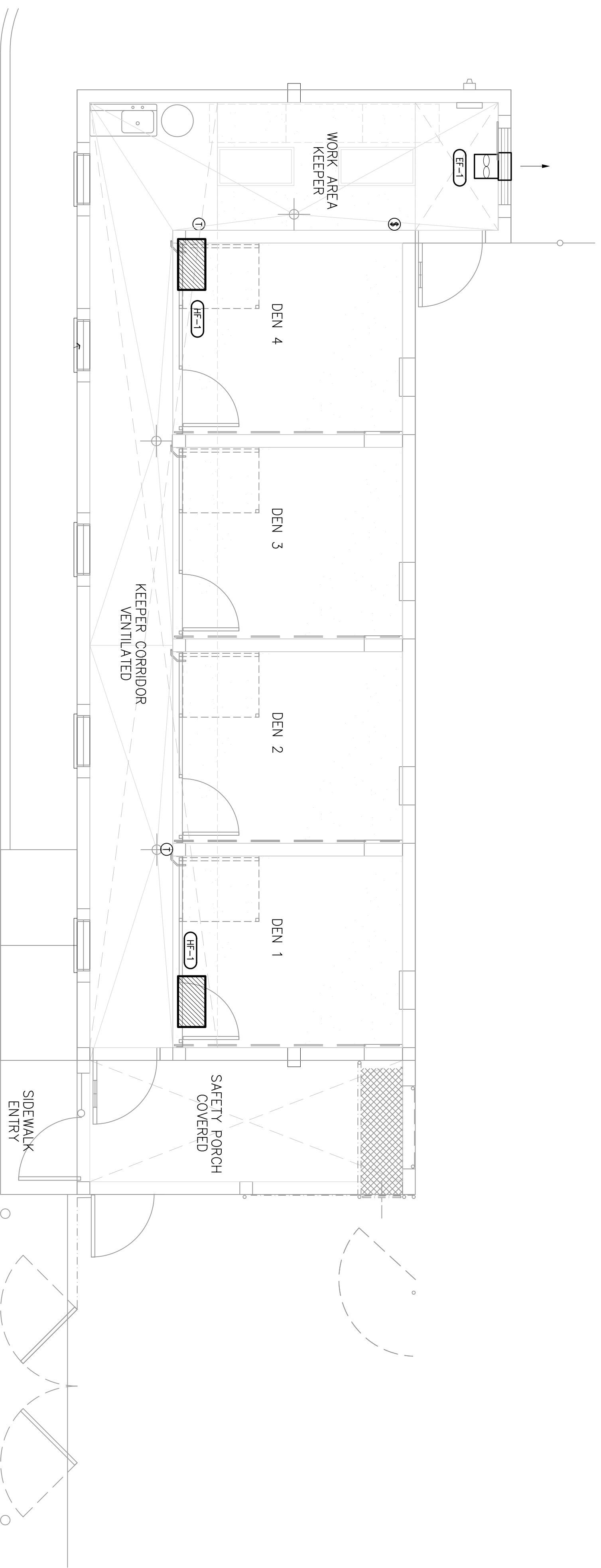
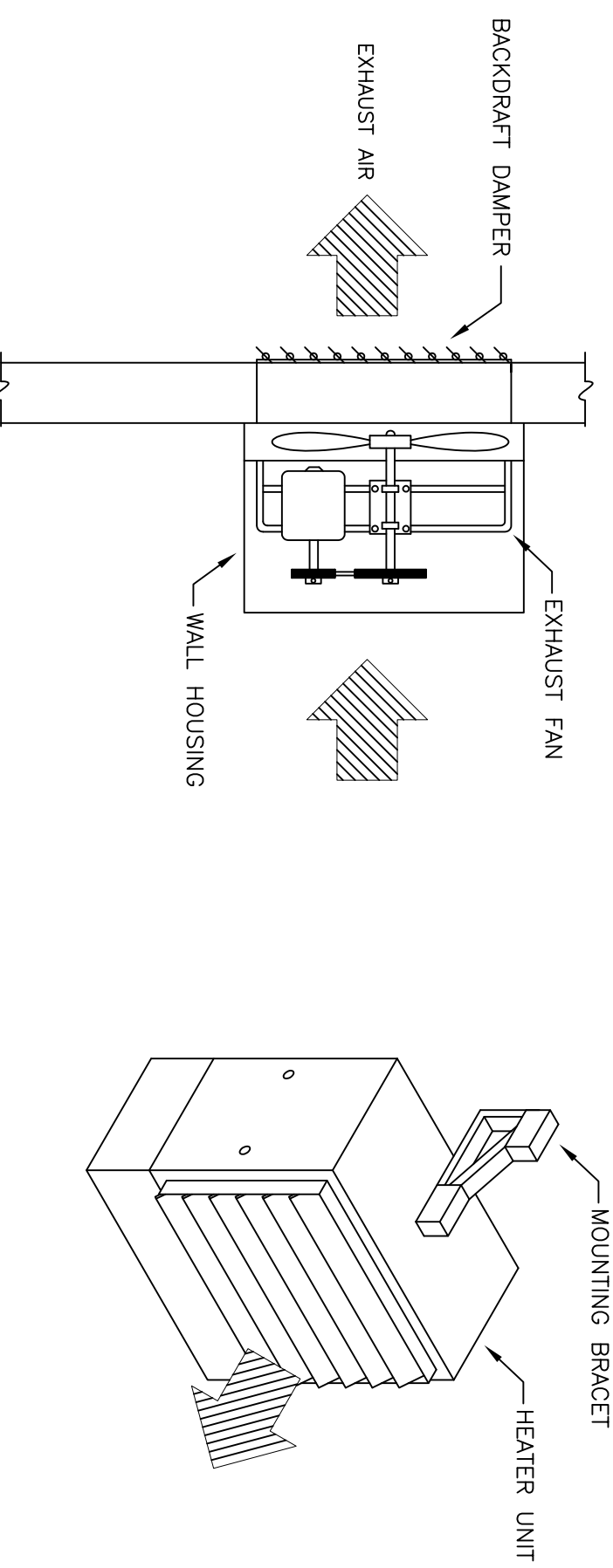


HEATER								
MARK	MFG'R	MODEL	KW	BTU	ELECTRICAL DATA AMP VOLTAGE	CFM	WEIGHT LBS	REMARKS
HE-1	MARVEL	H1HU03003	3.3	11200	13.8 240/1	400	36	①②③
① PROVIDE WALL MOUNT THERMOSTAT				③ DISCONNECT BY DIV. 16				
② PROVIDE MOUNTING HARDWARE								

FANS									
MARK	MFG'R	MODEL	CFM	EXT. S.P.	HP	VOLT	SONES	WEIGHT LBS	REMARKS
EF-1	GREENHECK	SE1-8-440	175	0.15	1/50	115/1	3.3	9	①②③
① PROVIDE WALL SWITCH				③ DISCONNECT BY DIV. 16					
② BACKDRAFT DAMPER				④ PROVIDE WALL HOUSING					



### MECHANICAL NOTES

GENERAL: ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD BUILDING CODES AND ALL APPLICABLE ORDINANCES. INSTALLATION SHALL COMPLY WITH THE STANDARDS SET BY NFPA, ASHRAE, SMACNA, NEC AND U.L. THE CONTRACTOR SHALL VISIT THE SITE, AND EXAMINE THE DRAWINGS AND SPECIFICATIONS BEFORE SUBMITTING A PROPOSAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXTREME ACCURACY IS NOT GUARANTEED. CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION SHOWN AS EXISTING. THE DRAWINGS ARE PARAMETRIC, INTENDED TO SHOW GENERAL SCHEDULE AND LOCATION OF WORK. VARIOUS COMPONENTS, EQUIPMENT AND DEVICES. CONTRACTOR IS RESPONSIBLE FOR PREPARING FABRICATION SHOP DRAWINGS. THE SYSTEMS, EQUIPMENT, DEVICES AND ACCESSORIES SHALL BE INSTALLED, FINISHED, TESTED AND ADJUSTED FOR CONTINUOUS AND PROPER OPERATION. COORDINATION BETWEEN THE TRADES IS CRITICAL FOR THE INSTALLATION OF THE SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK FITTING IN PLACE AND SHALL COORDINATE WITH OTHER TRADES TO AVOID INTERFERENCE WITH THEIR WORK. IF WORK IS REQUIRED IN A MANNER TO MAKE IT IMPOSSIBLE TO PRODUCE FIRST CLASS WORK, OR SHOULD DISCREPANCIES APPEAR AMONG THE CONTRACT DOCUMENTS, OR BETWEEN THE CONTRACT DOCUMENTS AND THE MANUFACTURER'S ACTUAL CONDITIONS, AND CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REQUEST INTERPRETATION BEFORE PROCEEDING WITH WORK. CONTRACTOR SHALL FURNISH AND INSTALL ALL MINOR ITEMS NOT SHOWN ON THE DRAWINGS. ACCESS SHALL BE PROVIDED TO COMPLETE THE INSTALLATION WHETHER OR NOT SPECIFIED IN THE DOCUMENTS. OPERATING AND MAINTENANCE DATA: SUBMIT THREE COPIES OF MANUFACTURER'S OPERATING AND MAINTENANCE INSTRUCTIONS AND SPARE PARTS LIST FOR EACH PIECE OF EQUIPMENT.

WARRANTY: THE ONE-YEAR GUARANTEE PERIOD SHALL NOT START UNTIL THE PROJECT IS COMPLETED AND THE CONTRACTOR HAS RECEIVED THE FINAL PAYMENT AND ALL WORK SHALL BE FULLY GUARANTEED. PARTS AND LABOR, FOR ONE YEAR FROM THE DATE OF THE CERTIFICATE OF COMPLETION, ARE MADE DURING THIS PERIOD. BEFORE THE DATE OF COMPLETION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO THE BUILDING, AND ITS CONTENTS OR OTHER EQUIPMENT, CAUSED BY DEFECTS OR IMPROPER INSTALLATION OF EQUIPMENT OR MATERIAL INSTALLED. ALL HVAC UNITS SHALL HAVE A FIVE (5) YEAR WARRANTY ON COMPRESSORS. SHOP DRAWINGS: THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH PROCEDURES OUTLINED IN DIVISION 1. RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE SUBMITTALS SHALL NOT BE RELEASED BY THE ARCHITECT'S OR ENGINEER'S REVIEW. ENGINEER'S REVIEW SHALL BE LIMITED TO CHECKING FOR CONFLICTS, BUT WILL INDICATE ONLY THAT A GENERAL METHOD OF CONSTRUCTION AND DETAILING IS SATISFACTORY. AS-BUILT DRAWINGS: DURING THE PROGRESS OF THE WORK, MAINTAIN AN ACCURATE RECORD SHALL SHOW CHANGES IN MATERIALS, TYPES, SIZES, AND DIMENSIONS. AS-BUILTS SHALL BE GIVEN TO OWNER'S CONSTRUCTION MANAGER AT COMPLETION OF JOB. SUBSTITUTIONS: EQUIPMENT AND MATERIALS SPECIFIED SHALL BE REPLACED WITH EQUIPMENT AND MATERIALS OF EQUAL OR BETTER QUALITY AND CAPACITY TO PERFORM FUNCTION SERVED. APPROVAL OF SUCH SUBSTITUTIONS WILL BE BASED ON QUALITY AND AVAILABILITY OF PARTS AND SERVICE. QUALITY OF EQUIPMENT, MANUFACTURER WARRANTY AND HISTORY OF SERVICE, ETC. THE ENGINEER SHALL REVIEW ALL REQUESTS FOR SUBSTITUTIONS. THE ENGINEER SHALL REVIEW ALL REQUESTS TO REFLECT ALL PROPOSED SUBSTITUTIONS. IF A SUBSTITUTED PRODUCT OR EQUIPMENT IS SELECTED, PROVIDE THE SPECIFIED PRODUCT OR EQUIPMENT.

PERMITS: CONTRACTOR SHALL OBTAIN AND PAID FOR ALL PERMITS, LICENSES AND INSPECTIONS AS REQUIRED. ACCESS: CONTRACTOR SHALL ENSURE THAT ACCESS IS PROVIDED FOR ALL ITEMS REQUIRING ACCESS FOR ADJUSTING OR MAINTENANCE. PROVIDE ACCESS PANELS AS NECESSARY WITH NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR ALL EQUIPMENT AND ENSURE THAT MINIMUM CLEARANCES ARE PROVIDED. FAN FORGED HEATER: HEATER SHALL UL-LISTED HAVE THE CAPACITY ACCESSORIES AND ELECTRICAL CHARACTERISTICS AS SHOWN ON THE DRAWINGS. THE HEATER SHALL BE PROTECTED AND PERMANENTLY LUBRICATED. UNITS SHALL BE CONTROLLED BY WALL SWITCH. EXHAUST FANS: DIRECT DRIVE AXIAL TYPE SIDEWALL EXHAUST CHARACTERISTICS AS INDICATED ON DRAWINGS. EXHAUST UNITS SHALL BE UL-LISTED AND CONSTRUCTED OF ALUMINUM. PROVIDE WALL HOUSING AND DAMPER. PROVIDE WALL SWITCH. CONTROLS: WALL THERMOSTATS SHALL BE INSTALLED AT AN ELEVATION OF 54" ABOVE FINISHED FLOOR TO THE TOP OF THE UNIT. THE THERMOSTAT SHALL BE INSTALLED IN THE COORDINATION WITH OTHER TRADES FOR A NEAT APPEARANCE. FINAL LOCATION OF THERMOSTAT SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT OR HIS REPRESENTATIVE IN THE FIELD. TEMPERATURE CONTROLS SHALL BE COMPLETE WITH ALL COMPONENTS REQUIRED TO ACCOMPLISH THE CONTROL SEQUENCE SPECIFIED. MECHANICAL CONTRACTOR SHALL FURNISH, INSTALL AND WIRE ALL TEMPERATURE AND CONTROL INTERLOCKS.

### ABBREVIATIONS

BRITISH THERMAL UNITS	BTU
CONDENSATE DRAIN	CD
CUBIC FEET PER MINUTE	CFM
DEGREE FAHRENHEIT	°F
DOWN	DN
DRY BULB TEMPERATURE	db
ENTERING AIR TEMPERATURE	EAT
EXHAUST AIR	EA
EXHAUST FAN	EF
EXTERNAL STATIC PRESSURE	ESP
HORSEPOWER	HP
LEAVING AIR TEMPERATURE	LAT
NOT TO SCALE	NTS
OUTSIDE AIR	OA
OUTSIDE AIR TEMPERATURE	OAT
RETURN AIR	RA
ROOFTOP UNIT	RTU
SUPPLY AIR	SA
SMOKE DETECTOR	SD
TOTAL STATIC PRESSURE	TSP
TYPICAL	TYP
WATER GAUGE	WG
WET BULB TEMPERATURE	wb
EQUIPMENT TAG	(AHU-1)
THERMISTAT	①

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PROJECT NAME :  
TENANT PATAS MONKEY EXHIBIT FOR:  
**LOWRY PARK ZOO**  
SLIGH AVENUE, TAMPA, FLORIDA

SHEET CONTENT :  
**MECHANICAL PLAN**

MATTHEW D. LEWIS, PE  
FL REG 56189

JOB NO. :  
09-104  
DRAWN / REVIEWED:  
JPS / MDL  
ISSUE DATE :  
12 APR 2010

REVISIONS  
1  
2  
3

**FOR REVIEW**  
**NOT FOR CONSTRUCTION**  
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