

A three inches = one foot  
B one and one-half inches = one foot  
C one inch = one foot  
D three-quarters inch = one foot  
E one-half inch = one foot  
F three-eighths inch = one foot  
G one-quarter inch = one foot  
H one eighth inch = one foot

### HVAC NOTES

1

VERIFY WITH THE ARCHITECTURAL DRAWINGS, SIZE, LOCATION, AND MOUNTING HEIGHT OF ALL LOUVERS. VERIFY COLOR AND FINISH WITH ARCHITECT.

2

ALL MOTOR STARTERS SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR.

3

THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE HVAC SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL REQUIREMENTS OF THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH. ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE HVAC SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS, AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE CONTRACT. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.

4

COORDINATE ALL ROOF AND SLAB PENETRATIONS WITH THE STRUCTURAL ENGINEER. TRANSITIONS RECTANGULAR DUCTWORK ON THE BOTTOM AND THE SIDES. MAINTAIN DUCTWORK LEVEL AND AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE.

5

CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EACH PIECE OF EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING.

6

DUCTWORK SHALL BE INSULATED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: RECTANGULAR SUPPLY: 1-1/2" EXTERNAL ROUND SUPPLY: 1-1/2" EXTERNAL FLEXIBLE SUPPLY: 1" PRE INSULATED RECTANGULAR RETURN: 1-1/2" EXTERNAL OSA/EXHAUST: 1-1/2" EXTERNAL

7

THE CONTRACTOR SHALL INSTALL THE CURB-MOUNTED EQUIPMENT IN SUCH A WAY THAT NO WATER LEAKAGE IS INTRODUCED INTO THE BUILDING.

8

MECHANICAL CONTRACTOR IS TO REVIEW THE ENTIRE SET OF PLANS FOR COORDINATION WITH OTHER TRADES. SHOP DRAWINGS WITH ALL TRADES COORDINATED WILL BE REQUIRED.

9

WARRANTIES SHALL BEGIN AT DATE OF SUBSTANTIAL COMPLETION. ALL COMPRESSORS SHALL INCLUDE MIN. OF FIVE YEAR WARRANTY. ONE YEAR WARRANTY FOR LABOR, PARTS, UNITS, ETC. IS REQUIRED FOR ALL EQUIPMENT.

10

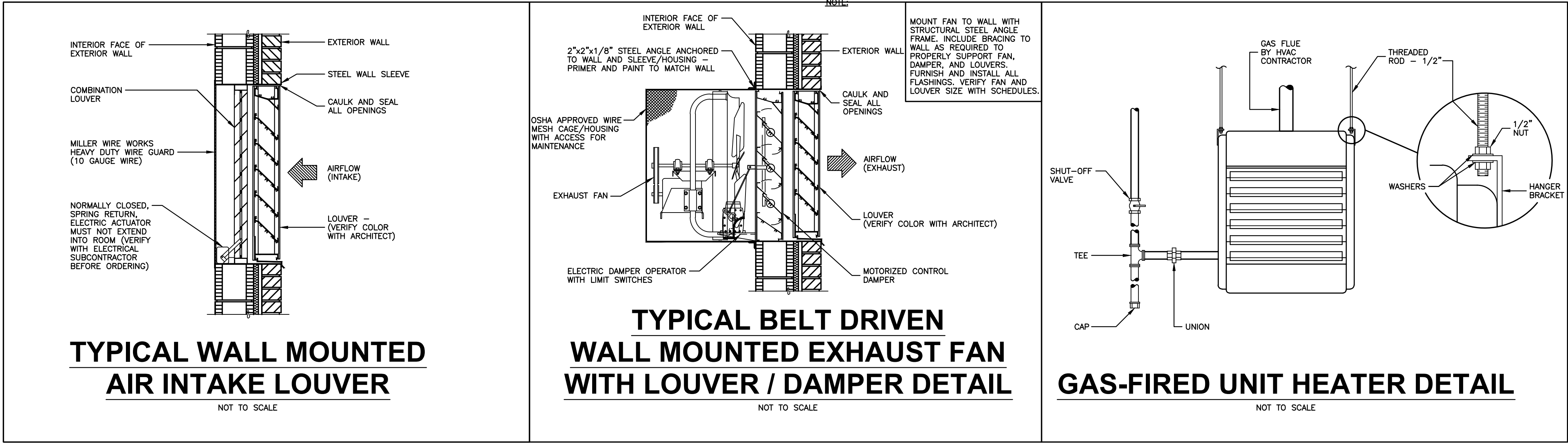
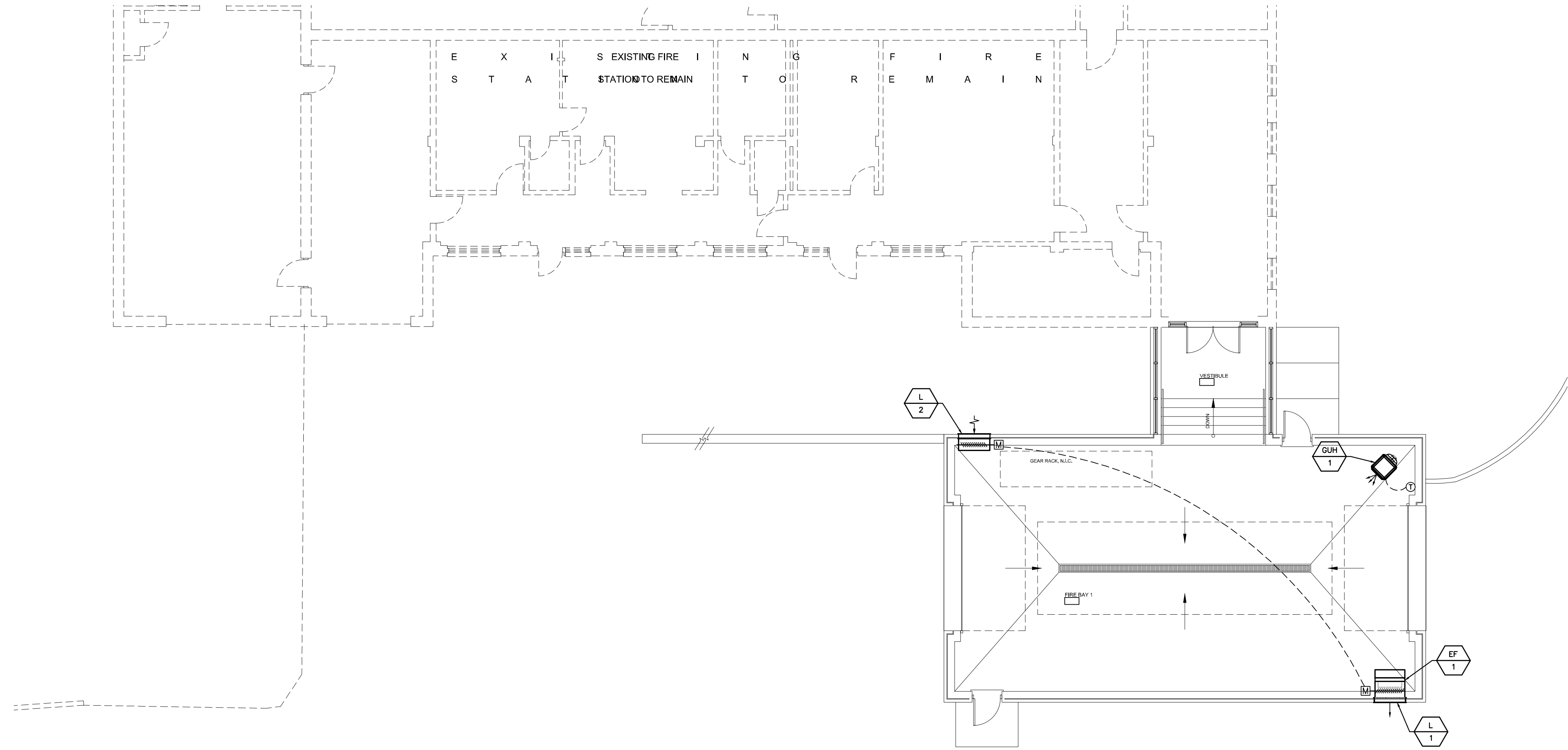
ALL THREE PHASE EQUIPMENT SHALL BE EQUIPPED WITH PHASE LOSS PROTECTION.

LOUVER SCHEDULE											
MARK NO.	MOUNTING	SIZE W X H	BLADE ANGLE	BLADE CENTERS	MIN. FREE AREA	MIN. FREE AREA SQ. FT.	MAX. PRESSURE DROP IN W.G.	CFM	MODEL NO. DATA		NOTES
									MANUFACTURER (OR APPROVED EQUAL)	MODEL NO.	
L-1	SIDE WALL	36"x36"	37.0'	3.58"	42%	3.83	0.15	4,000	UNITED ENERTECH	CFL-D-6	SEE BELOW
L-2	SIDE WALL	36"x48"	37.0'	3.58"	45%	4.50	0.10	4,000	UNITED ENERTECH	CFL-D-6	SEE BELOW
<div><div>1</div><div>LOUVER TO INCLUDE FLANGE FRAME. VERIFY FINAL COLOR AND FINISH WITH ARCHITECT. VERIFY QUANTITY WITH PLANS.</div></div> <div><div>2</div><div>LOUVER L-2 TO INCLUDE MOTORIZED DAMPER CONCEALED IN EXTENDED LOUVER BASE (SIZE SCHEDULED INCLUDES EXTENDED BASE).</div></div> <div><div>3</div><div>LOUVER L-2 TO INCLUDE MILLER WIREWORKS HEAVY DUTY WIRE GYM GUARD.</div></div> <div><div>4</div><div>LOUVER L-1 TO INCLUDE MOTORIZED DAMPER.</div></div>											
APPROVED EQUALS: GREENHECK AND RUSKIN.											

GAS-FIRED UNIT HEATER SCHEDULE											
PERFORMANCE								MOTOR DATA			
MARK NO.	TOTAL INPUT BTU/H.R.	TOTAL OUTPUT BTU/H.R.	CFM @ 70° F	FPM	AIR TEMP. RISE °F.	THROW	MAXIMUM MOUNTING HEIGHT	HP	AMPS @ 115V	RPM	UNIT MODEL NO.
GUH-1	260,000	241,800	4585	831	49	70'-0"	20'-0"	3/4 MHP	11.1	1125	PTC260
<div><div>1</div><div>UNIT TO INCLUDE SPARK IGNITION, LOW VOLTAGE THERMOSTAT CONTROLS, AND 4" EXHAUST FLUE.</div></div> <div><div>2</div><div>VERIFY FINAL MOUNTING HEIGHT AND LOCATION WITH ARCHITECT/ENGINEER.</div></div> <div><div>3</div><div>THERMOSTAT SHALL INCLUDE HEAVY DUTY WIRE GYM GUARD.</div></div> <div><div>4</div><div>UNIT SHALL INCLUDE FACTORY HORIZONTAL CONCENTRIC VENT KIT INCLUDING CONCENTRIC ADAPTER.</div></div> <div><div>5</div><div>UNIT SHALL INCLUDE ENERGY SAVER THERMOSTAT.</div></div> <div><div>6</div><div>4" COMBUSTION AIR INLET.</div></div> <div><div>7</div><div>4" VENT OUTLET.</div></div>											
APPROVED EQUALS: JANITROL AND REZNOR											

EXHAUST FAN SCHEDULE									
MARK NO.	MOUNTING	CFM	STATIC IN W.G.	SONES	WATTS/H.P.	ELECTRICAL	MANUFACTURER	MODEL NO.	WEIGHT (LBS.)
EF-1	WALL	4000	0.50	19.9	1.0 H.P.	208-3-60	LOREN COOK	30XMMH	340
<div><div>1</div><div>FAN TO BE SWITCHED WITH WALL MOUNTED SWITCH (HIGH/LOW/OFF)</div></div> <div><div>2</div><div>FAN TO INCLUDE WALL COLLAR, WIREGUARD-MOTOR SIDE, AND FACTORY DISCONNECT</div></div> <div><div>3</div><div>FAN TO BE TWO SPEED (1725/0860 RPM) TWO WINDING</div></div> <div><div>4</div><div>HIGH SPEED = 5500 CFM; LOW SPEED = 2740 CFM</div></div>									
APPROVED EQUALS: GREENHECK, AND PENN.									

HVAC LEGEND	
SYMBOL	DESCRIPTION
	LOW LEAKAGE MOTORIZED VOLUME DAMPER



HVAC DRAWING INDEX	
SHEET NO.	SHEET TITLE
M1.1	HVAC PLAN

**WHORTON ENGINEERING, INC.**  
HVAC - PLUMBING - PROCESS CONTROL  
*Randall Whorton*  
RANDALL WHORTON, P.E.  
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DATE

7-1-11

25 SUMMERALL GATE ROAD  
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REGISTERED PROFESSIONAL ENGINEER  
No. 14192  
ALABAMA  
R.D. WHORTON

WHORTON ENGINEERING PROJECT NO. 11132

Revisions

Date

ALABAMA REGISTERED PROFESSIONAL ENGINEER No. 15978 CHARLES CRAIG MILLS

**MCE**

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**CAVHCS**  
Central Alabama Veterans Health Care System

Approved:

Approved:

Approved:

Approved:

Approved:

Approved:

Approved:

Approved:

Drawing Title

HVAC PLAN

Safety Officer

Clinical Representative

Project Title

MODIFY FIRE BAY, B-15  
CENTRAL ALABAMA VETERANS  
HEALTH CARE SYSTEM  
TUSKEGEE, ALABAMA

Building Number

15

Checked

HWP

Drawn

DC

Location

East Campus, Tuskegee, AL

Date

7/01/11

Project No.

619-10-455

DRAWING NO.

M1.1

Dwg. 14 of 16

Veterans Administration

VA FORM 08-6231A, MAR 1984 1 2 3 4 5 6 7 8 9 U.S. GOVERNMENT PRINTING OFFICE: 1984-440-467