

ERWIN ELEMENTARY SCHOOL

301 S 10th St
ERWIN, NC, US

TYPE: DISTRIBUTED ANTENNA SYSTEM DESIGN
DATE: 01/07/2021



DESIGN CRITERIA

ASSUMPTIONS:

- -70 dBm OR BETTER SIGNAL AVAILABLE AT THE PROPOSED DONOR ANTENNA LOCATION
- 20 dB OR BETTER OF ISOLATION BETWEEN DONOR AND INDOOR ANTENNAS
- 32 CHANNELS FOR 700/800 MHz SYSTEM
- ALL PASSIVE DEVICES (DIRECTIONAL COUPLERS, SPLITTERS) ARE INSTALLED INSIDE JUNCTION BOXES WITH PROPER SPACING FOR CONNECTIONS.
- 24 HR BATTERY BACKUP SYSTEM IS INCLUDED
- ALL EQUIPMENT AND CABLING CAN BE INSTALLED AS DESIGNED
- FINAL ANTENNA LOCATION TO BE DETERMINED BY SYSTEM INTEGRATOR
- INSTALLER TO HAVE A VARIETY OF ATTENUATORS ON HAND TO BALANCE SYSTEM DURING COMMISSIONING STAGE

NOTES

COVERAGE AREA INCLUDES 1ST FLOOR, 2ND FLOOR
HONEYWELL NOTIFIER BDA: CLASS B, 0.5 WATTS COMPOSITE OUTPUT POWER
PASSIVE DAS OPERATIONAL RANGE 698-2700 MHZ
BDA LOCATED ON THE 2ND FLOOR
REMOTE ANNUNCIATOR TO BE INSTALLED AT FIRE CONTROL COMMAND ROOM AT LEVEL 1
DONOR ANTENNA AND ALL POWERED EQUIPMENT SHALL BE CONNECTED TO THE BUILDING GROUNDING SYSTEM.
DONOR ANTENNA SHALL BE CONNECTED TO LIGHTNING PROTECTION SYSTEM (IF EXISTING IN THE BUILDING).
PREDICTION HEATMAP OUTPUTS ARE BASED ON VARIABLE PATH LOSS

REVISIONS

VERSION 1: ORIGINAL, DATE: 02/05/2021

ERWIN ELEMENTARY SCHOOL
301 S 10th ST
ERWIN, NC, US

Revision History

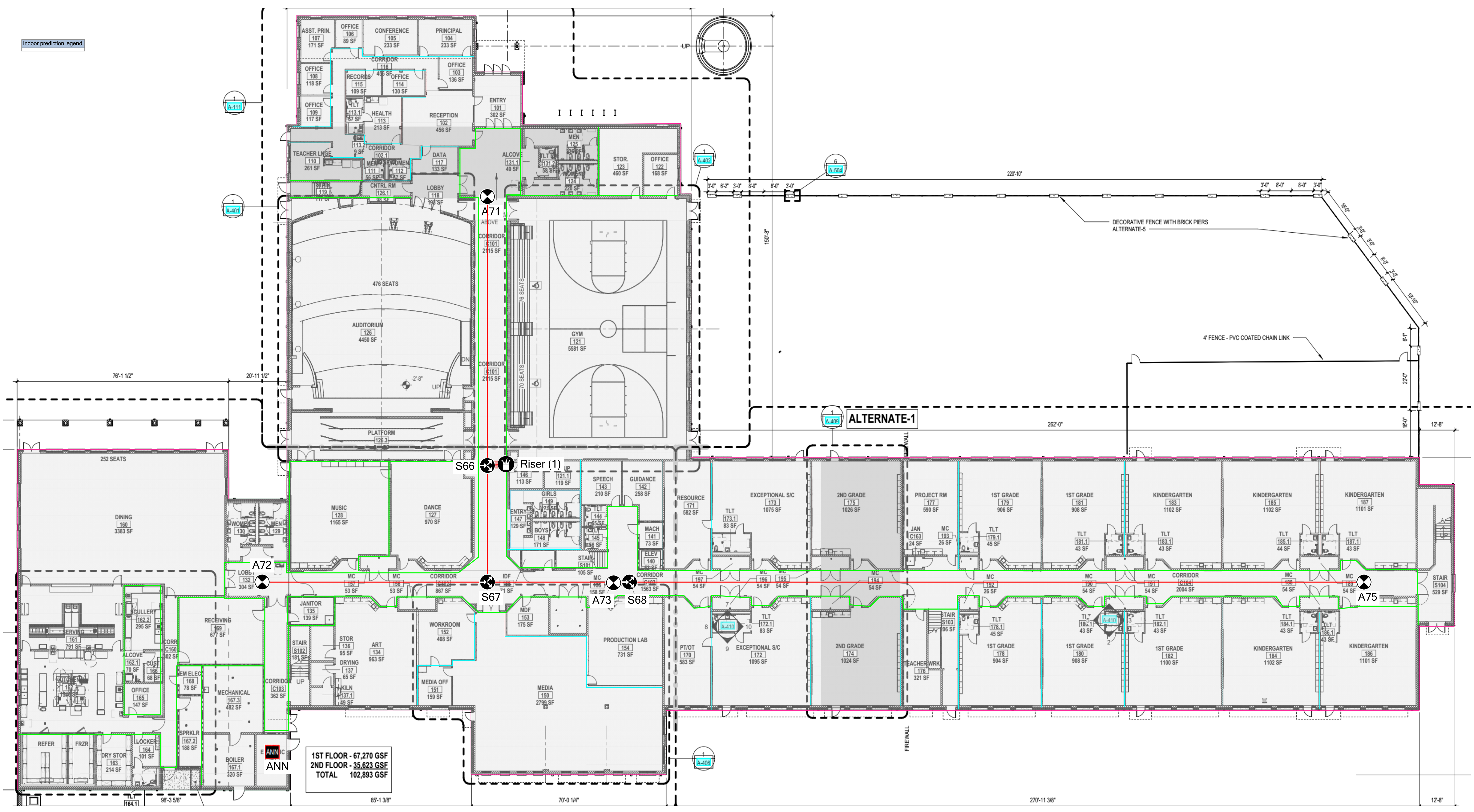
Rev. Name

Cover Page

Date

10/20/2021

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1ST FLOOR - 67,270 GSF
2ND FLOOR - 35,623 GSF
TOTAL 102,893 GSF

Legend

Donor Antenna, Yagi Directional
763-869MHz, 14dBi
BDA-YDA763869-14-1

Omni indoor 698-869MHz 3dBi, Low Profile
BDA-OIA-698869-3-1

- RF DIRECTIONAL COUPLER, 698-2690 MHz, 300W
BDA-DCx-W2
- POWER SPLITTER, 698-2700 MHz. Broadband power
splitter, 2 way, 50W
BDA-PS2-W2
- Coaxial RF Surge Protector, DC - 6GHz, 90W, IP67, 60 V Max
BDA-P8AX09-6G-N/FF

- Coaxial Cable Jumper NM-NM 1/4" Superflex, Outdoor UV, 48" long
BDA-NM-RG8-13-NM
- 1/2in Plenum coax cable Rated/ Indoor/ Outdoor Usage/ Color Red
BDA-ICA12-JPLLR-1K
- Coaxial Cable Grounding Kit
BDA-GNDKIT1
- Weatherproofing Silicone Coldshrink for EOL Assembly, 9.8"L
BDA-WPK-ATBC40_01

- 700/800MHz BDA, class B, 0.5W, DC
NFBDA-D-7S27B
- Battery Backup (BBU) 100AH, 24VDC
NFBDA-BTTY-100100
- Remote annunciator without dry contacts (ANN1)
NFBDA-BTTY-ANN-4

Revision History

Rev	Description

Date

FLOOR 1

Date

10/20/2021

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Revision History

Date

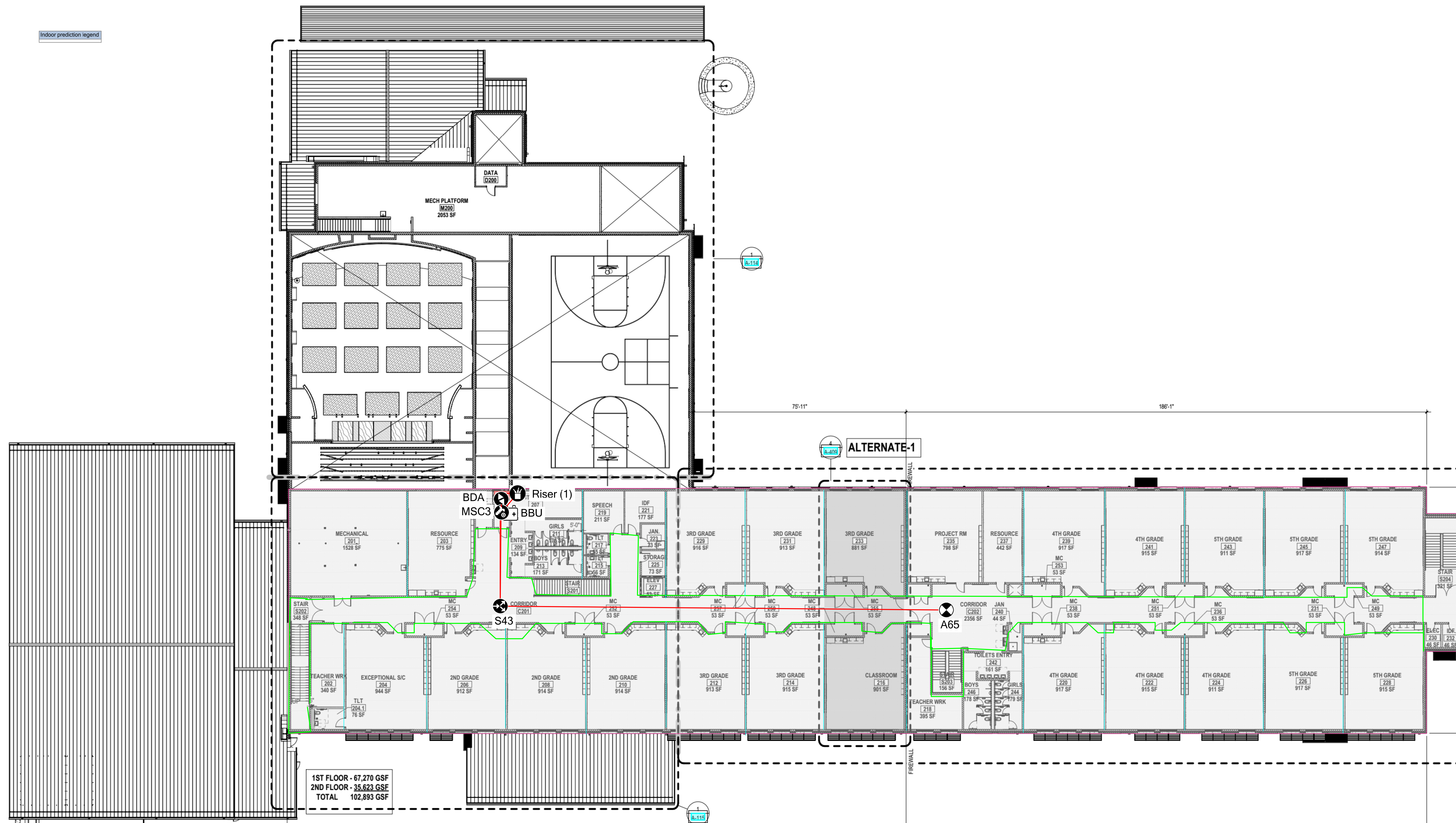
FLOOR 2

Date

10/20/2021

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Indoor prediction legend



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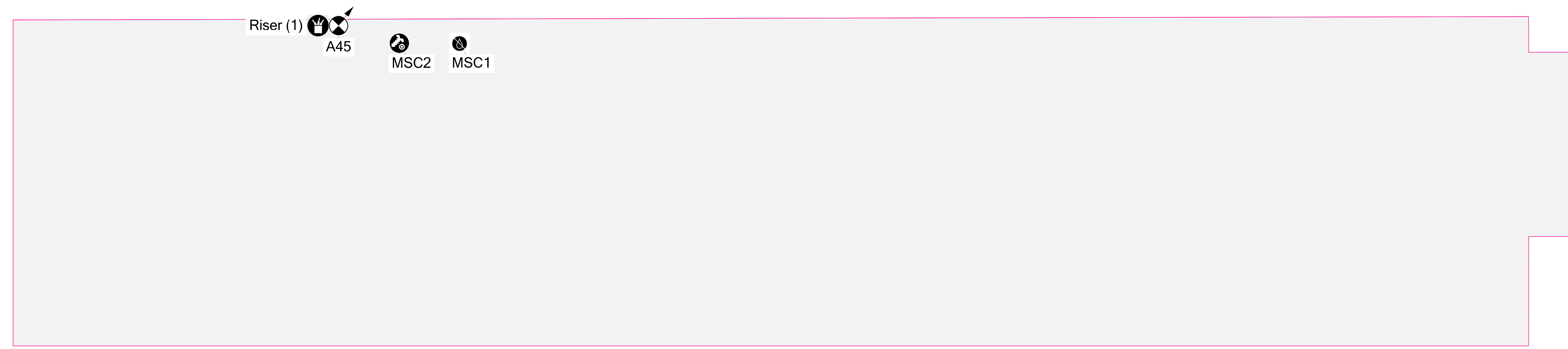
Coaxial Cable Grounding Kit
BDA-GNDKIT1

Weatherproofing Silicone Coldshrink for EOL Assembly, 9.8"L



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NFBDA-D-7S27B




Battery Backup (BBU) 100AH, 24VDC
NFBDA-BTTY-100100




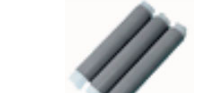
Remote annunciator without dry contacts (ANN1)
NFBDA-BTTY-ANN-4



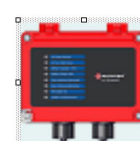


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Revision history

Data name

ROOF

Date