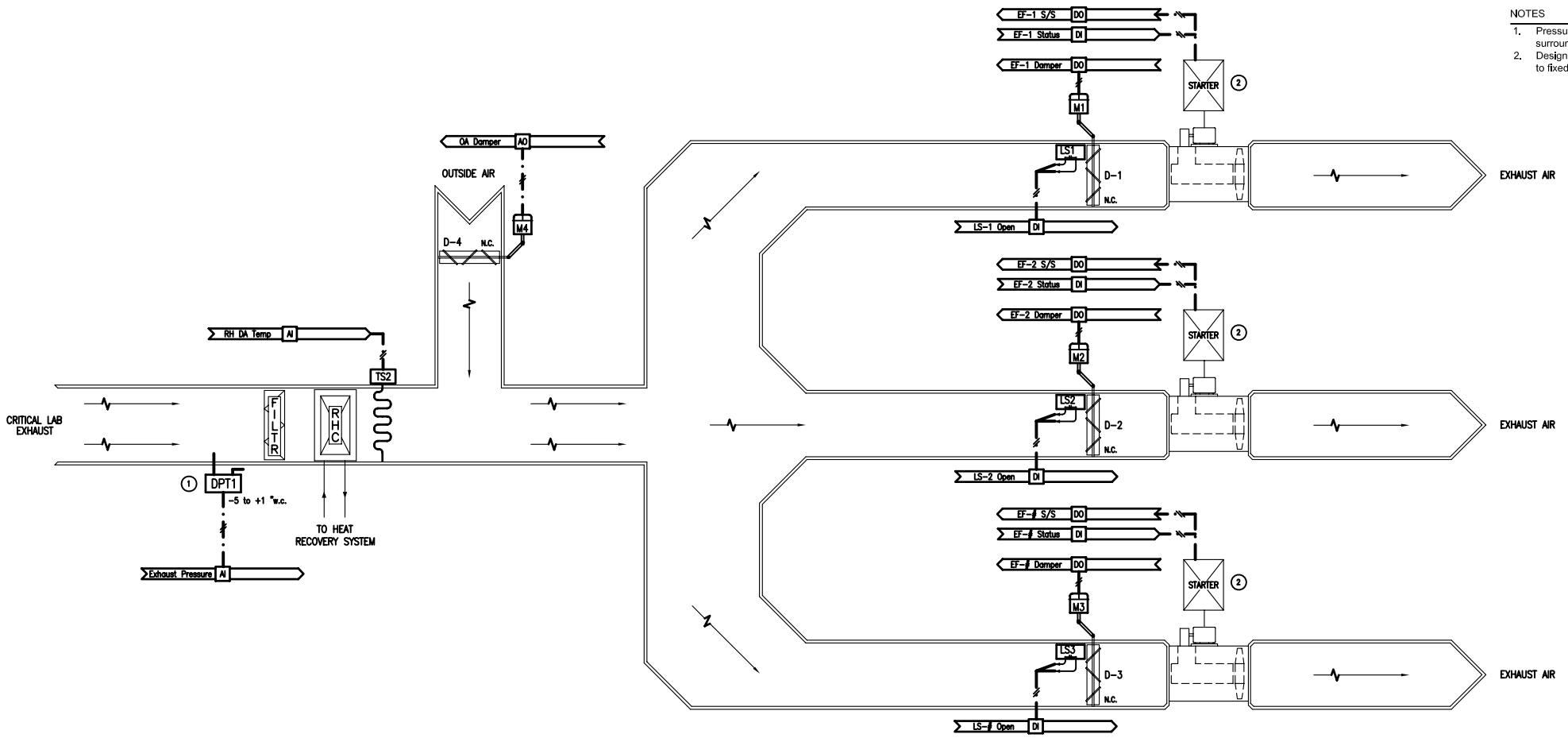


NOTES

1. Pressure monitoring relative to the less hazardous space surrounding the critical area served.
2. Designer may use VFD's for balancing and soft start of fans to fixed speed.

POINTS LIST

ADDRESS	POINT DESCRIPTOR	POINT TYPE DI	AI	DO	AO	VP	REMARKS
	EF-1 S/S			•			
	EF-1 Status	•					
	EF-2 S/S			•			
	EF-2 Status	•					
	EF-# S/S			#			
	EF-# Status	#					
	EF-1 Damper			•			
	LS-1 Open	•					
	EF-2 Damper			•			
	LS-2 Open	•					
	EF-# Damper			#			
	LS-# Open	#					
	OA Damper				•		
	Exhaust Pressure		•				
	RH DA Temp		•				

LOGIC VARIABLES

BINARY	ANALOG	DESCRIPTION
SysgO		ON WHEN COOLING SYSTEM IS ENABLED
EFxPF		ON WHEN EXHAUST FAN x STATUS IS PROVEN
EFxFL		ON WHEN EXHAUST FAN x PROOF HAS FAILED
EFx		ON WHEN EXHAUST FAN x IS COMMANDED TO RUN
EFDxF		ON WHEN EXHAUST FAN DAMPER x PROOF HAS FAILED
	EFxRT	VARIABLE VALUE OF EXHAUST FAN x RUNTIME (HHMM)

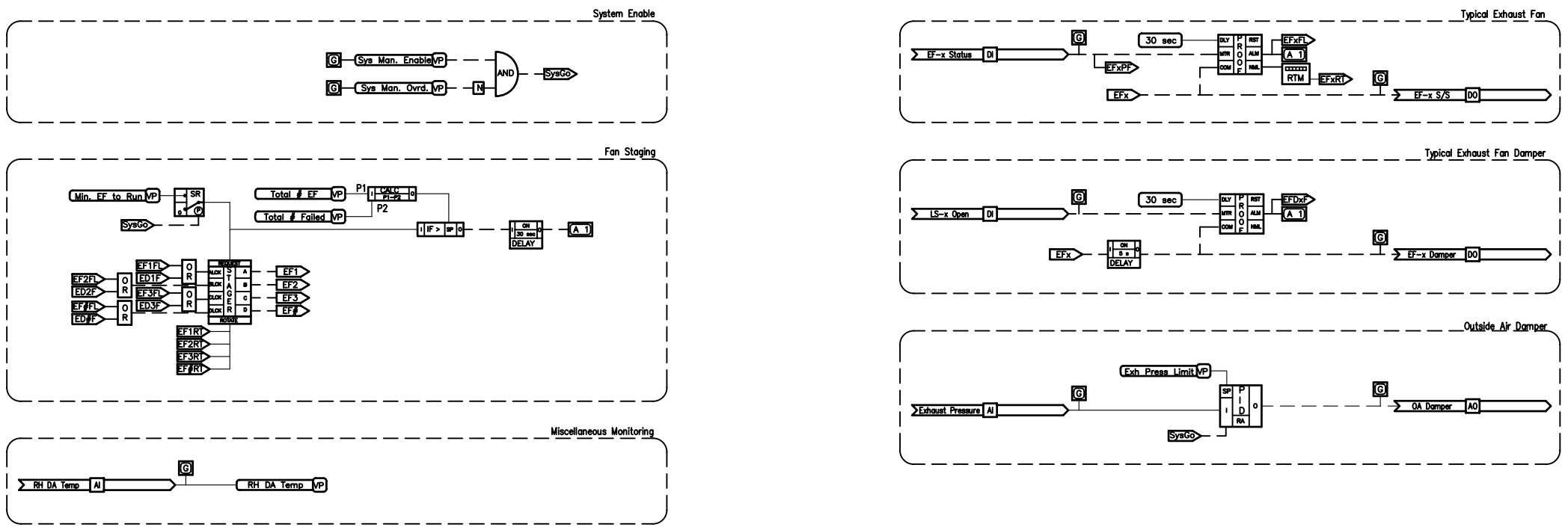
REVISIONS

NO.	DESCRIPTION	DATE

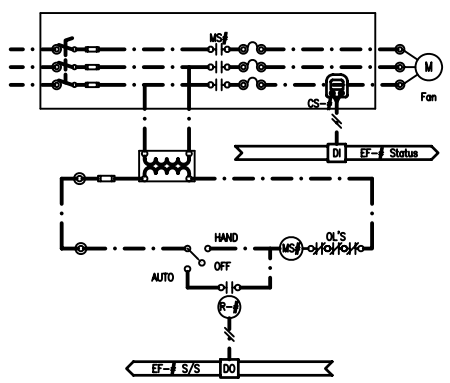
THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

REDUNDANT CV EXHAUST FAN CONTROL FOR MANIFOLD EXHAUST LAB SYSTEMS

Software Logic Diagram



ELECTRIC LADDER DIAGRAMS



EXHAUST FAN STARTER (TYPICAL FOR ALL EXHAUST FANS)

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The University of North Carolina
Chapel Hill, North Carolina

Drawings

Standard Control Drawings

Eng.	HJN
Drawn	HJN
Chkd	---
Appd	---
Issued	12/23/2008
Job No.	----
Scale	N/A
Proj Code	

100% Design Review (REV 3)

REDUNDANT CV EXHAUST FAN CONTROL FOR MANIFOLD EXHAUST LAB SYSTEMS

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SHEET NUMBER

C-4.00
DWG NUMBER