

**MECHANICAL GENERAL NOTES**

- A. REFER TO MH-100.1 & MH-100.2 SHEETS FOR THERMOSTAT LOCATIONS.
- B. REFER TO SPECIFICATIONS FOR PROPER HANGING REQUIREMENTS OF FAN COIL UNITS.
- C. ALL TRANSFER DUCTWORK SHALL HAVE 90° DUCT ELBOW FOR SOUND ATTENUATION. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.
- E. CONTRACTOR TO INSTALL ALL PIPING AND DUCTWORK AS HIGH AS POSSIBLE.
- F. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, SERVICING, MAINTENANCE AND CALIBRATION SHALL BE EASILY AND SAFELY ACCESSIBLE. SUCH ITEMS INCLUDE VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK ANY CONFLICTS BETWEEN THIS REQUIREMENT AND THE CONTRACT DRAWINGS SHALL BE REFERRED TO THE COR FOR RESOLUTION.
- G. PROVIDE ACCESS PANELS FOR ALL NEW AND EXISTING DAMPERS. CONTRACTOR TO COORDINATE EXACT LOCATIONS IN FIELD. CONTRACTOR TO COORDINATE DIFFUSER/REGISTER LOCATIONS WITH REFLECTIVE CEILING PLAN AND LIGHTING.

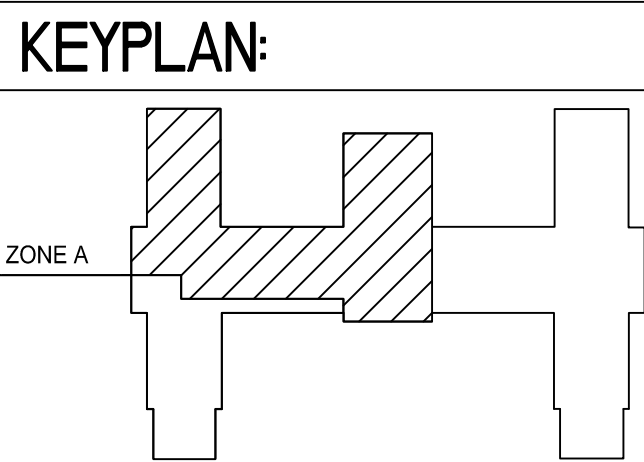
**MECHANICAL LEGEND**

- (E) EXISTING TO REMAIN
- FCU FAN COIL UNIT
- TBD TO BE DETERMINED. STILL IN PROGRESS
- NEW CONNECTION
- EX X EXHAUST RISER
- SR X SUPPLY RISER
- RR X RETURN RISER
- S-SUPPLY
- R-RETURN
- E-EXHAUST
- T-TRANSFER
- FCU-X FAN COIL UNIT TAG
- FD FIRE DAMPER
- XX DIFFUSER TYPE
- X"ØNK NECK SIZE
- X CFM CUBIC FEET PER MIN

**MECHANICAL KEY NOTES**

1. FURNISH AND INSTALL NEW FAN COIL UNIT.
2. FURNISH AND INSTALL NEW MECHANICAL ROOM EXHAUST FAN.
3. 2-POSITION N.C. THERMAL BREAK DAMPER ELECTRICALLY INTERLOCKED TO OPEN WITH "EF-4" OPERATION.
4. MOUNT UNIT ABOVE DOOR.
5. REFER TO DRAWING MH-100 FOR CONDENSING UNIT PIPE ROUTING.
6. REFER TO DEDUCT ALT #5 ON DRAWING G003.

**GROUND FLOOR MECHANICAL PLAN ZONE A**  
1/4"=1'-0"



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**Drawing Title:**  
GROUND FLOOR MECHANICAL PLAN ZONE A

Approved Project Director

<b>Project Title</b> COATESVILLE VAMC RENOVATE BUILDING 2 WEST		<b>Project Number</b> #542-16-114
<b>Location</b> COATESVILLE, PENNSYLVANIA		<b>Building Number</b> 2
<b>Date</b> 10-13-2017	<b>Checked</b> GS	<b>Drawn</b> JWK
<b>Drawing Number</b> MV-100.1		

**Office of Construction and Facilities Management**

Department of Veterans Affairs

<b>ISSUED FOR BID</b>	10-13-2017
<b>100% CONSTRUCTION DOCUMENTS</b>	09-14-2017
<b>95% DESIGN DEVELOPMENT SUBMISSION</b>	01-23-2017
<b>50% DESIGN DEVELOPMENT SUBMISSION</b>	12-08-2016
<b>SCHEMATIC DESIGN SUBMISSION</b>	10-14-2016
<b>Revisions</b>	Date

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DUCTLESS SPLIT-SYSTEM HEAT PUMP & AIR CONDITIONER SCHEDULE																		
MARK	LOCATION	MODEL #	SUPPLY FAN DATA		COOLING CAPACITY		HEATING CAPACITY		SPLIT SYSTEM OUTDOOR UNIT						REMARKS			
			TOTAL CFM		TOTAL COOLING (BTU/HR)	SEER	REVERSE CYCLE HEAT PUMP		MARK (OUTDOOR UNIT)	MODEL #	LOCATION	COMPRESSOR REFEGERANT TYPE	ELECTRICAL DATA					
			LO-MED-HI-SUPER HI	HEATING (BTU/HR)			MIN HSPF	MCA					MOCP	PHASE		VOLTS	FLA	
DSS-1	SUPPLY B11B	MS-A09WA	183-261-335-367		9500.0	13.0			CU-1	MU-A09WA	GROUND LEVEL	R410A	14	15	1	208	0.63	1, 2, 3, 4, 5
DSS-2	SUPPLY 115	MSZ-FE09NA-8	162-226-339-381		6000.0	26.0	3000.0	10.0	CU-2	MUZ-FE09NA-1	WALL MOUNT	R410A	12	15	1	208	0.56	1, 2, 3, 4

**REMARKS:**  
 1. BASE OF DESIGN: MITSUBISHI ELECTRIC OR APPROVED EQUAL.  
 2. PROVIDE MODEL CWMBI 4-PIECE (1 PAIR) CONDENSING UNIT WALL MOUNTING BRACKET  
 3. PROVIDE LOW AMBIENT KIT FOR YEAR ROUND COOLING WITH CRANKRASE HEATER AND WIND BAFFLES.  
 4. PROVIDE WIRELESS THERMOSTAT AND FUSED DISCONNECT.  
 5. COOLING ONLY

ELECTRIC BASEBOARD SCHEDULE									
TAG	LOCATION	TYPE	TOTAL HEATING CAPACITY		ELECTRICAL			NO. OF ELEMENTS	REMARKS
			WATTS	BTU/HR	VOLTS	PHASE	AMPS		
BB-1	VESTIBULE B07	ELECTRIC	1,500	5,119	208	1	7.2	2	1, 2, 3

**REMARKS:**  
 1. BASE OF DESIGN: QMARK MODEL NUMBER CPH-07A OR APPROVED EQUAL.  
 2. PROVIDE 120 V DUPLEX RECEPTICLE.  
 3. PROVIDE SINGLE POLE UNIT MOUNTED THERMOSTAT AND DISCONNECT.

ELECTRIC UNIT SCHEDULE									
TAG	LOCATION	TYPE	TOTAL HEATING CAPACITY		ELECTRICAL			REMARKS	
			WATTS	BTU/HR	VOLTS	PHASE	AMPS		
EUH-01	VESTIBULE 100	ELECTRIC	1,500	5,120	120	1	12.5	1, 2, 3	

**REMARKS:**  
 1. BASE OF DESIGN: QMARK MODEL NUMBER AWH3150F OR APPROVED EQUAL.  
 2. PROVIDE MOUNTING FRAME FOR SEMI-RECESSED INSTALLATION

EXHAUST FAN SCHEDULE														
MARK	LOCATION	ROOM SERVED	TYPE	CFM	ESP (IN WG)	SP (IN WC)	FAN (RPM)	RADIATED SONES	DRIVE	HP	VOLT/PH/Hz	REMARKS		
EF-1	ATTIC	123A TOILET	INLINE CENTRIFUGAL	100	0.50	NA	1284	8.5	DIRECT	1/4	115/1/60	1, 2, 6, 7		
EF-2	ATTIC	110A TOILET	INLINE CENTRIFUGAL	170	0.50	NA	1459	10.3	DIRECT	1/4	115/1/60	1, 3, 6, 7		
EF-3	ATTIC	131A AND B36 TOILET	INLINE CENTRIFUGAL	235	0.50	NA	1631	13.9	DIRECT	1/4	115/1/60	1, 4, 6, 7		
EF-4	MECH B34A	MECH B34A	SIDEWALL DIRECT DRIVE	800	0.5	NA	1550	9.6	DIRECT	1/8	115/1/60	5, 6, 7		
EF-5	ATTIC	AHU-1 & 2-AC-A	INLINE CENTRIFUGAL	6585	NA	2.0	1161	21.0	BELT	5	208/3/60	8, 9, 10, 11		

**REMARKS:**  
 1. FURNISH COMPLETE WITH BACKDRAFT DAMPER, FAN MOUNTING BRACKETS.  
 2. GREENHECK MODEL SQ-97-VG OR VA APPROVED EQUAL.  
 3. GREENHECK MODEL SQ-97-VG OR VA APPROVED EQUAL.  
 4. GREENHECK MODEL SQ-97-VG OR VA APPROVED EQUAL.  
 5. GREENHECK MODEL SE1-12-432-D OR VA APPROVED EQUAL.  
 6. PROVIDE FACTORY MOUNTED DISCONNECT.  
 7. PROVIDE SPEED CONTROLLER.  
 8. TWIN CITY 245HP/BSI WITH YASKAWA VFD MODEL Z1000  
 9. PROVIDE VFD WITH INTEGRAL BY-PASS. ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECT.  
 10. PROVIDE BACKDRAFT DAMPER, VIBRATION ISOLATORS, VARIABLE SPEED V-BELT DRIVE 1.5 SF, DISCONNECT SWITCH - UNFUSED (NEMA 1)  
 11. VFD TO BE INSTALLED IN MOTOR CONTROL PANEL. REFER TO ELECTRICAL DRAWING E-501 FOR LOCATION.

LOUVER SCHEDULE											
SYMBOL	SERVICE	CFM	SIZE WxH (IN.)	FREE AREA (FT²)	FREE AREA VEL. FPM	S.P. IN W.C.	FINISH	CONSTRUCTION		REMARKS	
								FRAME	BLADES		
L-1	AHU-1 INTAKE	8,000	90x72	21.75	370	0.02	MILL	EXTRUDED ALUMINUM		1, 3, 4, 5, 6	
L-2	MECHANICAL ROOM B34A	800	18x18	0.92	870	0.1	MILL	EXTRUDED ALUMINUM		2, 3, 4, 5, 6	
L-3	AHU-1 EXHUAUST	4,345	48x36	6.13	710	0.08	MILL	EXTRUDED ALUMINUM		3, 4, 5, 7	

**REMARKS:**  
 1. BASIS OF DESIGN: RUSKIN MODEL ELC6375DAX OR APPROVED EQUAL.  
 2. BASIS OF DESIGN: RUSKIN MODEL ELM6375DX OR APPROVED EQUAL.  
 3. 5/8" x 0.051 EXPANDED, FLATTENED ALUMINUM BIRD SCREEN  
 4. EXTRUDED VINYL BLADE SEALS ON REAR ADJUSTABLE BLADES AND FLEXIBLE, COMPRESSIBLE ALUMINUM JAMB SEALS.  
 5. CONCEALED IN FRAME LINKAGE  
 6. ELECTRIC ACTUATOR  
 7. BASIS OF DESIGN: RUSKIN MODEL ELF837 OR APPROVED EQUAL.


DIFFUSER, REGISTER, AND GRILLE SCHEDULE							
TAG	MANUFACTURER	MODEL	TYPE	NOMINAL FACE SIZE	MATERIAL	MAX N.C.	REMARKS
SA	TITUS	OMNI	SQUARE PANEL FACE	24"x24"	STEEL	30	1, 2, 3
SB	TITUS	FL-15	FLOWBAR	SEE PLAN	ALUMINUM	30	1, 2, 3, 5
SC	TITUS	250	ADJUSTABLE CEILING DIFFUSER	24"x24"	STEEL	30	1, 2, 3
SD	TITUS	300F	35 DEG. DEFLECTION REGISTER	6"x6"	STEEL	30	1, 3
SE	TITUS	S301FL	SPRAL DUCT MOUNTED SINGLE DEFLECTION GRILLE, 3/4" SPACING RADIUS 'S'	18"x3"	ALUMINUM	30	1, 2, 6
RB	TITUS	50FF	EGG CRATE	24"x24"	ALUMINUM	30	1, 2, 3, 4
RC	TITUS	45F	SIGHT-PROOF EGG CRATE RETURN GRILLE	12"x12"	ALUMINUM	30	1, 2, 3
TC	TITUS	45F	SIGHT-PROOF EGG CRATE RETURN GRILLE	12"x12"	ALUMINUM	30	1, 2, 3
EC	TITUS	350F	35 DEG. DEFLECTION REGISTER	12"x12"	ALUMINUM	30	1, 2, 3

**REMARKS:**  
 1. OTHER ACCEPTABLE MANUFACTURERS: VA APPROVED EQUALS.  
 2. FINISH AS SELECTED BY ARCHITECT.  
 3. 1/2"x1/2"x1/2" GRID AND FILTER FRAME.  
 4. 1" FILTER/BORDER TYPE-3  
 5. PROVIDE PLENUM & INLET DAMPER  
 6. PROVIDE ASD (AIR SCOOP DAMPER)

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50% DESIGN DEVELOPMENT SUBMISSION	12-08-2016
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Revisions:	Date

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Drawing Title  
**MECHANICAL SCHEDULES**

Approved: Project Director

Drawing Number  
**M-702**

Date  
 10-13-2017

Checked  
 GS

Drawn  
 JWK

Project Title  
**COATESVILLE VAMC RENOVATE BUILDING 2 WEST**

Project Number  
 #542-16-114

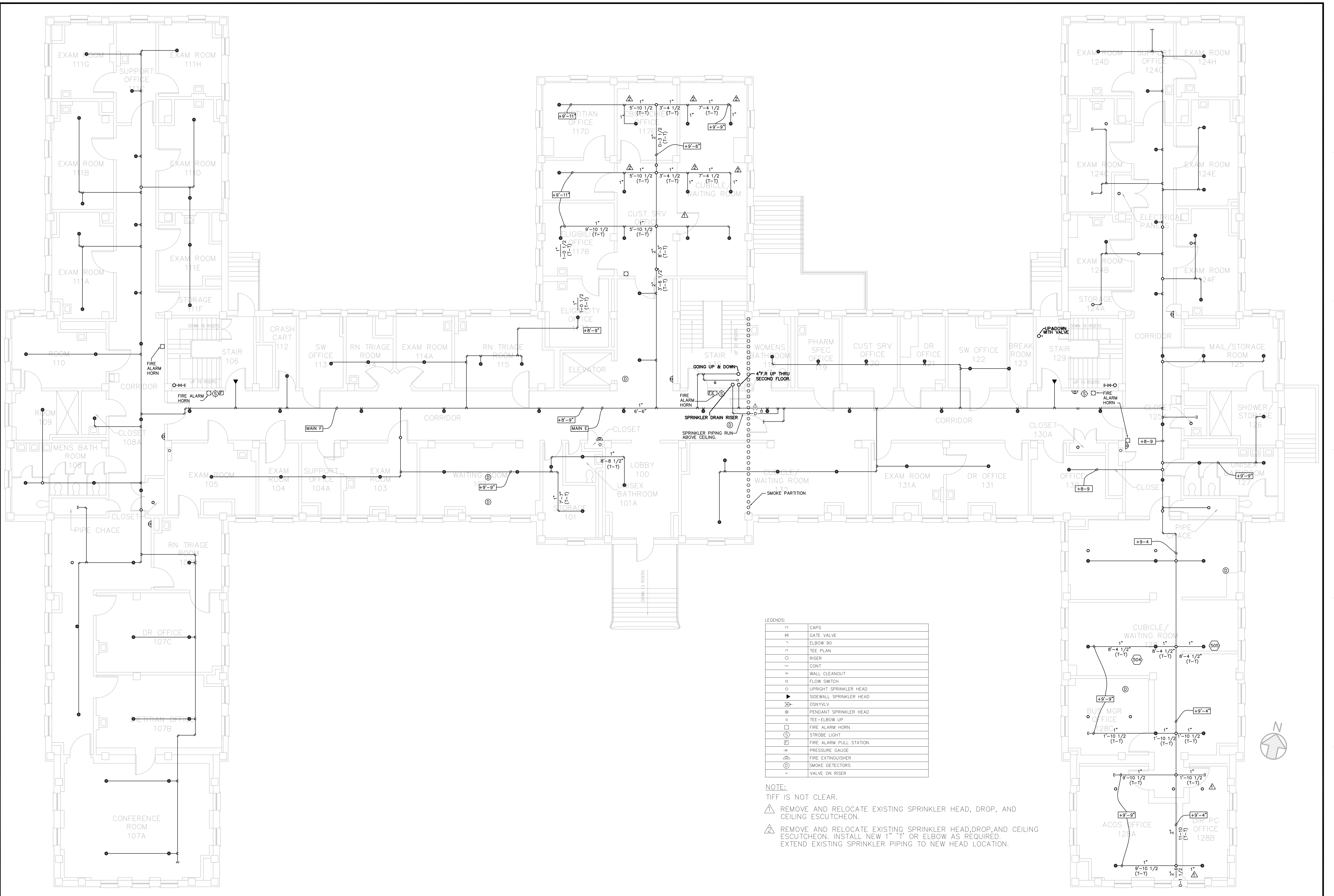
Building Number  
 2

Location  
 COATESVILLE, PENNSYLVANIA

Office of Construction and Facilities Management  
 Department of Veterans Affairs



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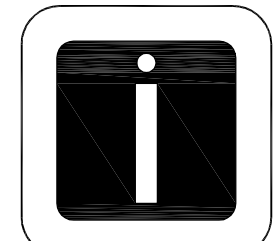
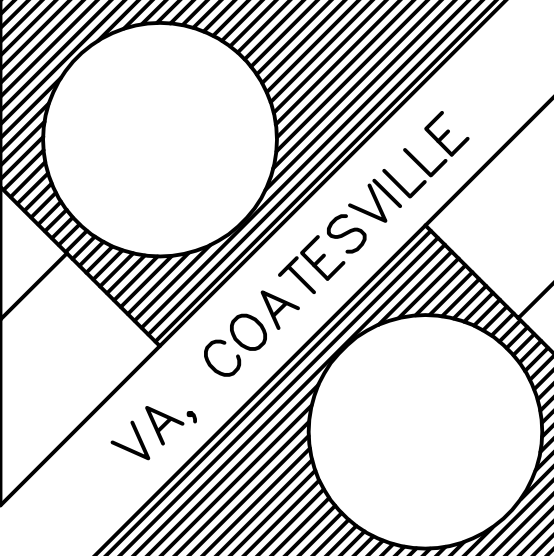


LEGENDS:

⊠	CAPS
⊞	GATE VALVE
⌒	ELBOW 90
⌒	TEE PLAN
⌒	RISER
⌒	CONT
⌒	WALL CLEANOUT
⊞	FLOW SWITCH
⊞	UPRIGHT SPRINKLER HEAD
⊞	SIDEWALL SPRINKLER HEAD
⊞	OSNYLV
⊞	PENDANT SPRINKLER HEAD
⊞	TEE-ELBOW UP
⊞	FIRE ALARM HORN
⊞	STROBE LIGHT
⊞	FIRE ALARM PULL STATION
⊞	PRESSURE GAUGE
⊞	FIRE EXTINGUISHER
⊞	SMOKE DETECTORS
⊞	VALVE ON RISER

NOTE:  
 TIFF IS NOT CLEAR.  
 REMOVE AND RELOCATE EXISTING SPRINKLER HEAD, DROP, AND CEILING ESCUTCHEON.  
 REMOVE AND RELOCATE EXISTING SPRINKLER HEAD, DROP, AND CEILING ESCUTCHEON. INSTALL NEW 1" T OR ELBOW AS REQUIRED. EXTEND EXISTING SPRINKLER PIPING TO NEW HEAD LOCATION.



		 <b>Indus Systems, Inc.</b> 2352, Main Street, Concord MA 01742 Tel: 978-461-0555 www.indus-systems.com		Drawing Title <b>FIRST FLOOR PLAN                  FIRE PROTECTION</b>	Project Title <b>AS-BUILT Drawings</b>	Date <b>10-04-2007</b>
Approved: _____ Approved: _____	Building Number <b>02</b>	Checked _____	Drawn _____	Location <b>VA COATESVILLE                  PA.</b>	Project No. _____	Drawing No. _____
Revisions _____	Date _____	Professional Seal _____	 VA Department of Veterans Affairs			