ELEVATOR EQUIPMENT MACHINE

ROOM FIRE PROTECTION

SYSTEM DESCRIPTION
CONTROL PANELS

1. THE CONTROL PANELS FOR PREACTION SUPPRESSION SYSTEM ARE EXISTING TO REMAIN. THE EXISTING PANEL WILL BE USED AS LOCAL ALARM PANELS.

2. PHOTOELECTRIC SMOKE DETECTORS SHALL BE 24 VDC, TWO WIRE LIGHT SCATTERING TYPE USING AND LED LIGHT SOURCE. EACH DETECTOR SHALL CONTAIN A REMOTE LED OUTPUT AND BUILT IN TEST SWITCH. DETECTOR SHALL BE PROVIDED ON A TWIST LOCK BASE AND TAMPER PROOF FEATURE. DETECTORS SHALL BE WIRED ON A CLASS "A" CIRCUIT. WHEN THE DETECTOR IS ACTIVATED, ALARM INDICATION WILL APPEAR ON THE LOCAL FIRE ALARM PANEL AND ALSO WILL BE ANNUNCIATED AT THE BUILDING FIRE ALARM PANEL.

3. EACH INDIVIDUAL POWER DISTRIBUTION CIRCUIT BREAKER FEEDING THE ELEVATOR MOTORS AND CONTROLS HAS BEEN PROVIDED WITH A POWER INTERRUPTION SHUNT TRIP MECHANISM.

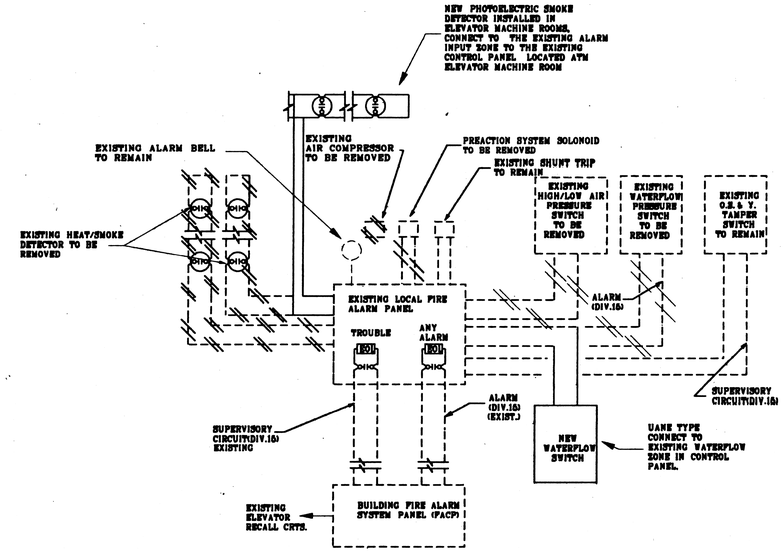
   THE SHUNT TRIP MECHANISMS OPERATE IN CONJUCTION WITH ACTIVATION OF WATERFLOW SWITCH ON SUPPRESSION OR ALARM SYSTEM AS DESCRIBED HEREIN.

   A. ACTIVATION OF WATERFLOW DEVICE ON THE SPRINKLER SYSTEM MUST SIMULTANEOUSLY SHUNT-TRIP ALL POWER TO THE ELEVATOR CONTROLLER.

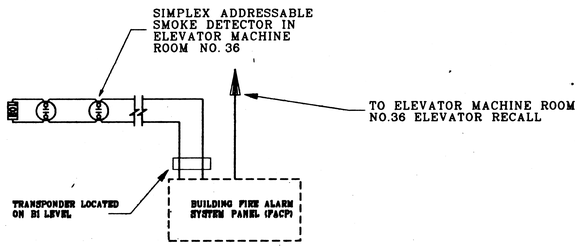
4. EACH ELEVATOR EQUIPMENT/MACHINE ROOM HAS BEEN PROTECTED BY A WET SPRINKLER SYSTEM EXCEPT THE ELEVATOR NO. 36 ELEVATOR NO. 56 HAS BEEN PROVIDED WITH PRODUCT OF COMBUSTIBLE DETECTORS.

   SEQUENCE OF EVENTS OF THE SPRINKLER ARE:

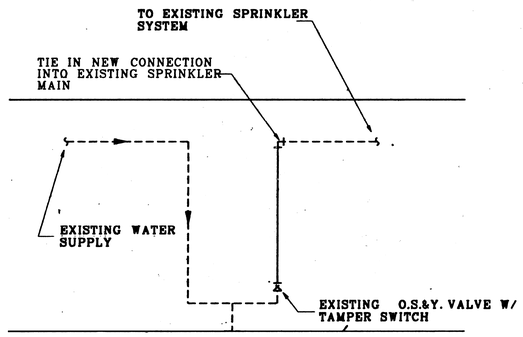
   1. PHOTOELECTRIC SMOKE DETECTORS IN ALARM.
   2. ELEVATORS ARE CAPTURED.
   3. WATERFLOW DEVICE HAS ACTIVATED.
   4. POWER TO AFFECTED ELEVATORS OF HOISTWAYS ROOM IS INTERRUPTED.



3 TYPICAL WIRING DIAGRAM FOR PRE-ACTION RELEASING PANEL



5 WIRING DIAGRAM FOR ELEVATOR NO. 36

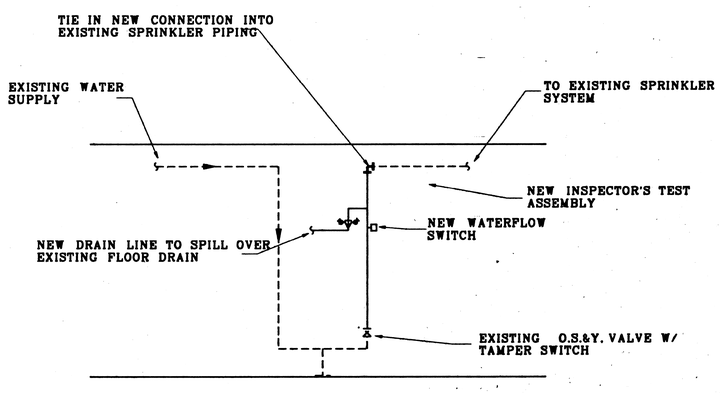


2 TYPICAL RISER DIAGRAM

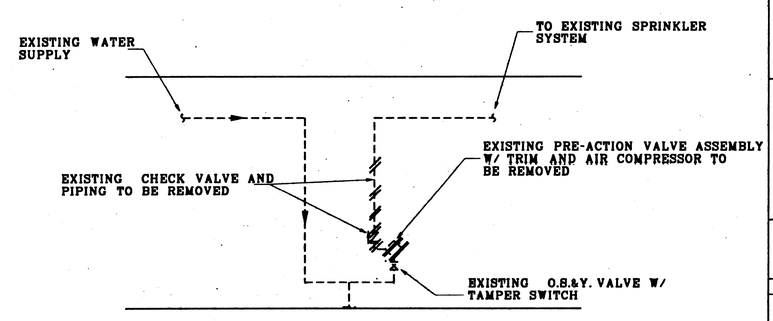
NOTES:

1. REMOVE EXISTING AIR COMPRESSOR SERVING PRE-ACTION SPRINKLER SYSTEM.

2. REMOVE EXISTING CONNECTION FROM PRESSURE SWITCHES TO LOCAL FIRE ALARM PANEL AND WIRE TO NEW WATERFLOW SWITCH AS SHOWEN ON DETAIL NO. 3



4 TYPICAL RISER DIAGRAM



1 TYPICAL RISER DIAGRAM FOR PRE-ACTION VALVE ASSEMBLY

NO.	REVISION	DATE
	FINAL	2/23/96

ENVIRONMENTAL SYSTEMS DESIGN
CONSULTING ENGINEERS
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GENERAL SERVICES ADMINISTRATION
PUBLIC BUILDING SERVICE
CHICAGO IL

BUILDING	NAME	E. M. DIRKSEN (EMD) BUILDING		
	ADDRESS	STREET 219 S. DEARBORN ST. / CITY CHICAGO	STATE IL	
	NUMBER			
PROJECT	DESCRIPTION	ELEVATOR IMPROVEMENT FOR EMD BLDG		
	NUMBER	IIL94004		
DRAWING	DRAWN BY M.R.	CKD BY S.S.	DATE 2/23/96	
	TITLE	SECTIONS & DETAILS		
	TYPE	FIRE PROTECTION PLAN		
	NUMBER	9 (TYPE)	FP (SERIES)	1 (SEQUENCE)

21-FEB-1996 /usr/esd/pipe/219sdbei/fg_00.dgn

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