ALL THERMOSTATS SHALL BE INSTALLED 4'-0" AFF.
- SUPPLY REGISTER (SR) SHALL BE TITUS MODEL 272RL OR APPROVED EQUAL. SIZED AS PER DRAWINGS.
- SIDEWALL RETURN AIR GRILLE (SRAG) SHALL BE TITUS MODEL 25RL OR APPROVED EQUAL. SIZED AS PER DRAWINGS.
- REFRIGERANT PIPING SHALL BE SIZED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR LIQUID, VAPOR HORIZONTALS AND VAPOR RISERS. JOINTS SHALL BE MADE WITH SILVER SOLDER.
- INSULATE REFRIGERANT SUCTION LINES WITH ARMAFLEX OR EQUAL. INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. RUN IN WALLS AND ABOVE CEILING AS MUCH AS POSSIBLE.
- MANUAL DAMPERS SHALL BE INCLUDED IN OUTSIDE AIR INTAKE DUCTS TO REGULATE OUTSIDE AIR TO THE AIR HANDLING UNITS. (UNITS SERVING COMMON AREAS ONLY)
- UNDERCUT RESTROOM DOORS 3/4" FOR EXHAUST MAKE-UP.
- CONDENSATE DRAIN MUST TERMINATE AT AN APPROVED POINT. VERIFY AT SITE.
- ALL LOW VOLTAGE CONTROL WIRING SHALL BE UNDER THIS CONTRACTOR.
- ALL INSULATING MATERIALS SHALL HAVE A COMPOSITE FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 50 (ASTM E-84, NFPA 255 & UL 723).
- PROGRAMMABLE THERMOSTATS AND OTHER CONTROL ITEMS SHALL BE A COMPATIBLE WITH THE EQUIPMENT MANUFACTURER.
- PROVIDE SMOKE DETECTORS IN ALL SUPPLY AIR DUCTS, OF UNITS SERVING GROSS CORRIDORS OR GREATER THAN 2,000 CFM, ARRANGED TO SHUT DOWN UNIT BLOWER.
- FIRE DAMPERS SHALL BE HUSON MODEL D-802 STYLE "B" OR APPROVED EQUAL WITH A 1-1/2 HOUR RATING.
- PROVIDE AIR EXTRACTORS AT DUCT TAKE-OFFS AS REQUIRED FOR AIR BALANCING. (COMMON AREAS ONLY)
- BALANCE ALL AIR SYSTEMS TO PRODUCE THE VOLUMES AND QUANTITIES SHOWN ON THE DRAWINGS OR SPECIFIED.
- THE CONTRACTOR SHALL VERIFY ALL ELECTRICAL CHARACTERISTICS WITH ELECTRICAL DRAWINGS BEFORE PURCHASING EQUIPMENT.
- ALL MECHANICAL EQUIPMENT WHICH HAVE ELECTRICAL CONNECTIONS SHALL BE SUPPLIED WITH DISCONNECT (PROVIDED BY ELECTRICAL CONTRACTOR.)
- OUTSIDE AIR TO AIR HANDLING UNITS SHALL CONFORM 2012 IMC TABLE 403.3. SEE CALCULATIONS FOR COMMON AREAS ONLY.



MECHANICAL POOL HOUSE PLAN  
P-M.1 1/2" = 1'-0"

VENTILATION REQUIREMENTS											
SPACE	EQUIPMENT	GROSS SQ.FT.	NET SQ.FT.	PEOPLE PER 1000 SQ.FT.	PEOPLE	VENTILATION PER PERSON	V/P	VENTILATION PER SQ.FT.	V/A	TOTAL CFM V/P + V/A	NET AHU TO
CLUB	AHU-P1	340	300	30	9	5	45	0.06	18	63	
CORRIDOR	AHU-P1	180	180	N/A	N/A	N/A	N/A	0.06	11	11	
TOTAL	AHU-P1									74	140

UNIT HEATER SCHEDULE										
MARK	SERVICE	CFM	MAX HP	HEATING CAP. (BTU/H)	ELECTRICAL VOLTAGE	MCA	MOCP	UNIT WT (LBS)	BASIS OF DESIGN	REMARKS
EUH-A	GENERAL	175	1/20	5/3.3	208/230/1	1.9/3.7	1.5/15	25	SERIES 5100	① ②

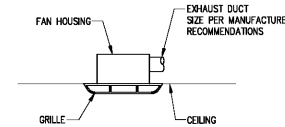
① DISCONNECT ② INTEGRAL THERMOSTAT

FANS										
MARK	SERVICE	TYPE	CFM	WATTS	ESP IN WC	DRIVE	SONES	UNIT WT (LBS)	BASIS OF DESIGN	REMARKS
F-A	FR	CABINET	70	45	0.1	DIRECT	1.9	8	SP-BB0	① ② ③
F-EQUIP	EQUIP	CABINET	200	45	0.1	DIRECT	1.9	16	SP-AZ00	① ② ④

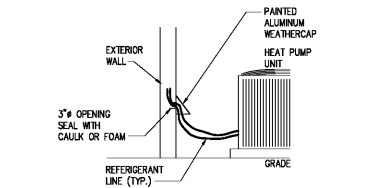
① BACKDRAFT DAMPER ② DISCONNECT SWITCH ③ CONTROLLED W/LIGHTS ④ CONTROLLED BY THERMOSTAT

AIR HANDLING UNITS												HEAT PUMP UNITS									
MARK	SERVICE	TONS	CFM	OA CFM	COOLING CAPACITY		HEATING CAPACITY	MAX HP	ELECTRICAL			UNIT WT (LBS)	BASIS OF DESIGN	REMARKS	MARK	ELECTRICAL VOLTAGE	SEER	UNIT WT (LBS)	BASIS OF DESIGN		
					TOTAL MBH	SENS. MBH			MCA	MOCP	VOLTAGE									GOODMAN	GOODMAN
AHU-P1	GENERAL	2.0	800	①	22.8	15.7	5 KW	1/3	25/28	30/30	208/230/1	140	ARF-303016B	① ②	HPU-P1	14.6	25	208/230/1	14	143	GS214-024

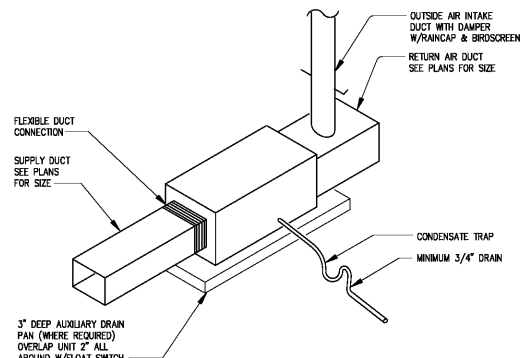
① DISCONNECT ② SMOKE DETECTOR ③ SEE CALCULATIONS



EXHAUST FAN DETAIL  
P-M.1 NOT TO SCALE



REFRIGERANT LINE ENTRY DETAIL  
P-M.1 NOT TO SCALE



AIR HANDLER DETAIL  
P-M.1 NOT TO SCALE

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