

LAB EXHAUST FAN SEQUENCE OF OPERATION:

THE LABORATORY EXHAUST FAN SHALL BE STARTED AND STOPPED BY THE BAS SYSTEM. THE EXHAUST FAN OPERATING STATUS SHALL BE MONITORED. THE BAS SYSTEM SHALL MEASURE THE EXHAUST STATIC PRESSURE. THE EXHAUST FAN BYPASS DAMPERS MOUNTED ON THE FAN PLENUM BASE SHALL BE MODULATED TO MAINTAIN THE EXHAUST STATIC PRESSURE SET POINT.

EXHAUST FAN SHALL BE INTERLOCKED WITH ACA-AHU-8 SUCH THAT WHENEVER ACA-AHU-8 IS OFF, THE EXHAUST FAN SHALL BE OFF. WHENEVER ACA-AHU-8 IS ON, THE EXHAUST FAN SHALL BE ENERGIZED AND RUN CONTINUOUSLY. THE HARDWARE INTERLOCKED EXHAUST FAN ISOLATION DAMPER SHALL OPEN AT THE SAME TIME THAT THE FAN MOTOR IS ENERGIZED. IF THE STATIC PRESSURE IN THE MAIN EXHAUST DUCT EXCEEDS THE 1.25 (ADJUSTABLE) INCHES WATER GAGE PRESSURE SETTING AND ALL FUME HOOD AND GENERAL EXHAUST DAMPER FLOW SENSORS ARE SATISFIED, THEN THE UNIT BYPASS DAMPERS SHALL OPEN TO MAINTAIN THE STATIC PRESSURE SET POINT. ON A DROP IN STATIC PRESSURE, THE BYPASS DAMPERS SHALL MODULATE CLOSED.

ON A FAILURE OF THE EXHAUST FAN TO OPERATE, AN ALARM SHALL BE SIGNALLED BY THE DDC SYSTEM.

UPON INITIATION OF SHUTDOWN SEQUENCE EXHAUST FAN SHALL RUN FOR 5 MINS BEFORE SHUTTING DOWN.

EXHAUST FAN SHALL BE PROGRAMMED TO SOFT START.

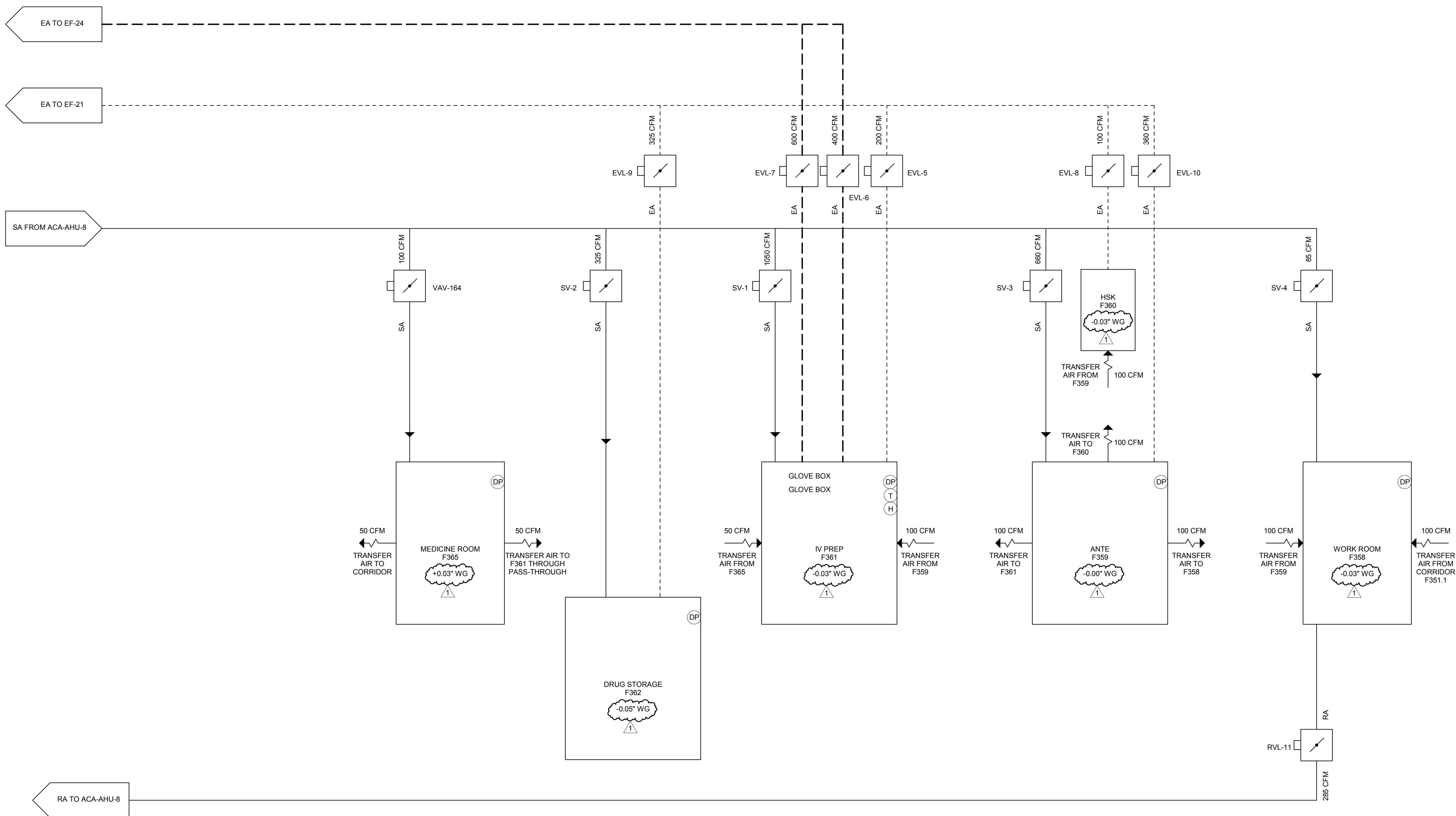
ALARM MONITORING:

AN ALARM WILL BE GENERATED AT THE BMS IF ANY OF THE FOLLOWING OCCUR:

1. LOW AIRFLOW ALARM
2. HIGH AIRFLOW ALARM
3. ABNORMAL ISOLATION DAMPER POSITION
4. HIGH CURRENT DRAW
5. ABNORMAL STATIC PRESSURE

1B LABORATORY STYLE EXHAUST FAN CONTROL SYSTEM SCHEMATIC

NTS





NOTES:

1. PROVIDE LOCAL INDICATING PRESSURE MONITOR FOR EACH DIFFERENTIAL PRESSURE SENSOR. LOCATE MONITOR ON THE CLEAN (POSITIVE) SIDE OF THE DOOR OR PASS THROUGH.
2. PROVIDE PRESSURE MONITORING WITH LOCAL DISPLAY AND ALARMING. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. SEE SPECIFICATIONS FOR LABORATORY AIRFLOW CONTROL SYSTEM SEQUENCE OF OPERATION.
4. BALANCE AIRFLOW AND ESTABLISH PRESSURIZATION OFFSETS AS INDICATED.
5. ALL INCHES WG VALUES ARE WITH RESPECT TO THE CORRIDOR.

3F IV PREP AREA AIRFLOW AND PRESSURIZATION DIAGRAM

NTS

			CONSULTANTS:				ARCHITECT/ENGINEERS:		<div>Drawing Title HVAC FLOW AND CONTROL DIAGRAMS</div> <div>Approved: Project Director</div>		<div>Project Title Harry S. Truman Memorial Veterans' Hospital Expand Ambulatory Care Addition</div> <div>Location Columbia, Missouri</div> <div>Date JANUARY 13, 2017</div> <div>Checked MEM</div> <div>Drawn BME</div>		<div>Project Number 589-333 <small>CANNON DESIGN PROJECT NO. 3850.06</small></div> <div>Building Number</div> <div>Drawing Number MH-603.2 Dwg. of</div>		<div>Office of Construction and Facilities Management</div> <div> Department of Veterans Affairs</div>	
			<div><div>AcoustiControl Acoustical Engineer 2464 Taylor Road Suite 214 Wildwood, MO 63040 314.436.9770</div><div>The Schachinger Group Elevator 4255 Stoney Creek Drive Fort Collins, CO 80525 703.606.2263</div></div>				<div>CANNONDESIGN 1100 Clark Avenue St. Louis, Missouri 63102 T: 314.241.6250 F: 314.241.2570</div> <div>© CannonDesign 2017 All rights reserved. No part of this document may be reproduced or utilized in any form, without prior written authorization by the Cannon Corporation</div>									
1 Addendum 01 06/01/17																
Revisions: Date																