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ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

NEW
RESIDENTIAL
COMMUNITY
HOME

STARC WEST
1705 VIOLA ST
MANDEVILLE, LA

MECHANICAL
PLAN

REV:

SCALE: AS NOTED

JOB#: 2081

DATE: 04-08-2011

SHEET 12

M-1

OF 17

LEGEND

- INDICATES NEW CEILING DIFFUSER - CFM AS NOTED - STANDARD 6x12 UNLESS OTHERWISE NOTED. SIZE INDICATES NECK SIZE
- INDICATES NEW RETURN AIR CEILING TRANSFER GRILLE OF SIZE INDICATED. TRANSFER DUCT TO BE FLEX OR RECTANGULAR AS INDICATED.
- EXHAUST FAN
- AC UNIT
- VAV TERMINAL "JOHNSON CONTROLS" DIGITAL USER INTERFACE
- SMOKE DETECTOR IN RETURN DUCT
- 125° FIRESTAT IN SUPPLY DUCT
- INDICATES NEW SHEET METAL DUCTWORK FOR SUPPLY AIR, SIZES INDICATED ARE SHEET METAL DIMENSIONS. REFER TO SPECIFICATIONS FOR TYPE OF INSULATION.
- INDICATES NEW SHEET METAL DUCTWORK FOR RETURN AIR, SIZES INDICATED ARE SHEET METAL DIMENSIONS. REFER TO SPECIFICATIONS FOR TYPE OF INSULATION.
- ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN R-3.5 PROVIDE MAN. DAMPER AT DIFFUSER CONNECTIONS, SIZE AS INDICATED

ALL DUCTWORK & HVAC COMPONENTS ARE DRAWN DIAGRAMMATICALLY

A/C UNIT SCHEDULE							
NO.	TOTAL BTU	ELECTRICAL			MANUFACTURER (OR EQUAL)	COMMENTS	
		VOLTAGE	MCA	MOCPP			
1	72,000 6 TON	208V, 3Ø	30.6A	35A	CARRIER		
2	72,000 6 TON	208V, 3Ø	30.6A	35A	CARRIER		

AIR HANDLING UNIT SCHEDULE									
NO.	SIZE	CFM	O.A.	HEAT ELEC.	ELECTRICAL			MANUFACTURER (OR EQUAL)	COMMENTS
					VOLTAGE	MCA	MOCPP		
1	6 TON	2,400	160	17 KW	208V, 3Ø	59A	60A	CARRIER	ARZ SERIES AHU WITH ELEC. HEAT
2	6 TON	2,400	180	17 KW	208V, 3Ø	59A	60A	CARRIER	

NOTES:

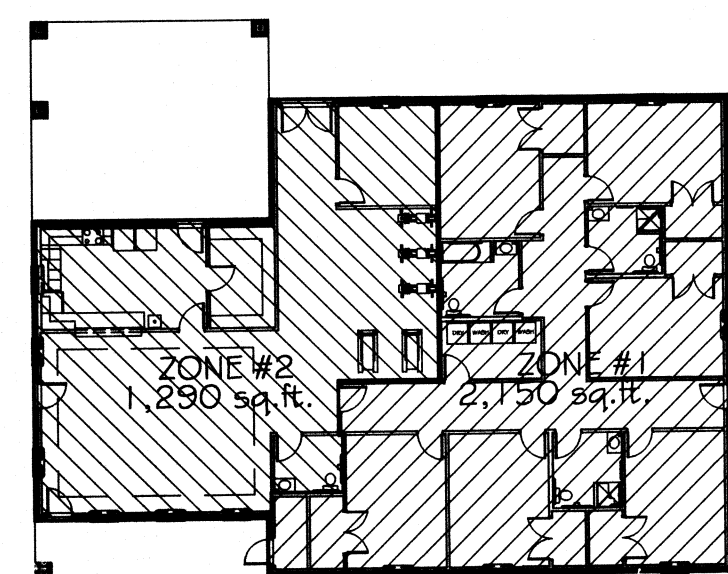
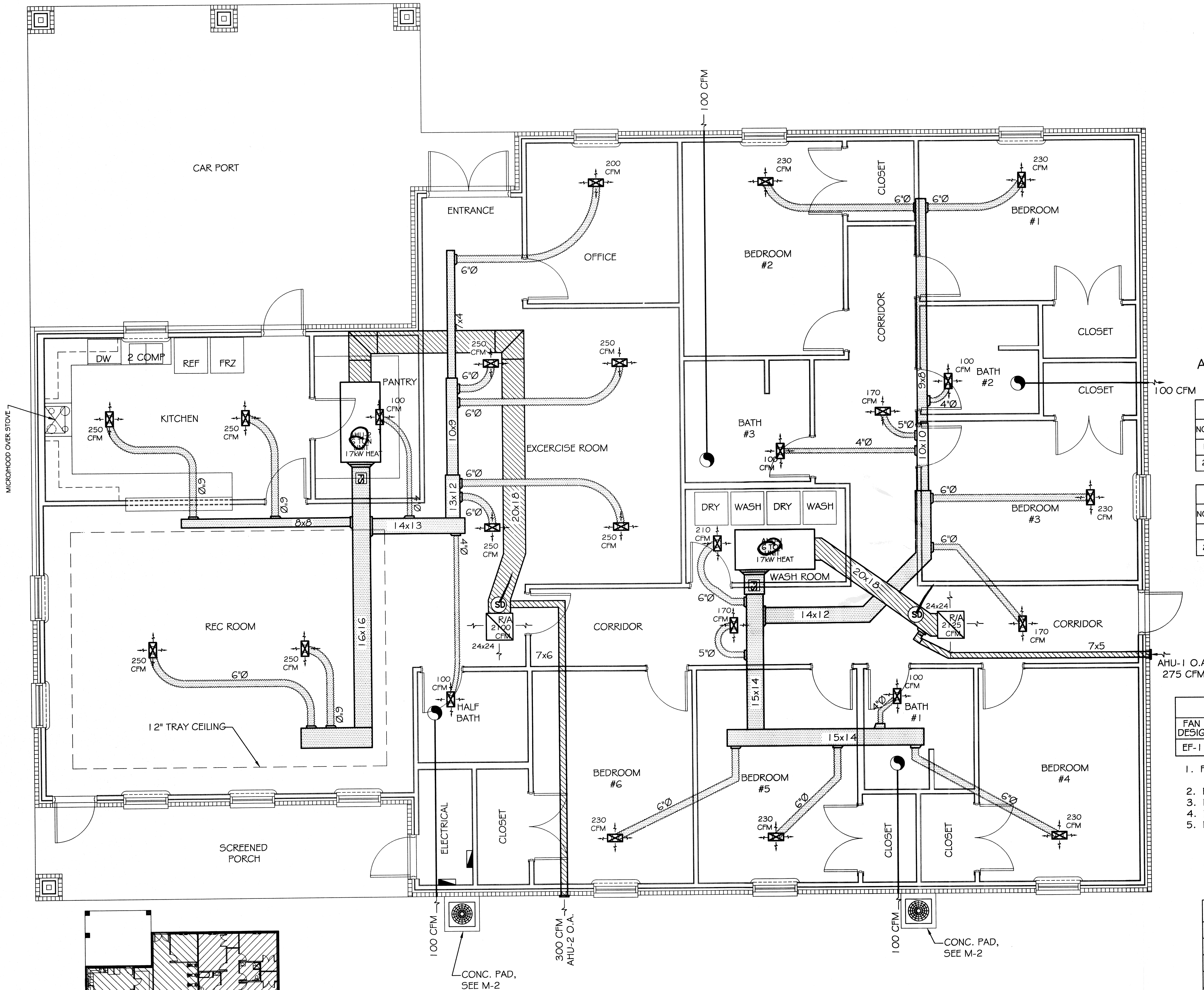
1. ALL AHU UNIT SHALL BE EQUIPPED WITH A PRE-HEATER COIL ON OUTSIDE AIR INTAKE DUCT.
2. PROVIDE STAINLESS STEEL SAFETY PAN FOR ALL AIR HANDLING UNITS INSTALLED.
3. REFRIGERANT PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
4. AIR UNIT AND ELECTRIC HEATER SECTION SHALL INCORPORATE SINGLE POINT ELECTRICAL CONNECTION.
5. SYSTEM SHALL HAVE 2 REFRIGERANT CIRCUITS.

EXHAUST FAN SCHEDULE								
FAN DESIG.	TYPE	BALANCE CFM	SELECTION CFM	S.P. IN INCHES	RPM	MOTOR DATA HP VOLTS PH.	COOK MODEL NO.	NOTES
EF-1	CEILING MOUNTED	340	425	0.375	1075	1/3 120 1	GC640	1,2,3,4,5

1. FAN SHALL BE SELECTED BASED ON SELECTION CFM AND STATIC PRESSURE LISTED. FAN SHALL BE BALANCED IN FIELD TO BALANCE CFM INDICATED.
2. PROVIDE MANUAL STARTER MOUNTED ON WALL - LOCATION AS DIRECTED BY ARCHITECT.
3. PROVIDE SOLID STATE SPEED SWITCH MOUNTED ON FAN.
4. PROVIDE BACK DRAFT DAMPER AND DISCONNECT SWITCH.
5. PROVIDE ANODIZED ALUMINUM BRICK VENT WITH FAN SIZED PER MANUFACTURERS GUIDELINES OR AS INDICATED ON PLANS.

AIR BALANCE SCHEDULE			
	AHU-1	AHU-2	EF-1
OUTSIDE AIR FLOW (CFM)	275	300	
RETURN AIR FLOW (CFM)	2125	2100	
SUPPLY AIR FLOW (CFM)	2400	2400	
EXHAUST AIR FLOW (CFM)			100
BUILDING PRESSURE (CFM)	+275	+300	-100
QUANTITIES	1	1	4
TOTAL PRESSURIZATIONS	+275	+300	-400

REMARKS:
OUTSIDE AIRFLOW FOR AHU 1 AND 2 IS MORE THAN REQUIRED BY CODE. ADDITIONAL AIR IS REQUIRED FOR MAINTAINING POSITIVE PRESSURE INSIDE THE BUILDING ENVELOPE.
RESULTING BUILDING PRESSURIZATION (CFM) = + 175



MECHANICAL ZONE KEY PLAN
N.T.S.

MECHANICAL PLAN
SCALE: 1/4" = 1'

Robert Wiltse