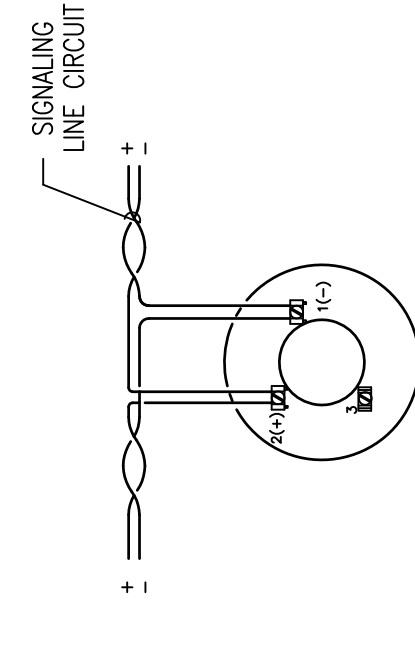
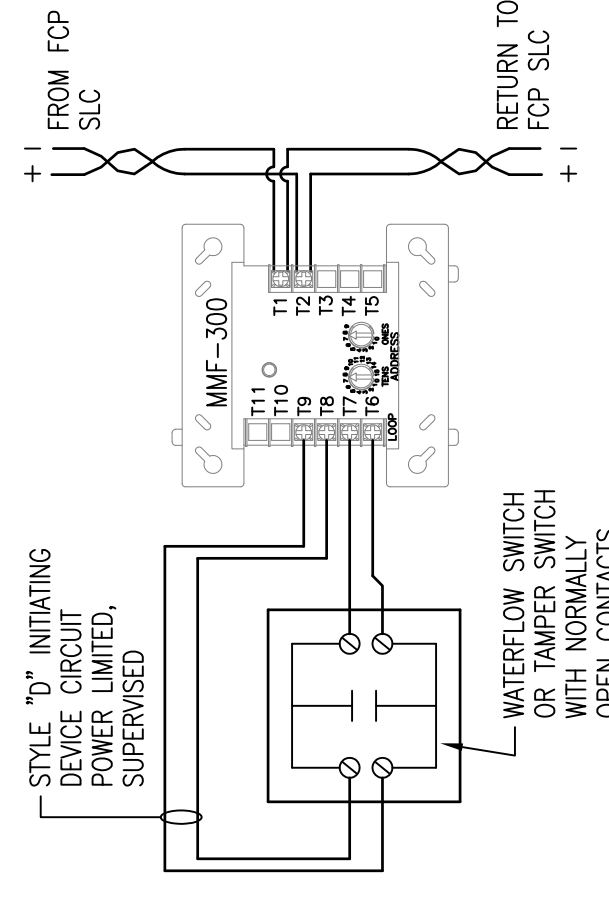


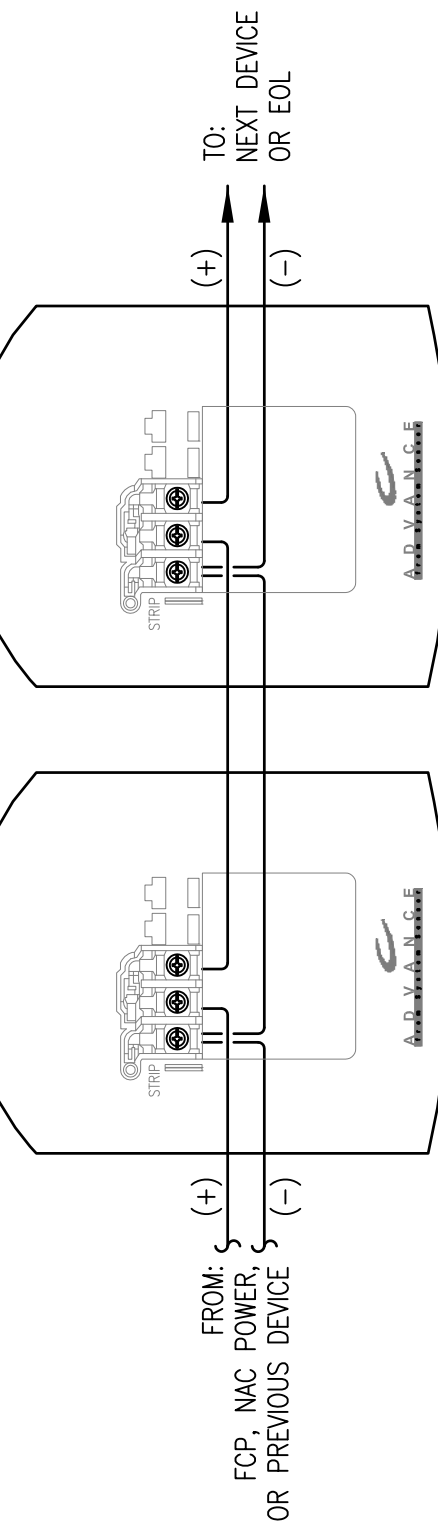
MANUAL PULL STATION WIRING DETAIL  
SCHEMATIC: NO SCALE



ADDRESSABLE SMOKE DETECTOR WIRING DETAIL  
SCHEMATIC: NO SCALE



WATERFLOW / TAMPER WIRING DETAIL  
SCHEMATIC: NO SCALE



TYPICAL 2 WIRE STROBE WIRING DETAIL  
SCHEMATIC: NO SCALE

GENERAL NOTES:

- THESE DRAWINGS ARE DIAGRAMMATIC. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
- INSTALLATION SHALL COMPLY WITH NEC, NFPA 72 AND ALL OTHER APPLICABLE CODES AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- WIRING DEPICTED ON THESE PLANS IS SCHEMATIC - ACTUAL WIRE LOCATIONS MAY DIFFER FROM THESE PLANS. WIRING SHALL BE PERFORMED AS ACTUAL BUILDING CONSTRUCTION CONDITIONS ALLOW AND TO MINIMIZE PENETRATIONS THROUGH AREA SEPARATION WALLS AND FIRE WALLS. THE USE OF A RACEWAY IS PERMITTED AS LONG AS NO 110V OR HIGHER VOLTAGE CABLES ARE IN THE SAME RACEWAY.
- FIRE RATINGS SHALL BE MAINTAINED FOR ALL PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION.
- POWER FOR ALL FIRE ALARM PANELS AND FIRE ALARM POWER SUPPLIES MUST BE PROVIDED BY A DEDICATED AC BRANCH CIRCUIT.
- POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST REMAIN SEPARATED IN CABINET. ALL POWER-LIMITED CIRCUIT WIRING MUST REMAIN AT LEAST 0.25" AWAY FROM ANY NONPOWER-LIMITED CIRCUIT WIRING. FURTHERMORE, ALL POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST ENTER AND EXIT THE CABINET THROUGH DIFFERENT KNOCK OUTS AND/OR SEPARATE CONDUITS.
- WHEN UTILIZING CLASS "A" CIRCUITS, SEPARATE OUTGOING AND RETURN CONDUCTORS OF CLASS "A" CIRCUITS BY A MINIMUM OF 12" WHERE RUN VERTICALLY AND 48" WHERE RUN HORIZONTALLY.
- WHEN UTILIZING SHIELDED CABLE TIE SHIELDS THROUGH AND INSULATE AT EACH JUNCTION BOX. INSULATE AND TAPE BACK AT END.
- ALL FIRE ALARM CABLING SHALL BE ACCEPTABLE TO THE FIRE ALARM EQUIPMENT MANUFACTURER FOR THE INTENDED PURPOSE.
- SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETED AND FINAL.
- LOCATE SMOKE DETECTORS A MINIMUM OF THREE (3) FEET FROM MECHANICAL DIFFUSERS, WALL-MOUNTED SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 4" AND A MAXIMUM OF 12" FROM CEILING. CEILING-MOUNTED SMOKE DETECTORS SHALL BE MOUNTED ON CEILINGS AND NOT ON THE BOTTOMS OF BEAMS OR JOISTS.
- PROVIDE SYNCHRONIZATION OF ALL VISUAL NOTIFICATION APPLIANCE CIRCUITS. PROVIDE ALL REQUIRED SYNC MODULES. PROVIDE A MULTI-SYNC MODE SLAVE CONNECTION BETWEEN ALL SYNC MODULES.
- VERIFY ALL FIELD SELECTABLE AUDIBILITY SETTINGS OF NOTIFICATION APPLIANCES WITH FIRE ALARM CONTRACTOR.
- UPON COMPLETION OF THE FIRE ALARM SYSTEM INSTALLATION AND PROGRAMMING, THE INSTALLING CONTRACTOR SHALL PERFORM FINAL TESTING OF THE ENTIRE SYSTEM, PER ALL APPLICABLE CODES, AND SHALL COORDINATE AND PERFORM A FINAL FIRE ALARM SYSTEM INSPECTION.
- PROVIDE OFF-SITE MONITORING AS REQUIRED BY THE INTERNATIONAL FIRE CODE, SECTION 907.15 AND THE LOCAL AUTHORITY HAVING JURISDICTION.
- INSTALLING CONTRACTOR SHALL, PHYSICALLY, LABEL ALL INITIATING DEVICES AND NOTIFICATION APPLIANCE CIRCUIT END OF LINE (WHEN WIRING CLASS 'B'). THESE LABELS SHALL BE IN PLACE PRIOR TO START-UP AND TESTING.

### FIRE ALARM SYMBOL LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT

SYMBOL	DESCRIPTION	MOUNTING
[FCP]	FIRE ALARM CONTROL PANEL	WALL-TOP @ 66"
[VCP]	VOICE CONTROL PANEL	FIELD VERIFY
[FSA]	FIRE SYSTEM ANNUNCIATOR	WALL-TOP @ 66"
[MIC]	REMOTE MICROPHONE	FIELD VERIFY
[C]	SMOKE DETECTOR	CEILING
[C-]	DUCT SMOKE DETECTOR	BY OTHERS
[H]	HEAT DETECTOR	CEILING
[CM]	ADDRESSABLE CONTROL MODULE	FIELD VERIFY
[MM]	ADDRESSABLE MONITOR MODULE	FIELD VERIFY
[P]	MANUAL PULL STATION	WALL @ 48"
[R]	CONTROL RELAY (MULTI-VOLTAGE)	FIELD VERIFY
[RM]	ADDRESSABLE RELAY MODULE	FIELD VERIFY
[D]	MAGNETIC DOOR HOLDER	FIELD VERIFY
[W]	WATER FLOW SWITCH	BY OTHERS
[V]	VALVE TAMPER SWITCH	BY OTHERS
[KB]	KNOX BOX	FIELD VERIFY
[C]	CEILING MOUNT STROBE	FIELD VERIFY
[C-]	CEILING MOUNT HORN / STROBE	FIELD VERIFY
[C]	CEILING MOUNT SPEAKER / STROBE	FIELD VERIFY
[H]	HORN	WALL @ 10'-0"
[H-]	HORN / STROBE	WALL 80"-96"
[S]	SPEAKER / STROBE	WALL 80"-96"
[SP]	SPEAKER	WALL @ 90"
[S]	STROBE	WALL 80"-96"

ABBREVIATION	DESCRIPTION
E	EXISTING
G	WITH GUARD
P	PENDENT MOUNT
R	RESIDENTIAL (110V)
S	SOUNDER BASE
WP	WEATHER PROOF
EOL	END OF LINE RESISTOR
EOLR	END OF LINE RELAY
AWG	AMERICAN WIRE GAUGE
TWP	TWISTED PAIR
TWSP	TWISTED SHIELDED PAIR
FPSP	FIRE POWER LIMITED PHENUM
FPFR	FIRE POWER LIMITED RISER

SYMBOL	DESCRIPTION
[S]	SPEAKER (SM) 75
[S]	STROBE (SM) 30
[C]	DEVICE ADDRESS 101
[C]	OR 10001 - ORANGE LOOP (101)
[C]	OR 11 - REMOTE DETECTOR (OF MODULE #)

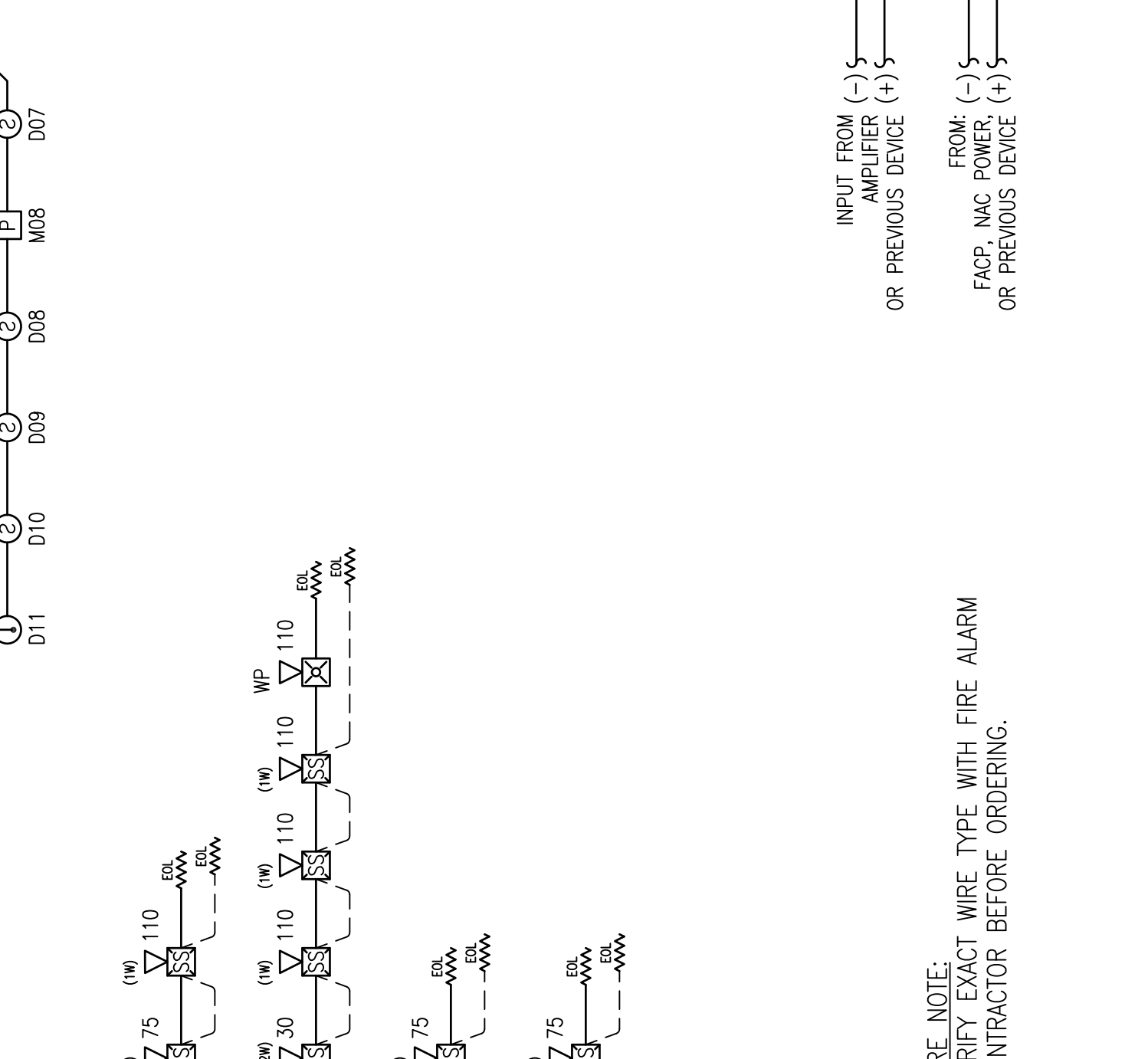
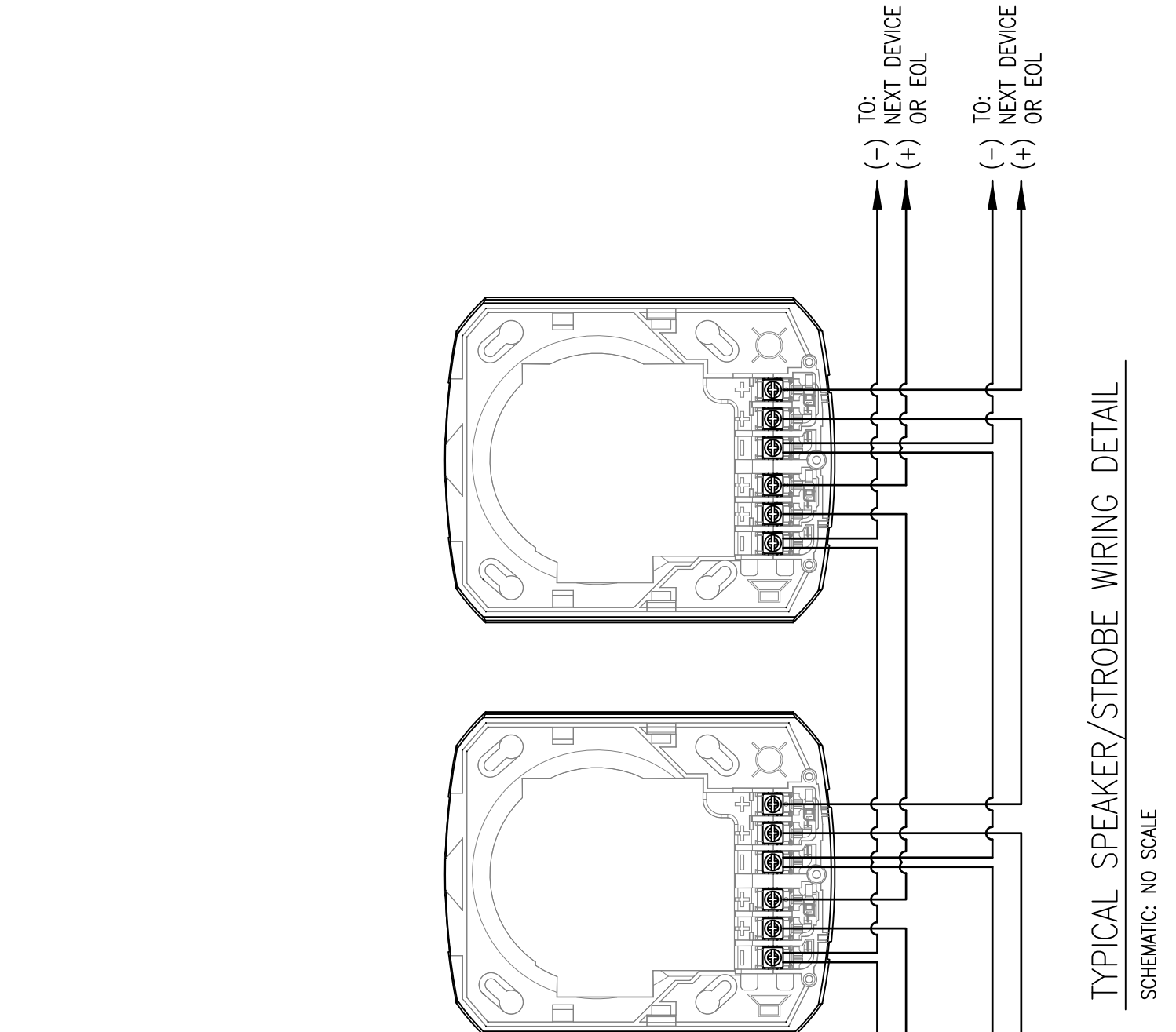
WIRE TYPE ASSOCIATED WITH WIRE SIZES (IF LIMITED ONLY 1 CABLE NEEDED)

- 1-#16/2 TWP
- 2-#14/2 AWG
- 1-#12/4 AWG

APPLICABLE CODES:  
 MAINE UNIFORM ENERGY & BUILDING CODE  
 PORTLAND CITY CODE, CHAPTER 10, FIRE PREVENTION & PROTECTION  
 NFPA 1, FIRE CODE, & NFPA 101, LIFE SAFETY CODE

### OPERATIONS MATRIX

	FIRE ALARM INPUT	FIRE ALARM INDICATOR	ACTIVATE AUDIBLE ALARM	ACTIVATE SUPERVISORY INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE TROUBLE INDICATOR	ACTIVATE AUDIBLE TROUBLE INDICATOR	TRANSMIT ALARM SIGNAL	TRANSMIT SUPERVISORY SIGNAL	TRANSMIT TROUBLE SIGNAL	ACTIVATE ALTERNATE ELEVATOR RECALL	ACTIVATE PRIMARY RECALL	ACTIVATE ELEVATOR SHUNT
FIRE ALARM DETECTORS	●	●	●	●	●	●	●	●	●	●	●	●	●
HEAT DETECTORS	●	●	●	●	●	●	●	●	●	●	●	●	●
PULL STATIONS	●	●	●	●	●	●	●	●	●	●	●	●	●
PRIMARY RECALL FLR, ELEV LOBBY SMOKE DET	●	●	●	●	●	●	●	●	●	●	●	●	●
ALTERNATE RECALL FLR, ELEV LOBBY SMOKE DET	●	●	●	●	●	●	●	●	●	●	●	●	●
ELEVATOR EQUIPMENT ROOM SMOKE DET	●	●	●	●	●	●	●	●	●	●	●	●	●
TOP & BOTTOM OF ELEV SHAFT SMOKE DET	●	●	●	●	●	●	●	●	●	●	●	●	●
ELEVATOR EQUIPMENT ROOM HEAT DET	●	●	●	●	●	●	●	●	●	●	●	●	●
TOP & BOTTOM OF ELEV SHAFT HEAT DET	●	●	●	●	●	●	●	●	●	●	●	●	●
WATERFLOW SWITCHES	●	●	●	●	●	●	●	●	●	●	●	●	●
VALVE TAMPER SWITCHES	●	●	●	●	●	●	●	●	●	●	●	●	●
FIRE ALARM AC POWER FAIL	●	●	●	●	●	●	●	●	●	●	●	●	●
FIRE ALARM LOW BATTERY	●	●	●	●	●	●	●	●	●	●	●	●	●
OPEN CIRCUIT	●	●	●	●	●	●	●	●	●	●	●	●	●
GROUND FAULT	●	●	●	●	●	●	●	●	●	●	●	●	●
NAC SHORT CIRCUIT	●	●	●	●	●	●	●	●	●	●	●	●	●
LOSS OF AC TO BUILDING	●	●	●	●	●	●	●	●	●	●	●	●	●



FIRE ALARM RISER DIAGRAM  
SCHEMATIC: NO SCALE

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**ETZ CHAIM SYNAGOGUE/MAINE JEWISH MUSEUM**  
 267 CONGRESS STREET  
 PORTLAND, MAINE 04101  
 DETAILS, LEGEND, MATRIX, NOTES, RISER DIAGRAM

DRAWN	JPB UNICAD JOB #11081
CHECKED	WAYNE B. HANS NICT 11/04/96
DATE	2/16/2016
REVISION	0
SCALE	NONE