

**2 SHUNT TRIP SUPERVISORY WIRING**  
FA3 NO SCALE

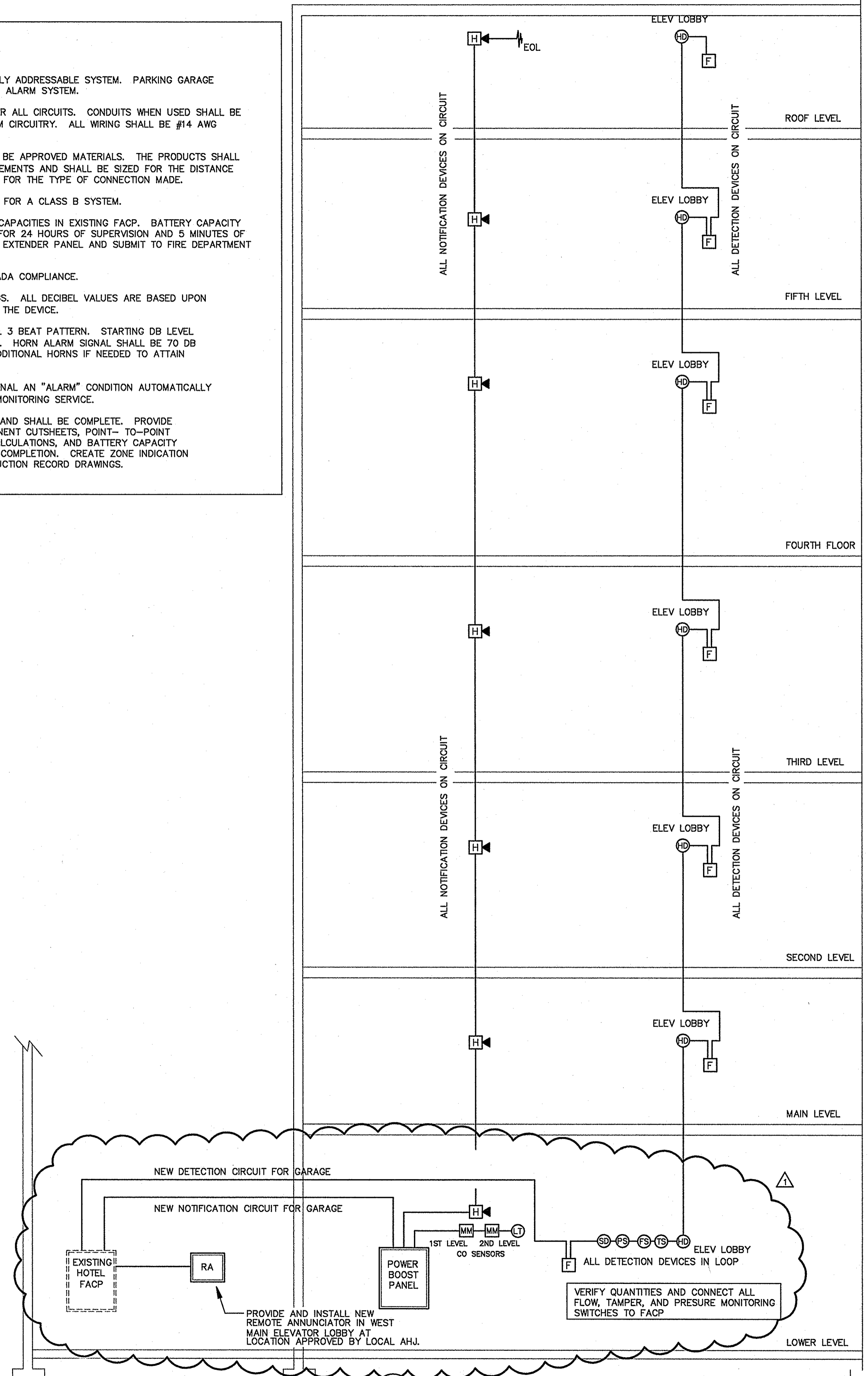
**SEQUENCE OF OPERATION FOR ELEVATOR RECALL:**

- ACTIVATION OF A SMOKE DETECTOR IN AN ELEVATOR EQUIPMENT ROOM, OR IN ANY ELEVATOR LOBBY (EXCEPT A PRIMARY FLOOR LOBBY) SHALL CAUSE THE ASSOCIATED ELEVATOR TO RETURN TO THE PRIMARY FLOOR, OPEN ITS DOORS, AND STOP. SIGNAL SHALL COME FROM FACP (NOT FROM DETECTOR CONTACTS).
- ACTIVATION OF A SMOKE DETECTOR IN A PRIMARY FLOOR ELEVATOR LOBBY SHALL CAUSE THE ASSOCIATED ELEVATOR TO RETURN TO THE SECONDARY FLOOR, OPEN ITS DOORS, AND STOP. SIGNAL SHALL COME FROM FACP (NOT FROM DETECTOR CONTACTS).
- ACTIVATION OF A HEAT DETECTOR IN THE ELEVATOR EQUIPMENT ROOM SHALL CAUSE THE ELEVATOR RECALL FUNCTION TO CAUSE THE ELEVATOR TO RETURN TO THE SECONDARY FLOOR, OPEN DOORS, AND STOP. SIGNAL SHALL COME FROM FACP (NOT FROM DETECTOR CONTACTS). ALSO, FACP SHALL INITIATE A 30 SECOND DELAY TO ALLOW ELEVATOR RECALL FUNCTION TO BE COMPLETED PRIOR TO ENERGIZING SHUNT TRIP FUNCTION OF ELEVATOR CONTROLLER CIRCUIT BREAKER.
- CLOSING OF THE MANUAL SHUT-OFF VALVE SHALL ACTIVATE A TAMPER SWITCH ON THE VALVE AND SEND A SUPERVISORY ALARM TO THE FIRE ALARM CONTROL PANEL.

**FIRE ALARM RISER NOTES:**

- EXISTING HOTEL FIRE ALARM SYSTEM IS A FULLY ADDRESSABLE SYSTEM. PARKING GARAGE DEVICES SHALL BE TIED INTO EXISTING HOTEL FIRE ALARM SYSTEM.
- USE APPROVED, LISTED FIRE ALARM CABLE FOR ALL CIRCUITS. CONDUITS WHEN USED SHALL BE 1/2" MINIMUM SIZE AND IDENTIFIED AS FIRE ALARM CIRCUITRY. ALL WIRING SHALL BE #14 AWG MINIMUM AND SHIELDED.
- ALL SYSTEM WIRING AND CONNECTIONS SHALL BE APPROVED MATERIALS. THE PRODUCTS SHALL CONFORM TO MANUFACTURER'S TECHNICAL REQUIREMENTS AND SHALL BE SIZED FOR THE DISTANCE BETWEEN THE CONTROL PANEL AND DEVICES, AND FOR THE TYPE OF CONNECTION MADE.
- PROVIDE END-OF-LINE RESISTORS AS NEEDED FOR A CLASS B SYSTEM.
- VERIFY POWER SUPPLY AND BATTERY POWER CAPACITIES IN EXISTING FACP. BATTERY CAPACITY SHALL BE INCREASED IF NECESSARY TO PROVIDE FOR 24 HOURS OF SUPERVISION AND 5 MINUTES OF ALARM TIME. RECALCULATE BATTERY POWER FOR EXTENDER PANEL AND SUBMIT TO FIRE DEPARTMENT INSPECTOR AS PART OF SHOP DRAWINGS.
- ALL STROBES SHALL BE SYNCHRONIZED FOR ADA COMPLIANCE.
- ALL STROBE VALUES ARE UL CANDELA RATINGS. ALL DECIBEL VALUES ARE BASED UPON MANUFACTURER'S TESTING AT 10' DISTANCE FROM THE DEVICE.
- ALL AUDIBLE HORN TONES SHALL BE TEMPORAL 3 BEAT PATTERN. STARTING DB LEVEL SHALL BE NO LESS THAN 85 DB AT 10' DISTANCE. HORN ALARM SIGNAL SHALL BE 70 DB MINIMUM THROUGHOUT THE BUILDING. PROVIDE ADDITIONAL HORNS IF NEEDED TO ATTAIN THIS VALUE.
- VERIFY THAT ALL NEW DETECTION DEVICES SIGNAL AN "ALARM" CONDITION AUTOMATICALLY THROUGH THE OWNER'S APPROVED THIRD PARTY MONITORING SERVICE.
- SUBMITTALS SHALL COMPLY WITH NCFC 907.1 AND SHALL BE COMPLETE. PROVIDE ENGINEER-APPROVED FIRE ALARM SYSTEM COMPONENT CUTSHEETS, POINT-TO-POINT WIRING PLAN OF THE BUILDING, VOLTAGE DROP CALCULATIONS, AND BATTERY CAPACITY CALCULATIONS TO THE FIRE INSPECTOR PRIOR TO COMPLETION. CREATE ZONE INDICATION MAP, POST ZONE ADDRESSES, AND POST CONSTRUCTION RECORD DRAWINGS.

FIRE ALARM SYSTEM MATRIX	BUILDING SYSTEMS OUTPUTS											CENTRAL COMM										
	ACTIVATE COMMON ALARM SIGNAL INDICATOR	ACTIVATE AUDIBLE ALARM SIGNAL	ACTIVATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE COMMAND TROUBLE SIGNAL INDICATOR	ACTIVATE AUDIBLE TROUBLE SIGNAL	ACTIVATE GENERAL EVACUATION SIGNAL	ACTIVATE EXTERNAL HORN/STROBE	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	RETURN ELEVATOR TO 2ND FLOOR	RETURN ELEVATOR TO 1ST FLOOR	SHUT TRIP AFTER ELEVATOR REACHES APPROPRIATE FLOOR	SHUT DOWN RESPECTIVE AIR HANDLER	PRESSURIZE STAIRWELLS	SHOW CHANGE OF STATUS ON ANNUNCIATOR	SHOW CHANGE OF STATUS ON CENTRAL PANEL	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	
MANUAL FIRE ALARM PULL BOXES	X	X					X	X	X								X	X	X			
BUILDING SMOKE DETECTORS	X	X					X	X	X								X	X	X			
FIRE ALARM A.C. POWER FAILURE				X	X						X						X	X				X
FIRE ALARM SYSTEM LOW BATTERY				X	X						X						X	X				X
OPEN CIRCUIT				X	X						X						X	X				X
GROUND FAULT				X	X						X						X	X				X
NOTIFICATION APPLIANCE CIRCUIT SHORT				X	X						X						X	X				X



**4 SCHEMATIC FIRE ALARM RISER**  
FA3 NO SCALE

THIS SHEET HAS BEEN ADDED TO THE SET

DIVERSIFIED CONSULTING GROUP, PLLC  
 PLUMBING MECHANICAL ELECTRICAL FIRE ALARM  
 4671 WESTERN BLVD, RALEIGH, NC 27606  
 PHONE: 919-859-8183 FAX: 919-859-8891  
 EMAIL: INFO@DCGRALEIGH.COM  
 LICENSE: P-4130

PROJECT NO: V051  
 DATE: 7/15/11  
 CAD DWG FILE: V051FA3.dwg  
 DRWN BY: GGR CHKD BY: GGR

**FIRE ALARM RISER/NOTES**  
**FA3**