

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Auditorium Renovations CC Spaulding Elementary, Main Bldg
Address: 1531 S Roxboro St. Durham NC 27707
Zip Code:
Owner/Authorized Agent: Durham Public Schools (919) 569-2504
E-Mail: bernard.hall@dpsn.net

CONTACT:
DESIGNER: Butte, PLLC
NAME: Lindsey Bute
LICENSE # NC 5824
TELEPHONE # 919.491.9105
E-MAIL: lindsey@butepllc.com
FIRM: Edmondson Engineers
NAME: Dennis Hays
LICENSE # 28869
TELEPHONE # (919.544.1936
E-MAIL: Dennis.hays@edmondsone.com

2018 NC BUILDING CODE:
New Building
Addition
Renovation
1st Time Interior Completion
Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements

2018 NC EXISTING BUILDING CODE:
Prescriptive
Repair
Alteration: Level I, Level II, Level III
Historic Property
Change of Use

CONSTRUCTED: (date) 1954
CURRENT OCCUPANCY(S) (Ch. 3): E, A1, A2, A3
RENOVATED: (date) 1975, 2009
PROPOSED OCCUPANCY(S) (Ch. 3): E, A1, A2, A3

RISK CATEGORY (Table 1604.5):
Current: I, II, III, IV
Proposed: I, II, III, IV

Table with 4 columns: FLOOR, EXISTING (SQ FT), NEW (SQ FT), SUB-TOTAL. Rows include 3rd Floor, 2nd Floor, Mezzanine, 1st Floor, Basement, and TOTAL.

ALLOWABLE AREA

Primary Occupancy Classification(s):
Assembly: A-1, A-2, A-3, A-4, A-5
Business
Educational
Factory
Hazardous
Institutional
Mercantile
Residential
Storage
Utility and Miscellaneous

Accessory Occupancy Classification(s): A1, A2, A3
Incidental Uses (Table 509):
Special Uses (Chapter 4 - List Code Sections):
Special Provisions (Chapter 5 - List Code Sections):
Mixed Occupancy: No

Actual Area of Occupancy A + Actual Area of Occupancy B
Allowable Area of Occupancy A Allowable Area of Occupancy B <= 1.00

Table with 6 columns: STORY NO., DESCRIPTION AND USE, (A) BLDG AREA PER STORY (ACTUAL), (B) TABLE 506.2* AREA, (C) AREA FOR FRONTAGE INCREASE 1, 2, (D) ALLOWABLE AREA PER STORY OR UNLIMITED 2, 3

Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 1232 (F)
b. Total Building Perimeter = 1248 (P)
c. Ratio (F/P) = .98 (FP)
d. W = Minimum width of public way = 30 (W)
e. Percent of frontage increase I = 100(F/P - 0.25) x W/30 = 73 (%)

ALLOWABLE HEIGHT

Table with 4 columns: ALLOWABLE, SHOWN ON PLANS, CODE REFERENCE. Rows include Building Height in Feet (Table 504.3), Building Height in Stories (Table 504.4)

Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.
The maximum height of air traffic control towers must comply with Table 412.3.1.
The maximum height of open parking garages must comply with Table 406.5.4.

FIRE PROTECTION REQUIREMENTS

Table with columns: BUILDING ELEMENT, FIRE SEPARATION DISTANCE (FEET), RATED (FEET), DETAIL # AND SHEET #, DESIGN # FOR RATED ASSEMBLY, SHEET # FOR PENETRATION RATED JOINTS

PERCENTAGE OF WALL OPENING CALCULATIONS

Table with 4 columns: FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES, DEGREE OF OPENING PROTECTION (TABLE 705.3), ALLOWABLE AREA (%), ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS
Emergency Lighting: No, Yes
Exit Signs: No, Yes
Fire Alarm: No, Yes
Smoke Detection Systems: No, Yes, Partial
Carbon Monoxide Detection: No, Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #:
Fire and/or smoke rated wall locations (Chapter 7)
Assumed and real property line locations (if not on the site plan)
Exterior wall opening area with respect to distance to assumed property lines (705.8)
Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
Occupant loads for each area
Exit access travel distances (1017)
Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
Dead end lengths (1020.4)
Clear exit widths for each exit door
Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
Actual occupant load for each exit door
A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
Location of doors with panic hardware (1010.1.10)
Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
Location of doors with electromagnetic egress locks (1010.1.9.9)
Location of doors equipped with hold-open devices
Location of emergency escape windows (1030)
The square footage of each fire area (202)
Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 1107)

Table with 8 columns: TOTAL UNITS, ACCESSIBLE UNITS REQUIRED, ACCESSIBLE UNITS PROVIDED, TYPE A UNITS, TYPE B UNITS, TYPE B UNITS PROVIDED, TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING (SECTION 1106)

Table with 5 columns: LOT OR PARKING AREA, TOTAL # OF PARKING SPACES REQUIRED, PROVIDED, # OF ACCESSIBLE SPACES PROVIDED: REGULAR WITH 5' ACCESSIBLE, 132' ACCESSIBLE, 8' ACCESSIBLE, TOTAL # ACCESSIBLE PROVIDED

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

Table with 4 columns: USE, WATERCLOSURES: MALE, FEMALE, UNSEX, LAVATORIES: MALE, FEMALE, UNSEX, SHOWERS, DRINKING FOUNTAINS: REGULAR, ACCESSIBLE

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet.

Existing building envelope complies with code: No, Yes (The remainder of this section is not applicable)
Exempt Building: No, Yes (Provide code or statutory reference)
Climate Zone: 3A, 4A, 5A
Method of Compliance: Energy Code, ASHRAE 90.1, Prescriptive

THERMAL ENVELOPE (Prescriptive method only)

Roof/Ceiling Assembly (each assembly):
Description of assembly: PVC membrane over rigid insulation, gypsum deck, steel structure
U-Value of total assembly: 0.03
R-Value of insulation: 28.8
Skylights in each assembly:
U-Value of skylight:
total square footage of skylights in each assembly:
Exterior Walls (each assembly): Existing
Description of assembly: 12" masonry
U-Value of total assembly:
R-Value of insulation:
Openings (windows or doors with glazing):
U-Value of assembly:
Solar heat gain coefficient:
projection factor:
Door R-Values:
Walls below grade (each assembly): Not applicable at Auditorium
Description of assembly:
U-Value of total assembly:
R-Value of insulation:
Horizontal/vertical requirement:
slab located:
Floors over unconditioned space (each assembly): Not applicable at Auditorium
Description of assembly:
U-Value of total assembly:
R-Value of insulation:
Floors slab on grade: Not applicable at Auditorium
Description of assembly:
U-Value of total assembly:
R-Value of insulation:
Horizontal/vertical requirement:
slab located:

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

IMPORTANCE FACTORS:
Snow (Is): 1.1
Seismic (Ie): 1.25
Live Loads:
Roof: 20 psf
Mezzanine: 100 psf
Floor: 100 psf
Ground Snow Load: 15 psf
Wind Load:
Ultimate Wind Speed: 120 mph (ASCE-7)
Exposure Category: B

SEISMIC DESIGN CATEGORY: A, B, C, D
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5): I, II, III, IV
Spectral Response Acceleration: 15.3 %g
Site Classification (ASCE 7): A, B, C, D, E, F
Data Source: Field Test, Presumptive, Historical Data
Basic structural system: Bearing Wall, Dual w/Special Moment Frame, Building Frame, Dual w/Intermediate R/C or Special Steel, Moment Frame, Inverted Pendulum
Analysis Procedure: Simplified, Equivalent Lateral Force, Dynamic
Architectural, Mechanical, Components anchored: Yes, No
LATERAL DESIGN CONTROL: Earthquake, Wind

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report): 2000 psf
Presumptive Bearing capacity:
Pile size, type, and capacity:

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
Thermal Zone: winter dry bulb, summer dry bulb, EXISTING
Interior design conditions: winter dry bulb, summer dry bulb, relative humidity
Building heating load:
Building cooling load:
Mechanical Spacing Conditioning System: Unitary
description of unit: heating efficiency, cooling efficiency, size category of unit:
Boiler: Size category. If oversized, state reason:
Chiller: Size category. If oversized, state reason:
List equipment efficiencies:

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT
Method of Compliance: Energy Code, ASHRAE 90.1, Performance, Prescriptive
Lighting schedule (each fixture type):
lamp type required in fixture, number of lamps in fixture, ballast type used in the fixture, number of ballasts in fixture, total wattage per fixture, total interior wattage specified vs. allowed (whole building or space by space), total exterior wattage specified vs. allowed
Additional Efficiency Package Options (When using the 2018 NCECC; not required for ASHRAE 90.1)
C406.2 More Efficient HVAC Equipment Performance
C406.3 Reduced Lighting Power Density
C406.4 Enhanced Digital Lighting Controls
C406.5 On-Site Renewable Energy
C406.6 Dedicated Outdoor Air System
C406.7 Reduced Energy Use in Service Water Heating

Auditorium Renovations
CC Spaulding Elementary
Durham Public Schools

BID SET March 7, 2024

Architect:
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Electrical Design:
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Structural Design:
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Hillsborough, NC 27278
919.241.8745

Acoustic Design:
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2500 Gateway Center Blvd, Suite 800
Morrisville, NC 27560
919.463.9995

Owner:
Durham Public Schools
2011 Hamlin Road
Durham, NC 27704
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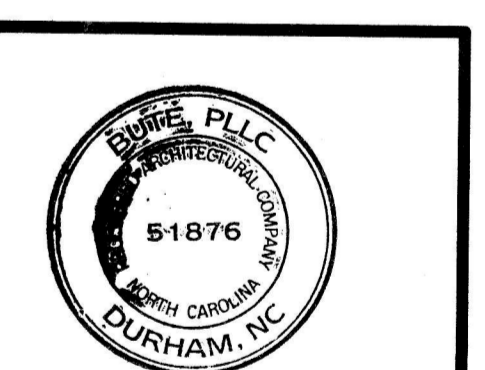
- Index of Drawings:
1.0 Cover/Data Sheet
0.1 Schedules/Notes
1.0 Plan - Demolition
2.0 Plan - New Construction
3.0 Sections/Reflected Ceiling
4.0 Elevations/Details
5.0 Reflected Ceiling Plan
6.0 Details

- E1.0 Electrical Cover Sheet
E2.0 Electrical Demolition Plan
E3.0 Electrical Renovation Plan
E3.1 Lighting Plan

- TA-001 Sheet Index and Notes
TA-101 AV Floor Plan
TA-301 Sections and Elevations
TA-701 Coordination Details

These drawings are instruments of service and as such remain the property of the Architect. No copies or reproductions are permitted without the consent of the Architect. Upon completion of the work all drawings (except the contract copies) are to be returned to the Architect.
Cover/Data Sheet

Auditorium Renovations
CC Spaulding Elementary
School
Butte, PLLC No. 2205

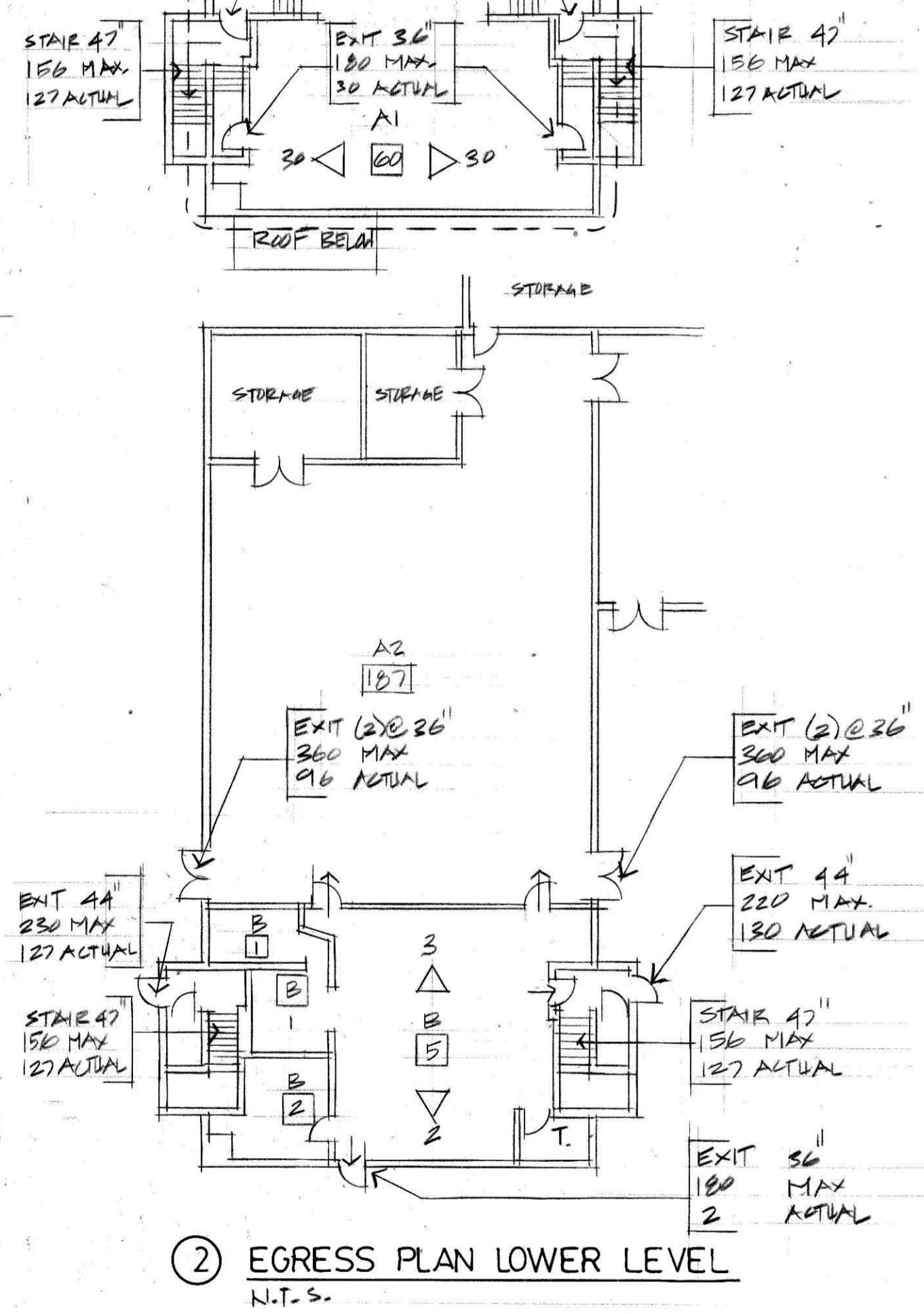
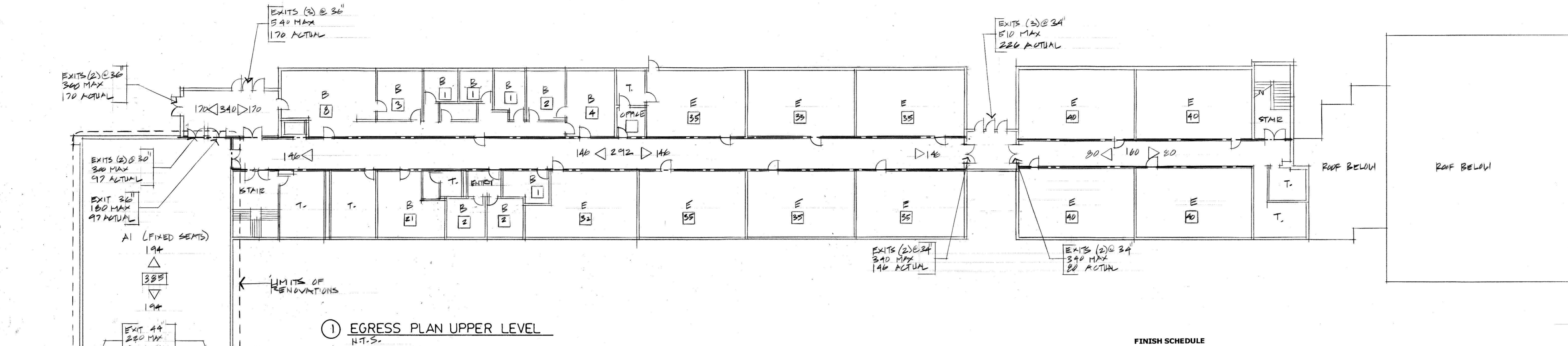


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Date: Bid Set March 7, 2024
Revisions:
Sheet 0.0

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Schedules/Notes



FINISH SCHEDULE

Room Number	Floor Material	Base	WS.	HT.	Wall Material	Ceiling Mat.	Notes
224	Auditorium	1	2	3	4	5	6
224A	Stage	2	3	4	5	6	7
224B	Stair	4	3	1	2	3	4
224C	Stair	4	3	1	2	3	4
224D	Stair	4	3	1	2	3	4
224E	Stair	4	3	1	2	3	4
225	Entry	4	3	1	2	3	4

DOOR SCHEDULE

No.	Door	Door Type	Label	Door Mat.	Glazing	Frame Type	Details	Hardware Set
E	Exit to remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	(1) 3'-4" X 7'-0" X 1 3/4" (1) 1'-8" X 7'-0" X 1 3/4"	See 7/3.0	20 min.	Wood	N/A	See 7/3.0 & 8/3.0	See 8/3.0	1. see 087000

LEGEND

- ① NEW DOOR NO.
- ⓔ EXIST DOOR # FRAME TO REMAIN
- Ⓛ EXIST LIGHT TO REMAIN
- ⓐ NEW CURTAIN TRACK, SEE SCHEDULE
- INDICATES 1 HOUR RATED PARTITION
- 50 < 100 > 50 OCCUPANT LOAD IN DIRECTION OF TRAVEL
- ↑ TOTAL OCCUPANT LOAD
- E ← OCCUPANCY TYPE
- 40 ← OCCUPANT LOAD
- EXIT DOOR OR STAIR → EXIT/STAIR 30" CLEAR OPENING WIDTH
- 180 MAX → MAX OCCUPANT LOAD
- 140 ACTUAL → ACTUAL OCCUPANT LOAD

**Auditorium Renovations
CC Spaulding
Elementary
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**Durham Public
Schools**

Bute, PLLC No. 2205



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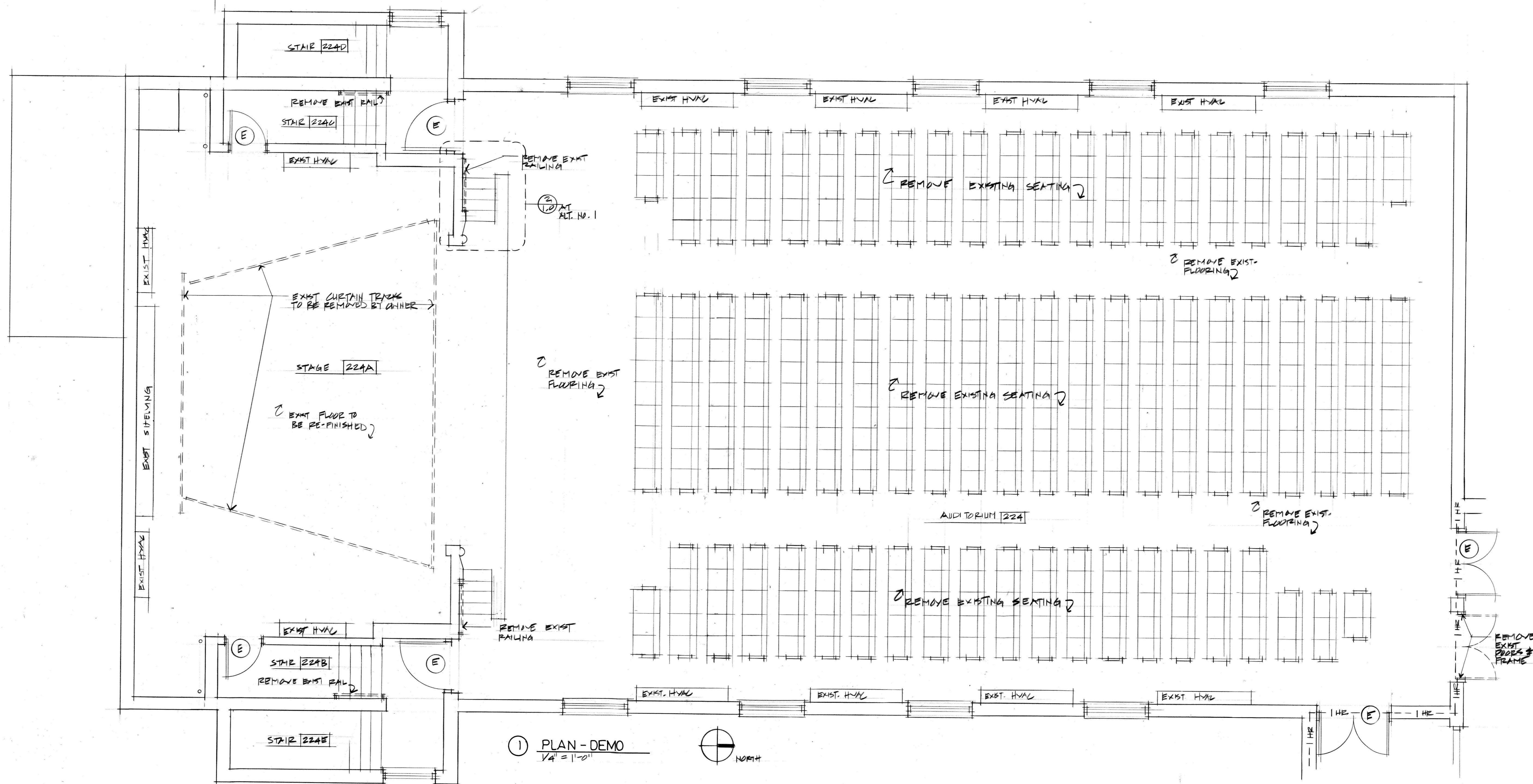
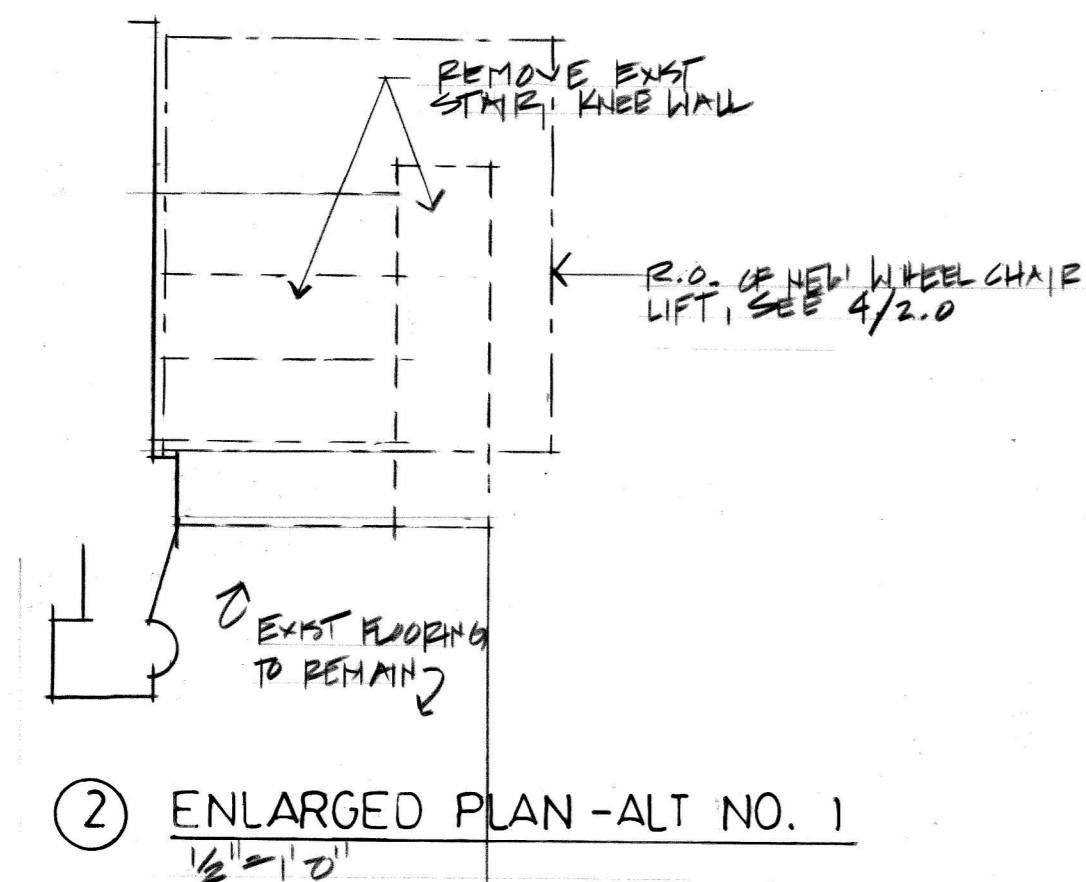
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DEMOLITION NOTES

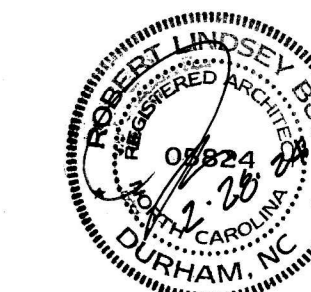
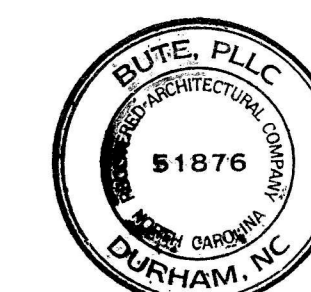
1. PROTECT ALL EXIST. HVAC UNITS
2. SEE SPECIFICATIONS FOR ABATEMENT REQUIREMENTS



Plan - Demolition

**Auditorium Renovations
 CC Spaulding Elementary School
 Durham Public Schools**

Bute, PLLC No. 2205



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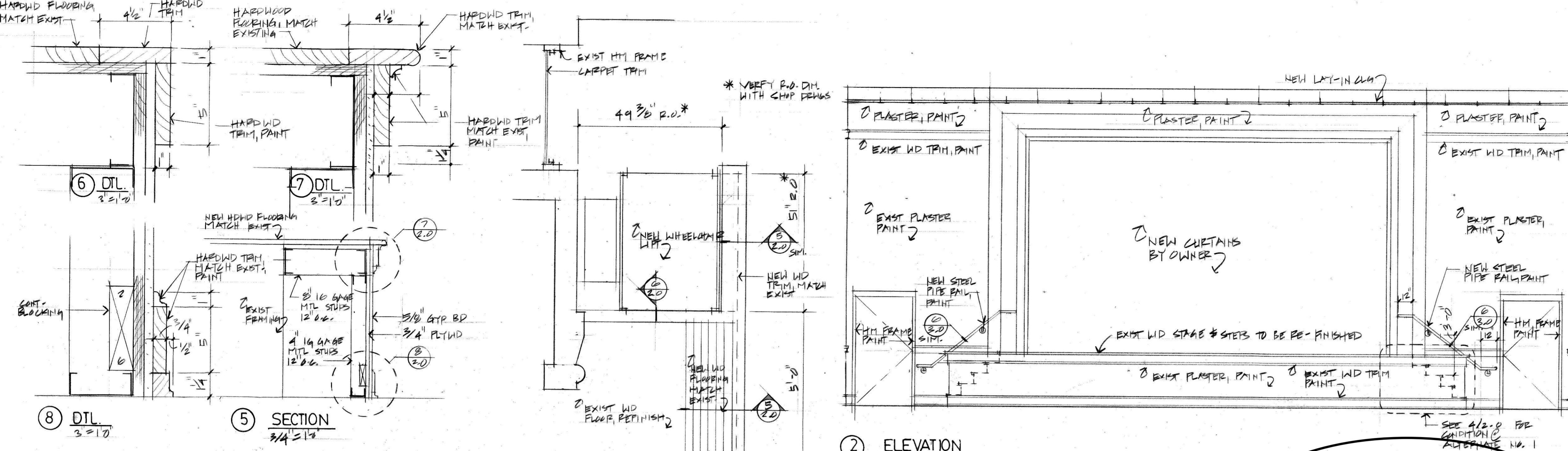
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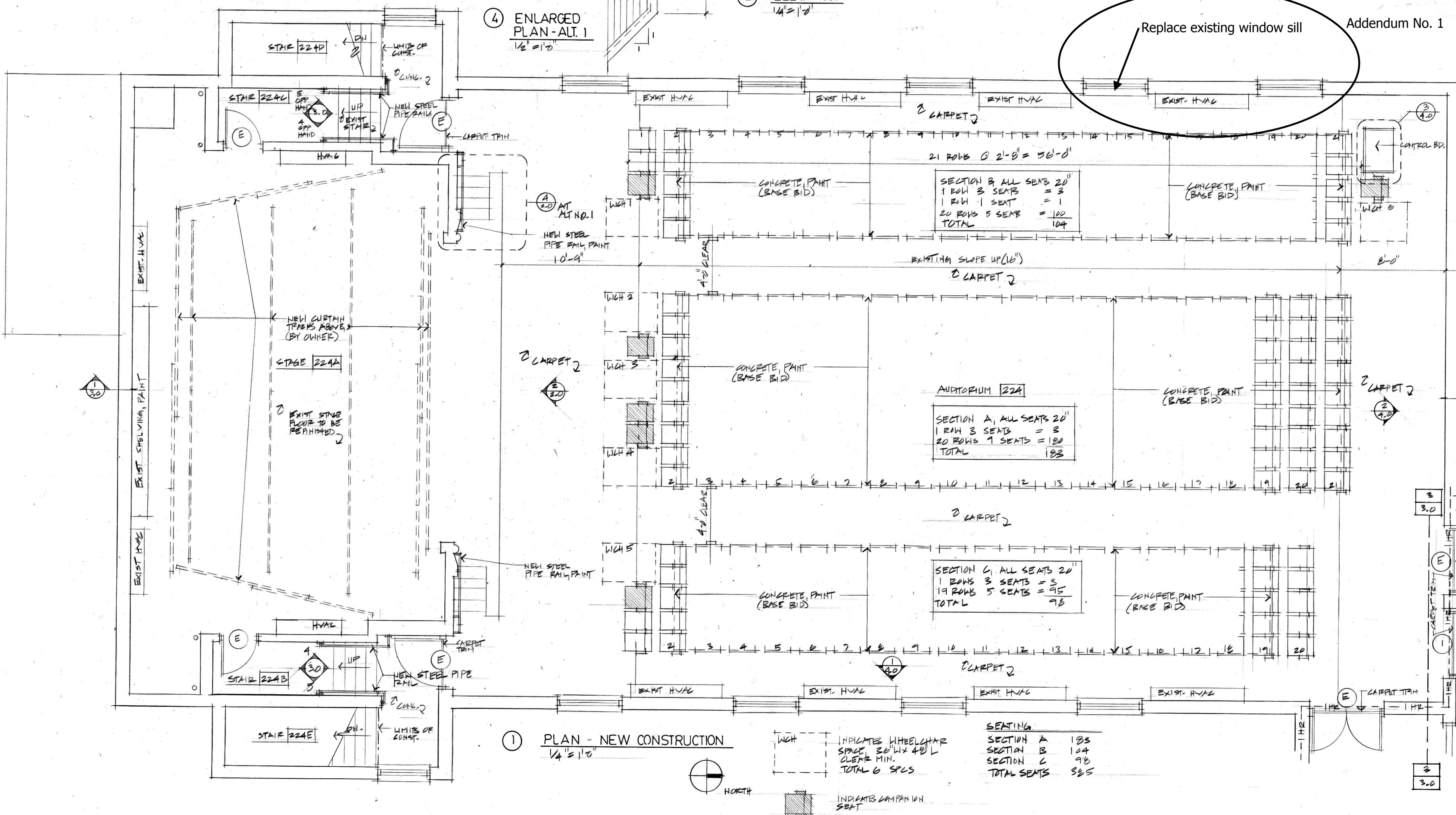
Sheet 1.0

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Plan - New Construction



- GENERAL CONSTRUCTION NOTES**
1. INSTALL NEW BLINDS ON ALL WINDOWS IN AUDITORIUM 224
 2. EXACT LOCATION OF SEATING TO BE DETERMINED IN SHOP PERMITS.
 3. ALL EXIST. HM DOOR FRAMES TO BE PAINTED.



Replace existing window sill

Addendum No. 1

SECTION B, ALL SEATS 20"

1 ROW 3 SEATS	= 3
1 ROW 1 SEAT	= 1
20 ROWS 5 SEATS	= 100
TOTAL	104

SECTION A, ALL SEATS 20"

1 ROW 3 SEATS	= 3
20 ROWS 1 SEAT	= 180
TOTAL	183

SECTION C, ALL SEATS 20"

1 ROW 3 SEATS	= 3
19 ROWS 5 SEATS	= 95
TOTAL	98

SEATING

SECTION A	183
SECTION B	104
SECTION C	98
TOTAL SEATS	385

**Auditorium Renovations
CC Spaulding Elementary School**

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Sheet 2.0

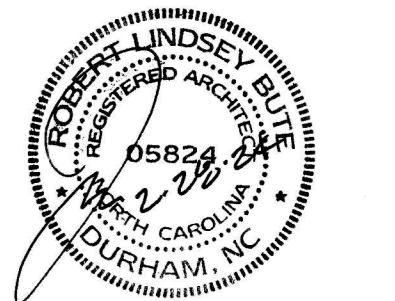
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Sections, Reflected Ceiling

**Auditorium Renovations
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**Durham Public
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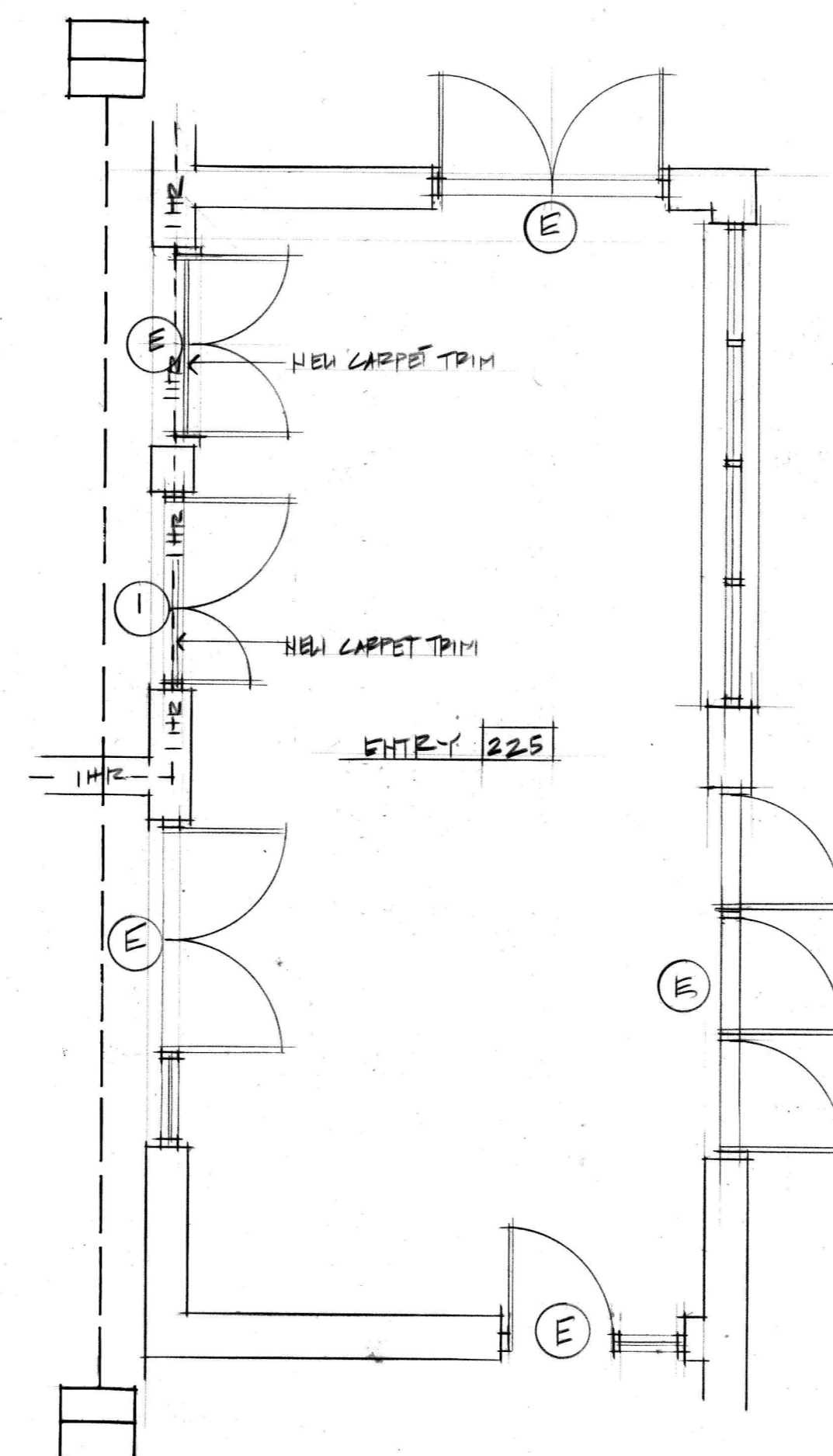
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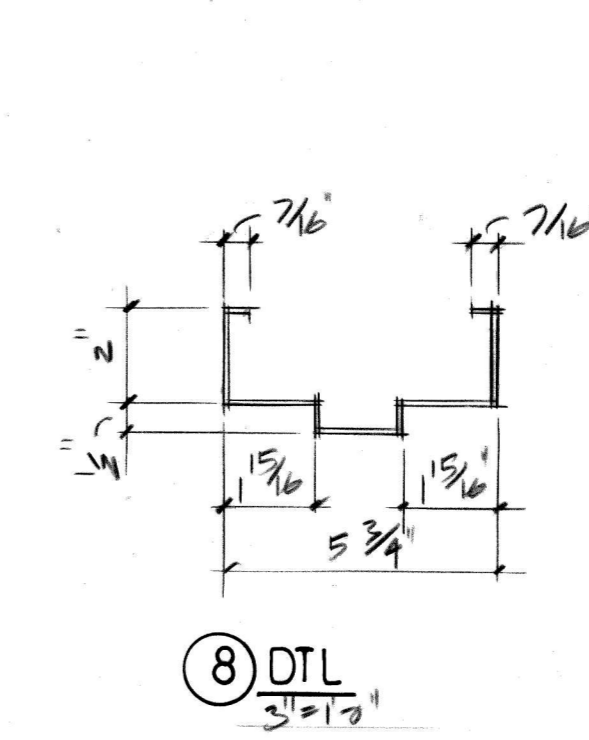
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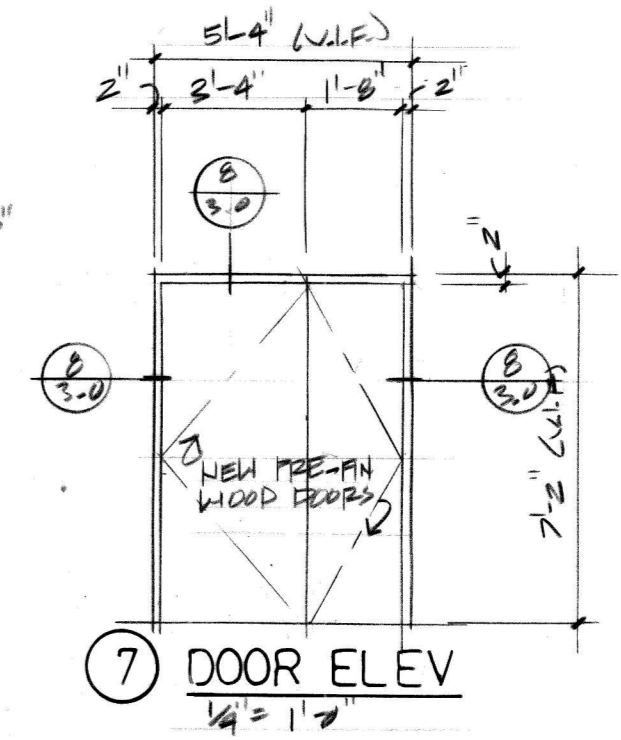
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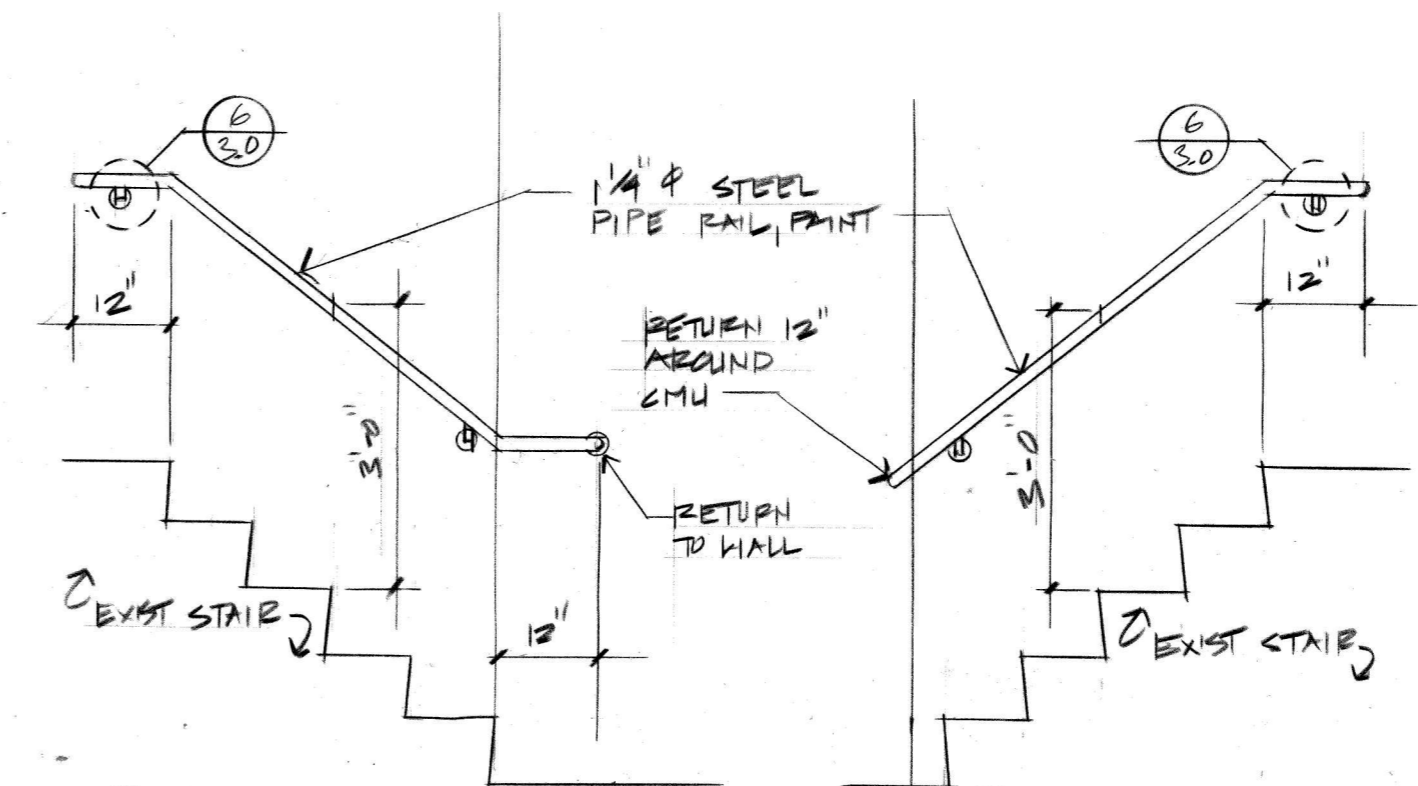
③ PLAN AT ENTRY 225
1/4" = 1'-0"



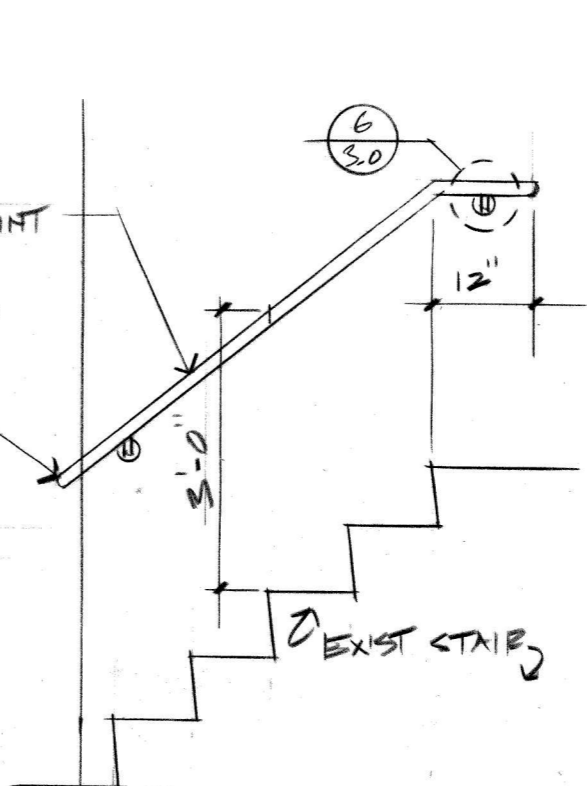
⑧ DTL
3/8" = 1'-0"



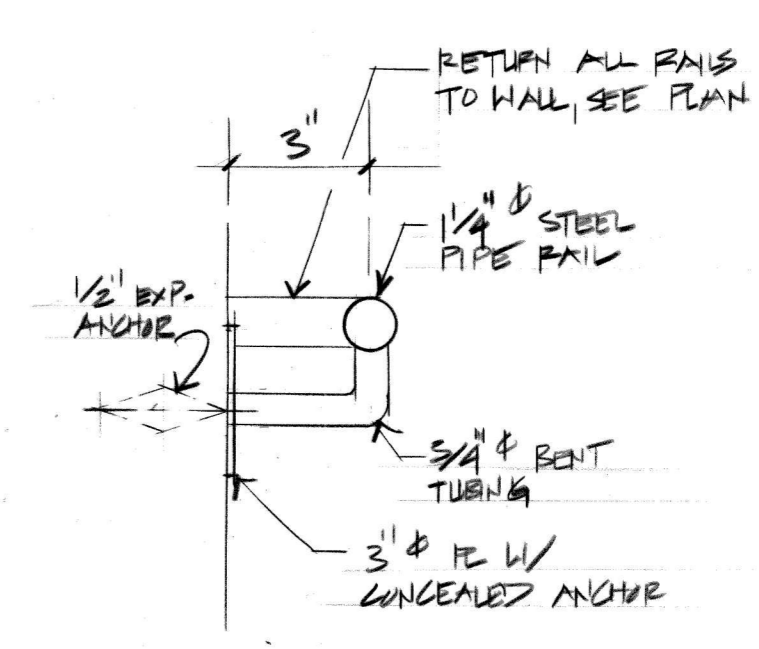
⑦ DOOR ELEV
1/4" = 1'-0"



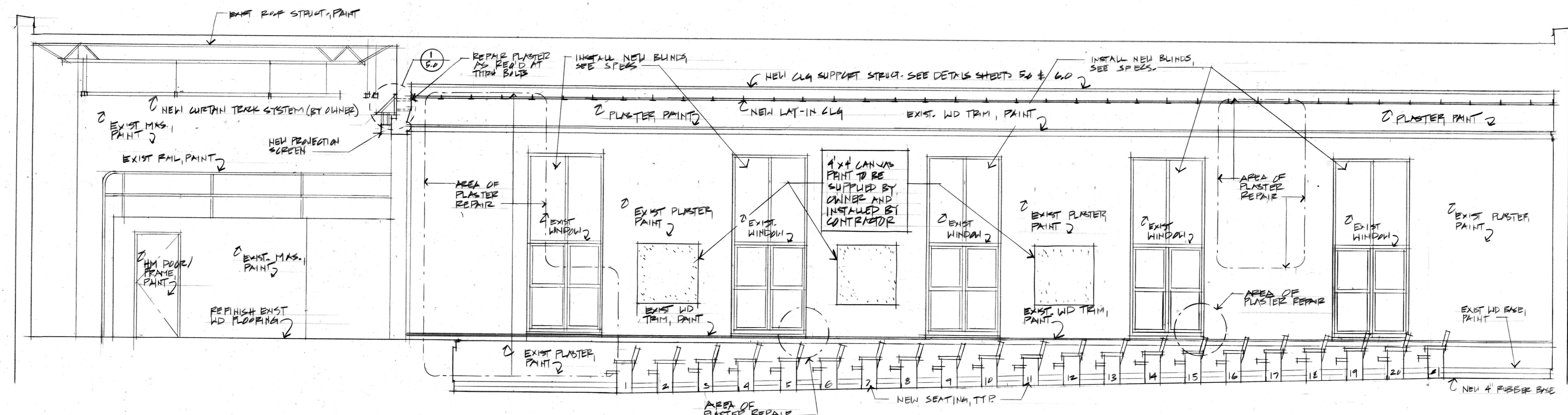
④ ELEV
1/2" = 1'-0"



⑤ ELEV
1/2" = 1'-0"



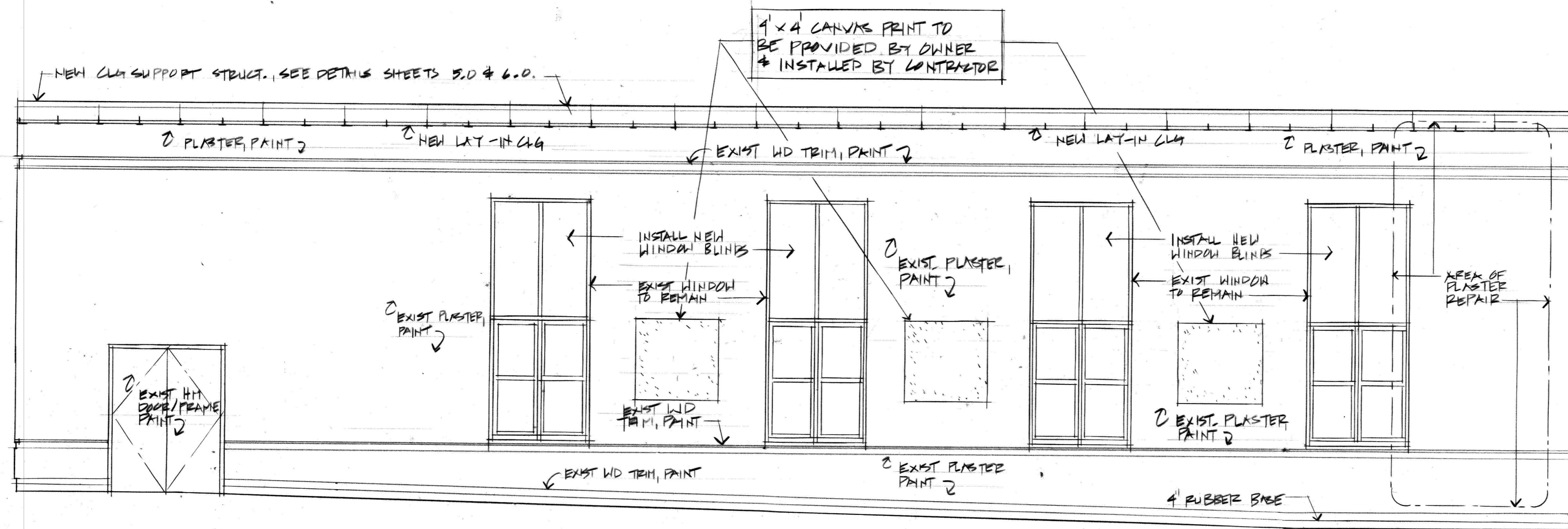
⑥ DTL
3/8" = 1'-0"



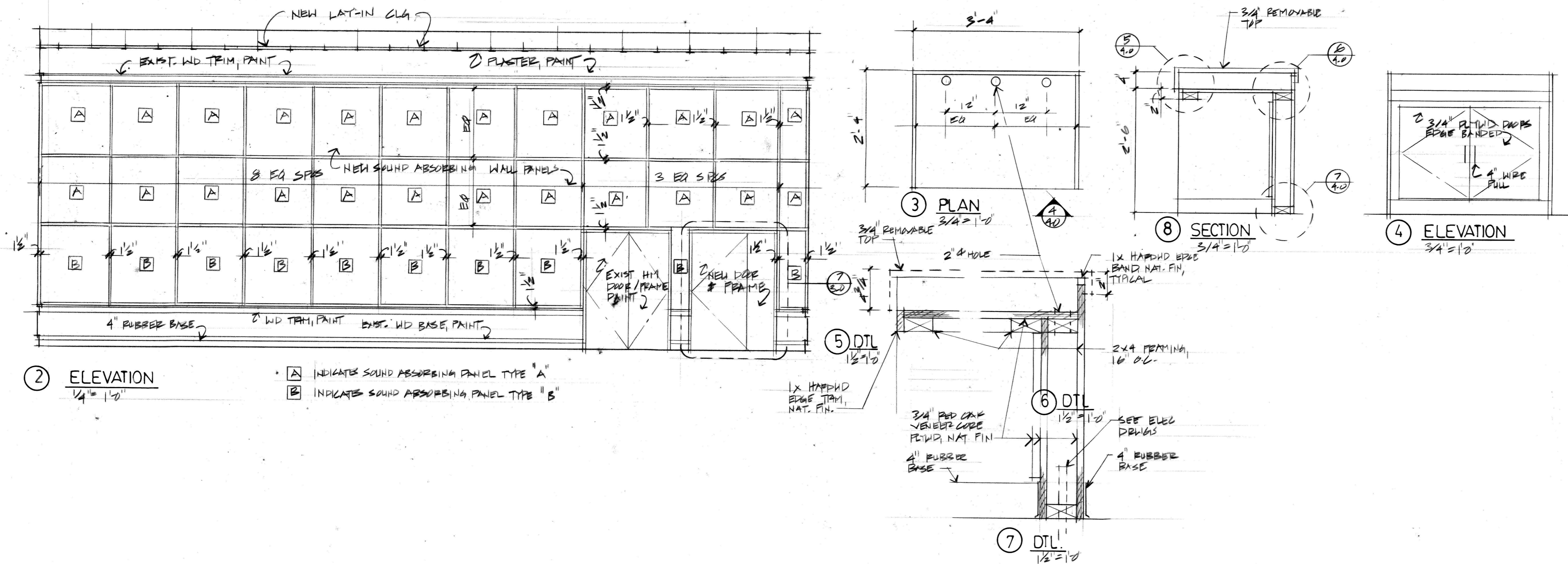
① SECTION
1/4" = 1'-0"

NOTE: REINFORCE EXIST ROOF JOISTS AT CURTAIN TRACK MOUNTING PER DTL 2/5.0

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1 ELEVATION
1/4" = 1'-0"



2 ELEVATION
1/4" = 1'-0"

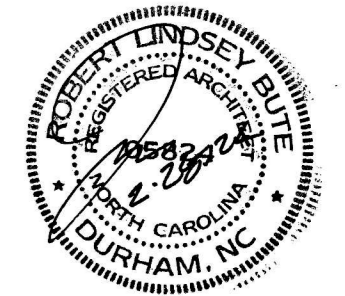
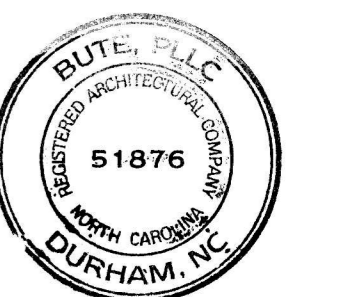
△ INDICATES SOUND ABSORBING PANEL TYPE "A"
 ▣ INDICATES SOUND ABSORBING PANEL TYPE "B"

Elevations/Details

**Auditorium Renovations
 CC Spaulding
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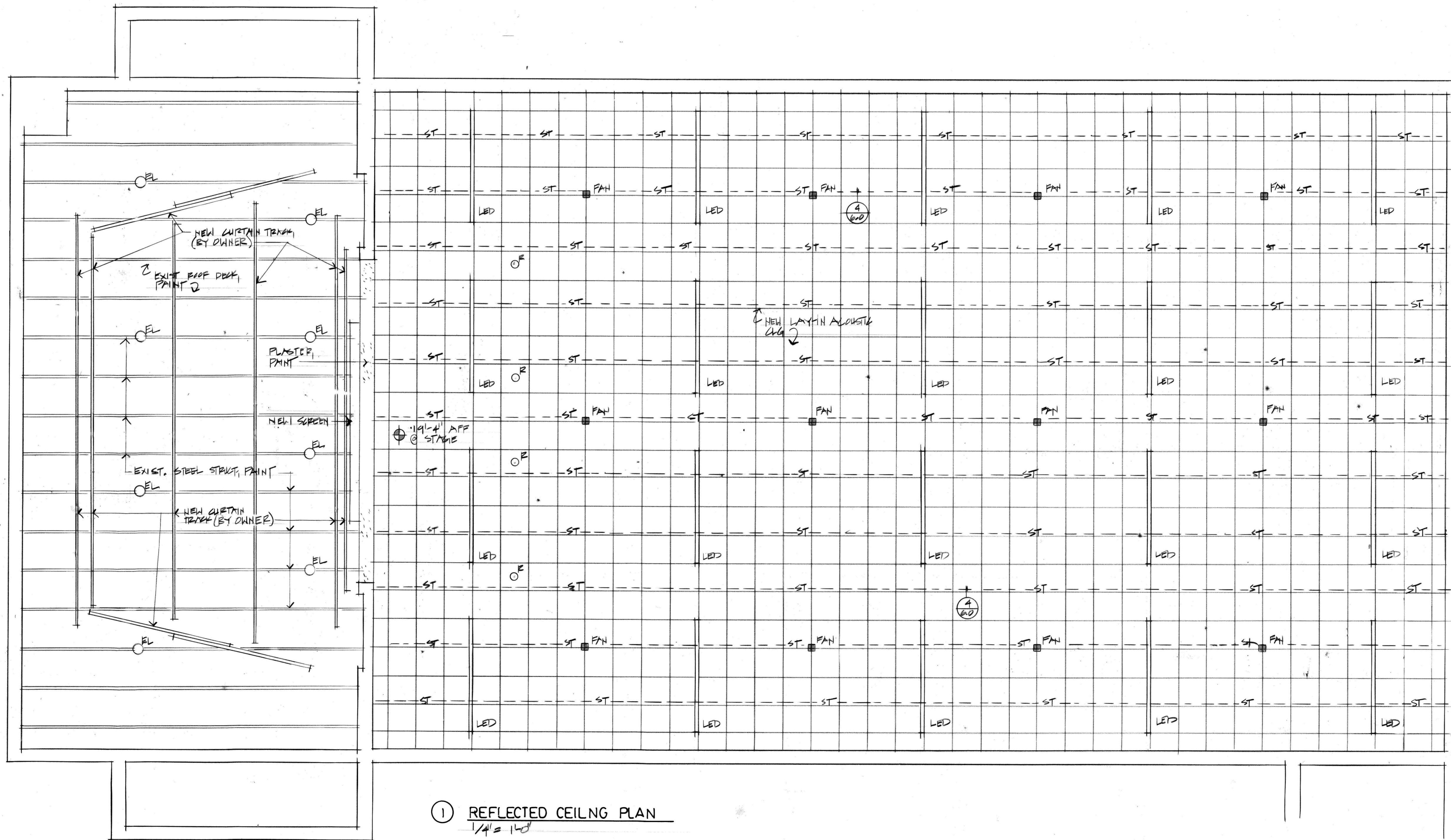
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Reflected Ceiling Plan

LEGEND

- FAN NEW CEILING FAN, SEE ELEC. DRAWG
- EL EXIST. LIGHT TO REMAIN, SEE ELEC. DRAWG
- R NEW RECESSED LIGHT, SEE ELEC. DRAWG
- ST - NEW STRUCT. ABOVE, SEE SHEET 6.0
- || LED NEW LED FIXTURE, SEE ELEC. DRAWG

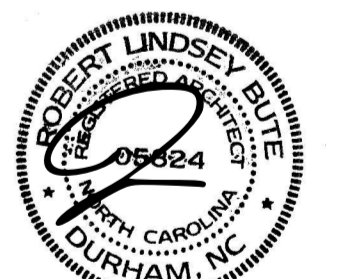


① REFLECTED CEILING PLAN
1/4" = 1'-0"

**Auditorium
Renovations
CC Spaulding
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School**

**Durham Public
Schools**

Bute, PLLC No. 2205



Bute, PLLC

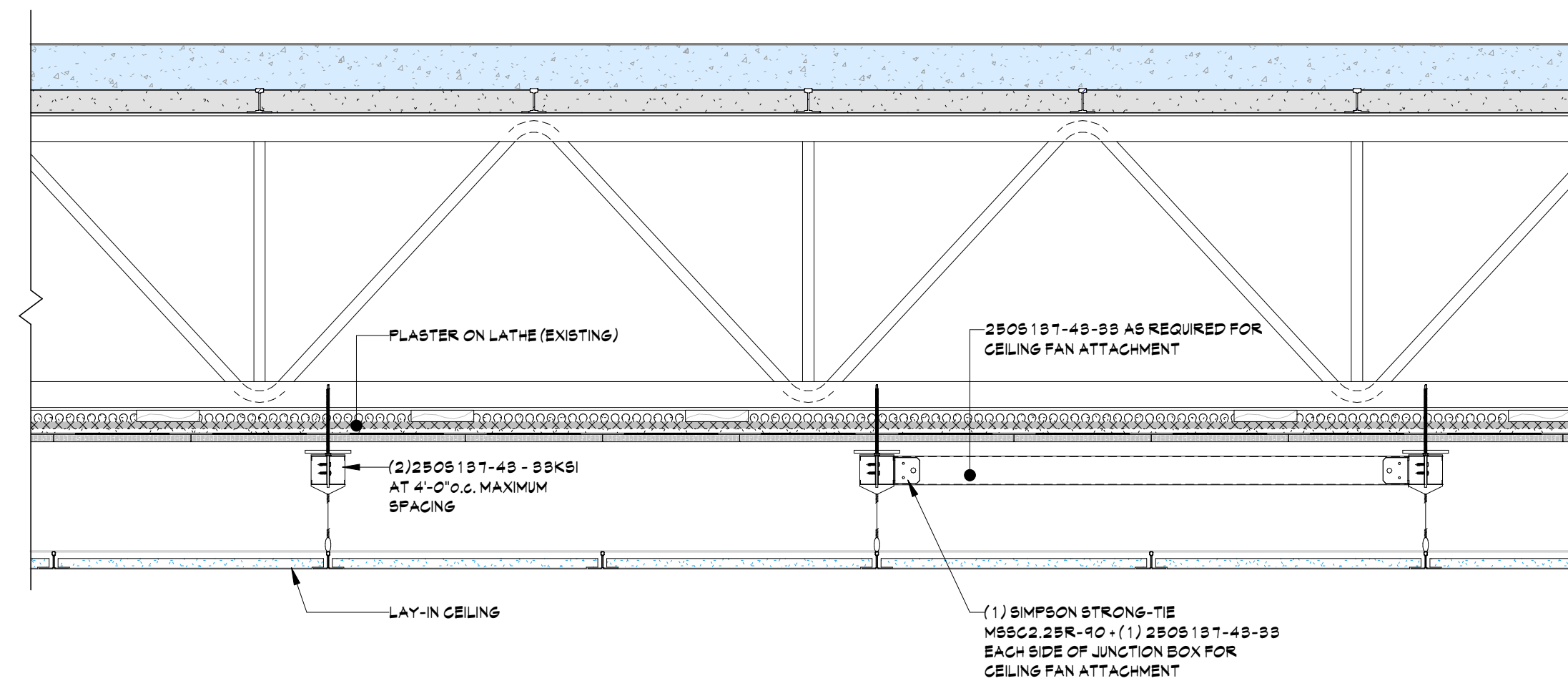
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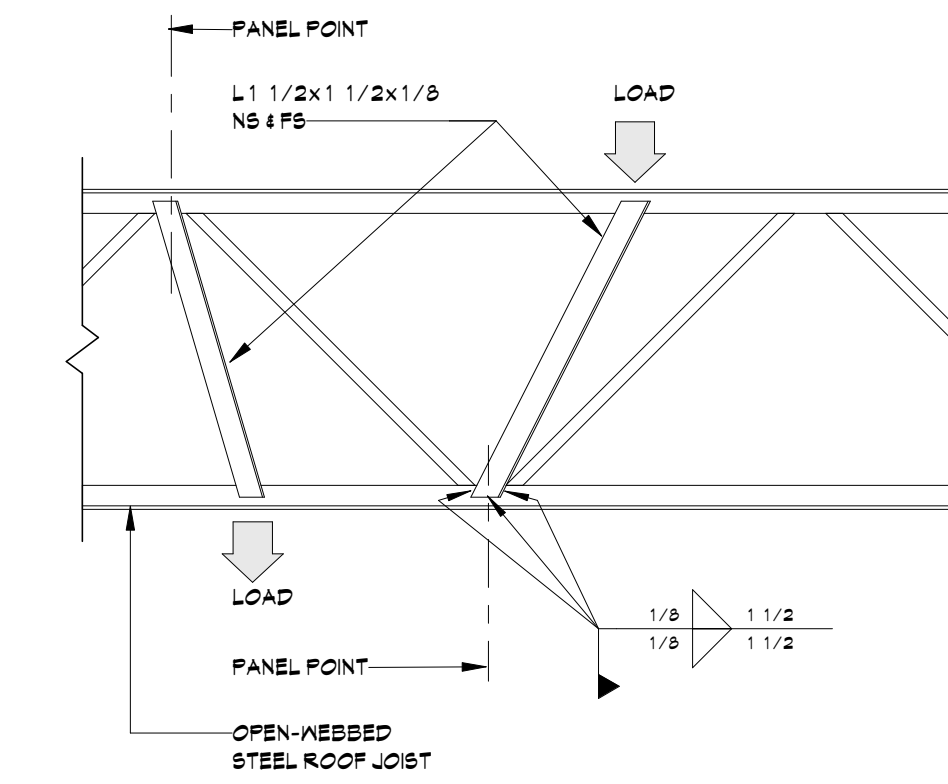
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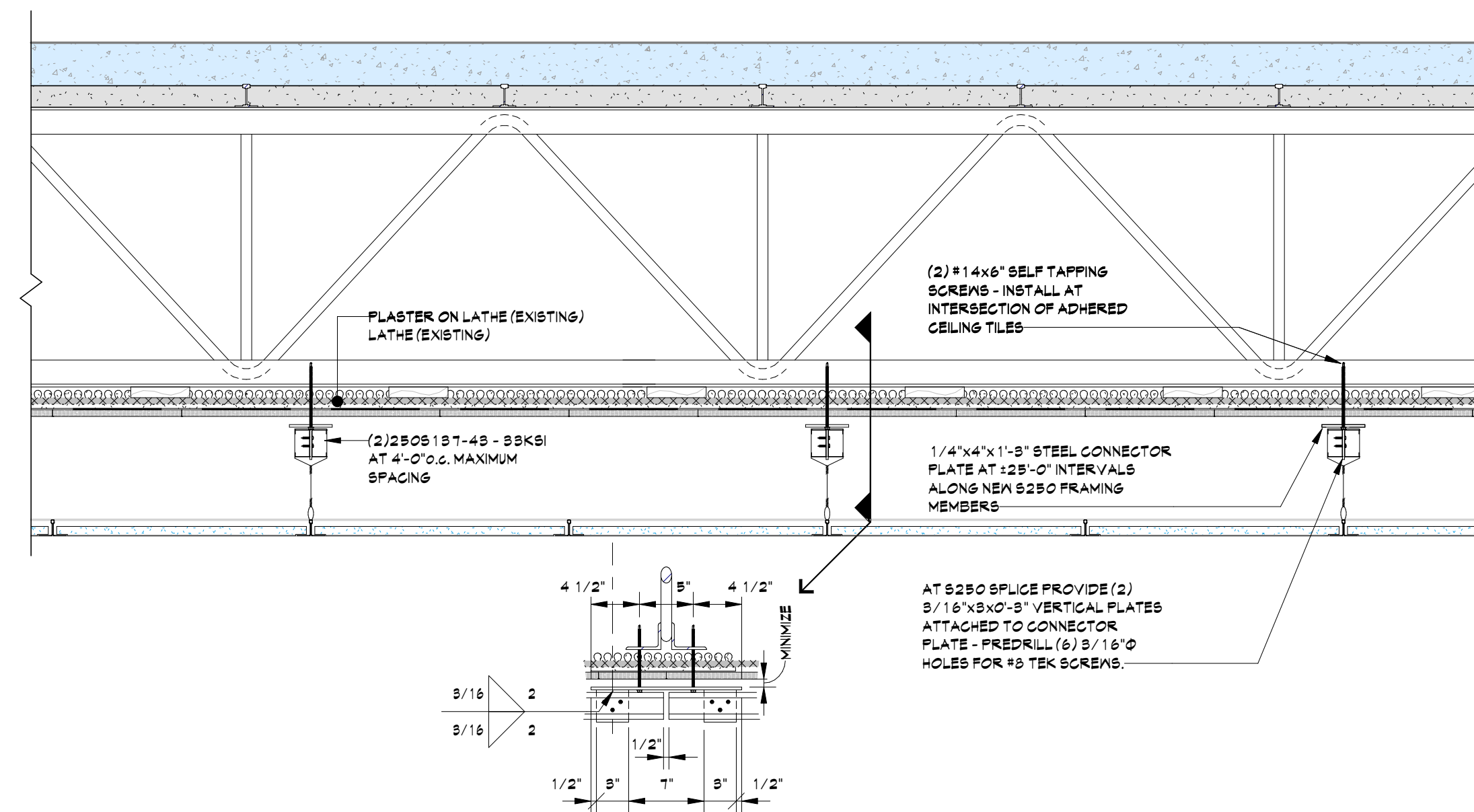
Sheet **5.0**



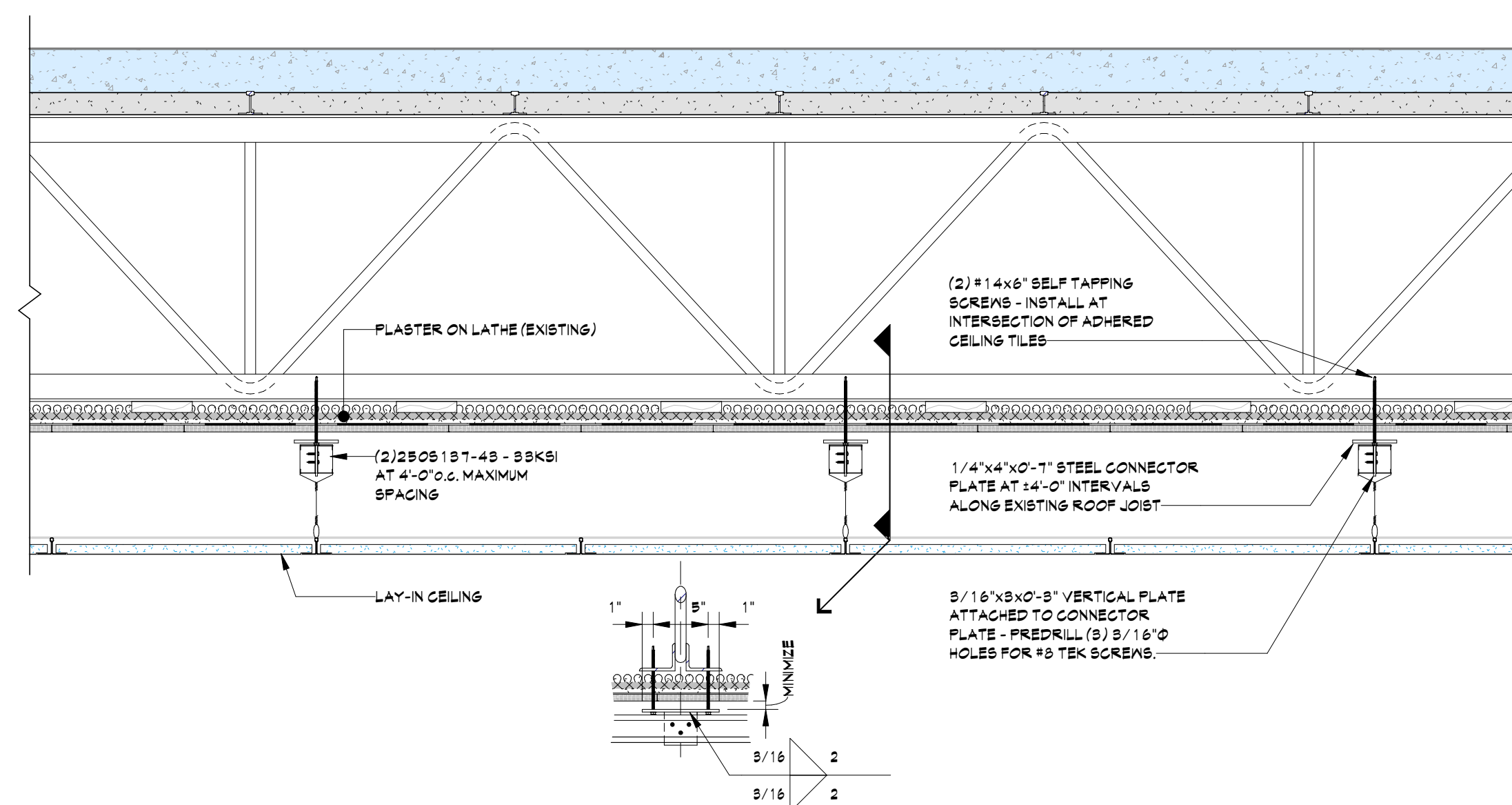
5 ADDITIONAL CEILING FRAMING AT CEILING FANS
6.0 1" = 1'-0"



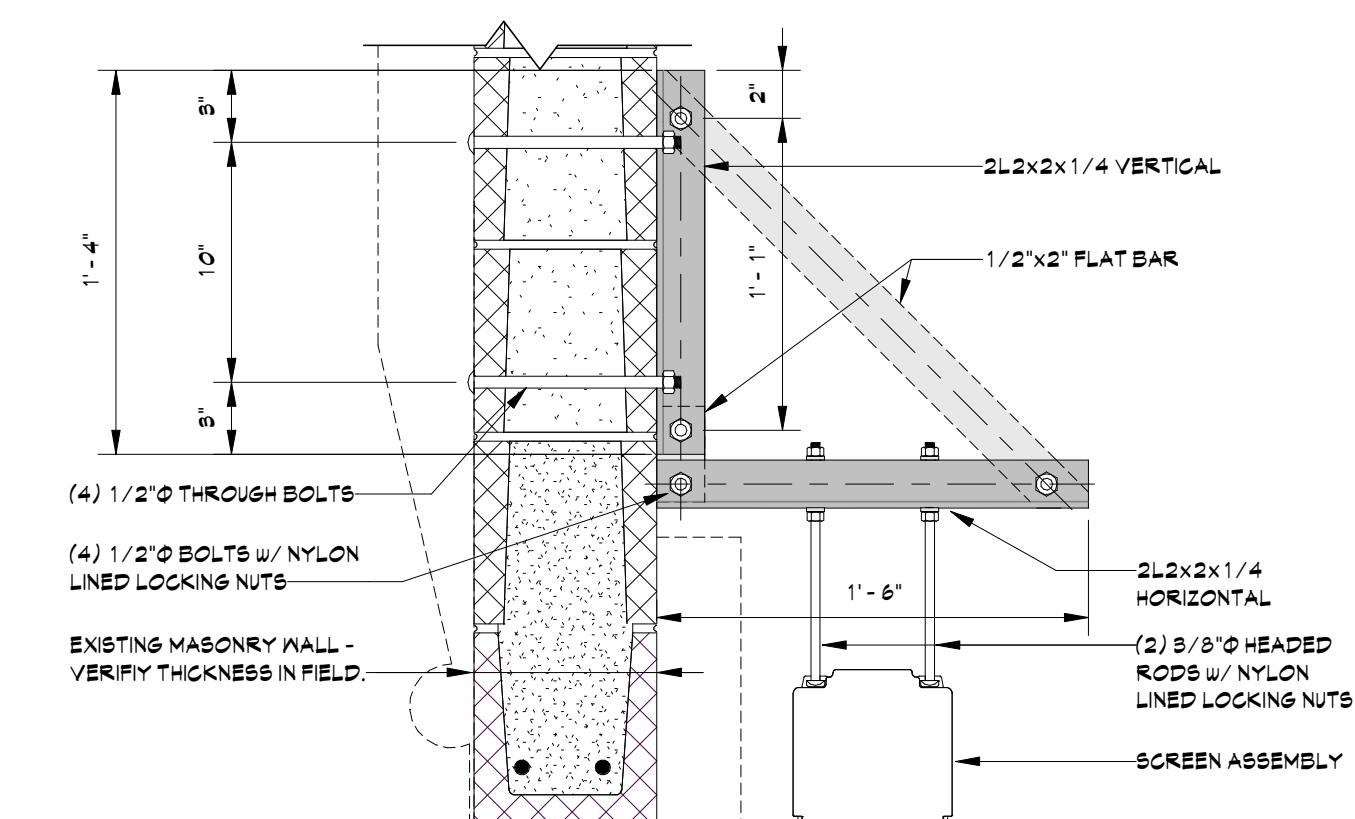
2 TYPICAL DETAIL - STEEL FRAMING - JOIST REINFORCEMENT
6.0 1" = 1'-0"



4 TYPICAL JOINT IN FRAMING MEMBER
6.0 1" = 1'-0"



3 TYPICAL GYPSUM CEILING CONNECTION
6.0 1" = 1'-0"



1 SECTION AT SCREEN ASSEMBLY
6.0 1 1/2" = 1'-0"

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Structural Details

Renovations To:

C.C. SPAULDING
ELEMENTARY SCHOOL

Auditorium
Renovations
CC Spaulding
Elementary
School

Bute, PLLC No. 2205

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Bid Set March 7, 2024

Date: 2/19/2024

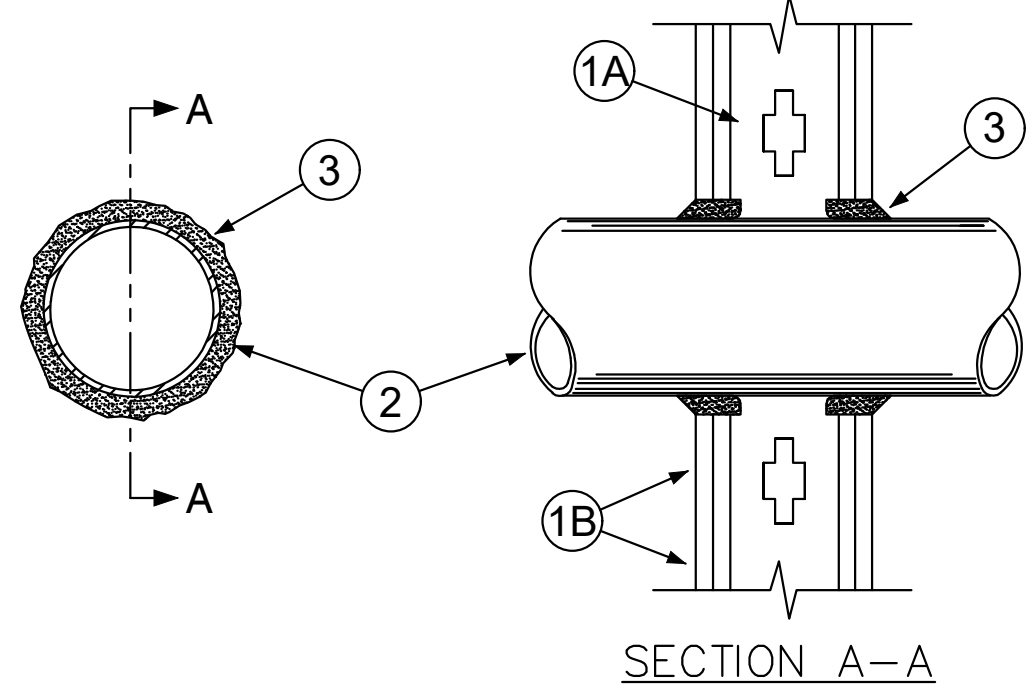
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Sheet:

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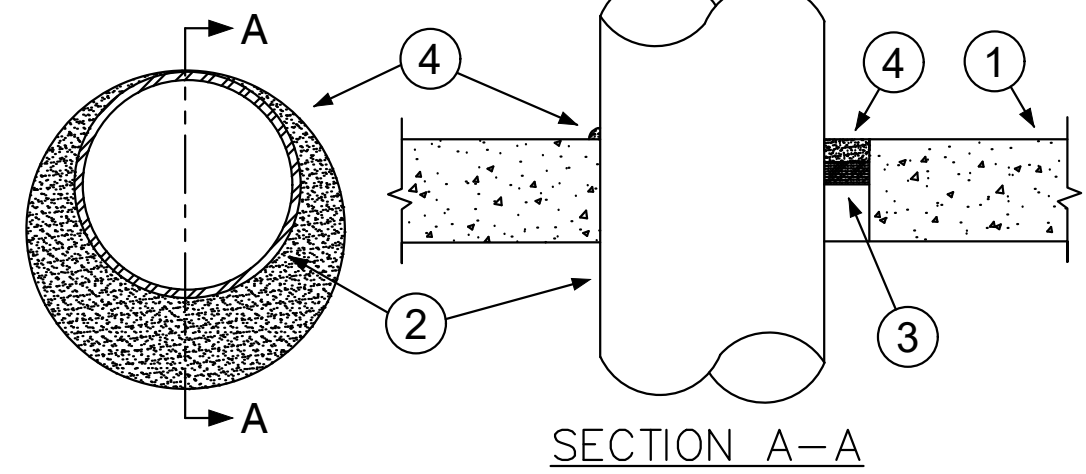
System No. W-L-1001

June 15, 2005
 F Ratings - 1, 2, 3 and 4 Hr (See Items 2 and 3)
 T Ratings - 0, 1, 2, 3, and 4 Hr (See Item 3)
 L Rating At Ambient - less than 1 CFM/sq ft
 L Rating At 400 F - less than 1 CFM/sq ft



System No. C-AJ-1001

March 05, 2007
 F Rating - 3 Hr
 T Rating - 0 Hr
 W Rating - Class 1 (See Item 4)



1. Floor or Wall Assembly - Min 4-1/2 in. (114 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of circular through opening is 32-1/2 in. (826 mm).
 See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

1A. Steel Sleeve - (Optional, not shown) - Nom 12 in. (305 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe sleeve cast into concrete floor or wall. Sleeve to be flush with or project max 2 in. (51 mm) from top surface of floor or from both surfaces of wall. As an alternate, nom 12 in. (305 mm) diam (or smaller) sleeve fabricated from nom 0.019 in. (0.48 mm) thick galv steel cast or grouted into floor or wall assembly flush with floor or wall surfaces.

2. Through - Penetrant - One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm, point contact) to max 1-3/8 in. (35 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. Steel Pipe - Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

A1. Iron Pipe - Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.

B. Conduit - Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.

C. Conduit - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.

3. Packing Material - Polyethylene backer rod or nom 1 in. (25 mm) thickness of tightly-packed ceramic (alumina silica) fiber blanket, mineral wool batt or glass fiber insulation material used as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of solid concrete or concrete block wall as required to accommodate the required thickness of caulk fill material (Item 4). As an alternate when max pipe size is 10 in. (254 mm) diam and when max annular space is 1 in. (25 mm), a min 1 in. (25 mm) thickness of tightly-packed ceramic fiber blanket or mineral wool batt packing material may be recessed min 1/2 in. (13 mm) from bottom surface of floor or from either side of solid concrete wall.

4. Fill, Void or Cavity Materials* - Caulk - Applied to fill the annular space to the min thickness shown in the following table:

Max Pipe Diam In.	Max Annular Space In.	Packing Mtl Type (a)	Min Caulk Thkns In.
10 (254)	1 (25)	BR, CF, GF or MW 1/2 (13) (b)	1/2 (13) (b)
10 (254)	1 (25)	CF or MW 1/2 (13) (c)	1/2 (13) (c)
30 (762)	2-1/2 (64)	BR, CF, GF or MW 1 (25) (b)	1 (25) (b)

(a) BR=Polyethylene backer rod.
 CF=Ceramic fiber blanket.

GF=Glass fiber insulation.

MW=Mineral-wool batt.

(b) Caulk installed flush with top surface of floor or both surfaces of wall

(c) Caulk installed flush with bottom surface of floor or one surface of solid (non-concrete block) wall
 3M COMPANY - Type CP 25WB+ or FB-3000 WT

(Note - W Rating applies only when FB-3000 WT is used on top surface of floor and when it laps onto concrete for sleeved opening.)

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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EXISTING PANEL UP-1																		
NOTES	CKT	LOAD	DESCRIPTION	COND	EGC	N	W	CB	LOAD	CB	W	N	EGC	COND	DESCRIPTION	LOAD	CKT	NOTES
	1	275	AUD AISLE LIG INVERTER	3/4"	12	12	12	20	275						SPARE	2		
	1	3	PROJECTOR SCREEN	3/4"	12	12	12	20		240					SPARE	4		
	1	5	STAGE LIFT	3/4"	12	12	12	20			1220				399 REC	720	6	
	1	7	AV CONTROL FLOOR BOX	3/4"	12	12	12	20	1050						309 REC	720	8	
	1	9	AV RACK	3/4"	12	12	12	20	2000						INVERTER	500	10	
	11		SPARE					20		1000	20				EX FAN	1000	12	
	13		SPARE					20	500		15				EX FAN	500	14	
	15		SPARE					20	0						SPARE	16		
	17		SPARE					20		500	15				AV UNIT	500	18	
	19		SPARE					20	500		15				AV UNIT	500	20	
	21		SPARE					20		0					SPARE	22		
	23		SPARE					20		0	20				SPARE	24		
	25		SPARE					20	0		20				SPARE	26		
	27		SPARE					20	0		20				SPARE	28		
	29		SPARE					20		0	20				SPARE	30		
	31		SPARE					20	0		20				SPARE	32		
	33		SPARE					20		0	20				SPARE	34		
	35		SPARE					20		0	20				PHL UP-2	4800	36	
	37		PHL GP-1					100	4800					EX		4800	38	
	39				EX			3P								4800	40	
	41							-			0						42	

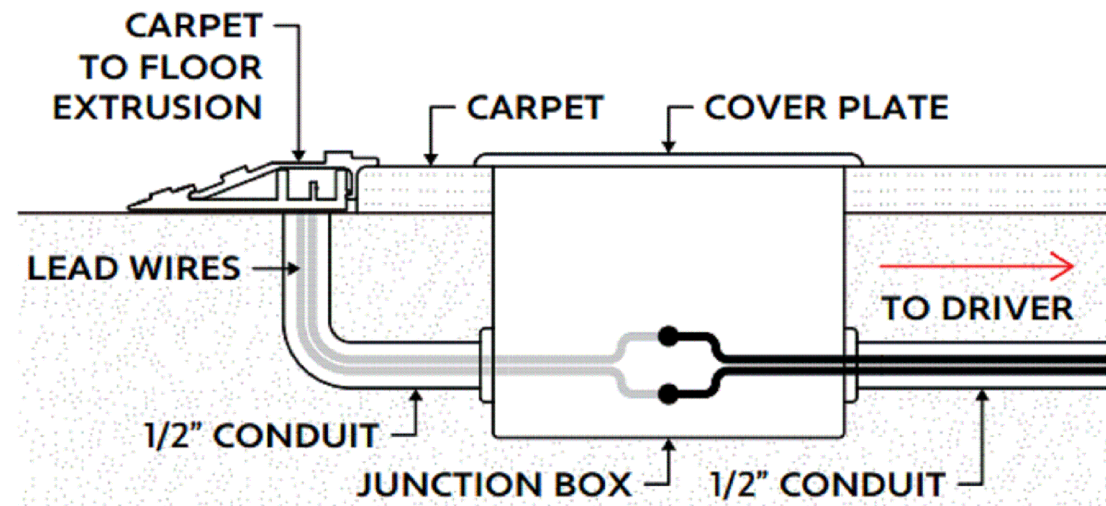
208Y / 120 VOLTS 3 PHASE X GROUND BAR SE RATED				FLUSH MOUNT NEMA 1 10K AC MINIMUM			
AMPS	PHASE TOTALS	KVA		AMPS	PHASE TOTALS	KVA	
250	PHASE A	7.16		90.00	PHASE A	10.80	
200	PHASE B	7.04		91.00	PHASE B	10.80	
	PHASE C	7.52		73.00	PHASE C	8.76	
	TOTAL CONNECTED	21.72		84.83	TOTAL CONNECTED	29.34	
	TOTAL DEMAND *	16.78		81.83	TOTAL DEMAND *	29.46	

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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ELECTRICAL SPECIFICATIONS

- GENERAL:**
 - PROVIDE ALL WORK, EQUIPMENT, SERVICES, LABOR, AND MATERIALS FOR THE CONSTRUCTION OF NEW ELECTRICAL SYSTEMS AS DESCRIBED OR IMPLIED BY THE CONTRACT DOCUMENTS.
 - THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO INCLUDE EVERY DETAIL OF CONSTRUCTION, MATERIALS, AND EQUIPMENT. TAKE ACTUAL FIELD MEASUREMENTS AT THE JOB SITE IN LIEU OF SCALING THE DRAWINGS.
 - REVIEW THE CONTRACT DOCUMENTS OF ALL TRADES AND COORDINATE ALL WORK WITH THE OTHER TRADES AS NECESSARY TO AVOID CONFLICTS AND INTERFERENCES.
 - ALL WORK AND MATERIALS SHALL COMPLY WITH APPLICABLE STATE, LOCAL, AND NATIONAL CODES (INCLUDING OSHA). COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND THESE SPECIFICATIONS SHALL BE THE MINIMUM STANDARD OF ACCEPTANCE.
 - OBTAIN AND PAY FOR ANY AND ALL REQUIRED PERMITS.
 - LOCATIONS INDICATED FOR OUTLETS, EQUIPMENT, ETC., ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR.
 - PROVIDE ONLY NEW MATERIALS AND EQUIPMENT LISTED AND LABELED (FOR THE USE INTENDED) BY AN APPROVED THIRD PARTY LABORATORY SERVICE SUCH AS UNDERWRITER'S LABORATORIES, INC.
 - SUBMIT IN ELECTRONIC FORMAT (PDF) SHOP DRAWINGS AND CATALOG DATA FOR ALL ELECTRICAL MATERIALS.
 - FIRE-STOPPING SEALANT SHALL BE USED TO SEAL ALL RATED FLOOR AND WALL PENETRATIONS.
- CONDUITS:**
 - ALL CONDUIT INSTALLED ABOVE GROUND SHALL BE ZINC-COATED EMT WITH COMPRESSION CONNECTORS OR GALVANIZED RIGID STEEL (GRS). CONDUIT ENCASED IN CONCRETE SHALL BE GALVANIZED RIGID STEEL.
 - SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED WALLS OR FLOORS WITH UL LABELED, FIRE SEAL.
 - ALL CONDUIT SHALL BE CONCEALED EXCEPT FOR NEW CONDUIT INSTALLED ON EXISTING MASONRY WALLS WHERE IT IS NOT POSSIBLE TO CONCEAL. IN THIS CASE THE CONDUIT SHALL BE ROUTED PARALLEL, PERPENDICULAR AND TIGHT TO STRUCTURE AS INCONSPICUOUSLY AS POSSIBLE. ALL SURFACE MOUNTED BOXES AND CONDUIT TO BE PAINTED TO MATCH ADJACENT SURFACE. FIELD BEND AS REQUIRED FOR SURFACE MOUNTING ON EXISTING CURVED SURFACES.
- WRING:**
 - CONDUCTORS SHALL BE COPPER, THHN/THWN, 12AWG MINIMUM, SOLID FOR #10 AWG OR #12 AWG, AND STRANDED FOR ALL LARGER SIZES. ALL CONDUCTORS SHALL BE COLOR-CODED.
 - LOW VOLTAGE WRING TO AISLE LIGHTS MAY BE #14AWG FOR DESIGN BASIS FIXTURE SPECIFIED. ALTERNATE PRODUCTS WILL NEED TO BE EVALUATED FOR VOLTAGE DROP BASED ON LOAD. LOW VOLTAGE WRING MAY BE STRANDED IF REQUIRED / RECOMMENDED IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - ALL CONDUCTORS AND CABLES SHALL BE INSTALLED IN CONDUITS AND TESTED FOR CONTINUITY AND GROUND BEFORE BEING ENERGIZED.
 - THE CONDUIT AND ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE GROUNDED. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITH EVERY CIRCUIT. NO CONDUIT SHALL CONTAIN MORE THAN THREE PHASE CONDUCTORS.
 - EXTENSION / REWORK OF EXISTING 120V OR 277V, 20A CIRCUITS SHALL UTILIZE 3-#12 AWG CONDUCTORS PER CIRCUIT IN 3/4" CONDUIT. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITH EACH CIRCUIT.
- DEVICES:**
 - ALL WRING DEVICES SHALL BE HEAVY DUTY SPECIFICATION GRADE, HUBBELL, ARROW HART, OR APPROVED EQUAL.
 - RECEPTACLES SHALL BE HEAVY DUTY SPECIFICATION GRADE, GROUNDING TYPE ARRANGED FOR SIDE AND BACK WRING WITH SEPARATE SINGLE OR DOUBLE GROUNDING TERMINALS. RECEPTACLES SHALL BE STRAIGHT BLADE RATED 20 AMPERES, 125 VOLT.
 - DEVICES SHALL BE GRAY WITH STAINLESS STEEL COVER PLATS. COLOR SELECTION TO BE CONFIRMED WITH OWNER DURING SUBMITTAL PHASE.
- ELECTRICAL IDENTIFICATION:**
 - CIRCUIT IDENTIFICATION LABELS SHALL BE INSTALLED ON ALL NEW AND MODIFIED DEVICE COVER PLATES. INSTALL LABELS EXTERNALLY USING PRESSURE-SENSITIVE, SELF-ADHESIVE LABELS. LABEL SHALL LIST PANEL AND CIRCUIT NUMBER OR EQUIVALENT.



1 Aisle Lighting Detail 1
 SCALE: NONE
 E1.0

ELECTRICAL SYMBOLS	
§	LIGHT SWITCH (3-WAY - 4-WAY) AS INDICATED
A-15	NEW HOMERUN TO PANEL 'A', CIRCUIT 15
- - -	NEW UNSWITCHED LIGHTING CIRCUITRY
- - -	NEW POWER OR LIGHTING CIRCUITRY
⊕	DUPLEX RECEPTACLE
⊕	FLOOR BOX
⊕	JUNCTION BOX
⊕	BACK BOX WITH BLANK COVER PLATE
⊕	DISCONNECT SWITCH
///	HATCHING INDICATES DEVICE TO BE DEMOLISHED (TYP.)
ER	RELOCATE EXISTING DEVICE

NOTE:

- ITEMS IN BOLD INDICATE NEW WORK. THIN LINE WEIGHT ITEMS INDICATE EXISTING CONDITIONS.
- NOT ALL DEVICES ARE IDENTIFIED IN THE LIST ABOVE. REFER TO DRAWINGS FOR ADDITIONAL INFORMATION.

GENERAL ELECTRICAL NOTES:

- THE CONTRACTOR SHALL VERIFY EQUIPMENT NAMEPLATE INFORMATION BEFORE INSTALLING CONDUIT, WRING, CIRCUIT BREAKERS, DISCONNECT SWITCHES OR FUSES.
- IN THE EVENT THE CONTRACTOR CHOOSES TO USE PRODUCTS OTHER THAN THE BASIS OF DESIGN, HE ASSUMES FULL RESPONSIBILITY FOR COORDINATION AND INTEGRATION OF SUCH ITEMS.
- ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE ELECTRICAL DRAWINGS REGARDING BUILDING CONSTRUCTION, DIMENSION AND ARRANGEMENT. CONTRACTOR SHALL COORDINATE CLOSELY WITH ALL TRADES TO AVOID CONFLICTS AND SHALL PROVIDE ALL OFFSETS AND EQUIPMENT AS REQUIRED TO FIT THE ELECTRICAL WORK INTO THE AVAILABLE SPACE.
- COORDINATE ANY AND ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION SO AS TO AVOID CONFLICT DURING CONSTRUCTION.
- THE CONTRACTOR SHOULD READ AND UNDERSTAND THE ENTIRE SET OF CONSTRUCTION DOCUMENTS WHICH INCLUDES BUT IS NOT LIMITED TO THE SPECIFICATIONS, ARCHITECTURAL, CIVIL, STRUCTURAL AND ALL ENGINEERING DRAWINGS, SO THAT HE MAY UNDERSTAND THE FULL SCOPE OF WORK AND CONVEY THE PROPER REQUIRED MATERIALS AND METHODS OF INSTALLATION TO THE ESTIMATORS, SUPPLIERS AND INSTALLERS.
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS IN ORDER TO OBTAIN A FULL UNDERSTANDING OF WORK TO BE DONE.
- NO EXISTING WORK (CIRCUIT BREAKER, DISCONNECT SWITCHES, ETC.) IS TO BE TURNED OFF UNTIL VERIFIED THAT IT IS NOT IN CURRENT USE AND UNTIL APPROVED BY THE OWNER.
- ALL ELECTRICAL EQUIPMENT AND WRING SHALL BE 75 DEG. RATED.
- IN FINISHED SPACES, ALL CONDUIT SHALL BE CONCEALED AND ALL OUTLET BOXES SHALL BE FLUSH MOUNTED - UNLESS OTHERWISE NOTED ON PLANS. CUT AS REQUIRED AND PATCH TO MATCH EXISTING FINISH.
- THE ELECTRICAL CONTRACTOR SHALL REMOVE ONLY THOSE EXISTING LIGHT FIXTURES, SWITCHES, RECEPTACLES, POWER JUNCTION AND OUTLET BOXES AS INDICATED ON DEMOLITION DRAWINGS.
- REMOVE POWER AND SIGNALING SYSTEMS WRING AND RACEWAY CIRCUITRY WHICH SERVES FIXTURES, DEVICES, OUTLETS AND/OR EQUIPMENT BEING REMOVED. REMOVE THIS CIRCUITRY BACK TO ITS SOURCE OR BACK TO THE POINT WHERE CIRCUITRY REMAINS TO CONTINUE SERVING EXISTING ITEMS.
- REWORK, EXTEND AND RECONNECT CIRCUITRY AS REQUIRED TO MAINTAIN POWER AND SIGNALING TO REMAINING EQUIPMENT. ALL REMAINING FEED-THRU PULL BOXES, OUTLETS AND JUNCTION BOXES SHALL BE ACCESSIBLE.
- PATCH AREAS WHERE DEVICES, LIGHT FIXTURES AND EQUIPMENT IS REMOVED TO MATCH EXISTING FINISH.
- ALL PANEL DIRECTORIES SHALL BE UPDATED TO INDICATE NEW OR MODIFIED CIRCUITS. NOTE EQUIPMENT SERVED AND ROOM NUMBER OF EQUIPMENT LOCATION, OR SPARE, OR SPACE. DIRECTORIES SHALL BE TYPED. OLD DIRECTORIES SHALL BE TURNED OVER TO THE OWNER.
- ALL SHUTDOWNS AND SERVICE INTERRUPTIONS MUST BE COORDINATED AND REQUESTED THROUGH OWNER AT LEAST 72 HOURS IN ADVANCE OF EXPECTED SHUTDOWN.

EXISTING PANEL STAGE'																		
NOTES	CKT	LOAD	DESCRIPTION	COND	EGC	N	W	CB	LOAD	CB	W	N	EGC	COND	DESCRIPTION	LOAD	CKT	NOTES
	1	1200	AUDITORIUM LIGHTS	EX	EX	EX	EX	EX	2400						AUDITORIUM CGL LTS	1200	2	1
	3	1200	AUDITORIUM LIGHTS	EX	EX	EX	EX	EX		2400					AUDITORIUM CGL LTS	1200	4	1
	5	1200	AUDITORIUM LIGHTS	EX	EX	EX	EX	EX			2400				AUDITORIUM SPOT LTS	1200	6	
	7	1200	AUDITORIUM WALL LTS	EX	EX	EX	EX	EX	2400						AUDITORIUM SPOT LTS	1200	8	
	9	1200	STAGE CGL LTS	EX	EX	EX	EX	EX		2400					STAGE CGL DRP LTS	1200	10	
	11	1200	STAGE CGL LTS	EX	EX	EX	EX	EX			1380				REAR STAGE REC	180	12	
	13	1200	STAGE PORTABLE LTS	EX	EX	EX	EX	EX	1380						STAGE DUPLEX	180	14	
	15	1200	STAGE PORTABLE LTS	EX	EX	EX	EX	EX			1200				SPACE		16	
	17	1200	STAGE PORTABLE LTS	EX	EX	EX	EX	EX			1380				AUDITORIUM REC	180	18	
	19	1200	FAN COOL UNITS	EX	EX	EX	EX	EX	2400						CEILING FAN	1200	20	1
	21	1200	FAN COOL UNITS	EX	EX	EX	EX	EX		2400					CEILING FAN	1200	22	1
	23	1200	AC UNIT CONTROL	EX	EX	EX	EX	EX			1200				SPACE		24	
	25	1200	FAN COOL UNITS	EX	EX	EX	EX	EX	2400						FAN COOL UNITS 37 & 38	1200	26	
	27	1200	FAN COOL UNITS	EX	EX	EX	EX	EX	2400						FAN COOL 39 & 40	1200	28	
	29	1200	FAN COOL UNITS	EX	EX	EX	EX	EX		2400					FAN COOL 35 & 36	1200	30	

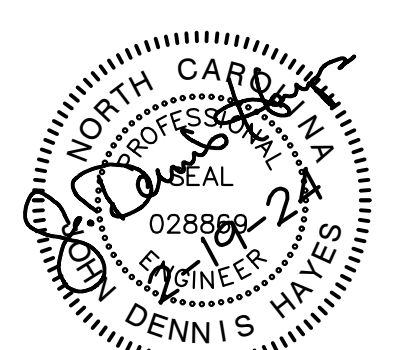
208Y / 120 VOLTS 3 PHASE X GROUND BAR SE RATED				FLUSH MOUNT NEMA 1 10K AC MINIMUM			
AMPS	PHASE TOTALS	KVA		AMPS	PHASE TOTALS	KVA	
100	PHASE A	7.16		91.00	PHASE A	10.80	
100	PHASE B	7.04		91.00	PHASE B	10.80	
100	PHASE C	7.52		73.00	PHASE C	8.76	
	TOTAL CONNECTED	21.72		84.83	TOTAL CONNECTED	29.34	
	TOTAL DEMAND *	16.78		81.83	TOTAL DEMAND *	29.46	

NOTES:

- REWORK AND EXTEND EXISTING CIRCUITS AS REQUIRED TO FEED NEW LIGHTS AND CEILING FANS MOUNTED IN NEW DROP CEILING BELOW EXISTING HARD CEILING

AMPS	PHASE TOTALS	KVA
90.00	PHASE A	10.80
91.00	PHASE B	10.80
73.00	PHASE C	8.76
84.83	TOTAL CONNECTED	29.34
81.83	TOTAL DEMAND *	29.46

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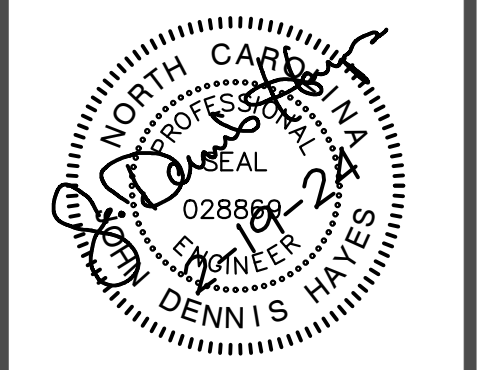


Electrical Cover Sheet

Renovations To:

**Auditorium
 Renovations
 CC Spaulding
 Elementary
 School
 Durham Public
 Schools**

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Electrical Demolition Plan

Renovations To:

Auditorium
Renovations
CC Spaulding
Elementary
School

Durham Public
Schools

Bute, PLLC No. 2205



Bute, PLLC

Architecture - Building
Envelope Consulting

P.O. Box 2833
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lindsay@butepllc.com

Bid Set March 7, 2024

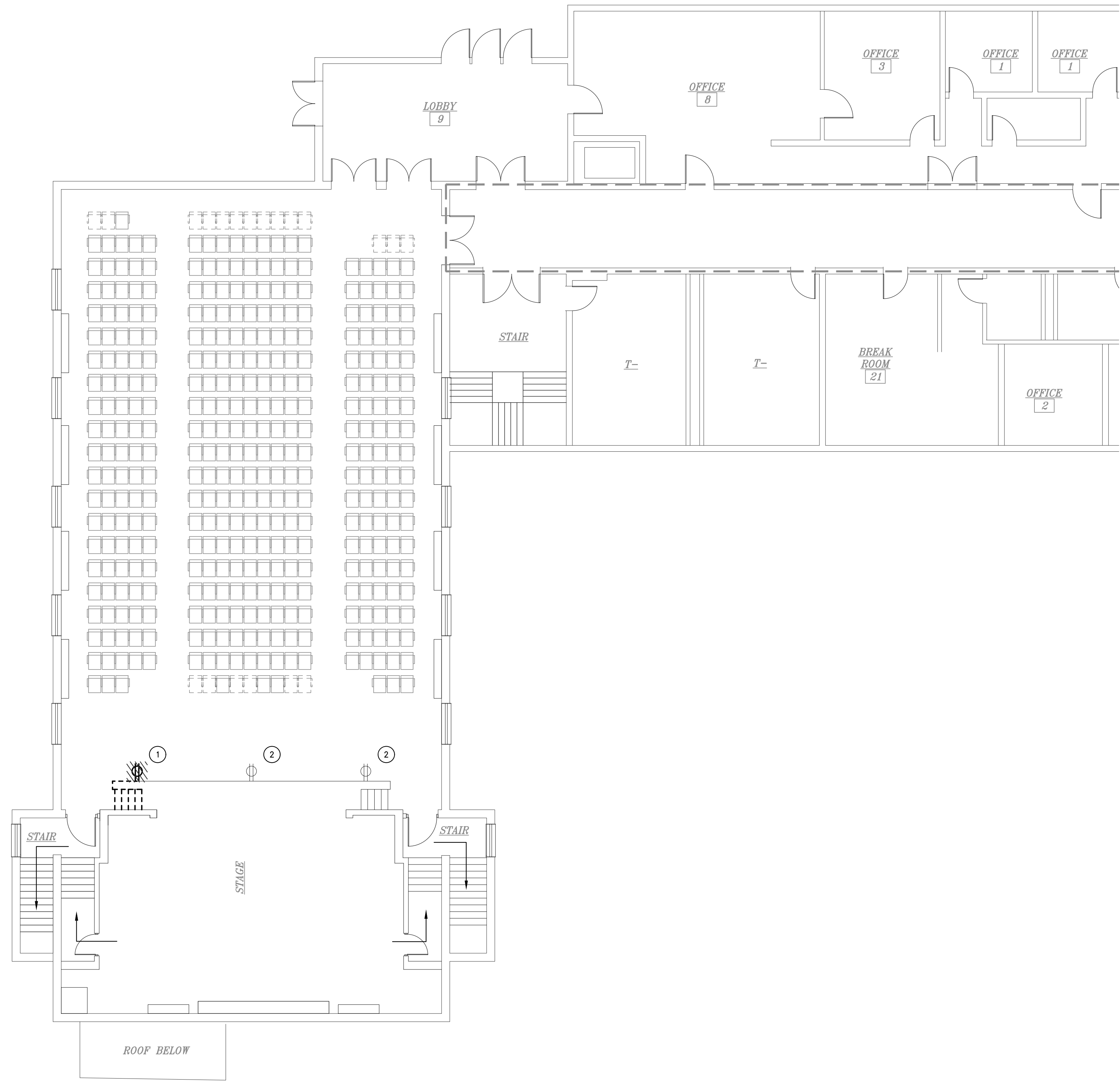
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Revisions:

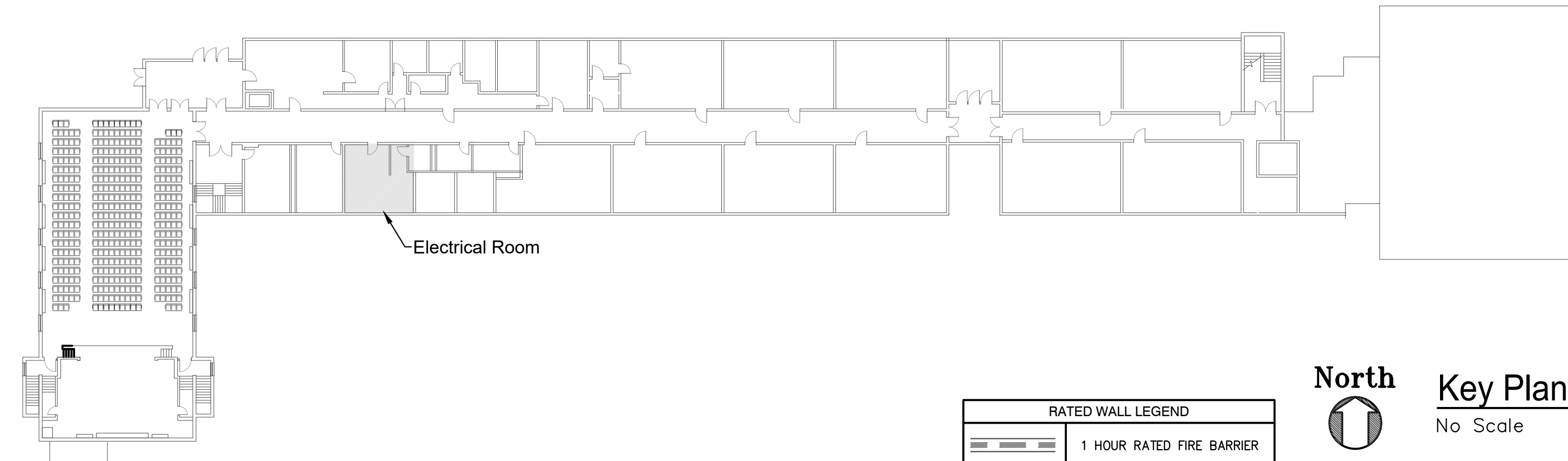
Sheet: **E2.0**

ELECTRICAL DEMOLITION NOTES:

- ① REMOVE RECEPTACLE AND REWORK AND EXTEND CIRCUIT AS REQUIRED TO FEED NEW RECEPTACLE IN NEW STAGE EXTENSION. MAINTAIN POWER TO ALL DOWNSTREAM RECEPTACLES ON SAME CIRCUIT. SEE RENOVATION PLAN FOR EXACT LOCATION OF NEW RECEPTACLE.
- ② EXISTING RECEPTACLE TO REMAIN AND TO BE REFEED. CIRCUIT ROUTING TO BE CONFIRMED BY ELECTRICAL CONTRACTOR.



1
E2.0 Electrical Demolition Plan
SCALE: 1/8" = 1'-0"

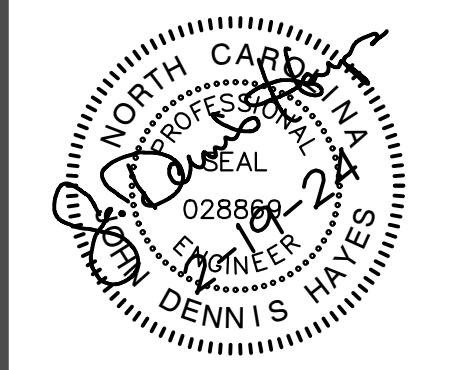


RATED WALL LEGEND	
	1 HOUR RATED FIRE BARRIER

North
Key Plan
No Scale

P:\PROJECTS\2023\24-107 CC SPAULDING AUDITORIUM RENOVATIONS\30 CAD\320 ELECTRICAL\E2.0.DWG PLOTTED 2/19/2024 1:01 PM BY: MILES SMITH

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Electrical Renovation Plan

Renovations To:

Auditorium
Renovations
CC Spaulding
Elementary
School

Durham Public
Schools

Bute, PLLC No. 2205

EDMONDSON ENGINEERS
1920 Hwy 54, Suite 700, Durham, NC 27715
Ph: 919-544-1936 - Fax: 919-544-2540 - License: C-1813

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Bid Set March 7, 2024

Date: 02/19/24

Revisions:

Sheet: E3.0

ELECTRICAL RENOVATION NOTES: (E)

- INSTALL NEW RECEPTACLE FLUSH MOUNTED IN SIDE WALL OF NEW STAGE EXTENSION. EXTEND AND REWORK EXISTING CIRCUIT AS REQUIRED.
- 1-1/4" CONDUIT FOR NEW A/V EQUIPMENT ROUTED AS CONCEALED AS POSSIBLE THROUGH STAGE CEILING TO A/V RACK. FIELD COORDINATE EXACT ROUTING WITH EXISTING CONDITIONS INCLUDING STRUCTURE AND OTHER EXISTING BUILDING SYSTEMS.
- ROUTE 2" CONDUIT DOWN TO CAFETERIA CEILING BELOW. ROUTE THROUGH CEILING AND UP TO NEW FLOOR BOX IN AV CONTROL AREA. FIELD COORDINATE EXACT ROUTE.
- INSTALL NEW FIRE RATED POKE THROUGH TYPE FLOOR BOX IN AV CONTROL AREA FOR POWER, DATA AND AV. FIELD COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS AND CASEWORK. SEE DETAIL THIS SHEET FOR MORE INFORMATION.
- INSTALL NEW AISLE LIGHTS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS INCLUDING ADHESIVE AND ANCHORS / SCREWS TO SECURE EXTRUSION TO FLOOR. PROVIDE COMPLETE SHOP DRAWINGS WITH LENGTHS AND ALL FITTINGS AS REQUIRED FOR A TURN-KEY INSTALLATION. REFER TO DETAIL 1/E1.0.
- PROVIDE UNISTRUT AS REQUIRED TO MOUNT LIGHTING INVERTER IN BREAK ROOM HIGH ON WALL. SEE LIGHTING FIXTURE SCHEDULE BELOW FOR INVERTER DESIGN BASIS. CIRCUIT TO UP1-1 USING EXISTING BREAKER. ROUTE DOWN TO LOWER LEVEL AND THEN OVER TO REMOTE DRIVERS TO FEED NEW AISLE LIGHTING.
- MOUNT REMOTE DRIVERS FOR AISLE LIGHTING ABOVE CAFETERIA CEILING BELOW. FIELD COORDINATE EXACT LOCATION SO THAT DRIVERS ARE EASILY ACCESSIBLE. DRIVERS ARE FED FROM LOAD SIDE OF INVERTER.
- ROUTE CONDUIT BELOW FROM DRIVERS TO EACH RUN OF AISLE LIGHTING AND STUB UP AT LINE FEEDS AS SHOWN. FIELD COORDINATE WITH EXISTING CONDITIONS.
- PROVIDE POWER TO NEW MOTORIZED PROJECTOR SCREEN. COORDINATE EXACT LOCATION WITH EQUIPMENT AND EQUIPMENT INSTALLER.
- 1-GANG OUTLET BOX FOR NEW SPEAKER AT 15"-8" AFF. FIELD COORDINATE EXACT LOCATION WITH A/V DRAWINGS.
- 1-GANG OUTLET BOX FOR NEW SUB-WOOFER AT 19"-2" AFF. FIELD COORDINATE EXACT LOCATION WITH A/V DRAWINGS.
- 2-GANG, 2-1/2" DEEP BOX AT 18" AFF. FIELD COORDINATE EXACT LOCATION.
- 2-GANG, 2-1/2" DEEP BOX FOR ANTENNA AT 10" AFF ABOVE A/V RACK

LIGHTING FIXTURE SCHEDULE:

A(XX) - LED AISLE LIGHT WHERE (XX) = THE LENGTH OF EACH RUN. PROVIDE CARPET TO FLOOR, MATTE BLACK, PVC EXTRUSIONS AS REQUIRED. PROVIDE WARM WHITE (3000K) LED LAMPS ON 4" CENTERS FOR ENTIRE LENGTH. LAMPS TO BE 0.25 WATTS EACH WITH 50,000 HRS MINIMUM LIFE. PROVIDE 96W 0-10V DRIVER, WITH UNIVERSAL VOLTAGE INPUT AND 24V OUTPUT. PROVIDE COMPATIBLE 0-10V DIMMER AND 0-10V CONTROL WIRING TO DRIVER. ALL COMPONENTS SHALL BE APPROVED FOR FIELD CUTS AND MITER CUTS AS REQUIRED FOR RADIUS BENDS. PROVIDE END FEEDS, END CAPS, LENS, ALL ANCILLARY PARTS, ETC., AS WELL AS ALL ADHESIVES, ANCHORS AND SCREWS AS REQUIRED FOR A COMPLETE TURN-KEY INSTALLATION.

PROVIDE THE FOLLOWING PRODUCTS BY ALUZ OR APPROVED EQUALS.

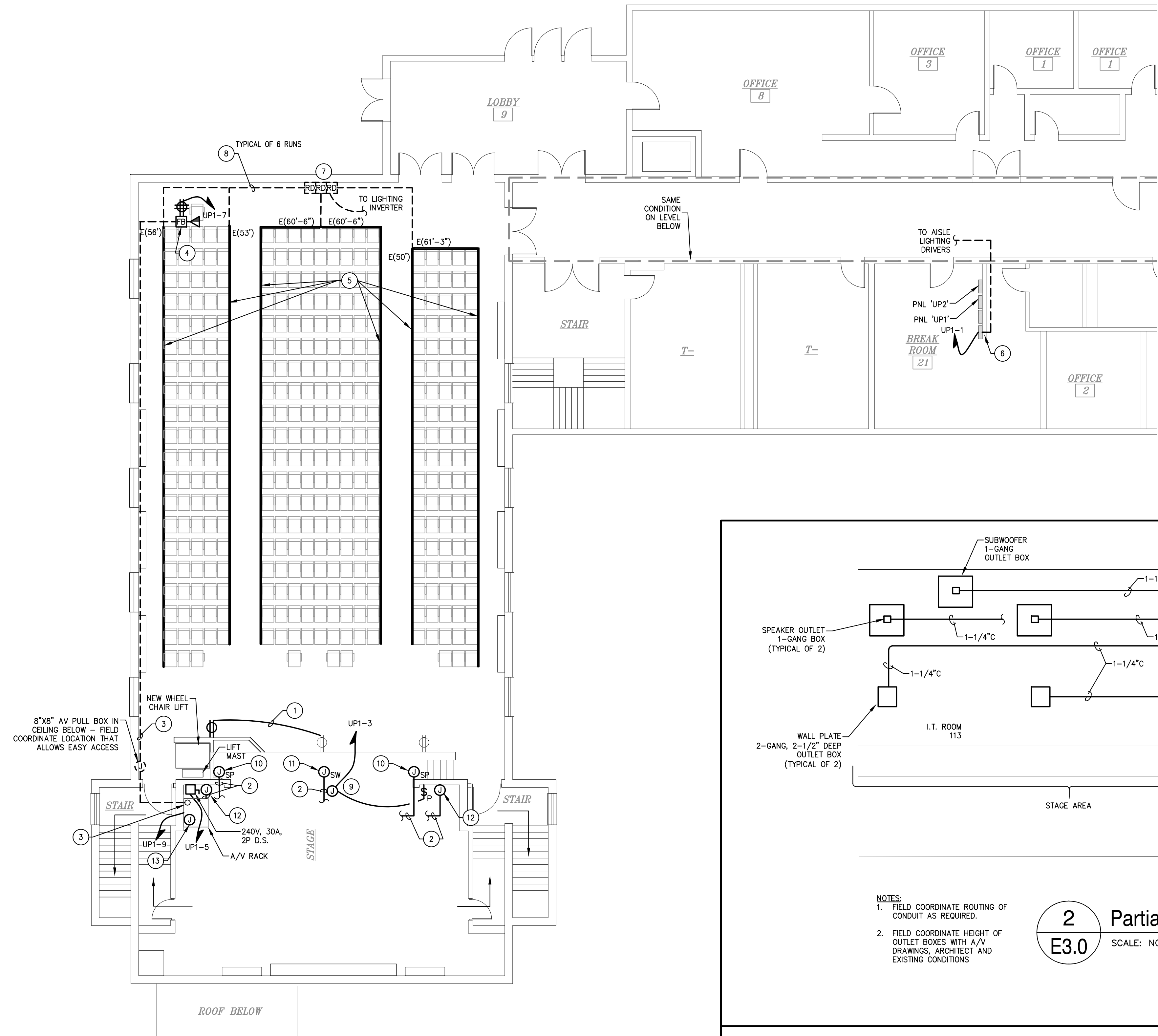
aisle LIGHT: ALUZ A7-ZYKU-CRF-4"-10V-30K-CL-XX" (SEE PLANS FOR LENGTHS). FIELD MEASURE AND COORDINATE EXACT LENGTHS WITH ACTUAL FEED POINTS.

0-10V DRIVER: ALUZ DRV150-E-UNV-24VDC-10V-DRY.

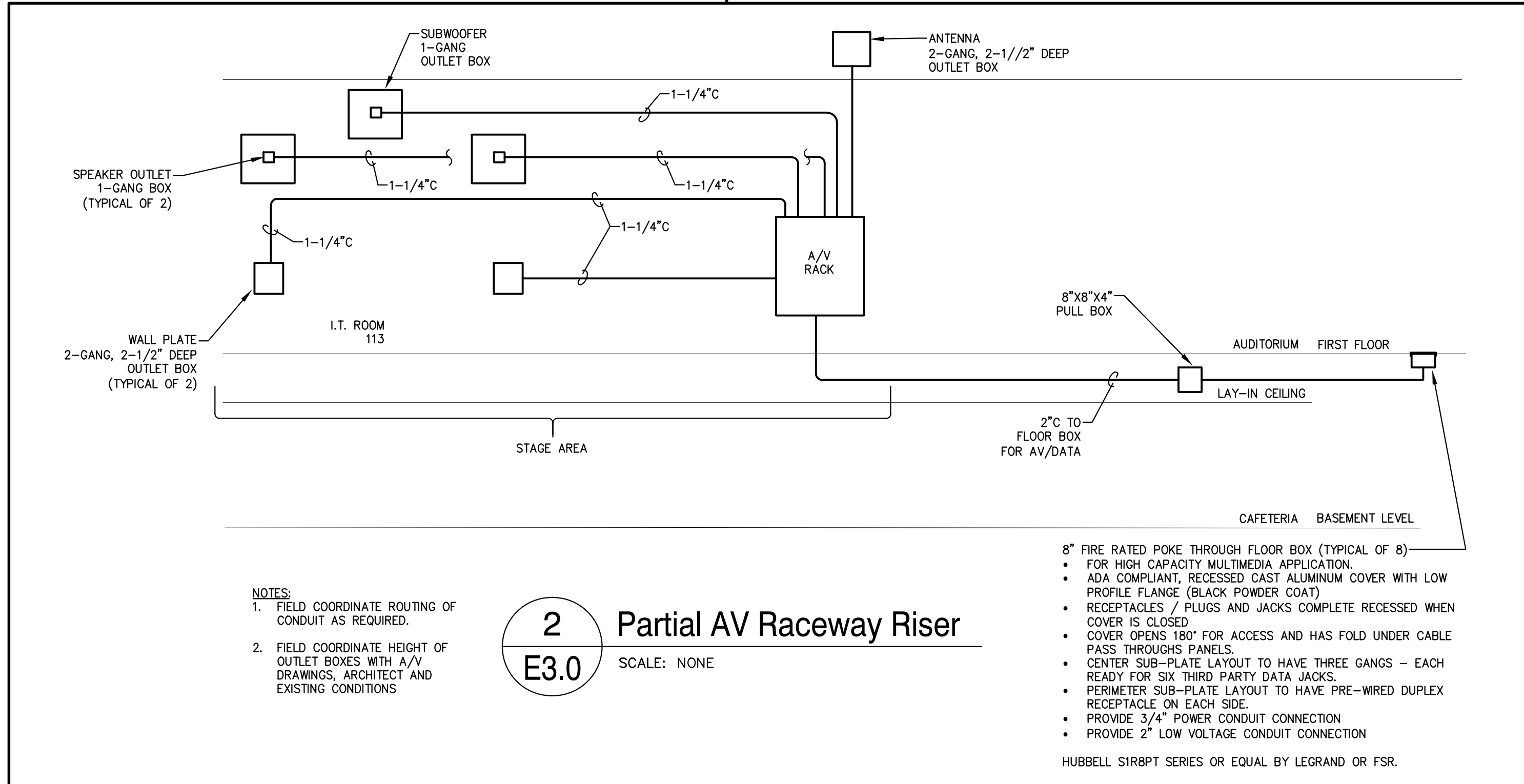
ALTERNATE FIXTURES BY CALI AND PRIMUS ALSO ACCEPTABLE.

PROVIDE 375W SURFACE MOUNTED LIGHTING INVERTER WITH UNIVERSAL INPUT / OUTPUT (120/120V OR 277/277V). PROVIDE 90 MINUTES OF BATTERY BACK-UP IN THE EVENT OF A NORMAL POWER FAILURE. INVERTER SHALL HAVE LOW VOLTAGE BATTERY DISCONNECT, BROWNOUT, OVERLOAD AND SHORT CIRCUIT PROTECTION. PROVIDE 10 YEAR RATED MAINTENANCE FREE BATTERY. DUAL-LITE, MODEL L6375S OR APPROVED EQUAL. INSTALL AHEAD OF DRIVER.

ALTERNATE INVERTERS BY LIGHTGUARD AND IOTA ALSO ACCEPTABLE.



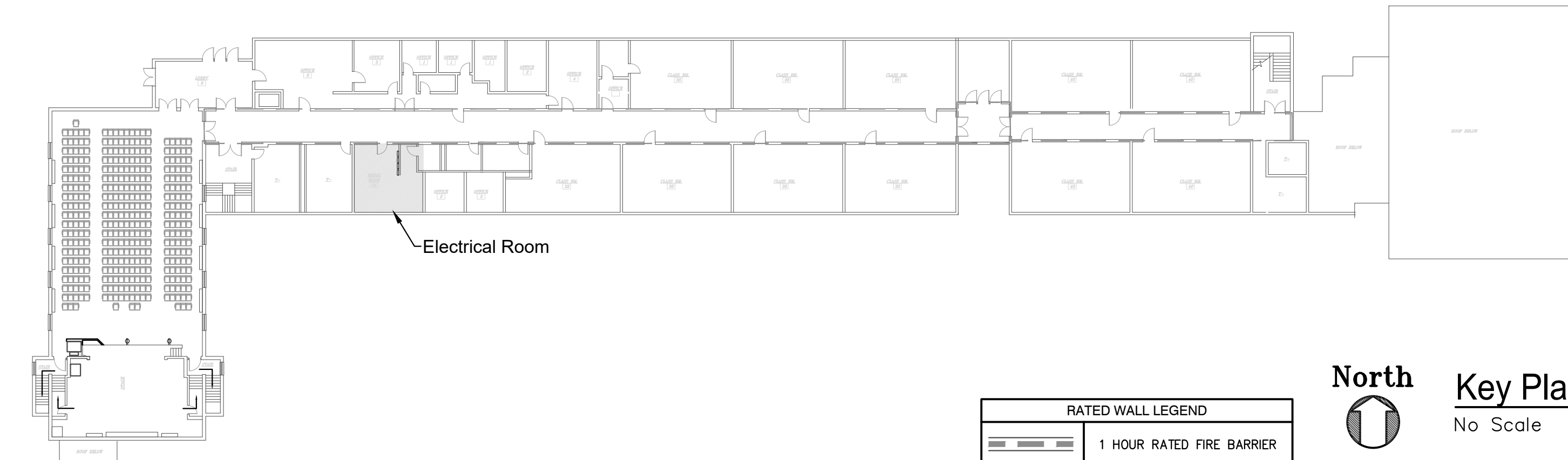
1 Electrical Renovation Plan
E3.0 SCALE: 1/8" = 1'-0"



2 Partial AV Raceway Riser
E3.0 SCALE: NONE

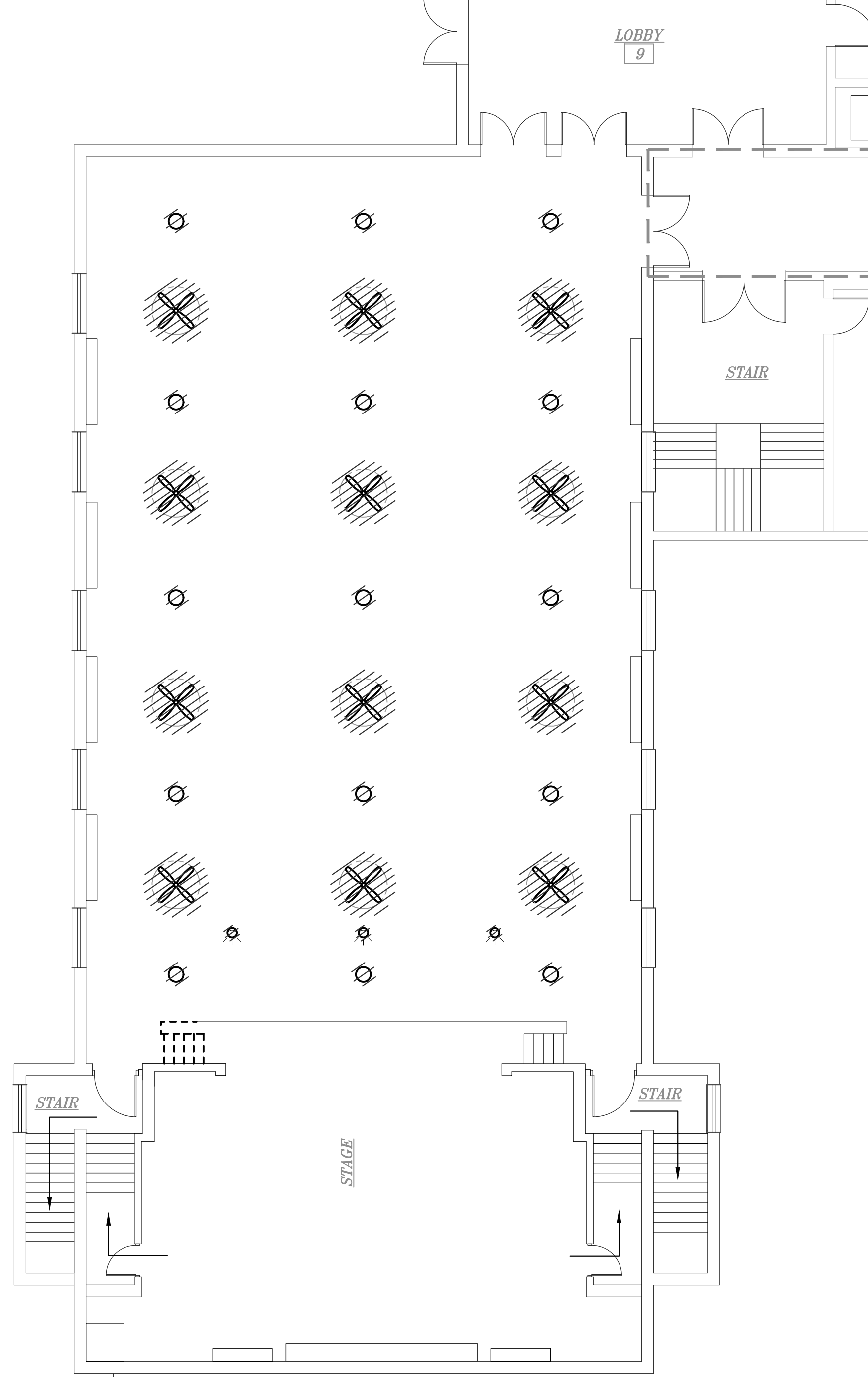
- NOTES:**
- FIELD COORDINATE ROUTING OF CONDUIT AS REQUIRED.
 - FIELD COORDINATE HEIGHT OF OUTLET BOXES WITH A/V DRAWINGS, ARCHITECT AND EXISTING CONDITIONS

- 8" FIRE RATED POKE THROUGH FLOOR BOX (TYPICAL OF 8)
 - FOR HIGH CAPACITY MULTIMEDIA APPLICATION.
 - ADA COMPLIANT, RECESSED CAST ALUMINUM COVER WITH LOW PROFILE FLANGE (BLACK POWDER COAT)
 - RECEPTACLES / PLUGS AND JACKS COMPLETE RECESSED WHEN COVER IS CLOSED
 - COVER OPENS 180° FOR ACCESS AND HAS FOLD UNDER CABLE PASS THROUGH PANELS.
 - CENTER SUB-PLATE LAYOUT TO HAVE THREE GANGS - EACH READY FOR SIX THIRD PARTY DATA JACKS.
 - PERIMETER SUB-PLATE LAYOUT TO HAVE PRE-WIRED DUPLEX RECEPTACLE ON EACH SIDE.
 - PROVIDE 3/4" POWER CONDUIT CONNECTION
 - PROVIDE 2" LOW VOLTAGE CONDUIT CONNECTION
- HUBBELL SIR8PT SERIES OR EQUAL BY LEGRAND OR FSR.

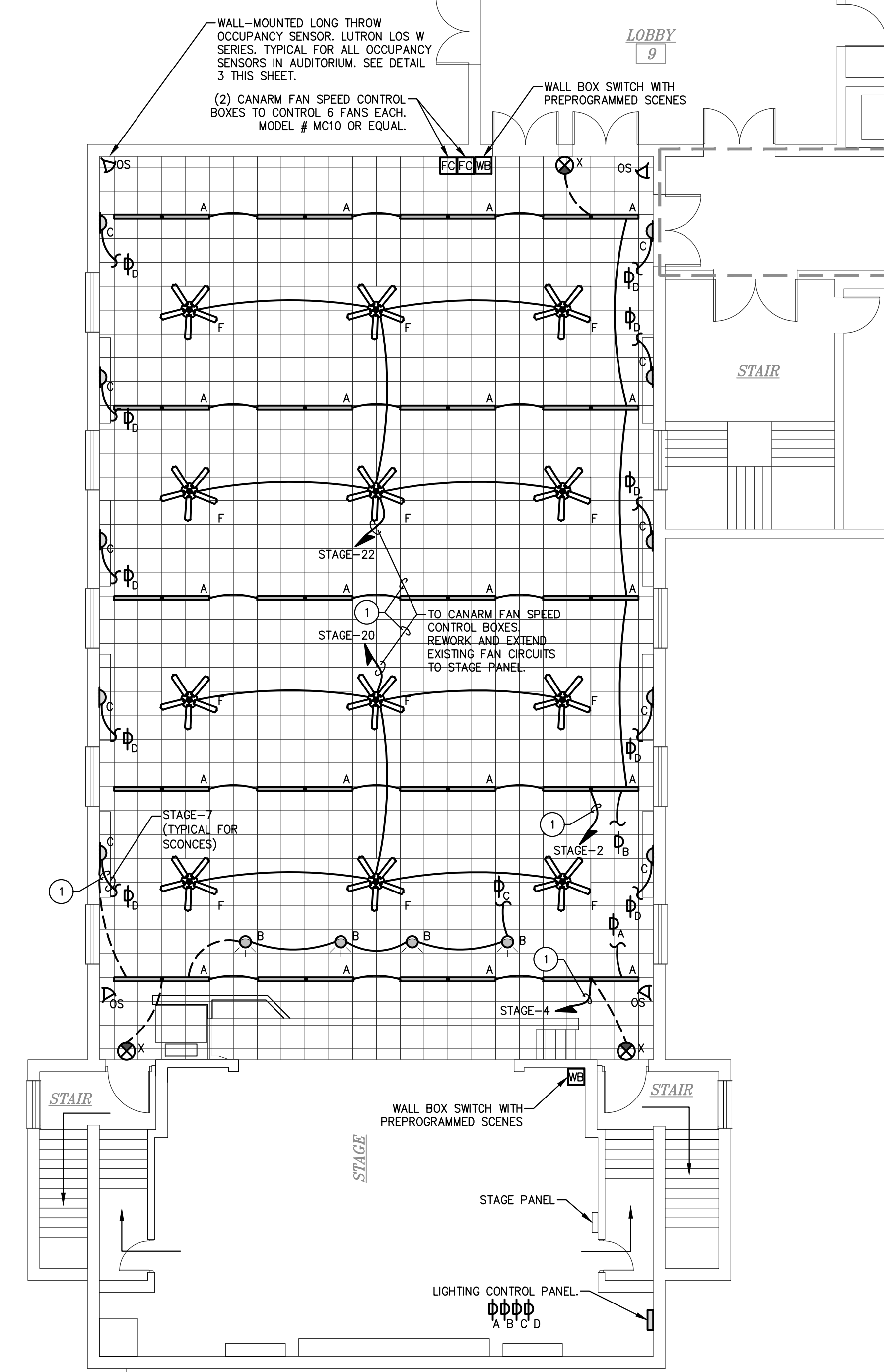


North
Key Plan
No Scale

P:\PROJECTS\2024\24-107-CC-SPAUDING-AUDITORIUM-RENOVATIONS\CD\A3.00 ELECTRICAL\E3.0.DWG PLOTTED: 2/19/2024 1:01 PM BY: MILES SMITH



1 Lighting Demolition Plan
E3.1 SCALE: 1/8" = 1'-0"



2 Lighting Renovation Plan
E3.1 SCALE: 1/8" = 1'-0"

LIGHT FIXTURE SCHEDULE							
TYPE	PRODUCT IMAGE	MANUFACTURER	MODEL NUMBER	LAMPING	VOLTAGE	VA	FIXTURE DESCRIPTION
A		CURRENT INTER-LUX DELVRO METALUMEN	4L-LG-D-8'-08-50F-CI-40K-D125-D01-1C-UNV	LED, 4000K 1250 LUMENS/FT	120-277V	11W/FT	4" WIDTH RECESSED LED LINEAR FIXTURE. 1% 0-10V DIMMING. CONFIRM CEILING TYPE WITH ARCHITECT (15/16 GRID VS 9/16 GRID) - CEILING TYPE MOUNT CAN NOT BE RETROFITTED IN FIELD.
B		SPECTRUM	SGABX-80L-40K-XW-D510-1-BH27-RABFBX-SG-WF	LED, 4000K 8000 LUMENS	120V	58W	8" ROUND OPEN APERTURE DEEP REGRESSED RECESSED LED ADJUSTABLE ACCENT LIGHT. TILTS 35 DEGREES, ROTATES 360 DEGREES.
C		KIM LIGHTING	CY1-25-4K8-2-WG-WG-UNV-DBT-CB	LED, 4000K 2500 LUMENS	120-277V	25W	WALL SCONCE. UP/DOWN LIGHT WITH WALL GRAZE OPTIC.
E							SEE AISLE LIGHT DETAILS ON SHEET E3.0.
F		CANARM OR EQUAL	CP56D10N		120V	72W	56" DIAMETER 3-BLADE FAN. BLACK METAL STRAIGHT BLADES.
X		BEGHELLI OR EQUIVALENT	BRZ-LR-U-W-AT	LED	120-277V	5W	RED LED COMBO EXIT LIGHT WITH LED STRIP EMERGENCY LIGHT BAR AND 90-MINUTE BATTERY BACKUP. UNIVERSAL MOUNTING. SELF DIAGNOSTICS.

NOTES:

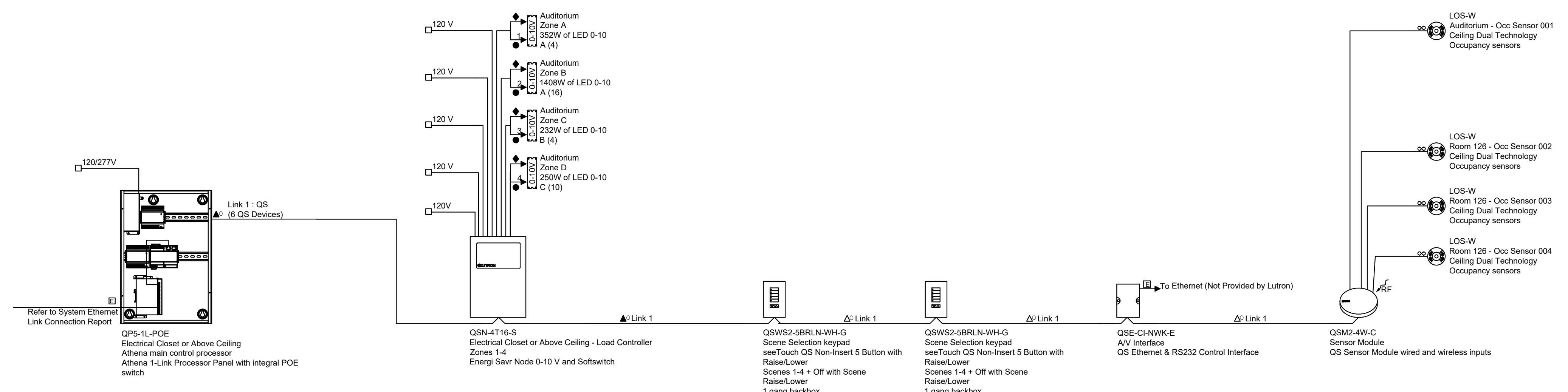
- FIXTURES SHALL BE APPROVED WITH ALL NECESSARY MOUNTING HARDWARE, OPTIONS, LAMPS AND COMPONENTS AS REQUIRED FOR THE INSTALLATION AND AS DESCRIBED IN THE SCHEDULE.
- PROVIDE SEPARATE POWER SUPPLIES, MOUNTING BRACKETS, END CAPS, ACCESSORIES AND ALL COMPONENTS TO ENSURE A COMPLETE AND CLEAN INSTALLATION.
- COORDINATE EXACT MOUNTING DETAILS, COLORS AND LENGTHS WITH ARCHITECTURAL DETAILS PRIOR TO ORDERING.
- ALL EXIT SIGNS AND EMERGENCY LIGHTS SHALL BE CIRCUITED TO THE LINE SIDE OF THE LOCAL AREA LIGHTING SWITCH.
- EQUAL FIXTURES IN APPEARANCE, QUALITY AND PERFORMANCE MAY BE SUBMITTED UNLESS OTHERWISE NOTED BY THE ENGINEER, ARCHITECT OR OWNER.

KEYNOTES:

- EXTEND AND REWORK EXISTING LIGHTING CIRCUIT AS REQUIRED TO POWER NEW LIGHTS IN NEW DROP CEILING GRID. CONTRACTOR TO VERIFY EXISTING CIRCUIT. #12 WIRE AND 3/4" C. TYPICAL ALL LIGHTING CIRCUITS AND FAN CIRCUITS.



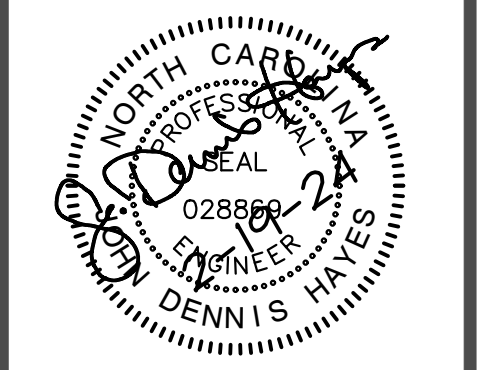
North Key Plan
No Scale



3 Lighting Control System Riser Diagram
E3.1 SCALE: NONE

RATED WALL LEGEND	
	1 HOUR RATED FIRE BARRIER

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Lighting Plan

Renovations To:

Auditorium
Renovations
CC Spaulding
Elementary
School

Durham Public
Schools

Bute, PLLC No. 2205



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Bid Set March 7, 2024
Date: 02/19/24
Revisions:
Sheet: E3.1

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TELECOMMUNICATIONS

110	TWISTED PAIR TERMINATION BLOCK
ADF	AREA DISTRIBUTION FACILITY
BDC	BUILDING DISTRIBUTION FRAME
BEF	BUILDING ENTRANCE FRAME
BO	BY OTHERS
CAB	TELECOM CABINET OR ENCLOSURE
CONN	CONNECTOR
CSC	COPPER SPLICE CLOSURE
CVE	CONTROLLED ENVIRONMENT VAULT
FD	FIBER DISTRIBUTION FACILITY
FS	FIBER SHELF/FIBER TERMINATION PANEL
FSC	FIBER OPTIC SPLICE CLOSURE
HH	HANDHOLE
IDC	INTERMEDIATE DISTRIBUTION TELECOMMUNICATIONS ROOM
IDF	INTERMEDIATE DISTRIBUTION FRAME
ISP	INSIDE PLANT - CABLE WITHIN A BUILDING
IT	INFORMATION TECHNOLOGY
LAN	LOCAL AREA NETWORK
MDC	MAIN DISTRIBUTION TELECOMMUNICATIONS ROOM
MDF	MAIN DISTRIBUTION FRAME
MH	MANHOLE, MAINTENANCE HOLE
MPOE	MINIMUM POINT OF ENTRY
OCEF	OPTICAL CABLE ENTRANCE FACILITY
OSP	OUTSIDE PLANT - CABLE OUTSIDE A BUILDING
PAV	PAVEMENT
PC	PLASTIC CONDUIT
PG	PAIR GROUP
POP	POINT OF PRESENCE
PR	PAIR
PVC	POLYVINYL CHLORIDE
RU	RACK UNIT
R/W	RIGHT-OF-WAY
SC	SPLICE CLOSURE
SCS	STRUCTURED CABLING SYSTEM
SER	SERIAL
SMR	SURFACE MOUNTED RACEWAY
SS	FIBER SPLICE SHELF
TC	TELECOM CONDUIT
TCM	TELECOM CONDUIT SLEEVE, HORIZONTAL
TCR	TELECOM HORIZONTAL AND VERTICAL RISER CONDUIT
TCT	TELECOM CABLE TRAY
TEC	TELECOM ENTRANCE CONDUIT
TEL	TELEPHONE
TELECOM	TELECOMMUNICATIONS
TERM	TERMINAL
TP	TWISTED PAIR
TPB	TELECOM PULL BOX
TR	TELECOM ROOM
TSL	TELECOM WALL OR FLOOR SLOT
TSV	TELECOM CONDUIT SLEEVE, VERTICAL
WAN	WIDE AREA NETWORK

ELECTRICAL

A or AMP	AMPERE
BND	BOND(ING)
C	CONDUIT
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRICAL NON-METALLIC TUBING
GRC	GALVANIZED RIGID CONDUIT
GND	GROUND
Hz	HERTZ
IG	ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
IB	PULL BOX
PLN	PANEL
PWR	POWER
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT
VAC	VOLTS, ALTERNATING CURRENT
DC	VOLTS, DIRECT CURRENT
W	WATT
XFMR	TRANSFORMER

GENERAL

(e) or (E)	EXISTING
(n) or (N)	NEW
ABV	ABOVE
ACH	ABOVE COUNTER HEIGHT
ACT	ACOUSTICAL CEILING TILE
ADJ	ADJUST(ABLE)
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
ASA	AMERICAN STANDARDS ASSOCIATION
AV	AUDIOVISUAL
AVC	AUDIOVISUAL CONTRACTOR
BET	BETWEEN
BFC	BELOW FINISHED CEILING
BLDG	BUILDING
BLW	BELOW
CB	CEILING BOX
C-C	CENTER TO CENTER
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASON UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
COORD	COORDINATE, COORDINATION
CORR	CORRIDOR
DED	DEDICATE, DEDICATED
DEMO	DEMONSTRATION
DEPT	DEPARTMENT
DET	DETAIL
DIM	DIMENSION
DIST	DISTANCE
DTV	DATA TELECOMMUNICATION CONTRACTOR
DWG	DRAWING
EACH	EACH
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
EMERG	EMERGENCY
EQ	EQUAL
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
EWB	ELECTRONIC WHITE BOARD
EXT	EXTERIOR
FCC	FEDERAL COMMUNICATIONS COMMISSION
FIN	FINISH
FLEX	FLEXIBLE
FLOOR	FLOOR

WIRE AND CABLE

AFWM	BONDED FILL FLOODED TWISTED CABLE
ARM	ARMORED BONDED MULTIPAIR CABLE
AWG	AMERICAN WIRE GAUGE
CAT3	CATEGORY 3 TWISTED PAIR COPPER CABLE
CAT4	CATEGORY 4 TWISTED PAIR COPPER CABLE
CAT5	CATEGORY 5 TWISTED PAIR COPPER CABLE
CAT5e	CATEGORY 5 ENHANCED TWISTED PAIR COPPER CABLE
CAT6	CATEGORY 6 TWISTED PAIR COPPER CABLE
CM	NEC, COMMUNICATIONS CABLE
CMR	NEC, COMMUNICATIONS PLENUM CABLE
CMR	NEC, COMMUNICATIONS RISER CABLE
COAX	COAXIAL CABLE
FO	FIBER OPTIC
HDPE	HIGH DENSITY POLYETHYLENE
LTF	LOOSE TUBE FILLED & FLOODED
MDPE	MEDIUM DENSITY POLYETHYLENE
MM	MULTIMODE FIBER OPTIC CABLE
MPP	NEC, MULTIPURPOSE PLENUM CABLE
OPF	NEC, OPTICAL FIBER CONDUCTIVE CABLE
OPCP	NEC, OPTICAL FIBER CONDUCTIVE PLENUM CABLE
OPFR	NEC, OPTICAL FIBER CONDUCTIVE RISER CABLE
OPN	NEC, OPTICAL FIBER NON-CONDUCTIVE CABLE
OPNP	NEC, OPTICAL FIBER NON-CONDUCTIVE PLENUM CABLE
OPNR	NEC, OPTICAL FIBER NON-CONDUCTIVE RISER CABLE
SM	SINGLE MODE FIBER OPTIC CABLE
STP	SHIELDED TWISTED PAIR
TB	TIGHT BUFFERED
UTP	UNSHIELDED TWISTED PAIR
WM	WIRE MANAGER/MANAGEMENT

MEASUREMENTS

BTU	BRITISH THERMAL UNIT
D or Dp	DEEP
DIA	DIAMETER
FT	FOOT or FEET
H or HGT	HEIGHT or HIGH
ID	INSIDE DIAMETER
I	INCH
L	LENGTH or LONG
Lb	POUND
LN	LINEAR
M	METER
mm	MILLIMETER
OD	OUTSIDE DIAMETER
R	RADIUS
RAD	RADIANS
um	MICRON
W	WIDE
WT	WEIGHT
YD	YARD

COLOR CODE

A	ALMOND
B	BROWN
C	CRIMSON RED
E	BLACK
G	GRAY
I	IVORY
L	BLUE
O	ORANGE
P	PURPLE
R	DARK RED
V	GREEN
W	WHITE
Y	YELLOW

ASSOCIATION/

FLOUR	FLUORESCENT
FUT	FUTURE
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GWB	GYPSON WALL BOARD
IFC	IN FINISHED CEILING
IFF	IN FINISHED FLOOR
INCAND	INCANDESCENT
INCL	INCLUDE, INCLUDING
INFO	INFORMATION
INT	INTERIOR
LVI	LOW VOLTAGE INTERFACE
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFG	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
NA	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
No.	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFE	OWNER FURNISHED EQUIPMENT
OFOI	OWNER FURNISHED OWNER INSTALLED
OPF	OPPOSITE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMIN.
OVHD	OVERHEAD
PLC	PERFORMANCE LIGHTING CONTRACTOR
PLY	PLYWOOD
PRI	PRIMARY
PROP	PROPOSED
PSC	PROTECTION SCREEN CONTROL
QTY	QUANTITY
RCP	REFLECTED CEILING PLAN
RCT	RECEPTACLE
REF	REFERENCE
REM	REMOVE
REPL	REPLACE
REQD	REQUIRED
RM	ROOM
SCHD	SCHEDULE
SECT	SECTION
SHT	DRAWING SHEET NUMBER OR SERIES
SIML	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
STD	STANDARD
STL	STEEL
SUSP	SUSPEND(ED)
SWT	SWITCH
SYM	SYMMETRICAL
TELC	TELECOMMUNICATIONS CONTRACTOR
TEMP	TEMPORARY
THK	THICK(NESS)
TA/EA	TELECOMMUNICATIONS INDUSTRY

SYMBOLS

#	POUND or NUMBER
&	AND
@	AT
'	FOOT or FEET
"	INCH or INCHES
+/- or ±	PLUS OR MINUS
<	LESS THAN
=	EQUAL
>	GREATER THAN
°	DEGREES, ANGULAR MEASURE
	PARALLEL
∅	DIAMETER
∠	ANGLE

DIRECTIONAL

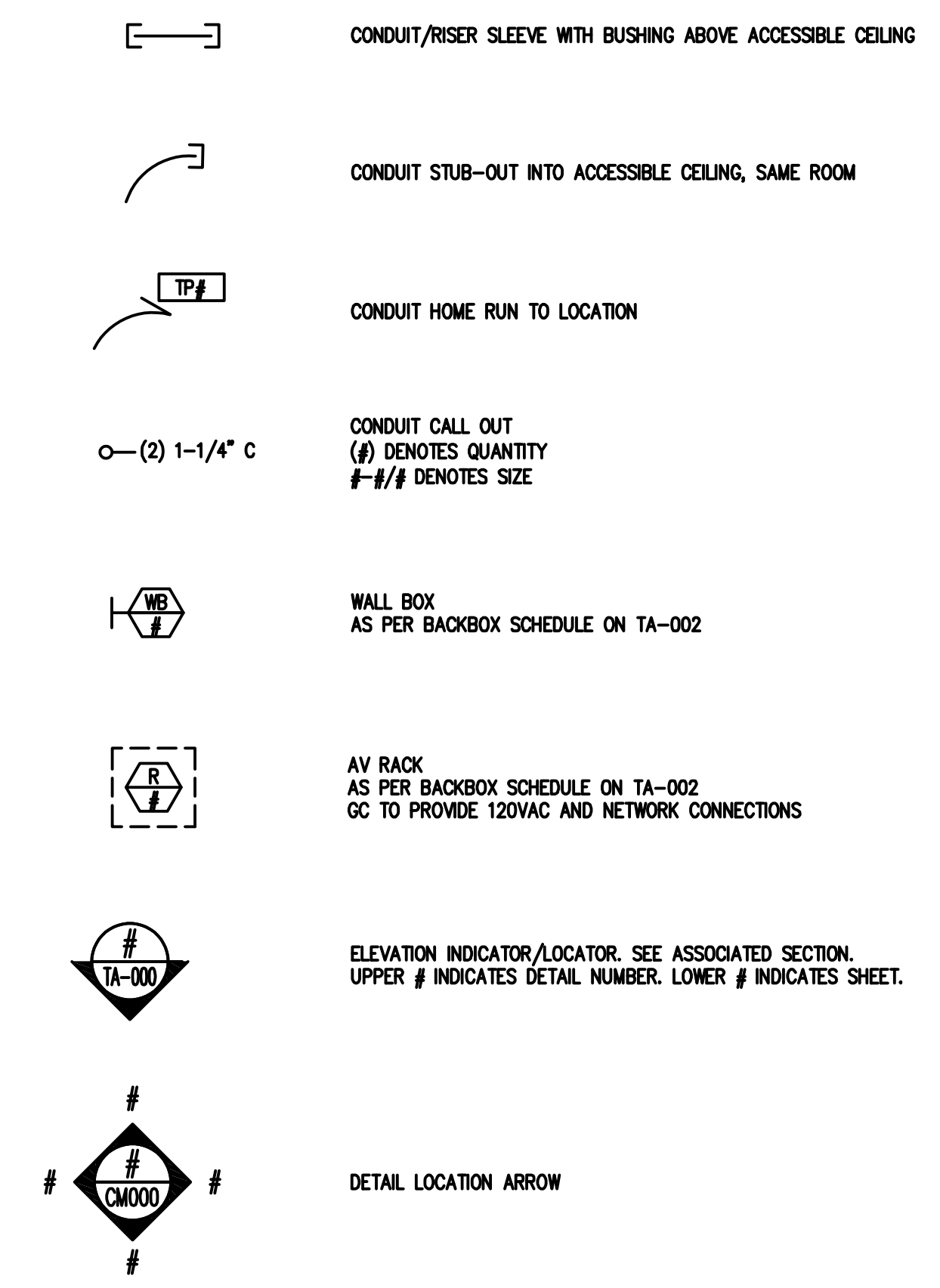
DN	DOWN
E	EAST
HORIZ	HORIZONTAL
LH	LEFT
L	LEFT HAND
N	NORTH
PERP	PERPENDICULAR
R	RIGHT
RH	RIGHT HAND
S	SOUTH
VERT	VERTICAL
W	WEST

GENERAL NOTES

- POWER:**
 - A EACH CIRCUIT THAT SERVES TECHNOLOGY SYSTEMS MUST HAVE A DEDICATED GROUND AND NEUTRAL CONDUCTOR. SHARED GROUNDS AND NEUTRALS ARE NOT ACCEPTABLE.
 - B ALL CIRCUITS ARE 120 VAC, 60 HZ, 1-PHASE, UON.
 - C NOMINAL ELECTRICAL VOLTAGE IS 120 VAC. VOLTAGE MUST BE MAINTAINED WITH +/-10 PERCENT OF NOMINAL AT ALL TIMES FOR PROPER EQUIPMENT OPERATION.
- TECHNOLOGY CONVEYANCE SYSTEM:**
 - A CONDUITS WHICH CARRY POWER MUST BE SEPARATED FROM TECHNOLOGY CONDUITS BY 12 INCHES FOR VOLTAGES OVER 100 VAC, 24 INCHES FOR VOLTAGES OVER 200 VAC AND 48 INCHES FOR ALL VOLTAGES OVER 300 VAC. WHERE POWER AND TECHNOLOGY CABLING AND CONDUIT CROSS, THEY SHOULD DO SO AT RIGHT ANGLES.
 - B ALL CONDUIT SHALL BE CLEANED, DEBURRED AND HAVE PULL-STRINGS INSTALLED.
 - C ALL INTERIOR AND ABOVE GRADE CONDUIT SHALL BE SOLID FERRIC METALLIC. ALL CONDUIT BELOW GRADE SHALL BE PLASTIC. CONTRACTOR SHALL NOT CHANGE CONDUIT TYPE WITHOUT DESIGN CONSULTANT APPROVAL.
 - D PROVIDE PULL BOXES USING SWEEP ELBOWS AS REQUIRED BY CONDUIT PATH, CABLE BEND RADIUS OR PULLING TENSION LIMITS.
 - E BACK BOXES TO BE SET TO ALLOW ALL TECHNOLOGY FACEPLATES TO BE INSTALLED TIGHT TO THE ADJACENT SURFACE.
- PRIOR TO THE START OF ACTIVE EQUIPMENT INSTALLATION THE EQUIPMENT SPACES SHALL BE:**
 - A CLEAN AND SEALED FROM DUST PRIOR TO EQUIPMENT INSTALLATION.
 - B MAINTAINED AT A TEMPERATURE OF 72 ± 10 DEGREES FAHRENHEIT AT ALL TIMES.
 - C MAINTAINED AT A RELATIVE HUMIDITY BETWEEN 40 AND 70 PERCENT AT ALL TIMES.
- ALL PHONE, DATA, CABLE AND NETWORK LINES ARE TO BE PROVIDED BY OTHERS.**
- ALL BLOCKING TO BE PROVIDED BY GC.**
- VENTS, GRILLS AND GROMMETS PROVIDED BY THE CASEWORK/MILLWORK VENDOR.**

FACILITY NOTES

- AUDIO CONNECTORS:** ALL CONNECTIONS TO SCREW CLAMP OR BINDING POST TERMINALS REQUIRE APPROPRIATELY COLOR CODED FLANGED OR SNAP SPADE TYPE LUGS. BARE WIRE CONNECTED TO A BINDING POST IS NOT ACCEPTABLE. GAS TIGHT INSULATION DISPLACEMENT "PUNCH-DOWN BLOCKS" ARE ACCEPTABLE TERMINAL CONNECTIONS FOR MICROPHONE AND LINE LEVEL INTERCONNECTIONS WITHIN EQUIPMENT ENCLOSURES.
- LOUDSPEAKER CONNECTORS:** ALL CONNECTIONS TO SCREW CLAMP OR BINDING POST TERMINALS REQUIRE APPROPRIATELY COLOR CODED FLANGED OR SNAP SPADE TYPE LUGS. BARE WIRE CONNECTED TO A BINDING POST IS NOT ACCEPTABLE. FOR CONSTANT VOLTAGE SYSTEMS CRIMP CONNECTIONS AT LOUDSPEAKERS ARE ACCEPTABLE. WIRE NUTS ARE NOT.
- VIDEO CONNECTORS:** ALL COAXIAL CABLE CONNECTIONS SHALL BE MADE WITH CRIMP TYPE CONNECTORS FOR BOTH SHIELD AND INNER CONDUCTOR. INSTALL WITH MANUFACTURER'S APPROVED ASSEMBLY METHODS AND TOOLS. CONNECTORS ATTACHED TO COAXIAL CABLE SHALL BE BNC STYLE CONNECTORS. USE BNC TO W/F ADAPTER OR BNC TO RCA ADAPTER AS APPROPRIATE FOR THE EQUIPMENT BEING CONNECTED.
- RF CONNECTORS:** ALL RF CABLE CONNECTIONS SHALL BE MADE WITH CRIMP TYPE CONNECTIONS FOR BOTH THE SHIELD AND INNER CONDUCTOR. INSTALL WITH MANUFACTURER'S APPROVED ASSEMBLY METHODS AND TOOLS. CONNECTORS ATTACHED TO RF CABLE SHALL BE "Y" STYLE CONNECTORS.
- RJ CONNECTORS:** ALL RJ CABLE CONNECTIONS SHALL BE MADE WITH CRIMP TYPE CONNECTIONS. RJ45 CONNECTIONS ARE TO BE MADE WITH SHIELDED GROUNDING CONNECTORS.
- SIGNAL GROUNDING:** USE THE RACK AS A COMMON POINT OF GROUNDING FOR ALL TECHNICAL SYSTEMS. THE RACK IS TO BE GROUND / BONDED TO EARTH. CABLE SHIELDS SHALL ONLY BE USED FOR SHIELDING AND CONNECTED TO GROUND AT THE RACK ONLY. ALL RACK-MOUNTED EQUIPMENT SHALL BE CHECKED FOR GROUND CONTINUITY BETWEEN CHASSIS AND THE RACK.
- CABLING:**
 - A ALL CABLING IS TO BE CONTINUOUS AND UN-SPLICED.
 - B CABLING NOT IN CONDUIT IS TO BE SUPPORTED FROM THE BUILDING STRUCTURE BY J-HOOKS. CABLES ARE NOT TO BE SUPPORTED FROM CEILING WIRES OR OTHER CONVEYANCE SYSTEMS.
 - C PLENUM RATED CABLES AND CABLE TIES MUST BE USED WHEN CABLES ARE LOCATED IN AN AIR PLENUM.
 - D CABLES WITHIN RACKS SHALL BE BUNDLED AND LACED NEATLY TO SUPPORT MEMBERS WITH A SERVICE LOOP LARGE ENOUGH TO MAINTAIN CONVENIENT ACCESS TO ALL EQUIPMENT CONNECTIONS.
 - E EQUIPMENT POWER CABLE IS TO BE SEPARATED FROM SIGNAL CABLES WITH IN ANY ENCLOSURE. PROVIDE THE MAXIMUM SEPARATION POSSIBLE WITHIN THE ENCLOSURE.
- WIRING:** ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH NETWORK AND BROADCAST STANDARD PRACTICES. CABLE JACKET SHALL BE COLOR CODED TO MAINTAIN A CONSISTENT IDENTIFICATION OF PHASING.
- MARKINGS:** PERMANENTLY MARK ALL CONNECTORS, CABLES, AND CABLE TERMINATIONS TO INDICATE THEIR FUNCTION AS IT CORRESPONDS TO THE WIRING DIAGRAM. ALL CABLE PAIRS SHALL BE CODED WITH PERMANENTLY ATTACHED LABELS ON THE CABLE ENDS WITH CONSISTENT COLOR-CODED MARKINGS TO INDICATE THEIR FUNCTION. SEE CABLE LABEL DETAIL (DETAIL 5/TA-400).
- AESTHETICS:** COORDINATE THE ELEVATION/LOCATION, FINISH AND COLOR OF ALL PLATES, WALL SWITCHES, FLOOR BOXES AND JUNCTION BOXES WITH THE CONSULTANT.
- VENTILATION:** PROVIDE ADEQUATE VENTILATION IN EQUIPMENT RACKS TO CONFORM TO THE EQUIPMENT MANUFACTURER'S TEMPERATURE REQUIREMENTS.
- FASTENERS, HANGERS, SUPPORTS:** PROVIDE FASTENERS, SUPPORTS AND SEISMIC RESTRAINTS TO ADEQUATELY SUPPORT THE LOAD.
- WORKMANSHIP:** INSTALLATION OF ALL WORK INCLUDING CABLING SHALL BE NEAT. ALL BOXES INCLUDING THE LOUDSPEAKER ENCLOSURES, EQUIPMENT RACKS, ETC. SHALL BE PLUMB AND SQUARELY LOCATED. REPLACE/PATCH ALL CEILING, WALLS AND FLOOR REMOVED OR MODIFIED FOR THIS WORK WHEN THE WORK IS COMPLETE. LEAVE THE JOB SITE CLEAN AND FREE FROM MARKS AND BLEMISHES.
- DIMENSIONED LOCATIONS:** AV DEVICE LOCATIONS ILLUSTRATED WITH DIMENSIONS ARE CRITICAL TO DESIRED PERFORMANCE. CONTRACTOR SHALL NOT FIELD ADJUST LOCATIONS WITHOUT COORDINATING WITH THE DESIGN CONSULTANT.
- ALL ENGRAVED LABELS SHALL BE FILLED WITH WHITE OR BLACK AS REQUIRED FOR THE GREATEST CONTRAST BETWEEN THE ENGRAVING AND FACEPLATE/LABEL BACKGROUND COLOR.



PROJECT SYMBOLS

DRAWINGS ISSUED LOG

NUMBER	DRAWING NAME						
TA-001	SHEET INDEX AND NOTES	X					
TA-101	AV FLOOR PLAN	X					
TA-301	SECTIONS AND ELEVATIONS	X					
TA-701	COORDINATION DETAILS	X					

ABBREVIATIONS

SHEET INDEX AND NOTES

Renovations To:

Auditorium
Renovations
CC Spaulding
Elementary
School

Durham Public
Schools

Bute, PLLC No. 2205

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Envelope Design • MEP

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Bute@butepllc.com

Bid Set March 7, 2024

Date: 02/15/2023

Revisions:

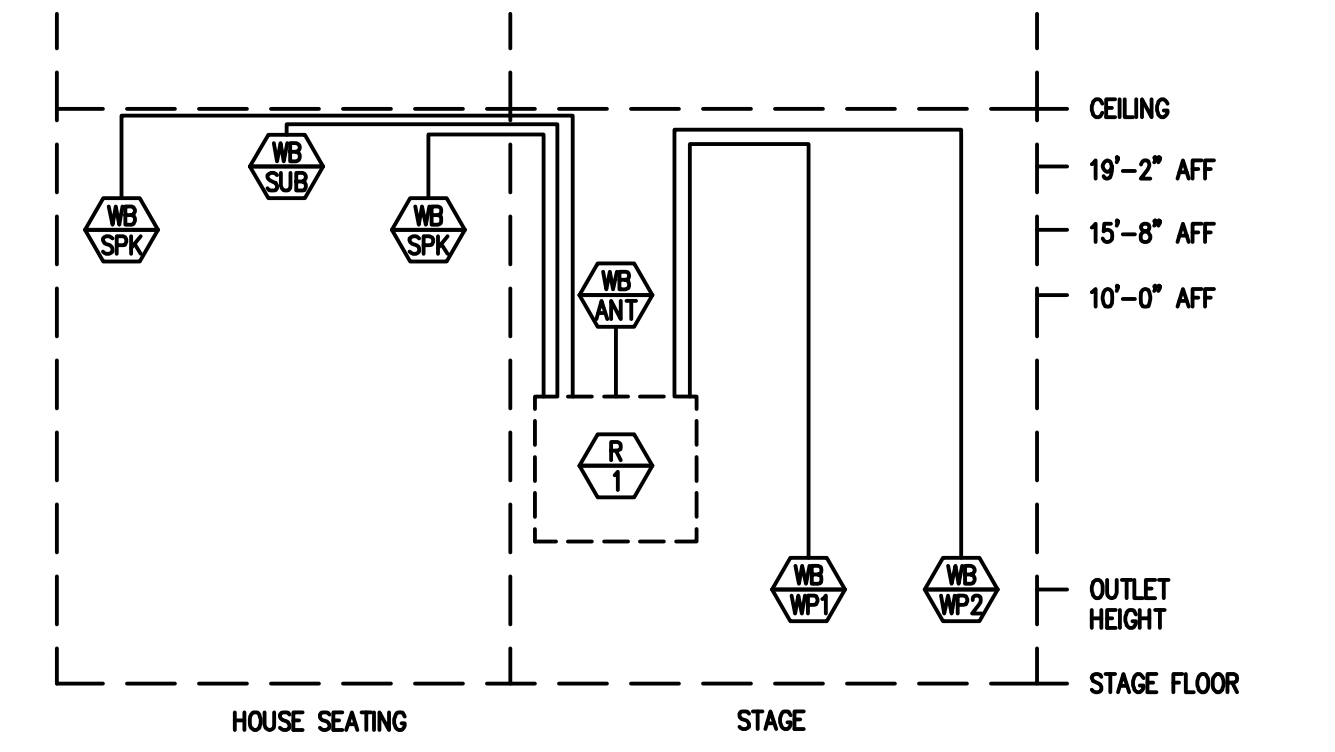
Sheet: TA-001

SHEET INDEX

SYMBOL	DESCRIPTION	TYPE, SIZE, FLUSH MOUNT (UON)	FURNISHED / INSTALLED BY	MOUNTING HEIGHT	MOUNT LOCATION (UON)	BLOCKING	COORDINATION DETAIL	INTERFACE PLATE DETAIL	NOTES
	WALL BOX - FRONT OF HOUSE LINE ARRAY SPEAKER	SINGLE GANG, STANDARD DEPTH, FLUSH MOUNT, GROMMET PASS THRU	EC/EC	1'-6" LOWER THAN THE TOP OF THE PROSCENIUM	FRONT OF HOUSE SIDE OF PROSCENIUM WALL	--	DETAIL 1/TA701	--	
	WALL BOX - SUBWOOFER	SINGLE GANG, STANDARD DEPTH, FLUSH MOUNT, GROMMET PASS THRU	EC/EC	1/2 WAY BETWEEN THE TOP OF PROSCENIUM AND THE CEILING	FRONT OF HOUSE SIDE OF PROSCENIUM WALL	--	DETAIL 2/TA701	--	
	WALL BOX - DOWN STAGE LEFT WALL PLATE	2-GANG, 2-1/2" DEEP WALL BOX, FLUSH MOUNT	EC/EC	1'-6" A.F.F. - 1'-6" LEFT OF THE PROSCENIUM LEFT EDGE	STAGE SIDE OF PROSCENIUM WALL	--	--	DETAIL 8/TA701	
	WALL BOX - DOWN STAGE RIGHT WALL PLATE	2-GANG, 2-1/2" DEEP WALL BOX, FLUSH MOUNT	EC/EC	1'-6" A.F.F. - 1'-6" RIGHT OF THE PROSCENIUM RIGHT EDGE	STAGE SIDE OF PROSCENIUM WALL	--	--	DETAIL 8/TA701	
	WALL BOX - ALS ANTENNA	2-GANG, 2-1/2" DEEP WALL BOX, FLUSH MOUNT	EC/EC	10'-0" A.F.F. INSTALLED ABOVE THE RACK LOCATION	STAGE SIDE OF PROSCENIUM WALL	--	DETAIL 7/TA701	--	
	MIDDLE ATLANTIC EWR-16-22-SD		AVC/AVC	BOTTOM OR RACK AT 4'-0" AFF	WALL	--	DETAIL 2/TA701	--	PROVIDE (1) 20A/120VAC DUPLEX RECEPTACLE ON DEDICATED CIRCUIT DIRECTLY BEHIND RACK LOCATION

BACK BOX SCHEDULE

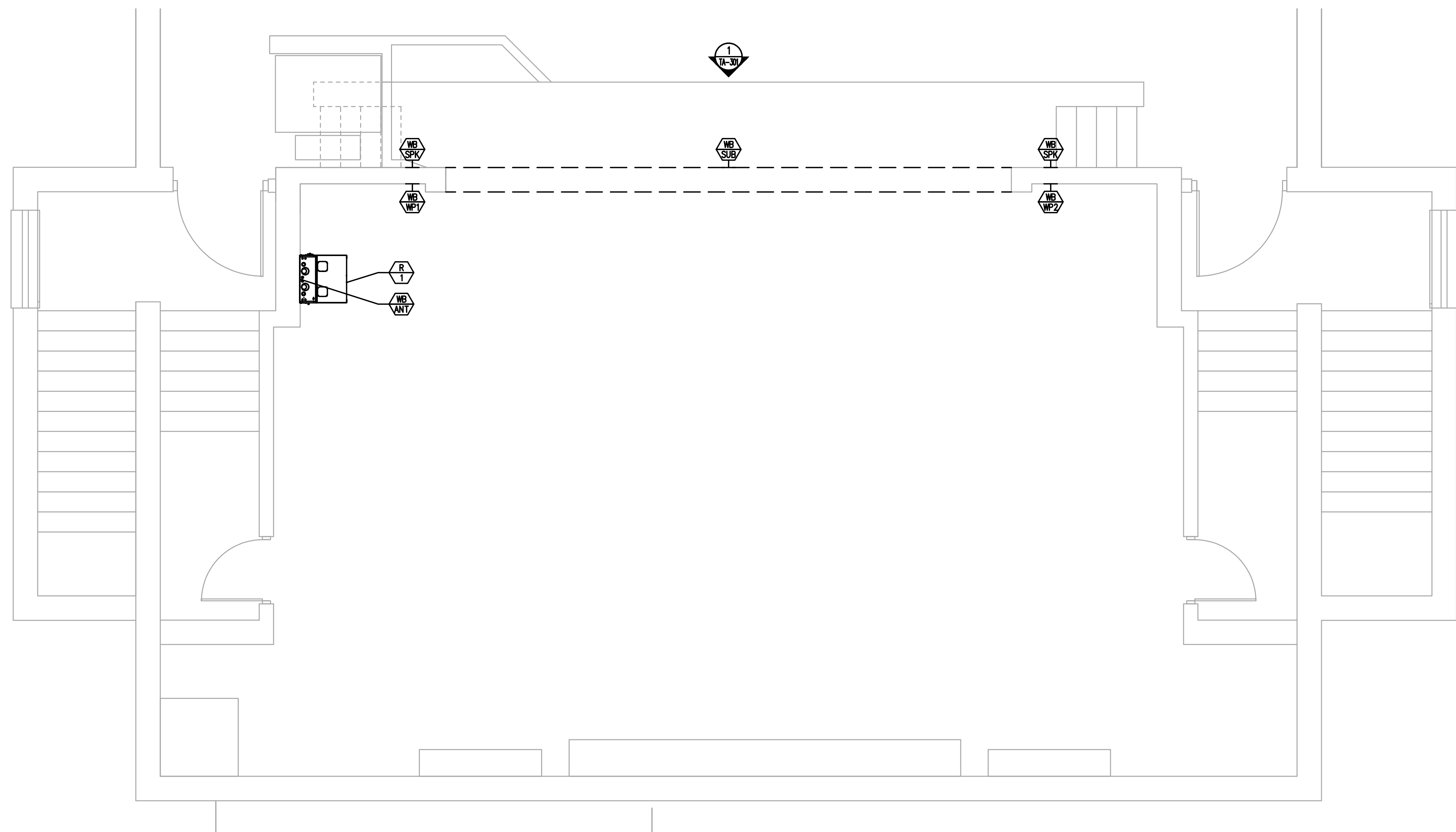
3



NOTE:
1) ALL CONDUIT 1" UON.

RISER DIAGRAM

2



FLOOR PLAN
SCALE: 3/8" = 1'

1

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AV FLOOR PLAN

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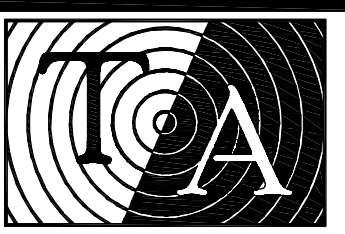
SECTIONS AND ELEVATIONS

Renovations To:

Auditorium
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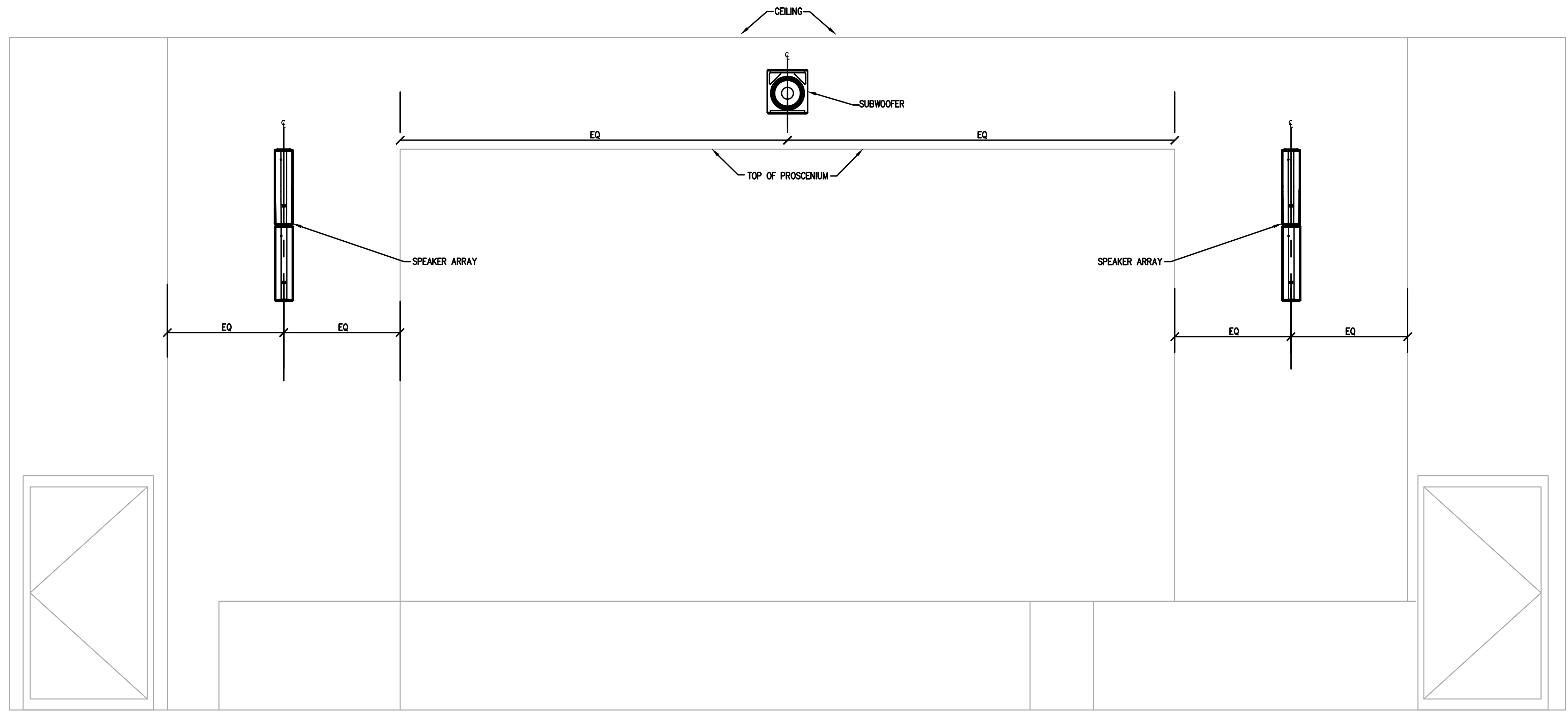
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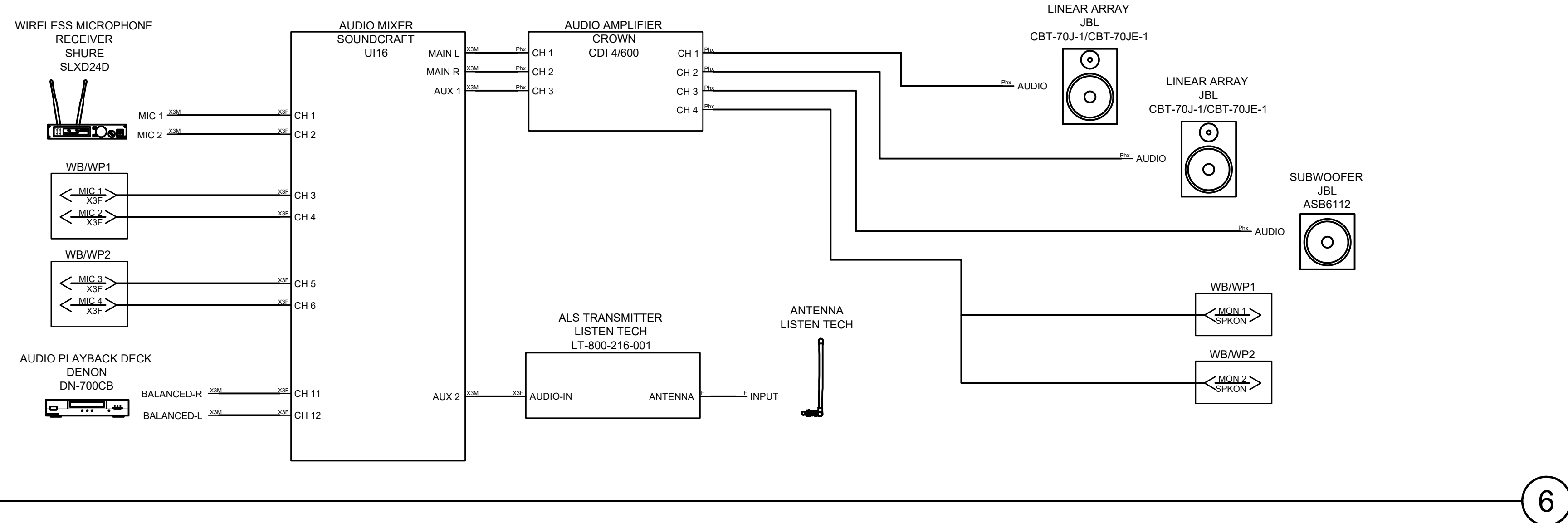
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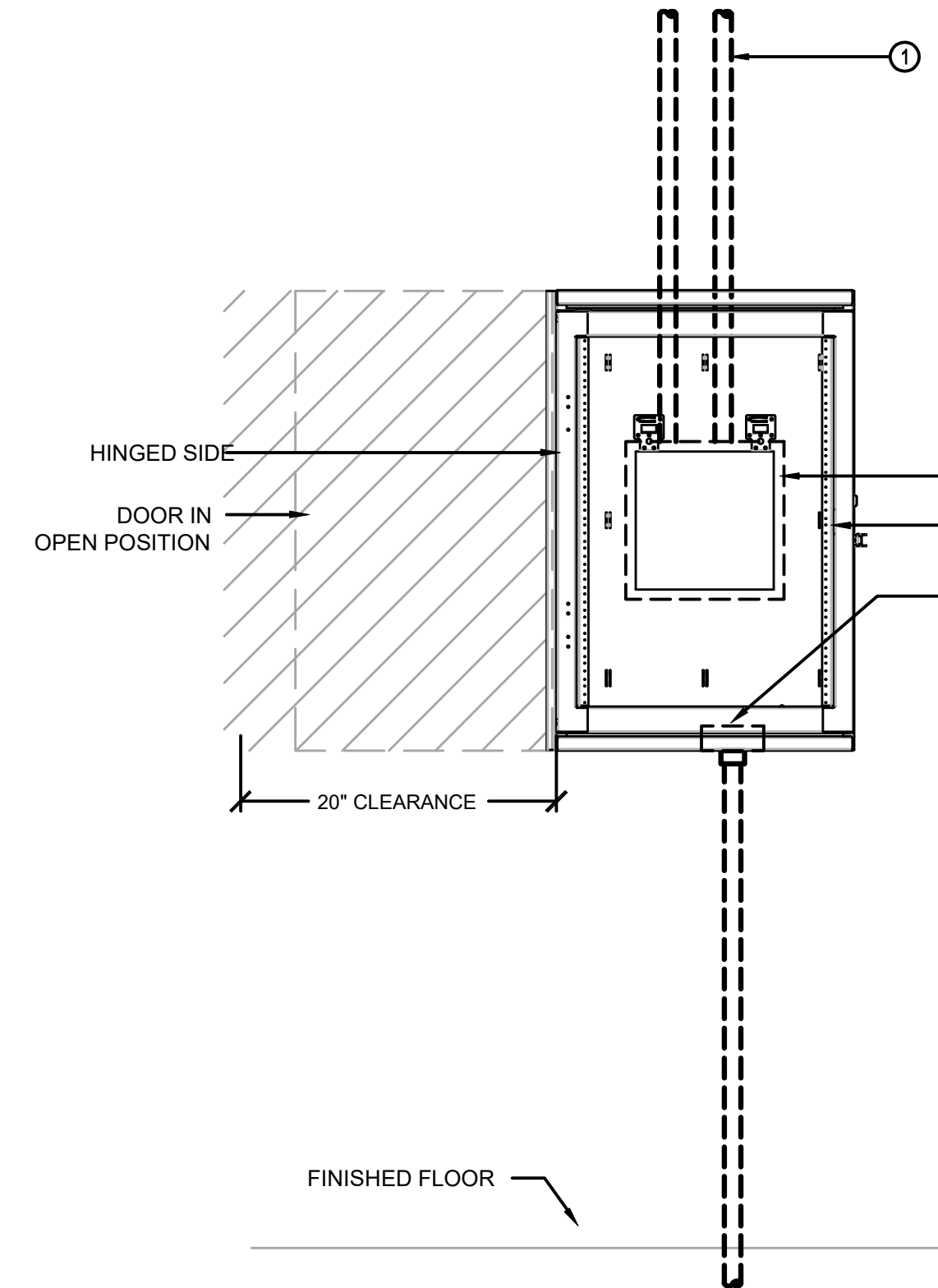


STAGE ELEVATION
SCALE: 1/2" = 1'

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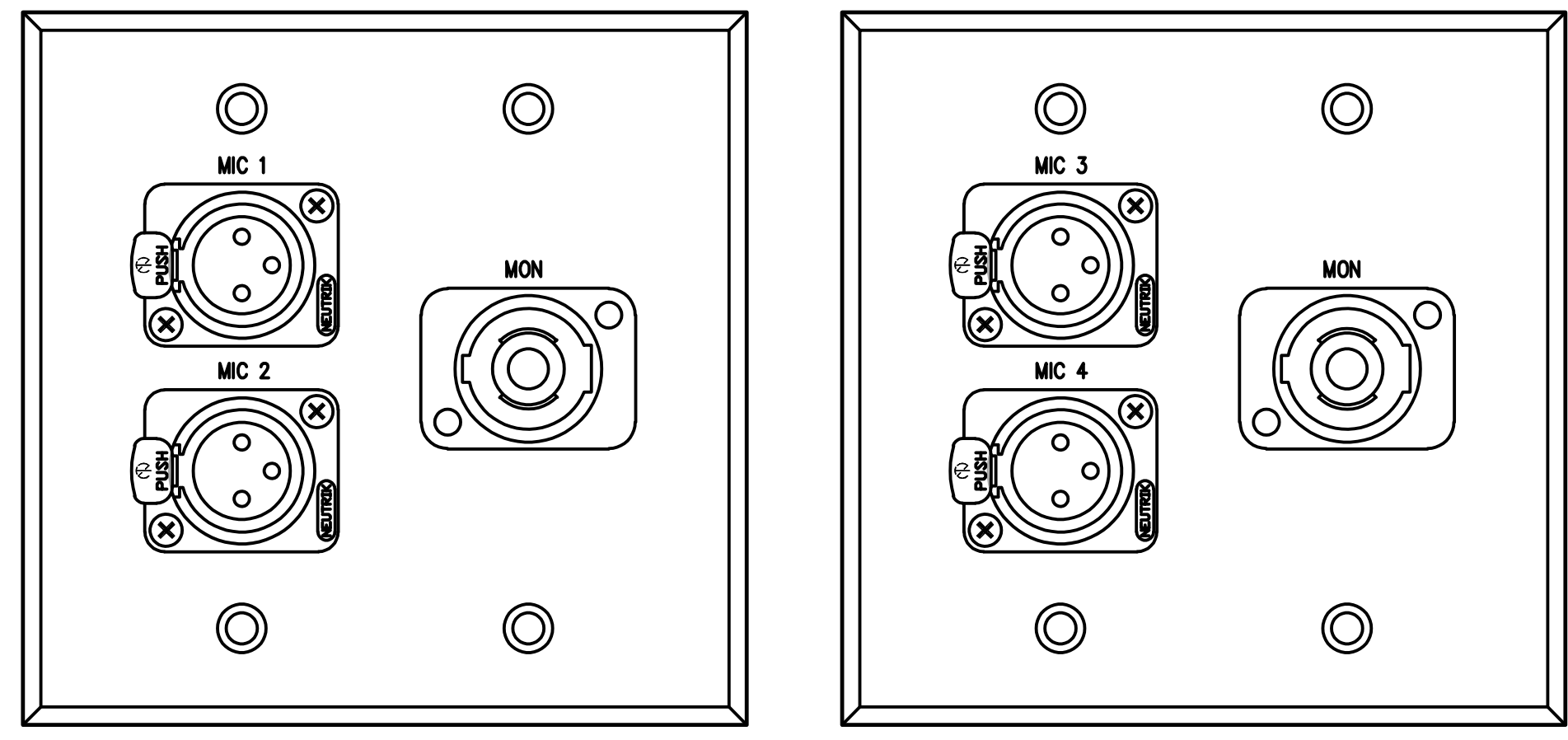
AUDIO FUNCTIONAL
SCALE: NTS



ITEM	DESCRIPTION	MFG/MODEL	BY	QTY.
①	CONDUIT	AS SPECIFIED	EC	1
②	TERMINAL PANEL	AS SPECIFIED	EC	1
③	POWER - (1) 20 AMP / 120VAC CIRCUIT	AS SPECIFIED	EC	1
④	WALL MOUNT EQUIPMENT RACK	PER SPEC SECTION 27 4116	AVC	1

NOTES:
 1. COORDINATE EXACT LOCATION OF EQUIPMENT RACK WITH ARCHITECT/SITE CONDITIONS.
 2. COORDINATE POWER AND CONDUIT REQUIREMENTS WITH ELECTRICAL ENGINEER/CONTRACTOR

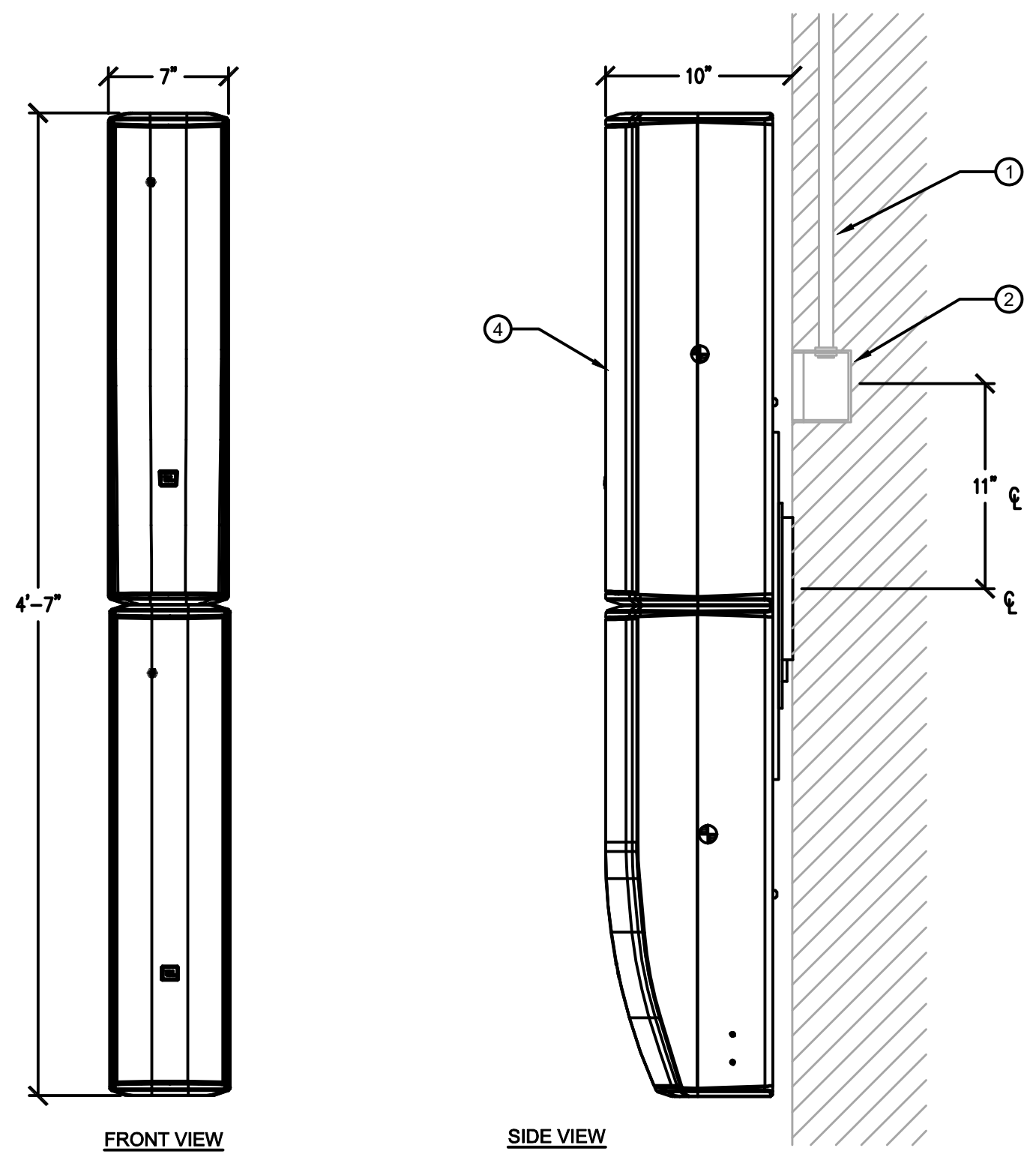
RACK MOUNTING DETAIL
SCALE: NTS



STAGE AV PLATE
SCALE: NTS

1	ID PLATE	16
2	POWER CONDITIONER [PWR]	15
3	1 SPACE BLANK	14
4	WIRELESS MIC RECEIVER [WRLS 2]	13
5	1 SPACE BLANK	12
6	MEDIA PLAYER [MDP]	11
7	1 SPACE BLANK	10
8		9
9	DIGITAL MIXER [MIXER]	8
10		7
11		6
12	1 SPACE BLANK	5
13	POWER AMPLIFIER [PA-1]	4
14		3
15		2
16	2 RU RACK DRAWER	1

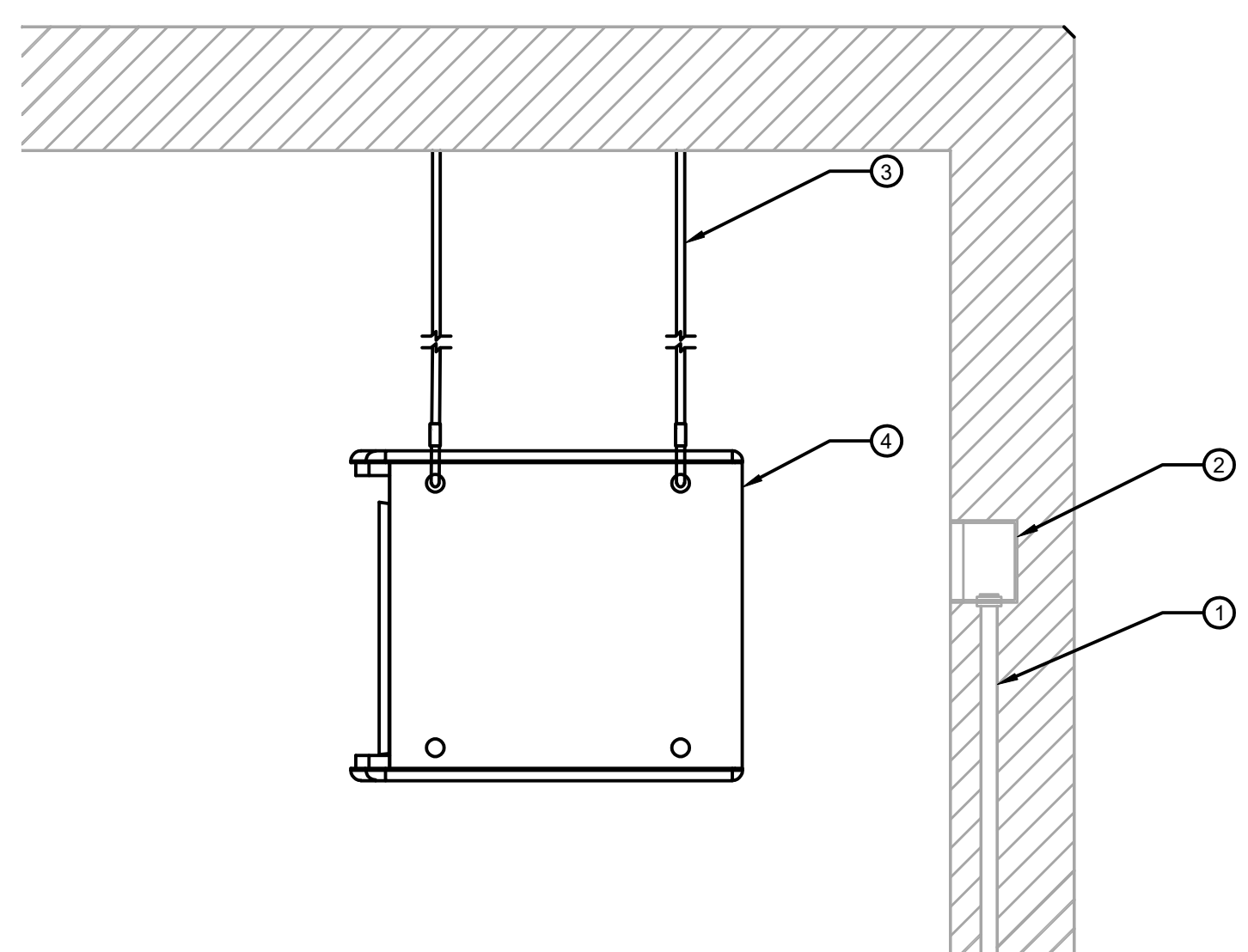
RACK ELEVATION
SCALE: NTS



ITEM	DESCRIPTION	MFG/MODEL	BY
①	CONDUIT	AS SPECIFIED	EC
②	WALL BOX	PER SPEC SECTION 27 4116	LVC
③	LOUDSPEAKER WALL MOUNT	PER SPEC SECTION 27 4116	LVC
④	LOUDSPEAKER	PER SPEC SECTION 27 4116	LVC

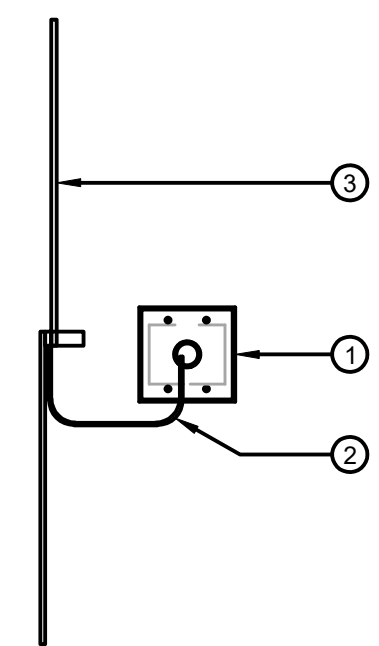
NOTES:
 1. LVC TO ADJUST SWIVEL-TILT WALL BRACKET AS REQUIRED TO PROPERLY AIM LOUDSPEAKER TO PROVIDE COVERAGE OF SPACE.

COLUMN LINE ARRAY MOUNTING
SCALE: NTS



ITEM	DESCRIPTION	MFG/MODEL	BY
①	CONDUIT	AS SPECIFIED	EC
②	WALL BOX	PER SPEC SECTION 27 4116	LVC
③	LOUDSPEAKER CEILING MOUNT	PER SPEC SECTION 27 4116	LVC
④	SUB WOOFER	PER SPEC SECTION 27 4116	LVC

SUB WOOFER MOUNTING
SCALE: NTS



ITEM	DESCRIPTION	MFG/MODEL	BY	QTY.
①	WALL PLATE	AS PER EC	EC	1
②	CABLE	AS PER 275125 SPEC	AVC	1
③	ANTENNA	AS PER 275125 SPEC	AVC	1

ADA ANTENNA
SCALE: NTS

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Revisions:
 Sheet: TA-701

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