

HARNETT COUNTY SCHOOLS

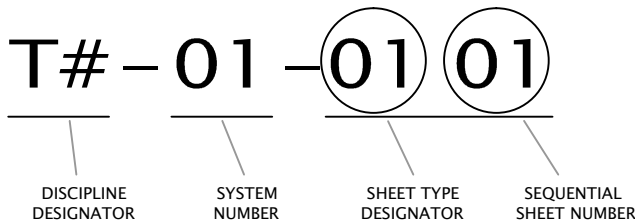


GYM EXPANSION	
SPEC SECTION:	28 31 16 MULTIPLEXED FIRE DETECTION AND ALARM SYSTEM

DRAWING INDEX

TITLE SHEET	
FA-00-001	TITLE SHEET
SYSTEM LEGEND	
FA-01-001	EDWARDS FIRE ALARM SYSTEM BACKBOX LEGEND
FLOORPLANS	
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FA-00-601	EDWARDS FIRE ALARM SYSTEM MATRIX SHEET
FA-00-602	EDWARDS FIRE ALARM SYSTEM CALCULATIONS SHEET

DRAWING SERIES AND PAGE NUMBER STANDARD	
00-0001	GENERAL DRAWINGS (TITLE PAGE, DRAWING INDEX, DRAWING KEYS, AND DRAWINGS SCHEDULES)
FACILITY DRAWINGS	THESE FACILITY DRAWINGS ARE SPECIFIC TO FLOOR PLANS, CEILING LAYOUTS, ELECTRIC/CONDUIT, POWER, MILLWORK, OR ANY GENERAL ARCHITECTURAL DRAWING DETAILS THAT WOULD AFFECT CONSTRUCTION OF ROOMS OR SPACES. FACILITY DRAWINGS SHALL ALWAYS USE A UNIQUE DRAWING NUMBER FOR EACH PRINTED PAGE OF DOCUMENTATION. NO MULTI-PAGE DRAWINGS SHALL BE FOUND IN THE FACILITY DRAWINGS.
00-0100	FACILITY FLOOR PLAN
00-0200	REFLECTED CEILING PLAN
00-0300	ELEVATION DETAIL
00-0400	LARGE SCALE VIEWS (SCALED UP REPRODUCTIONS OF PLANS, ELEVATIONS, OR SECTIONS THAT ARE NOT DETAILS).
SYSTEM DRAWINGS	SYSTEM DRAWINGS INCLUDE FLOW DIAGRAMS, WIRING DIAGRAMS, PIN-OUT DETAILS, AND EQUIPMENT RACK ELEVATIONS.
0x-0500	EQUIPMENT RACK ELEVATIONS, HIGH VOLTAGE/LOW VOLTAGE POWER SYSTEM DIAGRAMS, CUSTOM PLATE & PANEL DRAWINGS, PATCH BAY ELEVATIONS
0x-0600	SIGNAL FLOWS
0x-0700	RISER DIAGRAMS
0x-0800	CONDUIT DRAWINGS



☐ DESIGN ☒ BUILD ☐ AS-BUILT

01	SUBMITTAL	20 APR 25
NUMBER	ISSUE	DATE

LILLINGTON-SHAWTOWN
ELEMENTARY SCHOOL

855 OLD US HWY 421
LILLINGTON, NC 27546

OWNER

GYM EST-3 EXTENSION

PROJECT

FIRE ALARM

SECTION

NONE

SCALE

COVER SHEET

TITLE

F-00-0001

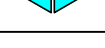
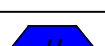
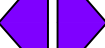
SHEET

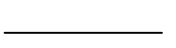
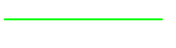
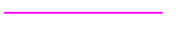
PROJECT #: 24D1K2100-100
ENG: DET

CAD: DET

EDWARDS FIRE ALARM BACKBOX LEGEND					
SYMBOL(S)	MANUFACTURER(MODEL(S))	DESCRIPTION	BACKBOX	TYPICAL MOUNTING, CONSULT ARCHITECT/OWNER/AJH	DIMENSIONS
	EDWARDS SIGA-278	PULL STATION	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH 3'-6" TO CENTER AFF	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS SIGA-OSD WITH SIGA-SB BASE	SMOKE DETECTOR	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH QUAM SSB-15 CEILING TILE	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	4.186"W x 2.316"H 3.954" DIAMETER
	EDWARDS SIGA-COD	CARBON MONOXIDE LIFE SAFETY DETECTOR	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH QUAM SSB-15 CEILING TILE	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	4.186"W x 2.316"H 3.954" DIAMETER
	EDWARDS SIGA-HRD WITH SIGA-SB BASE	HEAT DETECTOR	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH QUAM SSB-15 CEILING TILE	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	4.186"W x 2.316"H 3.954" DIAMETER
	EDWARDS SIGA-SD	DUCT DETECTOR	DEVICE COMES WITH ITS OWN MOUNTING BOX AND HARDWARE	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	5.45"W x 8.7"H x 1.9"D
	EDWARDS SD-TRK	REMOTE TEST STATION	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS SIGA-CR / SIGA-CRH / SIGA-CRR	CONTROL RELAY	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS SIGA-CT1	SINGLE INPUT MODULE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS SIGA-CT2 / SIGA-MCT2	DOUBLE INPUT MODULE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS G4SWF W/ STI-1221E (# INDICATES WATTAGE)	WALL MOUNTED SPEAKER	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH 96" TO TOP AFF	4.95"W x 5.78"H x 1.62"D
	EDWARDS GCVWF W/ STI-1221E (# INDICATES CANDELA)	CEILING MOUNTED STROBE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH QUAM SSB-15 CEILING TILE	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	6.8"W+H x 1.82"D
	EDWARDS G4AVWF (# INDICATES CANDELA)	WALL MOUNTED HORN STROBE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 778 DOUBLE-GANG PLASTER RING	MOUNTED FLUSH 96" TO TOP AFF	4.95"W x 5.78"H x 1.62"D
	EDWARDS GCVWF	CEILING MOUNTED HORN STROBE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH QUAM SSB-15 CEILING TILE	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	6.8"W+H x 1.82"D
	EDWARDS GWF-VMH (# INDICATES CANDELA)	WALL MOUNTED SPEAKER STROBE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 778 DOUBLE-GANG PLASTER RING	MOUNTED FLUSH 96" TO TOP AFF	4.95"W x 5.78"H x 1.62"D
	EDWARDS GCF-VMH (# INDICATES CANDELA)	CEILING MOUNTED SPEAKER STROBE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH QUAM SSB-15 CEILING TILE	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	6.8"W+H x 1.82"D
	EDWARDS 965-1A-8RW W/960A-8RF	CEILING MOUNTED SPEAKER WITH FLUSH MOUNT BACKBOX	EST 960A-8RF ROUND BACKBOX	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	12"W+H x 2.625"D
	EDWARDS SIGA-IM2	ISOLATION MODULE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 778 DOUBLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS SIGA-CT2	DUAL INPUT MODULE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS SIGA-CT2	DUAL INPUT MODULE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS SIGA-CT1	SINGLE INPUT MODULE	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	NO DIMENSION SPECIFICATIONS AVAILABLE
	EDWARDS 1504-AQN5	DOOR HOLDER	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R WITH RACO 772 SINGLE-GANG PLASTER RING	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	2.75"W x 4.5"H x 0.81"D
	STEEL CITY 52171 (OR SIMILAR)	4" SQUARE PULL BOX	2-1/8" DEEP BACKBOX RACO 232CS OR STEEL CITY 521511234EW-50R	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	4"W x 4"H x 2.125"D
	HOFFMAN ASE12X12X4NK (OR SIMILAR)	12" SQUARE PULL BOX	HAMMOND MFG PULL BOX	MOUNTED FLUSH PER JOB SPECIFICATION AND APPLICATION	12"W x 12"H x 4"D
	EDWARDS TERMINAL CABINET	TERMINAL CABINET	SIZES MAY VARY PER CABNET	SURFACE MOUNTED, OR FLUSH 54" AFF	SIZES MAY VARY PER CABNET
	EDWARDS EST-IO 1000RD	CONTROL PANEL	SIZES MAY VARY PER CABNET	SURFACE MOUNTED, OR FLUSH 54" AFF	SIZES MAY VARY PER CABNET
	EDWARDS EST-RLCD-C	ANNUNCIATOR PANEL	SIZES MAY VARY PER CABNET	SURFACE MOUNTED, OR FLUSH 54" AFF	SIZES MAY VARY PER CABNET
	EDWARDS EST-APS6A	AUXILIARY/BOOSTER POWER SUPPLY	12"W x 26"H x 5.3"D	SURFACE MOUNTED, OR FLUSH 54" AFF	12"W x 26"H x 5.3"D
	EDWARDS EST-BPS8A	BOOSTER POWER SUPPLY	6.5"W x 17"H x 3.375"D	SURFACE MOUNTED, OR FLUSH 54" AFF	6.5"W x 17"H x 3.375"D
	EDWARDS EST-30 WATT INTELLIGENT AMP	AUXILIARY/BOOSTER POWER SUPPLY	12"W x 26"H x 5.3"D	SURFACE MOUNTED, OR FLUSH 54" AFF	12"W x 26"H x 5.3"D

ALL BACKBOXES MUST BE METAL.
ALL BACKBOXES MUST BE GROUNDED BY THE ELECTRICAL CONTRACTOR, TYPICALLY THROUGH CONDUIT.

EDWARDS FIRE ALARM CABLE LEGEND		
LINETYPE	MANUFACTURER/MODEL	DESCRIPTION
	WINDY CITY 727109	FA SIGA DATA WIRE: 1 PR #16 AWG RED JKT
	WINDY CITY 728100-S	FA SIGA DATA WIRE: 1 PR #16 AWG RED JKT. W/ WHITE STRIPE
	WINDY CITY 728102	FA SIGA DATA WIRE: 1 PR #16 AWG RED JTK. W/ BLUE STRIPE
	WINDY CITY 729100LSZH C I CABLE	FA SIGA DATA WIRE: 1 PR #14 AWG RED JKT
	WINDY CITY 729100LSZH C I CABLE	FA SPEAKER WIRE: 1 PR #14 AWG RED JKT
	WINDY CITY 729100LSZH C I CABLE	FA SPEAKER WIRE: 1 PR #14 AWG RED JKT
	WINDY CITY 728104	FA SPEAKER WIRE: 1 PR #16 AWG RED JKT. W/ ORANGE STRIPE
	WINDY CITY 728103	FA SPEAKER WIRE: 1 PR #16 AWG RED JKT. W/ YELLOW STRIPE
	USAWC #14 THHNST	FA STROBE WIRE : THHN #14 AWG STR. 2 CON. BLUE [-] WHITE [-]
	USAWC #14 THHNST	FA STROBE WIRE : THHN #14 AWG STR. 2 CON. BROWN [-] ORANGE [-]
	USAWC #14 THHNST	FA STROBE WIRE : THHN #14 AWG SOLID 2 CON. RED [-] BLACK [-]
	USAWC #14 THHNST	FA DOOR POWER WIRE: THHN #14 AWG STR. 2 CON. RED [-] BLACK [-]
	USAWC #14 THHNST	FA DAMPER POWER WIRE: THHN #14 AWG STR. 2 CON. YELLOW [-] GREY [-]
	USAWC #14 THHNST	FIRE EXTINGUISHER POWER WIRE: THHN #14 AWG STR. 2 CON. PURPLE [-] GREEN [-]
	WINDY CITY 727300	FA LED/KEY SW WIRE : 4 CON #18 AWG STR.

CONDUIT LEGEND	
LINETYPE	CONDUIT SIZE/TYPE
	1" EMT
	3/4" EMT
	3/4" FLEX
	1/2" FLEX



AUDIO VISUAL / NURSE CALL / SECURITY / LIFE SAFETY
INTERCOMMUNICATIONS / TELEPHONE & DATA DESIGN

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NC BURGLAR ALARM LICENSE # 838-CBA
VA CLASS A CONTRACTORS LICENSE # 275-127876A
VA DCIS LICENSE # 11-6330

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hcs
HARNETT
COUNTY
SCHOOLS

☐ DESIGN ☒ BUILD ☐ AS-BUILT

01	SUBMITTAL	20 APR 25
NUMBER	ISSUE	DATE

**LILLINGTON-SHAWTOWN
ELEMENTARY SCHOOL**
855 OLD US HWY 421
LILLINGTON, NC 27546
OWNER

GYM EST-3 EXTENSION

PROJECT

FIRE ALARM
SECTION

NONE
SCALE

**SYMBOL AND
BACKBOX LEGEND**
TITLE

FA-01-0001
PROJECT #: 3409K21100.100
SHEET
ENG: DET CAD: DET



AUDIO VISUAL / NURSE CALL / SECURITY / LIFE SAFETY
INTERCOMMUNICATIONS / TELEPHONE & DATA DESIGN

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NC BURGLAR ALARM LICENSE # 835-GSA
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VA DCIS LICENSE # 11-6330

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ARCH OR ENG

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☐ DESIGN ☒ BUILD ☐ AS-BUILT

01	SUBMITTAL	20 APR 25
NUMBER	ISSUE	DATE

**LILLINGTON-SHAWTOWN
ELEMENTARY SCHOOL**
855 OLD US HWY 421
LILLINGTON, NC 27546
OWNER

GYM EST-3 EXTENSION

PROJECT

FIRE ALARM

SECTION

3/32" = 1'-0"

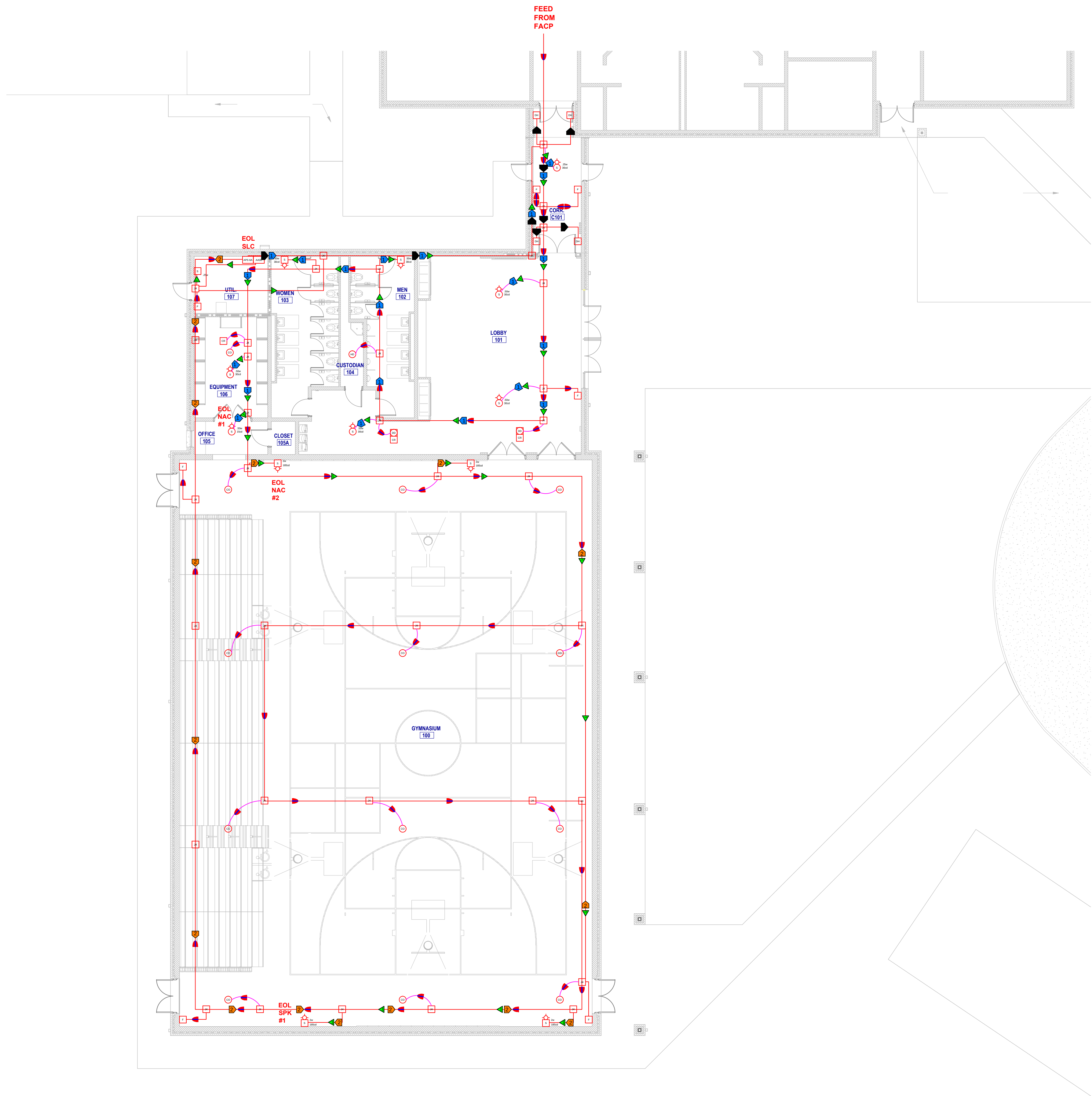
SCALE

REFLECTED CEILING PLAN

TITLE

FA-01-0101

PROJECT #: 24D1K2100-100
ENG: DET SHEET
CAD: DET



	ACTIVATE COMMON ALARM SIGNAL INDICATOR																								ACTIVATE AUDIBLE ALARM SIGNAL																								ACTIVATE COMMON SUPERVISORY SIGNAL INDICATOR																								ACTIVATE AUDIBLE SUPERVISORY SIGNAL INDICATOR																								DISPLAY GENERAL EVACUATION SIGNAL																								ACTIVATE EXTERNAL HORNS/STROBES																								RETURN ELEVATOR TO CENTRAL STATION																								SHUNT TRIP AFTER ELEV. REACHES DESIGNATED FLOOR																								SHOW CHANGE OF STATUS ON ANNUNCIATOR																								TRANSMIT FIRE ALARM SIGNAL TO CENTRAL PANEL																								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	X								X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

FIRE ALARM MATRIX



AUDIO VISUAL / NURSE CALL / SECURITY / LIFE SAFETY
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NC ELECTRICAL CONTRACTORS LICENSE # SP.FA.LV.35479
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VA CLASS A CONTRACTORS LICENSE # 275-127616A
VA DCIS LICENSE # 11-6330

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☐ DESIGN ☒ BUILD ☐ AS-BUILT

01	SUBMITTAL	20 APR 25
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**LILLINGTON-SHAWTOWN
ELEMENTARY SCHOOL**
855 OLD US HWY 421
LILLINGTON, NC 27546
OWNER

GYM EST-3 EXTENSION

PROJECT

FIRE ALARM
SECTION

NONE
SCALE

FIRE ALARM MATRIX
TITLE

FA-01-0601
PROJECT #: 24D1K2100-100
ENG: DET
SHEET
CAD: DET

NOTIFICATION APPLIANCE CIRCUIT LOADING DATA CHART														
				DEVICES ON CIRCUIT										
Bldg.	Flr	Ckt #	Ckt Type	GCSVWF 15-115 Cd SPEAKER/STROBE (CEILING MTD.)			GCSVHRF 135-185 Cd SPEAKER/STROBE (CEILING MTD.)			TOTAL CKT CURRENT [mA]	Est. Ckt Distance #14 AWG [ft]	Voltage Drop @ Estimated Distance [VDC]	Voltage @Ckt. EOL [VDC] (20 VDC Source Assumed)	Volts above Minimum Operating Voltage of 16VDC
				qty	ea. mA	extend . mA	qty	ea. mA	extend . mA					
LSTES	1	VIS-1	VISUAL	7	35	245		53	0	245	657	0.84	19.16	3.16
		VIS-2	VISUAL		35	0	4	53	212	212	657	0.72	19.28	3.28
	TOTALS:				7		245	4		212	457			

NOTE: ALL STROBE CURRENT VALUES FROM SPECIFICATION SHEETS AT 16 TO 33VDC