ADDENDUM NO. 01

December 22, 2025

2026 - Zionsville Community Schools District Wide Improvements
Zionsville, IN 46077

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated December 11, 2025, by Fanning Howey (Architect). Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 1-1 through ADD 1-2 and attached Fanning Howey Associates, Inc., Addendum No. 01 dated December 22, 2025, consisting of 16 items, 4 pages, new specification sections *11 61 00 – Theater and Stage Equipment* and *12 48 26.01 – Entrance Carpet Tile*, revised specification sections *27 51 16 – Public Address and Mass Notification Systems – Auditorium Audio Visual System*, *28 31 11 – Digital, Addressable Fire Alarm System*, and *32 31 21 – Decorative Metal Gates* and 27 drawing pages.

A. 00 20 01 – INFORMATION AVAILABLE TO BIDDERS

1. Specification section added in entirety as part of Addendum 01. This section shall be reviewed by all Bidding Contractors.

   Section includes reference to the following:
   - "ZCHS Interior Logistics Plan"
   - "ZCHS Interior Phasing Plan"
   - "District Wide Phasing Schedule"
   - ZCS 2026 – 2027 Academic Calendar
   - Pre-Award Meeting Schedule (subject to change)
   - Date of site visit opportunity: January 30, 2025
     - Contractor request via email to Jacob Bower, jbower@skillman.com

1. Revised specification section and reissued in entirety. Specific changes are noted below for reference. All Bidding Contractors shall review and incorporate revisions.

2. Bid Category #02- General Trades

Add the following specification sections:

Section	11 61 00	Theatre and Stage Equipment
Section	12 48 26.01	Entrance Carpet Tile

Add the following clarifications:
Clarification #'s 31, 32, 33, 34 & 36

3. Bid Category #03 – Plumbing & HVAC (ZCHS Only)

Add the following clarifications:
Clarification #'s 10, 11 & 12

4. Bid Category #04 – Electrical & Technology (ZCHS, ZWMS & ZMS)

Add the following clarifications:
Clarification #'s 13, 14, 15, 16 & 17

5. Bid Category #06 – Public Address and Fire Alarm (BME & SGE)

Add the following clarifications:
Clarification #'s 11

6. Bid Category #07 – Public Address and Fire Alarm (Union & ZWMS)

Add the following clarifications:
Clarification #'s 10

C. 01 32 00 – SCHEDULES AND REPORTS

1. A high level "District Wide Phasing Schedule" is included as attachment within Addendum 01 as part of 00 20 01 – Information Available to Bidders. A more detailed "Guideline Schedule is forthcoming in Addendum 02. All Bidding Contractors shall review these schedules for familiarity and bidding purposes.

A D D E N D U M N O. 1

Zionsville Community Schools 2026 Improvements

Zionsville Community Schools
Zionsville, Indiana

Project No. 224035.00

Index of Contents

Addendum No. 1, 16 items, 4 pages
New Project Manual Section: 11 61 00 – Theater and Stage Equipment and 12 48 26.01 – Entrance Carpet Tile
Revised Project Manual Sections: 27 51 16 – Public Address and Mass Notification Systems – Auditorium Audio Visual System, 28 31 11 – Digital, Addressable Fire Alarm System, and 32 31 21 – Decorative Metal Gates
New Drawing Sheet, Zionsville High School: ZH-EL12B – Second Floor Lighting Plan – Unit B
Revised Drawing Sheets, Zionsville High School: ZH-S-202, ZH-S-501, ZH-A-11A, ZH-A-11B, ZH-AC12A ZH-A-310, ZH-A-430, ZH-A-502, ZH-A-520, ZH-A-601, ZH-AF11A, ZH-AF201, ZH-AF202, ZH-AF601, ZH-AQ11A, ZH-AQ201, ZH-MP11A, ZH-ED11A, ZH-EL11A, ZH-EP11A, ZH-EF110, ZH-E-401, and ZH-E-403
Revised Drawing Sheets, Zionsville West Middle School: ZW-A-101
Revised Drawing Sheets, Eagle Elementary School: EEA-11A
Revised Drawing Sheets, Stonegate Elementary School: SG-G4-01

Date: December 22, 2025

I hereby certify that this Addendum was prepared by me or under my direct supervision and that I am a duly registered Architect/Engineer under the Laws of the State of Indiana.

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS/ENGINEERS/CONSULTANTS

Paul A. Miller
Registration Number AR10800161

TO: ALL BIDDERS OF RECORD

ADDENDUM NO. 1 to Drawings and Project Manual, dated December 11, 2025, for Zionsville Community Schools 2026 Improvements for Zionsville Community Schools, 900 Mulberry Street, Zionsville, Indiana, 46077; as prepared by Fanning/Howey Associates, Inc., Indianapolis, Indiana.
This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

Each bidder shall acknowledge receipt of this Addendum in his proposal or bid.

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum. (This includes miscellaneous items at the very end of this Addendum.)

RE: ALL BIDDERS

ITEM NO. 1. PROJECT MANUAL, TABLE OF CONTENTS

A. Volume #2, Page 00 01 10-2, DIVISION 12: Add Section 12 48 26.01 – Entrance Carpet Tile.

ITEM NO. 2. NEW PROJECT MANUAL SECTIONS

A. New Project Manual Sections 11 61 00 – Theater and Stage Equipment and 12 48 26.01 – Entrance Carpet Tile is included with and hereby made a part of this Addendum.

ITEM NO. 3. REVISED PROJECT MANUAL SECTIONS

A. Sections 27 51 16 – Public Address and Mass Notification Systems – Auditorium Audio Visual System, 28 31 11 – Digital, Addressable Fire Alarm System, and 32 31 21 – Decorative Metal Gates have been revised, dated 12/22/25 and is included with and hereby made a part of this Addendum.

ITEM NO. 4. PROJECT MANUAL, SECTION 08 71 00 – DOOR HARDWARE SETS

A. Article 3.8, Hardware Set No. 3.0: Delete Door No. A101A, from the list of doors.

B. Article 3.8, Door Hardware Sets: Add new Hardware Set No. 3.1 as follows:

Set: 3.1

Doors: A101A
Description: Rim Exit x Keyed Lever, Closer/Stop/HO, Rem Mullion, Sound Seals

8	Hinge (heavy weight)	T4A3786 (NRP)	US26D	MK
1	Keyed Removable Mullion	L980S	PC	SA
2	Rim Exit (classroom lvr)	43 8813 ETP	US32D	SA
2	Cylinder (match exstg)	Rim / Mortise (as req'd)		
1	Cylinder (Rem Mullion)	980C1/C2	US26D	SA
2	Closer x Stop/HO	351 PSH	EN	SA
2	Kick Plate	K1050 10" 4BE CSK	US32D	RO
1	Astragal Edge Seal	S772BL x Dr Ht		PE
1	Gasketing - Mullion	5110BL x mullion ht		PE
1	Acoustic Seal Set	PEMKOSTCSET-1A	BL	PE

Notes:
Adjust size and quantity of sound seals / drop bottoms for a pair of doors.

C. Article 3.8, Hardware Set No 4.0: Remove "(2) Offset Pull" items from the hardware set and revise exit devices to read as follows:

1	Rim Exit (classroom lvr)	43 8813 ETP	US32D	SA
1	Rim Exit (fixed lvr, no key)	43 8810 ETP	US32D	SA

D. Article 3.8, Hardware Set No. 10.0: Delete Door No. A204A, from the list of doors.

E. Article 3.8, Hardware Set No 11.0: Revise overhead stop to include closer function as follows:

1	Closer x Track/Bumper	351 OTB	EN	SA

F. Article 3.8, Hardware Sets No 13.0 and 15.0: Add closer as follows:

1	Closer	351 UO	EN	SA

G. Article 3.8, Hardware Set No 14.0: Revise closer as follows:

1	Closer x Track/Bumper	351 OTB	EN	SA

H. Article 3.8, Door Hardware Sets: Add new Hardware Set No. 19.0 as follows:

Set: 19.0

Doors: A204A
Description: Rim Exit x Storeroom Lever, Closer, Rated

3	Hinge (heavy weight)	T4A3786 (NRP)	US26D	MK
1	Rim Exit (storeroom lvr, rated)	12 43 8804 ETP	US32D	SA
1	Cylinder (match exstg)	Rim / Mortise (as req'd)		
1	Closer	351 UO	EN	SA
1	Kick Plate	K1050 10" 4BE CSK	US32D	RO
1	Stop	406 / 409 / 441	US26D	RO
1	Perimeter Gasketing	S88BL (head & jambs)		PE

ITEM NO. 5. PROJECT MANUAL, SECTION 09 64 01 – THEATER AND STAGE FLOORING

A. Add 2.3, E., as follows:

"E. Wood Sleepers: 2 by 4 inch by 4 foot nominal, S4S, #2KD Grade, Hemlock, Spruce, Douglas Fir or Southern Yellow Pine.
1. Preservative Treatment by Pressure Process: AWPA C2, except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPA C31 with inorganic boron (SBX)."

ITEM NO. 6. PROJECT MANUAL, SECTION 11 52 13 – FRONT PROJECTION SCREENS

A. Replace 2.3, A., 2., as follows:

"2. Low-Voltage Control: Provide manufacturer's Low Voltage Control Module allowing 3rd party control of the screen operation and a remote, key-operated, 3-position control switch installed in recessed metal device box with flush cover plate matching other electrical device cover plates in room where switch is installed.
a. Provide key-operated power-supply switch."

ITEM NO. 7. PROJECT MANUAL, SECTION 23 09 00.1 – HVAC DIRECT DIGITAL CONTROLS

A. Replace 1.8, A., 9., as follows:

"9. Continuous Commissioning Plan to be utilized as part of the (2) year service agreement."

B. Replace 2.1, A., 3., as follows:

"3. Honeywell Controls by e-Solutions."

C. Delete Article 3.5 in its entirety.

D. Article 3.6: Change title from "Service Agreement – Alternate Bid" to "SERVICE AGREEMENT".

ITEM NO. 8. PROJECT MANUAL, SECTION 32 18 24 – RUNNING TRACK SURFACE

A. Delete 1.02, B., 2., in its entirety.

B. Article 2.01, A., 6: Delete "and Polyurethane" from paragraph.

C. Article 3.07, B., 3: Delete the 3rd sentence in the paragraph "Thickness for alternate Polyurethane system shall be 1/2 inch."

ITEM NO. 9. NEW DRAWING SHEETS – ZIONSVILLE HIGH SCHOOL

A. Drawing Sheet No: ZH-EL12B – Second Floor Lighting Plan – Unit B, dated 12/19/25, is included with and hereby made a part of this Addendum.

ITEM NO. 10. REVISED DRAWING SHEETS – ZIONSVILLE HIGH SCHOOL

A. Drawing Sheets: ZH-S-202, ZH-S-501, ZH-A-11A, ZH-A-11B, ZH-AC12A ,ZH-A-310, ZH-A-430, ZH-A-502, ZH-A-520, ZH-A-601, ZH-AF11A, ZH-AF201, ZH-AF202, ZH-AF601, ZH-AQ11A, ZH-AQ201, ZH-MP11A, ZH-ED11A, ZH-EL11A, ZH-EP11A, ZH-EF110, ZH-E-401, and ZH-E-403 have been revised, dated 12/22/25, and are included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

ITEM NO. 11. REVISED DRAWING SHEETS – ZIONSVILLE WEST MIDDLE SCHOOL

A. Drawing Sheet: ZW-A-101 has been revised, dated 12/22/25, and are included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

ITEM NO. 12. REVISED DRAWING SHEETS – EAGLE ELEMENTARY SCHOOL

A. Drawing Sheet: EEA-11A has been revised, dated 12/22/25, and are included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

ITEM NO. 13. REVISED DRAWING SHEETS – STONEGATE ELEMENTARY SCHOOL

A. Drawing Sheet: SG-G4-01 has been revised, dated 12/22/25, and are included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

ITEM NO. 14. DRAWING SHEETS NO. BM-FA1A, SG-FA1A, UE-FA1A, ZW-FA1

A. Add general notes – fire alarm as follows:

"12. Provide spare fire alarm devices and installation as indicated on ZH-E-001 electrical general notes, typical for building."

ITEM NO. 15. DRAWING SHEET NO. ZH-E-001 Electrical Symbols and Abbreviations

A. Replace electrical general note 37 as follows below.

37. PROVIDE THE FOLLOWING ADDITIONAL DEVICES. INSTALL WHERE DIRECTED BY ARCHITECT/ENGINEER. INCLUDE CONDUIT AND WIRE AND CONNECT TO NEAREST PANELBOARD OR APPLICABLE SYSTEM AS REQUIRED. PROVIDE CUTTING AND PATCHING, AND ALL REQUIRED ACCESSORIES. AT PROJECT COMPLETION, TURN OVER ALL UNUSED DEVICES FROM LIST BELOW AND INCLUDE ON OWNER SIGN-OFF RECEIPT FOR EXTRA MATERIALS. FOR FIRE ALARM RELATED EQUIPMENT (A THRU F), THIS LIST IS PER BUILDING FOR FULL FIRE ALARM REPLACEMENT PROJECTS. NO EXTRAS TO BE INCLUDED FOR FIRE ALARM WORK AT THE HIGH SCHOOL.
    a. (4) FIRE-ALARM SYSTEM MANUAL FIRE-ALARM BOXES.
    b. (4) FIRE-ALARM SYSTEM SMOKE OR HEAT DETECTORS.
    c. (4) FIRE-ALARM SYSTEM DUCT SMOKE DETECTORS.
    d. (6) FIRE-ALARM SYSTEM VISIBLE NOTIFICATION APPLIANCES.
    e. (6) FIRE-ALARM SYSTEM COMBINATION HORN AND VISIBLE NOTIFICATION APPLIANCES.
    f. (4) FIRE-ALARM SYSTEM ADDRESSABLE INTERFACE DEVICES AND CONNECT TO INITIATE OR MONITOR DEVICES OR EQUIPMENT AS REQUIRED.
    g. (20) 20 AMP CIRCUITS WITH 8 RECEPTACLES EACH, CONDUIT, WIRE, COVER PLATES, DEVICE BOXES AND CIRCUIT BREAKERS CONNECTED WITH 4#10, 3/4-INCH CONDUIT LOCATED WITHIN 120-FEET OF NEAREST 120V PANELBOARD.
    h. (15) MOTOR CONNECTIONS, EACH WITH 30A, 2 POLE FUSIBLE SWITCH, WITH 120-FEET 3#10 IN 3/4-INCH CONDUIT.
    i. (8) EXIT SIGNS.
    j. (10) OCCUPANCY SENSORS, ANY TYPE AS DIRECTED BY ARCHITECT/ENGINEER.

ITEM NO. 16. DRAWING SHEET NO. ZM-E-001 Electrical Symbols and Abbreviations

A. Delete electrical general note 37 items a thru f without replacement.

END OF ADDENDUM

SECTION 00 20 01 - INFORMATION AVAILABLE TO BIDDERS

A. Existing Site Survey Information: A Site survey can be found within the construction drawings. It is not however, part of the Construction Contract Documents and is for informational use only. Information found is not a warrant or guarantee by the Owner or Project Consultant. The Contractor should visit the site and acquaint himself with all existing conditions. Any additional information, needed by the Contractor, shall be obtained by the Contractor at no cost to the Owner.

B. ZCHS Interior Logistics Plan is included as part of this section for reference by all Bidding Contractors.

C. ZCHS Interior Phasing Plan is included as part of this section for reference by all Bidding Contractors.

D. District Wide Phasing Schedule is included as part of this section for reference by all Bidding Contractors.

E. ZCS 2026-2027 Academic Calendar is included as part of this section for reference by all Bidding Contractors.

F. Pre-Award Meeting Schedule is included as part of this section for reference by all Bidding Contractors.

G. Scheduled date for project site visit(s) is January 30, 2025. Skillman personnel will be available on this date to show Bidding Contractors through buildings as requested. Bidding Contractor shall notify Skillman of site visit request via email to Jacob Bower, jbower@skillman.com.

END OF SECTION 00 20 01

General Trades Contractor to provide 3-5/8" metal framed temporary stud walls. 5/8" Type XP drywall to be installed on both sides with batt insulation filling the cavity. Exposed side of wall to be painted. Wall height to go to finished ceiling elevation. Spray foam or tape seal entire perimeter to mitigate dust migration.

General Trades Contractor to provide 3-5/8" metal framed temporary stud walls. 5/8" Type XP drywall to be installed on both sides with batt insulation filling the cavity. Exposed side of wall to be painted. Wall height to go to finished ceiling elevation. Spray foam or tape seal entire perimeter to mitigate dust migration.

General Trades Contractor to provide knockdown door frame, door slabs and lockable hardware for double door. Emergency egress panic hardware is required.

General Trades Contractor to provide 3-5/8" metal framed temporary stud walls. 3/4" plywood to be installed on both sides with batt insulation filling the cavity. Exposed side of wall to be painted. Wall height to be 10'-0" AFF. Spray foam or tape seal entire perimeter to mitigate dust migration.

Reinforced visquen enclosure to mitigate dust migration. Visqueen to be attached to temporary wall and existing walls to create a "tented" enclosure.

General Trades Contractor to provide 3-5/8" metal framed temporary stud walls. 5/8" Type XP drywall to be installed on both sides with batt insulation filling the cavity. Exposed side of wall to be painted. Wall height to go to finished ceiling elevation. Spray foam or tape seal entire perimeter to mitigate dust migration.

General Trades Contractor to provide knockdown door frame, door slabs and lockable hardware for double door. Emergency egress panic hardware is required.

General Trades Contractor to install and maintain masonite floor protection layed over foam (sound deadening) subflooring. All joints are to be taped to prevent dust / debris intrusion. All edges are to have flooring transition strip.

General Trades Contractor to provide knockdown door frame, door slabs and lockable hardware for double door. Emergency egress panic hardware is required.

General Trades Contractor to provide 3-5/8" metal framed temporary stud walls. 5/8" Type XP drywall to be installed on both sides with batt insulation filling the cavity. Exposed side of wall to be painted. Wall height to go to finished ceiling elevation. Spray foam or tape seal entire perimeter to mitigate dust migration.

General Trades Contractor to provide knockdown door frame, door slab and lockable hardware for single door.

General Trades Contractor to provide 3-5/8" metal framed temporary stud walls. 5/8" Type XP drywall to be installed on both sides with batt insulation filling the cavity. Exposed side of wall to be painted. Wall height to go to finished ceiling elevation. Spray foam or tape seal entire perimeter to mitigate dust migration.

1 ZH-A-301

General Trades Contractor to provide knockdown door frame, door slab and lockable hardware for single door.

General Trades Contractor to provide 3-5/8" metal framed temporary stud walls. 5/8" Type XP drywall to be installed on both sides with batt insulation filling the cavity. Exposed side of wall to be painted. Wall height to go to finished ceiling elevation. Spray foam or tape seal entire perimeter to mitigate dust migration.

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General Trades Contractor to provide knockdown door frame, door slabs and lockable hardware for double door. Emergency egress panic hardware is required.

General Trades Contractor to salvage, protect and store existing doors for reinstallation.

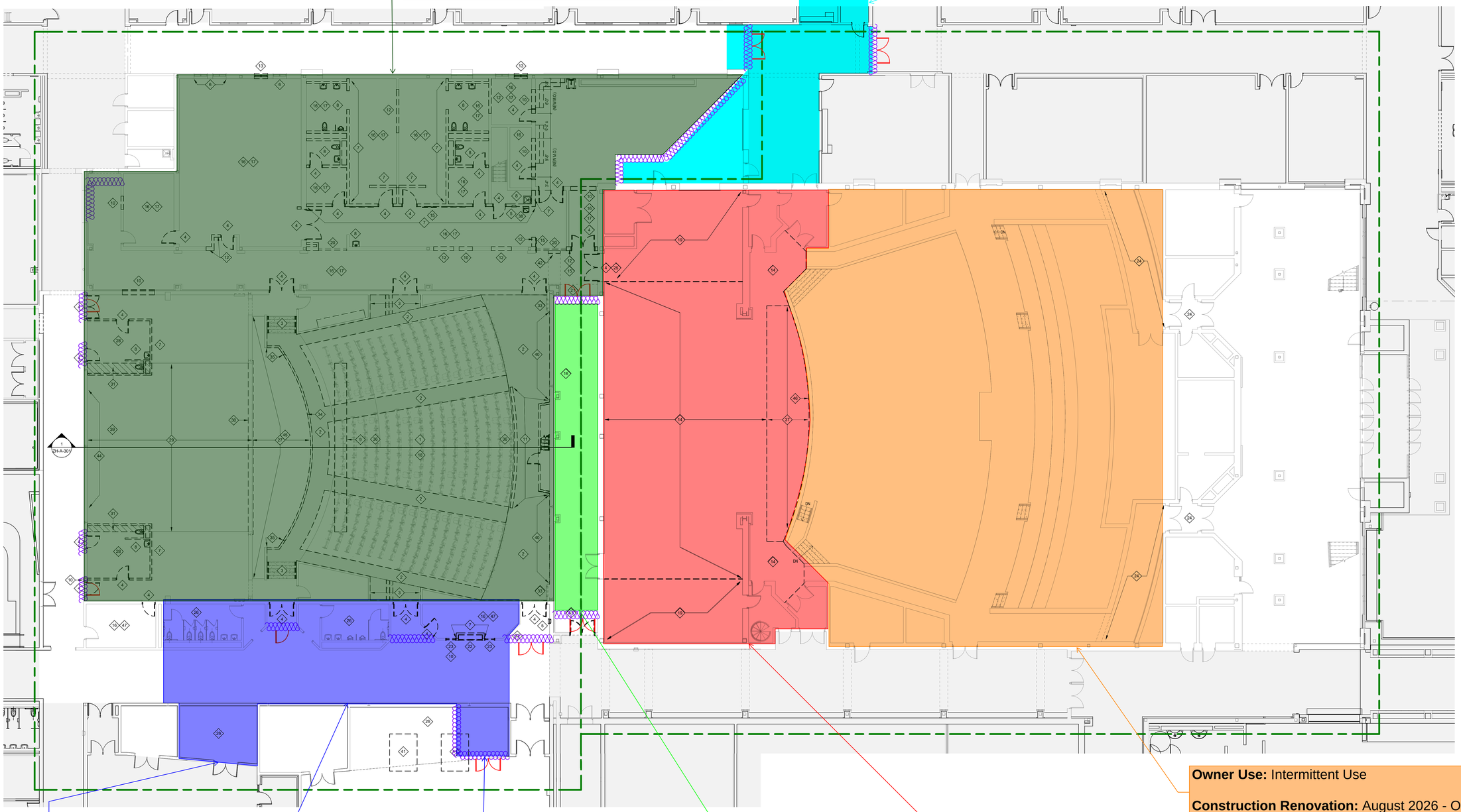
Temporary Owner occupied dressing room. Construction renovation work to occur last in project.

ZCHS INTERIOR LOGISTICS PLAN

Owner Use: TSC Supervised Access Only

Construction Renovation: March 2026 - July 2027

Shared Use Between Owner & Construction: March 2026 - July 2027



Owner Use: Intermittent Use

Construction Renovation: August 2026 - October 2026

Owner Use: March 2026 - June 22, 2026
July 29, 2026 - July 31, 2026

Construction Renovation: June 23, 2026 - August 2026
No work July 29 - 31, 2026

Construction Renovation: December 21, 2026 - January 22, 2027

Construction Renovation: January 25, 2027 - February 19, 2027

Owner Use: March 2026 - August 2027

Construction Renovation: December 21, 2026 - February 19, 2027.
Work separated into two smaller phases.

Setting both AHU March 26 - April 2, 2027

Owner Use: March 2026 - May 2027

Construction Renovation: June 2027 - July 2027

ZCHS INTERIOR PHASING PLAN

District Wide Phasing Schedule

	2026												2027											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Critical School Dates (see academic calendar)					5/28			8/4				12/21	1/4				5/28			8/4				
Project Bid & Award																								
ZCHS PAC & Auditorium Renovations																								
ZWMS HVAC Controls																								
ZWMS Theatrical Improvements																								
ZWMS Exterior Improvements																								
ZWMS FA/PA																								
ZMS Theatrical Improvements																								
Eagle Elementary Entrance Improvements																								
BME FA / PA																								
BME Exterior Improvements																								
SGE FA / PA																								
SGE Exterior Improvements																								
Union Elementary HVAC Controls																								
Union Elementary FA / PA																								

2026-2027 School Calendar

July 26

Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August 26

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Aug total = 20

September 26

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Sept total= 21

October 26

Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Oct total= 17

November 26

Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Nov total= 18

December 26

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Dec total= 14

January 27

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Jan total= 18

February 27

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

Feb total= 15

March 27

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Mar total= 19

April 27

Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Apr total= 20

May 27

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

May total = 18

June 27

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Jun total= 0

Notes

Blue - Teacher Day (no students)
Yellow - Student School Days
Orange - No School
Green - Make Up days if needed
7/30/26-8/3/26 - Teachers Return
8/4/26 - School Begins
9/7/26 - Labor Day-No School
10/9/26 - End of 1st Qtr (48 days)
10/12/26-10/16/26 - Fall Break-No School
11/25/26-11/27/26 - Thanksgiving-No School
12/18/26 - End of 2nd Qtr (42 days)
12/18/26 - End of Semester One (90 days)
12/21/26-1/4/27 - Winter Break-No School
1/4/27 - Teacher Work Day-No Students
1/18/27 - Dr. MLK Holiday-No School
2/15/27-2/19/27 - February Break-No School
3/16/27 - End of 3rd Qtr (45 days)
3/26/27-4/2/27 - Spring Break-No School
5/26/27 - End of 4th Qtr (45 days)
5/26/27 - End of Semester Two (90 days)
5/27/27 - Teacher Records Day-No School
5/31/27 - Memorial Day
5/28/27-6/3/27 - Make-up days, if needed
Commencement - TBD

semester 1 days	90
semester 2 days	90
total days	180

Calendars by Vertex42.com

Adopted by the Board of Trustees on June 10, 2024

Pre-Award Schedule		
Bid Category	**Date**	**Time**
01 - Asphalt Paving (All Buildings)	Thursday, January 15, 2026	8:30am - 9:30am
02 - General Trades (All Buildings)	Thursday, January 15, 2026	3:30pm - 4:30pm
03 - Plumbing & HVAC (ZCHS Only)	Thursday, January 15, 2026	9:30am - 10:30am
04 - Electrical & Technology (ZCHS, ZWMS & ZMS)	Thursday, January 15, 2026	10:30am - 11:30am
05 - HVAC Controls (ZWMS & Union)	Thursday, January 15, 2026	12:30pm - 1:30pm
06 - Public Address & Fire Alarm (BME & SGE)	Thursday, January 15, 2026	1:30pm - 2:30pm
07 - Public Address & Fire Alarm (Union & ZWMS)	Thursday, January 15, 2026	2:30pm - 3:30pm

SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and General Provisions of the Prime Contract, including amended General Conditions and other Division 1 Specification Sections, apply to Work of this Section.

1.02 SUMMARY

A. The intent of this Section is to indicate the Work required by the Contractors and to provide information regarding the duties, responsibilities, and cooperation required by the Contractors, with similar requirements for the subcontractors and suppliers.

B. Owners right to maintain current operations

C. Occupancy requirements

D. Work by Owner

E. Permits, fees, and notices

F. Labor and materials

G. Verifications of existing dimensions

H. Project security

I. Coordination of work

J. Time of commencement and completion

K. Schedule of contract responsibilities

1.03 WORK UNDER SEPARATE CONTRACTS

A. Prime Contracts are defined to include the following contracts described in the Schedule of Contract Responsibilities included hereinafter; and each is recognized to be a major part of the project, with Work to be performed concurrently and in close coordination with Work of other Prime Contracts.

B. The "Contract Documents," as defined in the General Conditions, include "the Drawings." Although Drawings are grouped and identified by classification of the

Work, Contractors shall be responsible for their Work as specified herein and as indicated on the Drawings. Although the majority of the Drawings are "to scale," Contractors are directed to use indicated dimensions for determining material quantities and for other reasons. No additional monies will be allowed due to Contractors using "scaling instruments" to determine material quantities or for other reasons.

C. Separate prime contracts will be awarded as per the **"Schedule of Contract Responsibilities"** (see Part 3 – Execution). Contractors shall include Work required by the Specifications and Drawings for each contract area defined in the Schedule.

D. Work for the complete construction of the Project will be under multiple prime contracts with the Owner. The Construction Manager will manage the construction of the Project.

E. Each Contractor shall be responsible for demolition and disposal of existing items relative to his Contract.

1.04 ADMINISTRATIVE RESPONSIBILITIES OF PRIME CONTRACTORS AND CM

A. The Construction Manager shall be responsible for the maintenance of the Construction Schedule and management of every phase of the Work.
   1. Each Contractor shall read the Specifications and Drawings for other separate Contracts for fixed equipment and the like to be incorporated or attached or built into the Work; and familiarize himself with the requirements and responsibilities of other Contracts to enable the required coordination and supervision.
   2. Each Contractor shall also familiarize himself with other items to be incorporated into the Work including equipment and Work by the Owner.
   3. Each Contractor shall cooperate with the Construction Manager in notifying him when the Work is at a stage to require the services of other Contractors and shall notify the Construction Manager in the event that such other Contractors do not carry out their responsibilities in connection with such notification.

B. Contractors shall cooperate with and assist the Construction Manager in the preparation of construction progress and procedures, schedule of product deliveries, and their effect on the overall project progress and completion. Other Contractors shall cooperate in getting their Work and the Work of their subcontractors completed according to the schedule as prepared and maintained by the Construction Manager. Each Contractor shall immediately notify the Construction Manager of a delay in delivery of products or the scheduled date of completion that may affect the total progress of construction.

C. The Owner will furnish the topographical survey, either as a part of these Drawings or separately, giving the general topographical lines existing at the site and the property lines.

D. Contractors required to make connections to existing utilities, especially sewerage where gravity flow occurs, shall verify grades and locations at points of such connections and shall notify the Construction Manager of circumstances which would adversely affect the proper flow or connection to such facilities.

1.05 PRIME CONTRACTORS USE OF PREMISES

A. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.

1. Owner Occupancy: Allow for Owner occupancy and use by the public.
2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.

B. Use of the Existing Building: Maintain the existing building in a weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.

C. The erection of signage other than what is specified in the contract documents is prohibited.

D. The use of drones on the property is restricted without prior written permission. Operators must be licensed and have insurance specific to the operation of aerial drones.

E. Photographs or other imagery of the work in progress or renderings of the project shall not include any personal identifiable information of the project, the property, the Owner, or any occupants.

1.06 OWNERS RIGHT TO MAINTAIN OPERATIONS

A. During the course of this Project, normal and customary functions and operations must be maintained. The Contract Documents are intended to define a strict separation between the school activities of students and staff from the activities of the construction project.

B. The Construction Manager, Architect, and Owner will not tolerate any visible or audible actions initiated or responded to by any employees of Contractors on this Project toward any students, teachers, or staff members at the school system. Violators shall be promptly removed from the site.

C. The Owner intends to instruct students, teachers, and staff to refrain from communications with Contractor's personnel working on this Project. All communication with Owner and staff shall be through the Construction Manager.

D. Contractors must expend their best effort toward protection of the health, safety, and welfare of occupants on the Owner's property during the course of Work on this Project.

1.07 OCCUPANCY REQUIREMENTS

A. Full Owner Occupancy: The Owner will occupy the site and existing building during the entire construction period. Cooperate with the Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Owner's operations.

B. Partial Owner Occupancy: The Owner reserves the right to occupy and to place and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.
   1. The Construction Manager will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner occupancy.
   2. Party which obtained general building permit shall obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
   3. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
   4. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

1.08 WORK BY OWNER

A. The Owner intends to complete the following items of Work outside the provisions of these Contract Documents. Contractors shall not restrict or interfere with the Owner's right to the Project to accomplish this Work.
   1. Equipment and furniture except as scheduled and specified under Divisions 11 and 12 and shown on the Drawings.

2. Items which may be deleted from Contracts for Work as required by the Contract Documents.
3. Existing school maintenance work.
4. The purchase and supplying of certain materials as noted in the Project Manual.
5. The Owner, under separate contract, shall provide removal of identified asbestos containing materials from the existing structure. The asbestos report is available through the Construction Manager upon request.

1.09 PERMITS, FEES, AND NOTICES

A. The Construction Manager will secure the general building permit for the Owner. Each Contractor shall secure and pay for other permits, governmental fees, and licenses necessary for the proper execution and completion of his Work, which are applicable at the time the bids are also received. Fees to relocate utilities on Owner's property shall be included in the bid of the Contractor doing the relocation.
   1. State filing fees for plan approval are the responsibility of the Owner and will be paid by the Owner.

B. Utility Tie-Ins: Shall be arranged with local utility company and other involved parties for minimum interruption of service.

C. Shutdowns of existing systems shall be limited to minimum time required and scheduled with other involved parties. Provide 2 days written notice of shutdown to Construction Manager and Owner.

D. Inspections of installed work shall be performed by the governing authority as arranged for by the Contractor. Work shall not be covered until approved.

E. Each Contractor shall give notices and comply with laws, ordinances, rules, regulations, and orders of public authorities bearing on the performance of his Work. If a Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Construction Manager in writing, and necessary changes shall be adjusted by appropriate notification. If a Contractor performs Work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Construction Manager, he shall assume full responsibility therefore and shall bear the costs attributable thereto.

1.10 LABOR AND MATERIALS

A. Unless otherwise specifically noted, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of his Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

B. Each Contractor shall enforce strict discipline and good order among his employees or other persons carrying out Work of his Contract and shall not permit employment of unfit person or persons or anyone not skilled in the task assigned to them.

C. Contractors and Subcontractors shall be subject to such rules and regulations for the conduct of the Work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs and feet will not be allowed. Possession or consumption of alcoholic beverages or drugs, tobacco or other noxious behavior on the site is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

D. Contractors will conduct criminal background checks (extent of and/or service to be used will be established by the Owner) on every employee assigned to work on the Project and clear them through the National Sex Offender Registry prior to their assignment to Project. Contractors will require the same of sub-contractors.

E. ID Badges will be issued by The Skillman Corporation upon receipt of verification from the Contractor that the employee/subcontractor employee or independent contractor has a satisfactory record to work on the Project.

F. E-Verify Compliance: Pursuant to I.C. 22-5-1.7, Contractor shall enroll in and verify the work eligibility status of all newly hired employees of Contractor through the E-Verify Program (Program). Contractor is not required to verify the work eligibility status of all newly hired employees through the Program if the Program no longer exists. Also pursuant to I.C. 22-5-1.7, Contractor must execute an affidavit affirming that the Contractor does not knowingly employ an unauthorized alien and confirming Contractor's enrollment in the Program, unless the Program no longer exists, shall be filed with the Owner prior to the execution of this contract. This contract shall not be deemed fully executed until such affidavit is delivered to the Owner.

Contractor and its subcontractors shall not knowingly employ or contract with an unauthorized alien or retain an employee or contract with a person that contractor or its subcontractor subsequently learns is an unauthorized alien. If Contractor violates this provision the Owner shall require Contractor to remedy the violation not later than thirty (30) days after the Owner notifies Contractor. If Contractor fails to remedy the violation within the thirty (30) day period, the Owner shall terminate the contract for breach of contract. If Owner terminates the contract, Contractor shall be liable to the Owner for actual damages in addition to any other contractual remedies. There is a rebuttable presumption that Contractor did not knowingly employ an unauthorized alien if Contractor verified the work eligibility status of the employee through the Program.

Prior to performing any work, Contractor shall require each subcontractor to certify to Contractor that the subcontractor does not knowingly employ or

contract with an unauthorized alien and has enrolled in the Program. Contractor shall maintain on file a certification from each subcontractor throughout the duration of this contract or project which is the subject of this contract. If Contractor determines that a subcontractor is in violation of this provision, Contractor may terminate its contract with the subcontractor for such violation. In Accordance with I.C. 5-16-13 Contractor must provide the E-Verify Case Number of every employee that works on the project. This requirement includes the contractor's subs and suppliers to the fourth (4^{th}) tier.

G. The Owner is requiring that all contractors' personnel and their onsite employees and subcontractors submit to expanded history and child protection index check. Contractors shall enroll in the Safe Vendor Program through Safe Hiring Solutions www.safehiringsolutions.com. Enrollment in Safe Vendor will ensure contractors employees are vetted in accordance with I.C. 20-26-5-10 for expanded criminal history and expanded child protection index check. Contractor is responsible for the cost of enrollment and employee background check. All contractors' personnel and employees, once cleared for work will be issued a project identification badge that must be worn at all times while on site. All contractors/subcontractors employees shall provide name, address, picture state driver's license or picture identification card and/or Safe Vendor Card to The Skillman Corporation Site Manager upon request.

H. Pursuant to Indiana Code 5-16-13 Requirements for Contractors on Public Works Projects enacted by the Indiana Legislator requires, in addition to requirements already in effect, contractors to comply with the following:

1. Tier 1 –General/Prime Contractors to self-perform 15% of their total Contract.
2. Qualification thru the Department of Administration or INDOT requirement in accordance with IC 4-13.6-4.
    a. **Bids shall not be considered unless (1) the Prime Bidder and (2) all lower tiered subcontractors whose subcontract value is estimated to be $300,000 or more are qualified at the time of the bid in accordance with IC 4 – 13.6 – 4.**
3. Include Written Drug Testing Plan that covers all employees of the bidder who will perform work on the public work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6 with Bid.
4. Minimum Insurance Requirements $1M/occurrence $2M/aggregate. However, check your bidding requirements as the Owners may have higher limit requirements.
5. Mandatory enrollment in E-Verify by all contractors down to the 4th Tier Sub Contracts and must provide the case verification number of all employees working on the project.

6. Prohibits contractors down to the 4th Tier Sub Contract from paying employees in cash.
7. Requirement to retain payroll records for 3 years
8. All contractors down to the 4th Tier Sub Contract must comply with Fair Labor Act, Indiana's Workers Compensation and Unemployment Compensation Insurance.
9. Mandatory Training Requirements based upon number of employees.
10. Failure to comply may result in debarment from public works projects for up to 4 years.

I. All contractors down to the 4th Tier Sub Contract must maintain general liability insurance in at least the following amounts: Each Occurrence Limit of $1,000,000 and General Aggregate Limit of $2,000,000. Other requirements and limits may apply see specification section 00 50 00 Schedule of Insurance Requirements.

1.11 CUTTING AND PATCHING

A. Refer to Section 01 73 29 – Cutting and Patching, for provisions on this subject.

1.12 VERIFICATIONS OF EXISTING DIMENSIONS

A. When verification of existing dimensions is required, the Contractor requiring said verification for the construction or fabrication of his material shall be the Contractor responsible for the procurement of the field information.

1.13 PROJECT SECURITY

A. Each Prime Contractor shall take all reasonable precautions to prevent injury, damage or loss to people and property in, on and adjacent to the project. This shall include not only their own work or property but that of other contractors and the Owner.

B. If deemed necessary by The Construction Manager a project wide security program may be developed for the purpose of preventing damage or loss at the project site or property adjacent thereto. Once accepted by the Owner, contractors shall comply.

1.14 SCHEDULE OF CONTRACT RESPONSIBILITIES - SCOPE

A. Contractors shall submit their proposals based on the work included under each contract area as listed herein. Include Work necessary for a complete project, as shown on the Drawings and called for in the Specifications.

B. Questions concerning the phasing or "Schedule of Contract Responsibilities" should be directed to the Construction Manager, who will be the interpreter and be

responsible for this Schedule of Contract Responsibilities and Contract Breakdown, prior to submitting proposals and during construction.

C. The requirements of Division 1 are a part of the Work of each and every contract area. The Contractor for any one contract area shall be familiar with the Work and requirements of all other contract areas.

D. Certain Specification Sections describe Work to be performed under several contract areas. (Example: 06 10 00 - Rough Carpentry.) Provide Work of this nature as required for each contract area whether or not enumerated in the Schedule of Contract Responsibilities.

E. The following contract areas are broken down by Specifications Section conforming basically to the CSI format.

F. The Drawings and Specifications as furnished for each of the Contracts is for the convenience of the Contractor in preparing a proposal for this Project. However, each Contractor is responsible to review the complete set of Drawings and Specifications to assure that Work required to be installed to complete his phase of the Work is included in his proposal. This "Schedule of Contract Responsibilities" is a definition of the work as it is to be bid in separate contracts. Where a specific item of Work is not defined, but is normally inherent to a trade, or is included in the scope of the applicable technical revision, it will be the responsibility of that Contractor to include the Work in his proposal.

G. This "Schedule of Contract Responsibilities" is to aid each Contractor in defining the Scope of Work to be included in his proposal. However, omissions from this "Schedule of Responsibilities" do not relieve the Contractor from including in his proposal that Work which will be required to complete his Contract. Each Contractor should read the "Schedule of Contract Responsibilities" completely to familiarize himself with the Work of other Contractors that may have Work in adjacent areas and to coordinate the interfacing problems that may occur as the work is assembled and constructed.

H. Where specific Work is to be completed under a particular phase of the Project and the Work is wholly or partially completed by other trades because of the type of work involved or jurisdictional trade agreements, the Contractor will be responsible to subcontract the Work as necessary to complete the Work included in his Contract. No delay in the Work will be allowed due to the failure of the Contractor to subcontract related work required by jurisdictional trade agreements.

1.15 COORDINATION OF WORK

A. Each Contractor is responsible to coordinate his Work with the Work of other trades and other Contractors and requirements of the school system. The Contractor must make space allowances for Work of other Contractors; provide necessary openings

where indicated or implied by the Drawings and Specifications. Each Contractor is responsible to protect his own Work.

1.16 TIME OF COMMENCEMENT AND COMPLETION

A. The Contractor shall commence work within ten (10) days after being notified in writing to proceed and shall complete the Work within the time limitations established in the Form of Agreement.
   1. It is anticipated that construction will start within **60** calendar days after receipt of bids.
   2. Construction shall be complete within **535** consecutive calendar days, or earlier, after Notice to Proceed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 SCHEDULE OF CONTRACT RESPONSIBILITIES

3.02 GENERAL REQUIREMENTS

A. PROVIDED BY OWNER THROUGH THE CONSTRUCTION MANAGER

Section	01 32 00	Schedules and Reports
Section	01 45 10	Testing Laboratory Services
Section	01 59 10	Project Office
Section	01 71 50	Final Cleaning
Section	23 05 93	Testing, Adjusting, and Balancing for HVAC

B. PROVIDED BY ALL CONTRACTORS AS APPLICABLE

Section	01 12 00	Multiple Contract Summary
Section	01 23 00	Alternates
Section	01 25 00	Contract Modification Procedures
Section	01 28 00	Schedule of Values
Section	01 29 00	Applications for Payment
Section	01 31 00	Project Meetings
Section	01 32 00	Schedules and Reports
Section	01 33 00	Submittal Procedures
Section	01 40 00	Quality Requirements
Section	01 45 10	Testing Laboratory Services (Paragraph 1.05)
Section	01 50 50	Temporary Facilities and Controls
Section	01 54 60	Environment Protection
Section	01 54 80	Utility Protection
Section	01 56 30	Water Control
Section	01 56 90	Housekeeping & Safety
Section	01 59 20	Offices and Sheds
Section	01 60 00	Product Requirements
Section	01 72 50	Work Layout

Section	01 73 10	Cutting and Patching
Section	01 77 00	Contract Closeout

All Contractors shall provide their Superintendents with radios capable of handling multiple channels and compatible with radios used by the Construction Manager.

Autodesk Build is replacing **PlanGrid**. **Autodesk Build** does not require users to purchase a license. **Contractors** will be invited to the project and required to use this tool. **Autodesk Build** will be used as the **Current Set** and **As-Built Record Drawings.** Additionally, it will be used to track **Issues** for **Safety**, **QA/QC**, **Non-Compliance Issues**, **Work Completion List** and **Punch List**.

C. PROVIDED BY DESIGNATED CONTRACTORS

Section	01 21 00	Allowances
Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 30	Temporary Heating, Ventilation and Cooling
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	01 53 10	Fences (Temporary Security)
Section	01 53 20	Tree and Plant Protection
Section	01 53 30	Barricades
Section	01 55 00	Access Roads and Parking Areas
Section	01 56 20	Dust Control
Section	01 56 80	Erosion Control
Section	01 57 60	Project Signs
Section	01 72 00	Field Engineering

3.03 BID CATEGORIES

A. BID CATEGORY NO. 1 – ASPHALT PAVING (ALL BUILDINGS)

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	02 41 19	Selective Demolition
Section	31 20 00	Earth Moving
Section	32 12 16	Asphalt Paving
Section	32 13 13.01	Concrete Schedule
Section	32 17 13	Parking Bumpers
Section	32 17 23	Pavement Markings

Clarifications:

1. Contractor is responsible for any/all barricades, partitions, fencing signage, security measures, traffic control, etc. to perform the Scope of Work in a safe and efficient manner. Logistics are to be reviewed and approved by Construction Manager during Pre-Installation Meeting.
2. Contractor is responsible for asphalt pavement demolition or milling and proper disposal of these materials.
3. Contractor is responsible for all work outlined in asphalt profiles such as stone base, intermediate course asphalt, surface course asphalt, asphalt wedging, sealcoating, etc.
4. All concrete curb and walk noted is the responsibility of Bid Category No. 2 Contractor.
5. Contractor shall communicate any concerns regarding adjacent concrete work to the Construction Manager during the Pre-Award Meeting schedule to occur following bid opening.
6. Contractor shall include any/all removal and/or installation of parking bumpers and signage as noted in the Contract Documents.
7. Contractor is responsible for all pavement markings.
8. All asphalt parking lot work must be 100% complete by July 31, 2026 to allow school buildings to operate for Fall Semester.
9. Asphalt scope of Work noted at the track in Zionsville West Middle School Drawings is the responsibility of Bid Category No. 2. Reference Drawing Sheet ZW-G1.00 and other related documents.

B. <u>BID CATEGORY NO. 2 – GENERAL TRADES (ALL BUILDINGS)</u>

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	01 53 10	Fences (Temporary Security)
Section	01 53 20	Tree and Plant Protection
Section	01 53 30	Barricades
Section	01 55 00	Access Roads and Parking Areas
Section	01 56 20	Dust Control
Section	01 56 80	Erosion Control
Section	01 57 60	Project Signs
Section	01 72 00	Field Engineering
Section	02 41 19	Selective Demolition
Section	03 06 30.01	Concrete Schedule
Section	03 30 00	Cast-in-Place Concrete
Section	04 20 00	Unit Masonry
Section	04 72 00	Cast Stone Masonry
Section	05 12 00	Structural Steel Framing
Section	05 31 00	Steel Decking

Section	05 40 00	Cold-Formed Metal Framing
Section	05 50 00	Metal Fabrications
Section	05 52 13	Column Covers
Section	05 58 13	Column Covers
Section	05 73 00	Decorative Metal Railings
Section	06 10 00	Rough Carpentry
Section	06 16 00	Sheathing
Section	06 20 23	Interior Finish Carpentry
Section	07 01 50.91	Roofing Restoration
Section	07 24 19	Water-Drainage Exterior Insulation and Finish System (EIFS)
Section	07 24 23	Direct Applied Exterior Finish System
Section	07 62 00	Sheet Metal Flashing and Trim
Section	07 71 00	Roof Specialties
Section	07 72 00	Roof Accessories
Section	07 84 13	Penetration Firestopping
Section	07 84 43	Joint Firestopping
Section	07 92 00	Joint Sealants
Section	07 92 19	Acoustical Joint Sealants
Section	08 11 13	Hollow Metal Doors and Frames
Section	08 14 16	Flush Wood Doors
Section	08 14 23	Plastic-Laminate-Faced Wood Doors
Section	08 31 13	Access Doors and Frames
Section	08 33 23	Overhead Coiling Doors
Section	08 41 13	Aluminum Framed Entrances and Storefronts
Section	08 71 00	Door Hardware
Section	08 81 13	Decorative Glass Glazing
Section	08 83 00	Mirrors
Section	09 01 61.91	Wood Flooring Restoration
Section	09 01 91	Moisture Resistant/Water-Proof Flooring Adhesive for Concrete Slabs
Section	09 05 16	Existing Substrate Preparation for Floor Finishes
Section	09 21 16	Gypsum Board Assemblies
Section	09 30 00	Tiling
Section	09 51 13	Acoustical Panel Ceilings
Section	09 64 01	Theater Stage Flooring
Section	09 65 13	Resilient Base and Accessories
Section	09 65 16	Resilient Sheet Flooring
Section	09 65 19	Resilient Tile Flooring
Section	09 65 43	Linoleum Flooring
Section	09 66 23	Resinous Matrix Terrazzo Flooring
Section	09 67 10.10	Fluid-Applied Epoxy Flooring
Section	09 67 23	Decorative Resinous Flooring (Aggregate)
Section	09 68 13	Tile Carpeting
Section	09 77 10	Framed Decorative Panel Systems
Section	09 84 01	Wood Acoustical Wall Treatment

Section	09 84 33	Sound-Absorbing Wall Units
Section	09 84 36	Sound-Absorbing Ceiling Units
Section	09 91 23.61	Interior Painting/Repainting
Section	09 93 00	Staining and Transparent Finishing
Section	09 96 00	High-Performance Coatings
Section	10 14 19	Dimensional Letters
Section	10 14 23.16	Interior Panel Signage
Section	10 21 13.19	Solid Polymer Toilet Compartments
Section	10 26 00	Wall and Door Protection
Section	10 28 00	Toilet, Bath, and Laundry Accessories
Section	11 52 13	Front Projection Screens
Section	11 61 00	Theatre and Stage Equipment (ADDED via Add. 01)
Section	11 61 10	Orchestra Pit Filler
Section	11 61 43	Stage Curtains
Section	12 31 00	Manufactured Metal Casework
Section	12 32 16	Manufactured Plastic Laminate-Faced (Educational) Casework
Section	12 48 26.01	Entrance Carpet Tile (ADDED via Add. 01)
Section	12 61 13	Upholstered Audience Seating
Section	31 10 00	Site Clearing
Section	31 20 00	Earth Moving
Section	31 23 19	Dewatering
Section	31 25 00	Erosion Control
Section	31 32 00	Geotextile
Section	31 50 00	Excavation Support and Protection
Section	32 12 16	Asphalt Paving
Section	32 13 13.	Concrete Paving
Section	32 13 13.01	Concrete Schedule
Section	32 13 73	Concrete Paving Joint Sealants
Section	32 18 24	Track Surface
Section	32 31 13	Fences and Gates
Section	32 31 21	Decorative Metal Gates
Section	32 91 13	Soil Preparation
Section	32 92 00	Turf and Grasses
Section	32 93 00	Plants
Section	33 05 00	Common Work Results for Utilities
Section	33 41 00	Storm Utility Drainage Piping
Section	33 46 00	Subdrainage
Section	41 22 23	Electric Trolley Hoists

Clarifications:

1. This Contractor is responsible for Work at all buildings throughout the district listed on the Drawing Index Sheet.
2. This Contractor is responsible for asphalt scope of Work noted at the track in Zionsville West Middle School Drawings. Reference Drawing Sheet ZW-

G1.00 and other related documents. This is the only location where this Contractor is responsible for asphalt scope of work.

3. Contractor to include sweeping compound and 500-man hours for general building, site cleanup, or other work to be performed by a Skilled Laborer at the direction of Construction Manager.
4. Contractor is to include a 400-man-hour allowance for a Skilled Carpenter to be used at the discretion of the Construction Manager.
5. Contractor is to include a 320-man-hour allowance for a Skilled Drywall Finisher to be used at the discretion of the Construction Manager.
6. Contractor is to include a 320-man-hour allowance for a Skilled Painter to be used at the discretion of the Construction Manager.
7. Contractor is to include a 120-man-hour allowance for a Skilled Concrete Finisher to be used at the discretion of the Construction Manager.
8. Contractor to include 80 hours of additional floor preparation over above requirements noted in drawings and specifications.
9. The General Trades Contractor is responsible to provide the temporary laydown area, remove, and restore the site at the end of the project. Reference 01 53 10 – Fences for lineal footage of temporary construction to be utilized at the direction of the Construction Manager for laydown areas.
10. The General Trades Contractor is responsible to remove any dirt and mud that is tracked on roadways daily.
11. Provide and maintain all erosion control measures, including all inspections and documentation required by IDEM following rain events.
12. Provide temporary sanitary facilities for all Contractors for duration of project. Placement of sanitary facilities to be coordinated with Construction Manager.
13. Contractor is responsible to provide and maintain concrete washout for all concrete spoils.
14. Contractor is responsible for all access doors noted on Architectural Drawings. Any access doors required to support MEPF equipment access not noted on Architectural Drawings is the responsibility of MEPF Contractor installing the equipment.
15. The General Trades Contractor shall include all temporary partitions and dust control necessary to allow for total separation of each area from the occupied areas in the building(s) during construction operations.
16. The General Trades Contractor shall refer to Guideline Schedule and include in their bid all necessary cold weather procedures or admixtures as required to meet the schedule (specifically reference concrete, masonry, insulated temporary enclosures).
17. The General Trades Contractor shall daylight (hydro-vacuum excavation) all existing utilities (private and public) to confirm depths, sizes, and locations, prior to starting or allowing any Contractor to start any excavation work. Other trades shall coordinate with the General Trades Contractor to confirm this work has been completed prior to excavation.
18. Equipment bases and pads shall be provided by the contractor installing the equipment, respectively.

19. Door hardware for all systems will be furnished and installed by the General Trades Contractor. Electrical Contractor shall provide final electrical connections, including but not limited to low voltage and power wiring, commissioning, or controls not integral to the hardware.
20. All final connections to equipment and furnishings (not integral to equipment), interior and exterior, shall be made by the Electrical, Mechanical, or Plumbing Contractors, as applicable. Coordinate with other trades, as necessary.
21. The General Trades Contractor shall coordinate with Utility Companies for services as it pertains to this contractor's scope of work, as necessary.
22. Contractor shall include any sleeves indicated per plans passing through their work.
23. Contractor is responsible to get familiarized with existing conditions of the site and review all new improvements indicated in the contract documents. Contractor shall include in their bid all demolition and structure moving as noted on the plans or as required to allow for installation of new improvements.
24. Unless noted otherwise, General Trades Contractor shall remove from site and properly dispose of all demolition debris and material.
25. General Trades Contractor is responsible to provide and maintain sufficient rubbish containers at each building(s) to support construction for all Contractors for the duration of the project.
26. All concrete curb and walk noted is the responsibility of this Contractor.
27. Theatrical rigging scope of work included within this Bid Category is outlined on the electrical drawing sheets for those respective buildings. Contractor shall be certain to reference these drawings along with all other Contract Documents.
28. General Trades Contractor shall provide material and labor for eight (8) knock down door frames, slabs and hardware to be installed in temporary wall partitions as requested by Construction Manager. Hardware shall be lockable.
29. All wall blocking is to be coordinated with MEP Contractors to ensure rough-in routing is maintained.
30. Opportunity exists for Contractor to walk the building(s) to familiarize themselves with the space during the bidding period from December 22, 2025 – January 2, 2026. Please contact the Skillman Corporation with inquiries (jbower@skillman.com & nholman@skillman.com).
31. The schedule intent is for Bid Category 03 Contractor to perform demolition, rough-in and preparatory work for both AHU's during Winter Break from December 21, 2026 – February 19, 2027. Additional crew sizes, weekend work and overtime should be included in base bid for this time frame for associated work within this Bid Category. (ADDED via Add. 01)
32. The schedule intent is for Bid Category 03 Contractor to set both AHU's in place during Spring Break from March 26, 2027 – April 2, 2027. Additional crew sizes, weekend work and overtime should be included in base bid for this time frame for associated work within this Bid Category. (ADDED via Add. 01)
33. All Work at across the District, less Zionsville Community High School, must start May 29, 206 and complete by August 3, 2026. All systems must be fully functional to allow all buildings to operate normally for school. Work at

Zionsville Community High School is not restricted to this same time line. (ADDED via Add. 01)

34. Overtime and weekend work required to accomplish dates noted in Clarification #33 must be included in base bid. (ADDED via Add. 01)
35. Contractor shall ensure that building systems and life safety are fully operational by August 4, 2026. This shall include any temporary means if permanent work is not complete. (ADDED via Add. 01)
36. Contractor shall include costs for labor and material for installation, maintenance and removal of the temporary systems noted in "ZCHS INTERIOR LOGISTICS PLAN." Reference specification section 00 20 01 – Information Available to Bidders. (ADDED via Add. 01)

C. BID CATEGORY NO. 3 – PLUMBING & HVAC (ZCHS ONLY)

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	01 51 30	Temporary Heating, Ventilation and Cooling
Section	01 51 50	Temporary Water
Section	21 05 00	Common Work Results for Fire Suppression
Section	21 10 00	Water-Based Fire Suppression Systems
Section	22 00 02	Work in Existing Buildings
Section	22 05 00	Common Work Results for Plumbing
Section	22 05 01	Basic Plumbing Materials and Methods
Section	22 05 19	Meters and Gages for Plumbing Piping
Section	22 05 23	General-Duty Valves for Plumbing Piping
Section	22 05 29	Hangers and Supports for Plumbing Piping and Equipment
Section	22 05 53	Identification for Plumbing Piping and Equipment
Section	22 07 00	Plumbing Insulation
Section	22 11 16	Domestic Water Piping
Section	22 11 19	Domestic Water Piping Specialties
Section	22 13 16	Sanitary, Waste, and Vent Piping System
Section	22 14 13	Facility Storm Drainage Piping
Section	22 40 00	Plumbing Fixtures
Section	22 47 00	Drinking Fountains and Water Coolers
Section	22 66 13	Facility Natural Gas Piping
Section	23 01 30	HVAC Air Duct Cleaning
Section	23 05 00	Common Work Results for HVAC
Section	23 05 13	Common Motor Requirements for HVAC Equipment
Section	23 05 29	Hangers and Supports for HVAC Piping and Equipment
Section	23 05 48	Vibration Controls for HVAC Piping and Equipment
Section	23 05 53	Identification for HVAC Piping and Equipment
Section	23 07 00	HVAC Insulation
Section	23 09 00	HVAC Direct Digital Controls

Section	23 09 93	HVAC Sequence of Operation
Section	23 21 13	Hydronic Piping
Section	23 31 13	Metal Ducts
Section	23 33 00	Air Duct Accessories
Section	23 34 23	HVAC Power Ventilators
Section	23 36 00	Air Terminal Units
Section	23 37 13	Diffusers, Registers, and Grilles
Section	23 37 23	HVAC Gravity Ventilators
Section	23 74 13	Packaged, Outdoor, Central-Station Air-Handling Units

Clarifications:

1. This Contractor is responsible for Work at Zionsville Community High School only.
2. Equipment bases and pads shall be provided by the contractor installing the equipment, respectively.
3. All wall blocking is to be coordinated with MEP Contractors to ensure rough-in routing is maintained.
4. Contractor is responsible for roof curbs for equipment within their scope of work.
5. Critical long-lead equipment items are to have all submittals and shop drawings submitted for review within two weeks of Notice to Proceed. Equipment includes, but not limited to: Water Heaters, Hydronic Pumps, Water Softeners, AHU's, etc.
6. Electrical Contractor is responsible for all in-wall rough-in locations for temperature control. Low voltage wiring for temperature control is by the HVAC Contractor.
7. Contractor is responsible for providing exact locations of required sleeves to Contractor responsible for footing, foundation, or wall construction.
8. General Trades Contractor is responsible for access panels depicted on Architectural Drawings. Access panels required to support MEPF equipment access not noted on Architectural Drawings is the responsibility of MEPF Contractor installing the equipment.
9. Opportunity exists for Contractor to walk the building(s) to familiarize themselves with the space during the bidding period from December 22, 2025 – January 2, 2026. Please contact the Skillman Corporation with inquiries (jbower@skillman.com & nholman@skillman.com).
10. The schedule intent is for Contractor to perform demolition, rough-in and preparatory work for both AHU's during Winter Break from December 21, 2026 – February 19, 2027. Additional crew sizes, weekend work and overtime should be included in base bid for this time frame. (ADDED via Add. 01)
11. The schedule intent is for Contractor to set both AHU's in place during Spring Break from March 26, 2027 – April 2, 2027. Additional crew sizes, weekend work and overtime should be included in base bid for this time frame. (ADDED via Add. 01)

12. Specification Section 23 05 93 – Testing, Adjusting, and Balancing for HVAC is assigned to be provided by Owner (ADDED via Add. 01)

D. BID CATEGORY NO. 4 – ELECTRICAL & TECHNOLOGY (ZCHS, ZWMS & ZMS)

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	26 00 05	Electrical Demolition
Section	26 00 50	General Electrical Requirements
Section	26 05 05	Electrical Testing
Section	26 05 19	Low-Voltage Electrical Power Conductors and Cables
Section	26 05 26	Grounding and Bonding for Electrical Systems
Section	26 05 29	Hangers and Supports for Electrical Systems
Section	26 05 33	Conduit and Boxes for Electrical Systems
Section	26 05 35	Surface Raceways for Electrical Systems
Section	26 05 43	Underground Ducts and Raceways for Electrical Systems
Section	26 05 53	Identification for Electrical Systems
Section	26 09 23	Lighting Control Devices
Section	26 09 61	Theatrical Controls
Section	26 24 16	Panelboards
Section	26 27 26	Wiring Devices
Section	26 28 13	Fuses
Section	26 28 16	Enclosed Switches and Circuit Breakers
Section	26 29 13	Enclosed Controllers
Section	26 51 00	Interior Lighting
Section	26 55 61	Theatrical Lighting
Section	27 01 00	Operation and Maintenance of Communications Systems
Section	27 01 11	Demonstration, Training and Warranty of Communications Systems
Section	27 05 00	Common Work Results for Communications
Section	27 05 26	Grounding and Bonding for Communications Systems
Section	27 05 28	Pathways for Communications Systems
Section	27 05 53	Identification for Communications Systems
Section	27 11 00	Communications Equipment Room Fittings
Section	27 11 13	Communications Entrance Protection
Section	27 13 23	Communications Fiber Optical Backbone Cabling
Section	27 15 11	Conductors and Cables for Intercom, Public Address and Mass Notification Systems
Section	27 15 17	Communications Copper Horizontal Cabling

		(Augmented Cat 6A)
Section	27 41 12	Communications Audio-Video Mounts
Section	27 51 16.00	Public Address and Mass Notification System – ZHS Auditorium
Section	27 51 16.01	Public Address and Mass Notification Systems – ZHS Stadium
Section	27 51 16.02	Public Address and Mass Notification Systems – ZHS BB-SB Fields
Section	27 51 16.03	Public Address and Mass Notification Systems ZHS Pool Area
Section	27 51 16.04	Public Address and Mass Notification Systems – ZM-ZW Auditorium
Section	27 51 23.00	Intercommunications and Program Systems – ZHS Auditorium
Section	28 31 11	Digital, Addressable Fire-Alarm System

Clarifications:

1. This Contractor is responsible for Work at Zionsville Community High School, Zionsville West Middle School & Zionsville Middle School.
2. Equipment bases and pads shall be provided by the contractor installing the equipment, respectively.
3. Door hardware for all systems will be furnished and installed by the General Trades Contractor. Electrical Contractor shall provide final electrical connections, including but not limited to low voltage and power wiring, commissioning, or controls not integral to the hardware.
4. Electrical Contractor shall review architectural door schedule and door hardware specification for comments, remarks or notes that may identify the need of power or data at door openings. Not every electrical requirement may appear on electrical or technology discipline drawings. Electrical Contractor shall include the necessary labor and materials to install all Work noted for each opening.
5. All wall blocking is to be coordinated with MEP Contractors to ensure rough-in routing is maintained.
6. Contractor is responsible for roof curbs for equipment within their scope of work.
7. Critical long-lead equipment items are to have all submittals and shop drawings submitted for review within two weeks of Notice to Proceed. Equipment includes, but not limited to: Lighting, Switchgear, Panelboards, etc.
8. Contractor is responsible for all in-wall rough-in locations for temperature control. Low voltage wiring for temperature control is by the HVAC Contractor.
9. Contractor is responsible for final connection of all hard-wired equipment and furnishings, either Contractor or Owner provided.
10. Contractor is responsible for providing exact locations of required sleeves to Contractor responsible for footing, foundation, or wall construction.

11. General Trades Contractor is responsible for access panels depicted on Architectural Drawings. Access panels required to support MEPF equipment access not noted on Architectural Drawings is the responsibility of MEPF Contractor installing the equipment.
12. Opportunity exists for Contractor to walk the building(s) to familiarize themselves with the space during the bidding period from December 22, 2025 – January 2, 2026. Please contact the Skillman Corporation with inquiries (jbower@skillman.com & nholman@skillman.com).
13. The schedule intent is for Bid Category 03 Contractor to perform demolition, rough-in and preparatory work for both AHU's during Winter Break from December 21, 2026 – February 19, 2027. Additional crew sizes, weekend work and overtime should be included in base bid for this time frame for associated work within this Bid Category. (ADDED via Add. 01)
14. The schedule intent is for Bid Category 03 Contractor to set both AHU's in place during Spring Break from March 26, 2027 – April 2, 2027. Additional crew sizes, weekend work and overtime should be included in base bid for this time frame for associated work within this Bid Category. (ADDED via Add. 01)
15. All Work at Zionsville Middle School and Zionsville West Middle School must start May 29, 206 and complete by August 3, 2026. All systems must be fully functional to allow all buildings to operate normally for school. Work at Zionsville Community High School is not restricted to this same timeline. (ADDED via Add. 01)
16. Overtime and weekend work required to accomplish dates noted in Clarification #15 must be included in base bid. (ADDED via Add. 01)
17. Contractor shall include labor and materials for installation and removal of ten (10) temporary exit lights to be utilized at temporary doorways per the direction of the Construction Manager. (ADDED via Add. 01)

E. BID CATEGORY NO. 5 – HVAC CONTROLS (ZWMS & UNION)

General requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	01 51 30	Temporary Heating, Ventilation and Cooling
Section	07 84 13	Penetration Firestopping
Section	07 84 43	Joint Firestopping
Section	07 92 00	Joint Sealants
Section	07 92 19	Acoustical Joint Sealants
Section	23 09 00.1	HVAC Direct Digital Controls
Section	23 09 93.1	HVAC Sequence of Operation

Clarifications:

1. This Contractor is responsible for Work at Zionsville West Middle School & Union Elementary School.

2. Spring Semester 2026 concludes on May 28, 2026, and Fall Semester 2026 begins August 4, 2026. The goal is for all Contract work to complete to be complete within this timeframe. Contractor shall plan for necessary overtime and weekend work.
3. In the case that all work cannot be accomplished within the dates noted above, the Contractor shall prioritize crucial learning areas such as classrooms and media center followed by administrative space. Any work that extends beyond August 4, 2026, must be completed on second shift and weekends when school is not in session. Premium labor costs are the responsibility of the Contractor.
4. Contractor shall ensure that building systems are fully operational by August 4, 2026. This shall include any temporary means if permanent work is not complete.
5. If a combination bid is awarded, Contractor is responsible to supply adequate supervision and manpower at each building.
6. Opportunity exists for Contractor to walk the building(s) to familiarize themselves with the space during the bidding period from December 22, 2025 – January 2, 2026. Please contact the Skillman Corporation with inquiries (jbower@skillman.com & nholman@skillman.com).

F. BID CATEGORY NO. 6 – PUBLIC ADDRESS & FIRE ALARM (BME & SGE)

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	07 84 13	Penetration Firestopping
Section	07 84 43	Joint Firestopping
Section	07 92 00	Joint Sealants
Section	07 92 19	Acoustical Joint Sealants
Section	27 15 11	Conductors and Cables for Public Address and Mass Notification System
Section	27 51 23.01	Intercommunications and Program Systems Elementary Schools Section
Section	28 31 11	Digital, Addressable Fire-Alarm System

Clarifications:

1. This Contractor is responsible for Boone Meadow Elementary School & Stonegate Elementary School.
2. Contractor to include 120-man hours as Electrician Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.
3. Contractor to include painting of wall surface adjacent to new devices (both PA & FA Devices) if new device profile is smaller than existing. Paint color to match existing.
4. All Work must start May 29, 206 and complete by July 24, 2026. This allows for six (6) business days to test and commission the systems prior to the first

student day scheduled for August 4, 2026. All systems must be fully functional to allow all buildings to operate normally for school.

5. Overtime and weekend work required to accomplish the above listed dates must be included in base bid.
7. Contractor shall ensure that building systems are fully operational by August 4, 2026. This shall include any temporary means if permanent work is not complete.
8. Contractor is responsible for sealing all penetrations generated by their Work.
9. If a combination bid is awarded, Contractor is responsible to supply adequate supervision and manpower at each building.
10. Opportunity exists for Contractor to walk the building(s) to familiarize themselves with the space during the bidding period from December 22, 2025 – January 2, 2026. Please contact the Skillman Corporation with inquiries (jbower@skillman.com & nholman@skillman.com).
11. In addition to Clarification #7, the Contractor is responsible for costs associated with fire watch for building occupancy if Work is incomplete on August 4, 2026. School occupancy will not be delayed. (ADDED via Add. 01)

G. BID CATEGORY NO. 7 – PUBLIC ADDRESS & FIRE ALARM (UNION & ZWMS)

General Requirements in Paragraph 3.02.B above.

Section	01 21 00	Allowances
Section	07 84 13	Penetration Firestopping
Section	07 84 43	Joint Firestopping
Section	07 92 00	Joint Sealants
Section	07 92 19	Acoustical Joint Sealants
Section	27 15 11	Conductors and Cables for Public Address and Mass Notification System
Section	27 51 23.01	Intercommunications and Program Systems Elementary Schools Section
Section	28 31 11	Digital, Addressable Fire-Alarm System

Clarifications:

1. Contractor is responsible for Union Elementary School & Zionsville West Middle School.
2. Contractor to include 120-man hours as Electrician Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.
3. Contractor to include painting of wall surface adjacent to new devices if new device profile is smaller than existing. Paint color to match existing.
4. All Work must start May 29, 206 and complete by July 24, 2026. This allows for six (6) business days to test and commission the systems prior to the first student day scheduled for August 4, 2026. All systems must be fully functional to allow all buildings to operate normally for school.

5. Overtime and weekend work required to accomplish the above listed dates must be included in base bid.
6. Contractor is responsible for sealing all penetrations generated by their Work.
7. Contractor shall ensure that building systems are fully operational by August 4, 2026. This shall include any temporary means if permanent work is not complete.
8. If a combination bid is awarded, Contractor is responsible to supply adequate supervision and manpower at each building.
9. Opportunity exists for Contractor to walk the building(s) to familiarize themselves with the space during the bidding period from December 22, 2025 – January 2, 2026. Please contact the Skillman Corporation with inquiries (jbower@skillman.com & nholman@skillman.com).
10. In addition to Clarification #7, the Contractor is responsible for costs associated with fire watch for building occupancy if Work is incomplete on August 4, 2026. School occupancy will not be delayed. (ADDED via Add. 01)

END OF SECTION 01 12 00

SECTION 11 61 00 – THEATER AND STAGE EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

A. This Section pertains to the demolition of existing equipment as well as provision and installment of new theatrical equipment. To ensure a complete system, it is the intent of the specification that this equipment be purchased through a manufacturer-certified dealer and installed by a theatrical integrator who employs at least one ETCP-certified rigger.

B. This Section includes:
   1. Fabrics
   2. Stage Curtains
   3. Rigging

C. Related Sections:
   1. 26 55 61 – Theatrical Lighting
   2. 26 09 61 – Theatrical Controls
   3. 26 09 23 – Lighting Control Devices

D. **Base bid** includes:
   a. Stage Curtains
   b. Motorized Battens
   c. Fixed Battens

1.2 SUBMITTALS

A. With Bid: Bill of materials

B. Shop Drawings: Submit shop drawings for Architect's approval in accordance with requirements of Section 01300
   1. Shop Drawings shall indicate dimensions, connections, and information for coordination with other Contractors' work.
   2. Individual components shall be detailed as required to illustrate materials, thickness, sizes, and methods of assembly and attachment to adjoining components.
   3. Provide drawings for other contractors whose work adjoins or attaches to the work of this contractor.
   4. Submit complete color selection samples of curtain materials for Architect's selection.
   5. Provide as built record drawings.
   6. Provide flameproof certificates for all fabrics at time of installation.

C. General: Closeout Submittals are to be submitted with Operation and Maintenance Manuals only. Do not submit with other action and informational Submittals.

D. Operation and Maintenance Data: Provide the Owner with an Operation and Maintenance Manual in accordance with Division 01 Section “Operation and Maintenance Data”.

E. Project Data:
   1. As-built drawings and schematic diagrams.
   2. List of components for all assemblies with part/model numbers, including manufacturers' addresses and phone numbers.
   3. Inspection check sheets with maintenance schedules.
   4. Name and telephone number or email address of manufacturer, installer, architect, and consultant for guidance of future service personnel.
   5. Extra Materials: Receipt for extra materials.

1.3 QUALITY ASSURANCE

A. Rigging Systems Manufacturer Qualifications: Experienced in manufacture of similar products in use in similar environments with the production capacity to meet the construction and installation schedule.

   1. Due to the highly specialized nature of theatrical rigging equipment, and the safety requirements of the equipment, the rigging products provided for this work shall be the

products of a single rigging manufacturer. Only accessory items such as wire rope, fittings, and curtain tracks may be from other specialty manufacturers.

2. The manufacturer shall have a product testing program, including determination of recommended working loads for products based on destructive testing and reviewed by a licensed engineer.

B. Rigging Systems Installer Qualifications: Experienced in installation of the work described in this Section and must be acceptable to the manufacturer. Must employ at least one manufacturer-authorized technician and an Entertainment Technician Certification Program (ETCP) Certified Theatre Rigger. A Certified Rigger shall be either the project manager or site foreman and be responsible for the overall project including the layout, inspection, and onsite user training.

C. Preinstallation Meeting: Conduct meeting before commencement of work to comply with requirements in Division 01 Section "Project Management and Coordination."

D. Delivery, Storage, and Handling: Store and handle all products in strict compliance with manufacturer's written instructions and recommendations, including protection of products from damage due to weather, extreme temperatures, and construction operation.

E. Project Conditions: Maintain environmental conditions within limits recommended by manufacturer for optimum results. Do no install any products in environmental conditions outside of manufacturer's recommendations.

1.4 WARRANTY

A. Special Warranty for Rigging Systems: Manufacturer's standard limited warranty against defects in materials or workmanship.
1. This warranty may be contingent on the annual inspection of the equipment and training of its use by an Entertainment Technician Certification Program (ETCP) Certified Theatre Rigger at the Owner's expense. It is the responsibility of the Owner to make arrangements for the annual inspection and training.
2. Minimum of three (3) years from the date of Substantial Completion.
3. The installing Contractor shall be the primary Owner contact for warranty responsibility for all equipment, material and work furnished and installed under this specification

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Manufacturers
1. All products are subject to compliance with requirements and must be provided by one of the manufacturers specified.
2. Products of other manufacturers will be considered for acceptance provided they equal or exceed requirements and functional qualities of the specified product. Requests for Architect's approval and complete technical data for evaluation must be received at least 10 days prior to bid due date. Additional approved manufacturers will be issued by Addendum.
3. Acceptable Rigging Manufacturers:
   a. Electronic Theatre Controls ("ETC")
   b. JR Clancy
   c. United Stage Equipment
   d. H & H Specialties
   e. SECOA
   f. Tiffin Scenic Studios
   g. Custom Rigging Systems
4. Acceptable Fabric Manufacturers
   a. KM Mills
   b. Valley Forge Fabrics

2.2 FABRICS

A. General:

1. Cut from the so neither defects nor imperfections are in the visible surface of the finished curtains.
2. Flameproofing by immersion process at the mill is required of all curtain fabrics prior to fabrication.
3. Linings shall not be used.
4. Tie laces: 2'-0" dark twill tape where required
5. Colors: As selected by Architect from stock fabric colors. Velours may require special colors to match auditorium decor.

B. Medium Weight Velour: KM MILLS, "Memorable Velour"
1. Cotton pile, width as indicated in Schedule on Drawings, finished weight before flameproofing; 25 oz. per linear yard
2. Approximately 135 thousandth pile height, 40 backing ends, 32 picks per inch; 640 pile tufts per square inch

C. Border Protection:
1. As HEATSTOP 1832: W.E. Palmer, 850 Albany Street., Boston, MA 02119
2. Weight: 24 oz per square yard.
3. Color: Black

2.3 STAGE CURTAIN FABRICATION

A. General: Widths of fabric shall be continuous. Flameproof fabrics by immersion process before sewing. Neither cut nor torn edges will be permitted in the finished product. Turn side hem selvage under the hem. Sew bottom hems with two parallel rows of stitching approximately 1/2" apart. If manufacturer's labels are used, attach to the back of the webbing or the back of the bottom hem in such a manner that the stitching or other attachment does not show from the front.

B. Side hems: Traveler curtains of pile fabrics are to have 1/2 panel turnback in lieu of a side hem. Leg drops of pile fabrics shall have 10" side hems.

C. Bottom hems: All travelers, leg drops, and Grand Border; 8" bottom hem. Equip all except Grand Border with weight chain.
1. Include a 4" muslin pocket suspended from the top of the hem in each 8" hem to hold weight chain or pipe.
2. Other border curtains: 6" bottom hems, no pocket.

D. Reinforcing and pleating:
1. Box pleat curtains on approximate 12" centers.
2. Use 3” non-stretch cotton drill webbing for curtains to operate on tracks, for Grand Border, and for leg drops.
3. Sew cotton webbing to fabric with 3 rows of stitching.
4. Stitch 1/2" from top; 1/2" and 1/4" from bottom of webbing
5. Border curtains and pit curtains may have 1-1/2" webbing, or carpet binding, either sewn with two rows of stitching, 1/2" from each edge.

E. Grommets:
1. Place brass grommets in each pleat and top corner.
2. Set 1-1/4" from top of 3" webbing; in middle of carpet binding.
3. Provide a hanging device for each grommet: spring snap as A.D.C SS-63 for each grommet to be suspended from a track carrier; minimum 2'-0" dark color twill tie lace for grommet tied to a batten. “S” Hooks are not acceptable

F. Border Protection:
1. Cut specified fabric to scheduled length.
2. Place grommets 1'-0" o/c. along top edge, provide tie laces.
3. Suspend from scheduled electric battens to cover downstage side of plug strip and associated lights.

2.4 RIGGING

A. General Overview and Requirements
1. Standards Compliance: UL Listed and tested as a complete system made up of UL listed components.
2. Pre-Shipment Testing: Test hoists under full rated load through its full travel with its lift lines terminated to hoist before hoist is shipped.
   a. Testing results to be given to Architect and Owner Representative prior to system commissioning.
   b. Testing to include:
      1) Hoist operation
      2) Hoist and motor speed
      3) Lift line terminations under load
      4) Braking and stopping under load
      5) Load cell functions
      6) Slack line detection
      7) Position sensing
      8) Hoist noise
3. Inserts, Bolts, Rivets, and Fasteners: Manufacturer's standard corrosion-resistant units.
   a. All threaded fasteners shall be SAE grade 5 or better
   b. Compression fittings shall be equal to Nicopress© swaged copper compression sleeves applied in conformance with the manufacturer's specifications.
4. Safety Cables: Heavy-duty, flexible steel; 30-inch nominal length, with spring clip at one end and steel ring at other.
5. C-Clamps: All C-clamps shall be permanently marked with a load rating and constructed from high tensile, aircraft grade, extruded aluminum or cast-iron.
6. Pipe Clamps: Hot rolled steel (two strips of 12 Ga. by 2 inch) formed to encompass and clamp the pipe batten to prevent its rotation. Corners shall be rounded.
   a. There shall be a hex bolt with lock nut above and below the batten. A hole in the top of each clamp half allows the attachment of cable, chain, or other fittings.
   b. Manufacturer's recommended load rating of at least 750 lbs.
7. Turnbuckles: Must conform to ASTM F-1145 Type 1, Grade 1 standard and be drop forged and galvanized. Turnbuckles shall be moused after adjustment to prevent loosening.
8. Pipe Battens:
   a. All battens shall be 1-1/2 inches nominal diameter, schedule 40 pipe in lengths as shown on the drawings.
   b. All joints shall be spliced with 18 inches long sleeves with 9 inches extending into each pipe and held by two hex bolts and lock nuts on each side of the joint.
      1) Not more than one joint each 21 ft. or fraction thereof. Shortest section(s) shall be in the middle of the batten.
      2) Not less than 10 ft apart, or 12 ft from end of batten.
   c. Each end shall be covered with a bright yellow, closed end, soft vinyl safety cap at least 4 inches in length.
9. Safety Factors:
   a. Cables and Fittings: 10 times design factor.
   b. Cable Bending Ratio: 26 times diameter.
   c. Fleet Angle: 2 degrees maximum.
   d. Steel: 1/5 of yield.
   e. Bearings: 2 times required load at full for 2000 hours.
10. Chains:
   a. Weight chain for bottom hems: 2/0 electrical weld twist link machine chain.
   b. Batten adjustment (trim): 3’-0” long, 1/4”. grade 30. plated, proof coil chain.
11. B. Cables:
   a. Individual support lines of counterweight set battens, and tormentor tower suspension lines shall be 1/4" diameter, 7X19 construction wire rope.
12. D. Fastenings:
   a. Chains: Suspend a 3'-0" batten trim chain from each set lead line with thimble and cable clips or Nicopress© fitting. The loose end shall fasten into standing part with a forged and plated 5/16” round pin shackle. In addition, provide and install a 3/8” bolt, two washers, and self-locking nut through both parts of the chain.

b. Cables: Attach to carriage head and chain with cable clips or properly set Nicopress© fitting and galvanized wire rope thimble. Cable clip or pressure fittings are to be placed as close to the thimble as possible. Cable protruding from clip or fitting is to be stopped to the standing line with not less than six turns of Scotch No. 33 tape.

B. Heavy Duty Curtain Tracks
   1. Standards:
      a. J. R. CLANCY, 732
      b. AUTOMATIC DEVICES, 280
   2. Carriers: One for each foot of track,
      a. Double wheel, steel frame with neoprene tired ball-bearing wheels
      b. Five link pendant of single steel jack chain for curtain adjustment
      c. Backpack or rearfold feature on each carrier.
   3. 3. Track/pipe clamps spaced not more than 6'-0" apart to join track and its supporting pipe.
   4. Floor block of demountable type with associated "keyhole" plate.
   5. Overlap 2'-0”. The overlap direction of all tracks is to match.

C. Motorized Battens as specified in Section 26 09 61 Theatrical Controls

PART 3 - EXECUTION

3.1 INSTALLATION

A. Coordination:
   1. Take all measurements required at the job site and verify the location of all items to which attachment must be made, or which may cause any restriction in the total operation of the rigging.
   2. Provide connecting members needed for proper installation and securing to masonry, joists, walls, structural members or other parts of the construction as may be best suited.
   3. Provide a training session with the Owner and personnel who are to operate the facility at which time proper method of operation of the system(s) and all relevant safety measure will be explained.
   4. Provide drawings to mechanical and electrical Contractors indicating critical locations and spacing.

B. Relocation:
   1. Owner reserves the right to notify this Contractor of any desired change in spacing without causing a change in the bid price.
   2. Such notification must be made before the installation of any piece of equipment for that set has begun.
   3. This Contractor, while carefully following the detailed schedule of sets, may make such minor adjustments as deemed necessary to clear possible obstacles.
   4. Notification must be made to the Architect's representative on the job.
   5. Relocation of a major nature must be proposed in writing to the Architect.

C. Trimming of sets:
   1. Test empty battens of counterweight set or winch sets in the presence of the Owner's representative by loading approximately 100 lbs. under each line and checking for trim to the floor within one trim chain link.
   2. Trim all curtains within 1" of parallel to the floor. Tracked curtains shall maintain this trim during operation from full open to full close.

D. Cleanup:
   1. Remove from the building, all trash and accumulated materials not caused by other trades at the completion of work.
   2. Leave the work site in a clean, orderly and acceptable condition.

3.2 CURTAIN AND SET SCHEDULE AS INDICATED ON DRAWINGS.

END OF SECTION 11 61 00

SECTION 12 48 26.01 – ENTRANCE CARPET TILE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes:
   1. Entrance carpet tile (ECT).

B. Related Sections include the following:
   1. Division 09 Section “Tile Carpeting” for modular carpet tiles.

1.2 ACTION SUBMITTALS

A. Samples for Verification: For each type of product indicated.
   1. Size: 8-1/2 by 11 inch square, assembled sections.

1.3 CLOSEOUT SUBMITTALS

A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals:
   1. Maintenance Data: For floor mats to include in maintenance manuals.
   2. Extra Materials: Receipt for extra materials.

1.4 MAINTENANCE MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Entrance Carpet Tiles: Full-size units equal to 2 percent of amount installed for each size, color, and pattern indicated, but no fewer than 10 units.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
   1. Products: Subject to compliance with requirements, provide one of the products specified.
   2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.
   3. Basis-of-Design Product: The design for entrance floor mats and frames is based on products named. Subject to compliance with requirements, provide either the name product or a comparable product by one of the other manufacturers specified.

B. Products of other manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of specified product. Requests for A/E's approval must be accompanied by the “Substitution Request Form” and complete technical data for evaluation. All materials for evaluation must be received by the Project Manager and Specification Department at least 10 days prior to bid due date. Additional approved manufacturers will be issued by Addendum.

2.2 ENTRANCE CARPET TILE

A. General: Refer to “List of Finishes.”

B. Entrance Tile; carpet tiles shall be specifically designed for use in entries to reduce the amount of contaminates tracked into occupied space.
   1. Indoor Air Quality (IAQ): CRI IAQ Certification “Green Label Plus”.
   2. Flammability – Radiant Panel Test: Class I, ASTM E648.
   3. NBS Smoke: <450 Flaming Mode, ASTM E662.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and floor conditions for compliance with requirements for location, sizes, and other conditions affecting installation of floor mats and frames.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, ENTRANCE CARPET TILE

A. General: Comply with CRI 104, Section 14, "Carpet Modules," and with carpet tile manufacturer's written installation instructions.

B. Installation Method: Glue down; install every tile with full-spread, releasable, pressure-sensitive adhesive.

END OF SECTION 12 48 13

SECTION 27 51 16 – PUBLIC ADDRESS AND MASS NOTIFICATION SYSTEMS
AUDITORIUM AUDIO VISUAL SYSTEM

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections apply to this Section.

1.2 SUMMARY

A. Provide a complete auditorium audio visual system as defined in these specifications, floor plans and shown on the line drawings. All audio components will be professionally installed and fully integrated for ease of use. The graphical user interfaces will facilitate the operational needs of the end user. A complete system includes all audio and video components as well as connecting cables, software and hardware.

B. Fire Alarm Tie-In

1. NFPA 72, Sections 18.4.3.5, 18.4.3.5.1, 18.4.3.5.2, and 18.4.3.5.3. Any rooms/areas of buildings that may have noise/sound/music that exceed the normal operating db levels expected in such a place shall need the ambient sound reduced or shut off in order to facilitate correct fire alarm notification via horn, chime, or voice evacuation or special messages.

2. O.B.C Section 907.5.2 and subsequent sub-sections, addresses db levels in Use Group areas.

3. Provide a tie-in from the sound system headend to the fire alarm device. Coordinate with the electrical contractor.

C. The work described by this section includes the furnishing of all materials, equipment, labor and service and the performance of all operations necessary for the installation of sound systems in operating condition as indicated on the drawings and herein.

D. In general, the conduit, electrical circuits and outlets shall be furnished and installed by the Electrical Contractor. The entire responsibility of the system, its operation and function shall be that of the Systems/Electrical Contractor.

E. Provide all licenses, permits as may be applicable

F. Provision of submittal information

G. Installation in accordance with contract documents, manufacturers' recommendations and applicable codes

H. Programming and configuration of control and signal processing software

I. Complete system testing and adjustments, including documentation thereof

J. Demonstration of complete system operation for approval

K. System operations training of owner’s staff including set up and assistance of up to three events

L. Testing and adjustments, including documentation thereof

M. Provision of custom manuals to fully detail system operation and maintenance

N. Maintenance and warranty services

1.3 APPLICABLE REFERENCES:

A. National Electric Code (NEC)

B. Underwriters Laboratories (UL)

C. Sound System Engineering (Davis & Patronis) - 3rd Edition 2006

D. Audio Systems Design and Installation (Giddings) 1990

E. Telecommunications D NFPA 70 - National Electrical Code.

F. Underwriter's Laboratory.

G. TIA/EIA-607 Telecommunications Grounding.

H. 13th Edition (or latest) BICSI Telecommunications Distribution Methods Manual (TDMM).

I. American with Disabilities Act.

J. Federal Communications Commission Part 15.

K. Sound System Engineering (Davis & Patronis) – 3rd Edition 2006.

L. Audio Systems Design and Installation (Giddings) 1990.

M. BICSI Telecommunications Distribution Methods Manual (TDMM)

1.4 QUALITY ASSURANCE

A. The intent of these Specifications is to describe and provide for a complete Audio-Visual Presentation and Sound Reinforcement System of professional quality and reliability. Professional performance standards as provided by a qualified and experienced sound systems contractor (hereafter referred to as Systems Contractor) will be required. References and documentation of the System Contractor's experience and following qualifications shall be provided, if requested.

B. The Systems Contractor shall:

1. An authorized dealer/service organization for all major items of electronic equipment furnished.
2. Have completed, within the past two (2) years the satisfactory installation of at least three (3) systems of similar size and type as that herein specified.
3. Maintain a factory trained service department on call 24 hours a day, 365 days a year, to service the specified product.
4. Employ, on a full-time basis, a qualified audio/electronics Engineer under whose direction and supervision the entire installation shall be carried out. AVIXA CTS, NICET or C-EST audio certification required.
5. Audinate Dante Level 2 Certification required
6. Certified Crestron Programmer and DMC-E required. Or Equal certification from AMX or Extron.

C. Employ, on a full-time basis, technician(s) who are experienced in the installation of sound reinforcement equipment, its interconnection and setup. Qualified technicians shall perform the assembly, wiring, interconnection setup and programming of all equipment, jacks and devices. AVIXA CTS, NICET or C- EST audio certification required.

D. The Systems Contractor shall coordinate final utility rough-in locations with actual equipment furnished. Verify dimensions and conditions at the job site prior to installation, and perform installation in accordance with these Specifications, manufacturer's recommendations and all applicable code requirements.

E. In all cases, the Owner and Engineer shall determine the acceptability of the work based upon site visits and observations.

1.5 COOPERATION AND COORDINATION

A. Cooperate and coordinate as required with the other contractors who are responsible for work not included in this section.

B. Verify dimensions and conditions at the job site prior to installation, and perform installation in accordance with these Specifications, manufacturer's recommendations and all applicable code requirements.

C. Coordinate final utility rough-in locations with actual equipment furnished.

D. Provide any and all information as required or requested by the Owner, Engineer, or General Contractor in order for this work to be completed to the satisfaction of the Owner, and in the best interests of the Project. Such assistance or information shall be transmitted in writing to the requesting party in all cases.

E. Contractor is required to attend a minimum of 4 onsite meeting with the construction team to review and coordinate all cabling infrastructure, pathways, device rough ins, device mounting, etc. It is the contractor’s responsibility to make sure onsite rough in for the audio visual is provided by the construction team to meet the needs of the system they are providing.

1.6 SYSTEM WARRANTY

A. Guarantee all parts, labor and workmanship furnished under this contract for the minimum period of twelve months from the date of substantial completion, or first formal use by the Owner, whichever is last to occur.

B. During the warranty period, report to the site and repair or replace any defective materials or workmanship without cost to the Owner. Warranty service shall be rendered within 24 hours after request by the Owner. Equivalent replacement equipment shall be temporarily provided when immediate on-site repairs cannot be made.

C. Where manufacturers’ warranties on certain equipment exceed twelve months, the guarantee period on that particular equipment shall match the extended warranty period.

D. Provide assistance to the Owner during the guarantee period of the system, as required to ensure maximum Owner satisfaction.

E. Upon completion of the work, the contractor shall submit a signed Certificate of Warranty, stating commencement and expiration dates and conditions of the warranty. Incremental warranties for completed portions of the work may be negotiated at the discretion of the Owner, if delays occur beyond the control of the Contractor

1.7 SHOP DRAWINGS AND SUBMITTALS

A. Completely detailed shop drawings shall be prepared prior to the procurement of equipment or commencement of work. Blue-line drawings shall be prepared and submitted on 30” x 42” paper. Equipment lists, data sheets, etc. Shall be 8-1/2” x 11” size properly bound into a single or multiple volumes. B. Submit to the following for approval:

1. A complete equipment list, with manufacturers' names, model numbers, and quantities of each item referencing the section number in Part 2 of this specification.

2. Manufacturer's data sheets on all equipment items.
3. System block diagram(s)
4. Equipment rack layouts showing all rack mounted equipment items.
5. Floor plans, prepared at a scale of not less than 1/8” = 1’0”, showing loudspeaker locations and orientation, wall plates, and all other related device locations.
6. Proposed construction details for all custom fabricated items, including interface panels, patch panels, and wall plates. These details shall show dimensions, materials, finishes and color selection.
7. Riser diagrams showing conduit requirements with pull boxes, outlet boxes, part numbers of cable types used, and number of circuits in each conduit.
8. Electrical power requirements for head-end and ancillary equipment. Include diagrams for any remote control of electrical power, in sufficient detail to coordinate with Division 26.
9. Certain other submittals as noted elsewhere in this specification, and as may be required for various equipment items prior to construction, fabrication, or finishing of that item.

C. Control System GUI submittal: This submission shall include all proposed control system screen shots with a functional description of every button press and a flow to the actions the buttons perform. The submission shall be provided in a storyboard form. The storyboard shall include programming for all the system functions of the system. All system functions and operation steps must be clearly outlined in the storyboard. The contractor shall plan for a minimum of one onsite meeting with the consultant and or owner to explain the proposed system operation and screen shots prior to control system approval. This submission can be provided as part of the above submittal or follow the approval of all the equipment. The objective of the control system is to be easy and intuitive to operate for anyone regardless of technical skill.

1.8 FINAL DOCUMENTATION:

A. All final documentation shall be submitted and approved before final acceptance by the Owner will be granted. Within 45 days after completion of the work, deliver to the Owner, four (4) sets of the following:

1. A complete as-installed equipment list, listed by room, with manufacturer's names, model numbers, serial numbers and quantities of each item.
2. A complete and correct system schematic, showing detailed connections for all parts of the system, including wire numbers, terminal block numbers, layouts and other designations and codings.
3. Documentation of system performance measurements as noted elsewhere in this specification. Include diagrams or charts showing final setting of all control knobs in the system (mixers, equalizers, power amplifiers, etc.)
4. Complete equipment rack layouts showing all rack mounted equipment items.
5. Floor plans, prepared at a scale of not less than 1/8” = 1’0”, showing loud speaker locations and orientation, wall plates, rack locations and other related device locations.
6. Riser diagrams showing installed conduit with pull boxes, outlet boxes part number of cable types used, and number of circuits in each conduit.
7. Operations instructions for each major item of equipment furnished.
8. Manufacturer's warranty for each major item of equipment furnished.

9. Technical Systems Operations Manual, custom-written by the Contractor, for the purpose of instructing the Owner's operating personnel in the detailed step-by step operation of the system and preventive maintenance procedures. This manual shall include descriptions of the system components and their relationship to system function. This manual shall be bound separately and labeled appropriately.

1.9 RELATED WORK BY OTHERS

A. All conduits with pull strings, all electrical pull boxes, and all outlet boxes shall be furnished and installed under the electrical section of Division 26. Coordinate as necessary for proper installation. All conduit systems shall be insulated from the equipment racks using non-metallic bushings or raceways.

B. All 120 VAC power conductors and conduits associated with power circuits to all equipment locations shall be furnished and installed under the electrical section of Divisions 26. The 120 VAC power to the equipment racks shall be terminated inside the racks to Sound Contractor - supplied isolated ground plug strips or quad convenience outlets. All conduit systems shall be insulated from the equipment racks using nonmetallic bushings or raceways.

C. An insulated #6 AWG stranded copper ground wire from each equipment rack to the building main service ground. Shall be furnished and installed under the electrical section of Division 16. Refer to the sound system drawings for additional details.

PART 2 – PRODUCTS

2.1 GENERAL

A. All equipment items shall be new, unused and the latest version or model.

B. Where quantities are not noted, they may be obtained from the drawing. In the event of a discrepancy between the specifications and the drawings, the greater quantity or better quality shall be furnished.

C. Speaker locations are shown on the drawings for bidding purposes only. The exact speaker locations, aiming points and mounting angles shall be coordinated with the Engineer and determined through the use of an acoustical modeling program and/or good engineering practices and field conditions. Speaker aiming shall be adjusted as required after installation to provide optimal coverage and system performance.

D. Substitutions

1. Products specified herein by manufacturer's name and model number are intended to establish a minimal level of quality, performance and function. Proposed substitute equipment by listed equal manufacturers shall be equal in all respects to the specified product.

2. Proposed speaker substitute requests shall additionally be supported by electro-acoustic modeling data showing proposed speaker location(s)and aiming points, maximum SPL levels and evenness of coverage at key frequencies, interaction between multiple speakers and intelligibility predictions (Alcons, STI).The following sections specifically list the acceptable equipment types and items for this project. Where quantities are not noted, they may be obtained from the drawing. In the event of a discrepancy between the specifications and the drawings, the greater quantity or better quality shall be furnished.

E. Furnish equipment racks for use in housing the equalizers, processors, power amplifiers and ancillary devices necessary to the operation of the system.

F. Furnish five (5) keys for each type of equipment rack lock installed. Lock types shall be coordinated with Owner.

G. Install the required number of units, of sufficient size to accommodate the equipment specified, at the locations indicated in the drawings.

2.2 CONTRACTOR AND OWNER PROVIDED EQUIPMENT MATRIX

A. Refer to Sheets ZH-T-001 along with ZH-T501 for clarification of scope and equipment inclusion information.

B. Anything not listed in this spec section will be listed in one of those matrixes for inclusion.

2.3 AUDIO MATRIX PROCESSOR

A. Manufacturers: AHM - 64

B. 64x64 Audio Matrix processor shall be properly sized to include all the inputs, outputs, signal routing, signal processes and control capabilities described in these documents including all the drawings. Mixer shall be able to create the modes of operation with easy usability required for this facility.

C. Audio matrix processor for sound management and installation. It is designed for audio distribution, paging, conferencing and speaker processing.

D. The system shall have the capability of 64x64 processing matrix along with:

1. 12x12 local analogue I/O
2. I/O Port for audio networking, up to 128x128
3. Dante 96kHz 64x64 provided card (AES67 and DDM)
4. 128x128 built-in SLink port for audio expansion
5. 64 configurable processing outs – up to 64 mono/stereo zones
6. 96kHz FPGA core with ultra-low latency
7. Compatible with IP1, IP6, IP8 remote controllers
8. 2x2 local GPIO plus networkable GPIO interface
9. System Manager software
10. Custom Control app and editor

E. Event scheduler being completely redundant. The processor shall be able to support a second synchronized backup processor with complete automatic failover in ten seconds or less. Each processor and I/O peripheral shall have redundant network connections for seamless audio stream failover.

F. The system processor shall have a minimum network channel capability of 128 channels, an end node capacity of 128 channels, and 128 channels of 32-bit (internal processing) audio. I/O capacity shall be 8 card slots using one of six I/O circuit cards (HD-15 pin Amp Out, Line Out, High-performance Mic/Line In, Standard Mic/Line In, CobraNet In/Out, and AES/EBU In/Out).

G. The system processor shall have the following front panel controls and indicators: LCD page forward momentary switch, Unit ID button momentary switch, Clear settings momentary switch, Power On blue LED, Device Status tri-color LED, 32 audio signal tri-color LEDs, and a 240 x 64 monochrome LCD graphics display displaying the device name, design name and status, type of I/O cards in the I/O slots, LAN A and B settings, and the firmware version.

H. The system processor shall store a single design which can be comprised of components, wiring, links, text, and graphics on a single or multiple schematic pages. Designs shall include any of the following DSP functions, test and measurement components, control components, and layout components: Acoustic Echo Cancellers, Audio Players, Audio Streaming components, Crossfaders, Crossovers, Delay components, Auto Gain control elements, Compressors, Gates, Duckers, Expanders, Ambient Noise Compensators, Limiters, Gain blocks, Graphic Equalizers, Parametric Equalizers, FIR Filters, All-Pass Filters, Band-Pass Filters, Band-Stop Filters, High-Pass Filters, Low-Pass Filters, FIR High-Pass filters, FIR Low-Pass Filters, Dual-Shelf Equalizers, Notch Filters, Meters, Matrix Mixers, Gain-Sharing Automatic Mixers, Gated Automatic Mixers, Signal Routers, Public Address Routers, Room Combiners, Signal Presence Meters, Tone Generators, Tone and Noise Generators, Dual Trace FFT Measurement Modules, Real Time Analyzers, Signal Injectors, and Signal Probes.

I. The system processor shall support custom user control interfaces either on proprietary touch screen controllers, or network computers utilizing a control application, or iOS devices on Wi-Fi. Custom control interfaces shall be capable of having multiple user selectable pages with different controls on each.

2.4 POWER AMPLIFIER

A. Manufacturers: Lab Gruppen D20:4

B. See Technology Sheets

2.5 CENTRAL SOUND INTERFACE

A. A transformer shall convert the 25-volt speaker-level audio signal from the Central Sound System to an unbalanced line level signal for insertion into the mute send module of the mixer amplifier. An 18awg twisted pair cable shall be parallel wired to and extended from the nearest paging horn to the equipment cabinet to provide required the muting input signal. Provide quantity as shown on drawings. Basis of design is Radio Design Labs 25-volt interface or equal by FSR or Jensen.

2.6 SEQUENCING AC POWER CONTROL SYSTEM

A. Manufacturers: Middle Atlantic PDS-620R-SP,Lowell, Atlas, SurgeX

B. The Power Sequencer shall feature six 20 amp rear mounted outlets and one front mounted. The delays shall turn the power amplifiers on and off separate from the other audio visual equipment.

C. Power rating of 120VAC, 60Hz/20A with EMI/RFI filtering. Each receptacle rated 20A.

D. Includes two dry contact closures for triggering remote power control units.

E. Actuation Switch: front panel rocker switch with momentary contacts (normally open SPST) plus rear barrier strip termination blocks for momentary (normally open) remote switches. F. Termination via 9 ft. attached cord with NEMA 5-20P plug.

G. Dimensions: 19"W x 1.75"H (1U) x 9"D • Made in the U.S.A.

2.7 POWER DISTRIBUTION SURGE SUPPRESSION

A. Manufacturers: Middle Atlantic PD-920-SP,Lowell, Atlas, SurgeX

B. The power distribution unit shall have power capacity of 20 amps. The power distribution shall have 8 rear outlets and one front outlet. The contractor will provide enough power distribution to safely connect all devices in the system and provide 2 rear spare outlets. The power distribution shall provide surge protection for both over and under voltage cut-off and be capable of restoring power once event has passed. The under voltage cut off threshold shall be 100vac and the over voltage shall not exceed 135 vac.

C. Power distribution shall be RoHS EU directive 2002/95/EC complaint or better.

D. Dimensions: 19"W x 1.75"H (1U) x 9"D • Made in the U.S.A.

2.8 DC POWER DISTRIBUTION

A. Manufacturers: Middle Atlantic PD-DC-125R, Lowell, Atlas or APC

B. DC Power Distribution power management shall be provided in the equipment rack to replace all individual DC transformer wall plugs. DC Power Distribution products shall be x 1.74”H x 16.13”W x 7.26”D. DC Power shall output 125.3 watts. DC Power shall provide MOV surge and overload protection and resettable PTC overload protection on each individual DC output. The DC power distribution system shall provide the following output voltages as a minimum 6qty 5VDC outputs, 6qty 12VDC outputs, 6qty 18VDC outputs, 6qty 24VDC outputs, and 4qty USB outputs and rackmount flush or recessed, or mount to the side of the enclosure. DC Power outputs shall be color coded.

DC Power shall include a 6’ removable IEC power cord with a NEMA 5-15P plug. DC Power shall include a thermostatically controlled fan and have a maximum sound level of 28 dBA.

2.9 THERMAL CONTROL UNIT

A. Manufactures: Middle Atlantic UQFP-4D, Lowell, Atlas or APC

B. Ultra-quiet fan panel shall have variable speed controls based on the rack temperature with set points which increases airflow. Provides proper intake temperatures, increasing equipment life. Fault-tolerant fan system In the event of a fan failure, the remaining fan(s) will continue to operate. Contractor must provide the necessary ventilation with in the rack configuration to ensure proper air flow.

C. General Air Flow 100.0 CFM (63.72 lps) Input

D. Rack Height 2U Physical Maximum Height 3.50 inches (89 mm) Maximum Width 19.00 inches (483 mm) Maximum Depth 5.00 inches (127 mm)

E. Environmental Audible noise at 1 meter from surface of unit 27.00 dBA

2.10 WIRELESS MICROPHONE SYSTEM

A. Manufactures: Shure – Refer to Sheets ZH-T-001 along with ZH-T501

B. Provide Combination Handheld and Lapel UHF frequency agile Wireless Microphone systems.

C. The receivers shall be ½ rack space units to mount side by side in a 1 RU configuration.

D. Contractor shall coordinate frequency selection with the manufacturer to avoid conflicts with area UHF and Digital TV channels in the geographical area. Also coordinate with owner to avoid conflicts with other wireless equipment in the facility.

E. Provide the following transmitters and microphones for the quantity of receivers indicated in the plans and specifications. Wireless belt pack transmitter ULXD1 and ear set head worn microphone MX153. Handheld transmitter and microphone ULXD2/SM87.

F. Provide one antenna combiner, remote antenna kit and cable to remote the antennas. The remote antennas need to provide reliable coverage in all critical areas of the facility. May not required for applications.

2.11 SPEAKERS

A. Manufacturers: Different Types Specified on Sheets ZH-T-001 along with ZH-T501.

B. Speakers shall be arranged for best sound coverage and be flush or pendant mount.

2.12 AUDIO MIC/LINE INPUT PLATES

A. Manufactures: AHM

B. As Shown on ZH technology Sheets

C. The interface shall receive POE over the Ethernet cable (CAT6) from a complaint network switch. The interface will be complaint with FCC Part 15, Class A and CE.

2.13 TOUCH SCREEN CONTROL PANEL

A. Acceptable Manufacturer: AHM

B. The touch screen shall deliver complete touch screen control for audio and video devices within the system via Ethernet, RS232, IR or relays. The touch panel control programming shall be completed by a certified control system programmer. All system programming shall be approved by the consultant and owner prior to commissioning the system. All programming and source code becomes the sole property of the owner at the completion of the project. Prior to completion of the warranty period the contractor is required to return and make programming updates and changes per the owner's request. The touch screen shall have a minimum high-resolution 7" widescreen touch display, be a fully-customizable user interface with easy-to-use controls and icons, true feedback and real-time status display. Enable the creation of dynamically rich user interfaces with incredible efficiency and unparalleled functionality. The touch screen control system shall integrate advanced controls using gestures, animation, and metadata for an engaging and ultra-intuitive touch screen experience.

C. High-speed Ethernet connectivity enables integration with IP-controllable devices and allows the touch screen to be part of a larger managed control network. The touch screen provides secure, reliable interconnectivity with computers, mobile devices, video displays, media servers, security systems, and other equipment, whether on premises or across the globe.

D. Touch screen shall be located per the drawings.

2.14 POE NETWORK SWITCH

A. Provided by Owner.

B. Refer to Sheets ZH-T-001 along with ZH-T501 for clarification

C. The number of ports and POE plus power budget shall be sized to adequately meet all the system requirements. The switch shall be the building block of a high performance Gigabit network. The switch shall be capable of Layer 2 and 3 plus RIP routing. The switch shall support POE and POE+. The switch shall be stackable for future growth. The switch support shall come with a lifetime warranty.

2.15 VIDEO PROJECTOR

A. Projector to be provided by owner. Contractor to provide complete mounting assembly for mounting the projector.

B. Projector type is listed on Sheets ZH-T-001 along with ZH-T501.

2.16 LOOSE EQUIPMENT

A. Refer to Sheets ZH-T-001 along with ZH-T501 for list of equipment and responsibilities.

2.17 WIRE AND CABLE

A. Refer to ZH-T602 for Wall Plate/Wiring Matrix. All wire and cables shall be new and unused.

B. **Entire system** shall support the transmission of a resolution of 2160p59.94 at minimum, including up to 50’ of additional portable 12G-SDI cable at each port. This shall be tested and verified by contractor after installation and any situation of signal loss shall be corrected by the contractor before certifying the system.

C. 2160p60 is a display resolution of 3840x2160 pixels with a 60 frames per second (fps) refresh rate, commonly referred to as 4K Ultra HD at 60Hz.

D. VIDEO CABLING – 12G-SDI

1. All SDI cabling shall be at minimum 12G-SDI. Entire system shall support the transmission of a resolution of 2160p59.94 at minimum, including through up to 50' of additional portable 12G-SDI cable at each port. This shall be tested and verified by the contractor after installation, and any instance of signal loss will be corrected by the contractor before certifying the system. Pathological test patterns should be used when testing and certifying SDI runs. 2160p60 is a display resolution of 3840x2160 pixels with a 60 frames per second (fps) refresh rate, commonly referred to as 4K Ultra HD at 60Hz.
2. All 12G-SDI cabling shall be terminated exclusively with crimp-style 12G-SDI connectors. Compression, twist-on, solder-type, or any non-crimp termination methods are not permitted. All terminations must use manufacturer-approved dies, materials, and crimp tools to maintain proper impedance, return loss, and mechanical retention.
3. Acceptable Cable Models:
   a. Belden 4694R or 4694P (12G-SDI rated coax)
   b. Canare L-5.5CUHD (12G-SDI rated coax)
   c. Approved Equal
4. Video Connectors and Termination Hardware: All SDI connectors, panels, and BNC jacks shall be 12G-SDI rated (true 75Ω). Patch panels shall not introduce reflections or impedance mismatch.
5. Acceptable Models
   a. Canare BCP-D 12G Series BNC panel connectors
   b. Kings / RF Industries 12G-SDI 75Ω crimp BNC connectors
   c. Approved Equal

E. HDMI-OVER-FIBER CABLING – ACTIVE OPTICAL HDMI (AOC)

1. All point-to-point HDMI cabling used for long-distance transport shall be Active Optical HDMI (AOC) fiber cable rated for full 18 Gbps or higher bandwidth. Cables shall support 4K60 4:4:4, HDR10, and HDCP 2.2 or later. All HDMI AOC cables shall be directional AOC assemblies using optical fiber for high-speed transitions and copper conductors for low-speed data and power. No extenders, baluns, or external power injectors shall be required.
2. All HDMI AOC cables shall maintain minimum bend radius and strain relief per manufacturer guidelines. Contractor shall replace any cable showing handshake failure, HDCP instability, video dropouts, or degraded bandwidth before system certification.
3. Acceptable Cable Models:
   a. FSR DR-HDMI-4K-AOC Series
   b. Celerity Technologies Universal Fiber Optic HDMI (UFO) System
   c. Approved Equal
4. HDMI Connectors / Panels: HDMI AOC cables are factory-terminated assemblies. Where panel pass-throughs are required, feedthrough connectors shall be 18 Gbps rated.
5. Acceptable Models:
   a. Neutrik NAHDMI-W HDMI feedthrough

b. Amphenol 18 Gbps HDMI feedthrough
c. Approved Equal

F. DATA / NETWORK CABLING – SHIELDED CAT6A (HDBaseT)

1. All network and data cabling shall be fully shielded Category 6A (F/UTP or better). Entire system shall support 10-Gigabit Ethernet transmission across all permanent links and shall fully comply with the latest HDBaseT specification for the transport of uncompressed audio, video, control, Ethernet, and power. All cabling pathways shall reliably support HDBaseT over the full installed cable length, including up to 50' of additional portable shielded Category 6A cable connected at any data outlet.
2. This shall be tested and verified by the contractor after installation, and any instance of signal loss, crosstalk, HDBaseT link failure, reduced bandwidth, or failure to meet 10GBASE-T certification shall be corrected before system acceptance. Shielded Category 6A cabling includes both an overall foil shield and individually twisted pairs designed to reduce electromagnetic interference, particularly in environments with LED power supplies, dimmers, and motorized rigging systems. All shielded Category 6A cabling shall be terminated with shielded Category 6A-rated connectors and shall maintain continuous drain-wire bonding and shield continuity end-to-end. Cat6A to be 23AWG and able to support 90W PoE++ over entire distance.
3. Acceptable Cable Models:
   a. Belden 10GXW / 10GXS F/UTP Cat6A
   b. Commscope SYSTIMAX GigaSPEED X10D F/UTP Cat6A
   c. Approved Equal
4. Network Connectors / Panels: All connectors must maintain shield continuity and be Cat6A-rated.
5. Acceptable Models:
   a. Belden REVConnect Shielded Cat6A jacks
   b. Neutrik NE8FDP-CAT6A shielded EtherCON feedthrough
   c. Approved Equal
6. All Category 6A data cabling shall be tested and certified by the contractor to meet or exceed the performance requirements for 10-Gigabit Ethernet (10GBASE-T) over the full installed permanent link length. Certification shall include verification of:
   a. wiremap
   b. length
   c. insertion loss
   d. return loss
   e. near-end crosstalk (NEXT)
   f. power sum NEXT
   g. far-end crosstalk (FEXT)
   h. power sum FEXT
   i. shield continuity on all shielded cable types
7. All measurements shall meet the requirements defined in ANSI/TIA-1152-A and ANSI/TIA-568.2-D for Category 6A cabling.
8. All Cat6A cable terminations shall use the TIA-568B wiring method (T568B). All patch panels, jacks, connectors, and field terminations shall be wired consistently using this standard. Any cabling that fails to achieve full 10GBASE-T certification shall be remedied or replaced by the contractor at no additional cost prior to system acceptance.

G. INSTALLED MICROPHONE CABLING – 2-CONDUCTOR SHIELDED (IN-WALL)

1. All microphone cabling installed inside walls, conduits, raceways, junction boxes, equipment racks, or stage pockets shall be **2-conductor shielded low-noise microphone cable** rated for permanent installation. Cable shall be UL-listed for in-wall use (CM, CMR, or CMP as required by code). Cabling shall support low-level balanced microphone signals without audible hum, RF interference, or electromagnetic noise. Shielding shall be 100% foil with a drain wire or braided shield providing minimum 85% coverage.
2. All terminations shall be completed using professional XLR connectors or Euroblock connectors as required by equipment design, with proper strain relief and shield continuity.
3. Acceptable Cable Models:
    a. Belden 1800F (2-conductor, low-capacitance, shielded)
    b. West Penn 291 (2-conductor, shielded, riser/plenum rated variants)
    c. Approved Equal

G. PORTABLE MICROPHONE CABLING – STAR-QUAD (STAGE, FLOOR POCKETS, REMOVABLE USE)

1. All **portable or stage-connected microphone cabling** shall be **quad-conductor star-quad type**, designed for maximum RF and electromagnetic noise rejection in dynamic, mobile, and on-stage environments. This includes floor pockets, patch panels, stage extension cables, and any cable intended to be touched, moved, coiled, or handled during typical performance activity.

2. Star-quad microphone cable shall maintain 10–15 dB improved common-mode noise rejection compared to standard microphone cable and shall be flexible, low-handling-noise, and suitable for continuous portable use.

3. Acceptable Cable Models:

    a. Canare L-4E6S or L-4E3 (portable quad cable)

    b. Mogami W2534 (portable quad cable)

    c. Approved Equal

4. If quad-conductor microphone cable is preferred for installed infrastructure applications, the cable shall be UL-listed for permanent installation.

5. Optional Installed Quad Cable:

    a. Mogami W2799 (UL-rated star-quad for in-wall use)

    b. Approved Equal

H. OPTICALCON CAMERA FIBER – INSTALLED HYBRID OPTICAL/ELECTRICAL CABLE (OPTICALCON SMPTE-COMPATIBLE)

1. All installed cabling intended to support broadcast-style camera positions shall utilize hybrid optical/electrical cabling compatible with Neutrik OpticalCon DUO SMPTE hybrid interfaces. Hybrid cabling shall transport optical video signals, camera control data, tally, intercom, and DC power return paths as required by professional camera systems. All installed camera fiber infrastructure shall be rated for permanent installation in conduit, walls, raceways, and auditorium pathways.

2. All hybrid fiber assemblies shall use OS2 single-mode optical fibers. Optical and electrical elements shall maintain full end-to-end continuity from panel to panel.

3. Fiber/Electrical Conduit Routing: Fiber and electrical conductors may be run in separate conduits where required by code or physical constraints; however, all fiber and electrical conductors belonging to a single hybrid run shall terminate together at both endpoints. Panels shall present a unified hybrid interface. No installation may terminate only fiber or only electrical conductors; hybrid continuity is required.

4. Acceptable Electrical Cable Models:

   a. Clark CW1622FS series

   b. Belden 7825 series

   c. Approved Equal

5. Acceptable Installed Hybrid Optical/Electrical Cable Models (Permanent Install):

(Multi-channel hybrid permitted when a shared conduit supports multiple camera drops.)

   a. Clark HFC series (single or multi-channel)
   b. Belden 7804, 7824 series (single or multi-channel)
   c. Approved Equal

6. Portable SMPTE-style cables such as Canare HFO-series, Draka SMPTE cables, or any field-deployable hybrid cables shall not be used for permanent installation.
7. Termination and Panel Hardware: All installed camera fiber shall terminate to Neutrik opticalCON DUO SMPTE hybrid chassis connectors. All optical fibers shall be fusion-spliced to manufacturer-approved pigtails. All electrical conductors shall be terminated using manufacturer-approved methods.
8. Acceptable Panel Connector Models:
   a. Neutrik NO2-4FDW-A opticalCON DUO SMPTE chassis connectors
   b. Approved Equal
9. Camera Fiber Connector Identification: To ensure proper identification and avoid cross-patching:
   a. All camera fiber connectors shall be clearly differentiated using colored labels, tags, or boots.
   b. Color markers shall be installed at both ends of each hybrid run.
   c. Color coding shall be paired with printed identifiers (such as CAM-1, CAM-2, CAM-3, etc.).
   d. Identification shall be permanent and rated for long-term AV installation environments.

I. MONITOR SPEAKER CABLING – 4-CONDUCTOR (NL4)

1. All speaker cabling designated for portable monitor or passive loudspeaker circuits shall be 4-conductor stranded copper cable (minimum 14/4 AWG or 12/4 AWG where distances and power levels warrant). Entire system shall support full-range passive loudspeaker operation at all installed distances without audible loss, impedance instability, or power handling reduction, including up to 50' of additional portable 4-conductor speaker cable connected at any monitor output location.

2. All 4-conductor loudspeaker cabling shall be terminated to Neutrik Speakon NL4 or NL4-compatible ports using the correct 4-pole pin assignment (1+/1– and 2+/2–). All terminations shall maintain full conductor integrity and polarity continuity end-to-end.

3. Acceptable Cable Models:

   a. Belden 5T00UP (12/4)

   b. West Penn 25244B (12/4)

c. Approved Equal

4. Monitor Speaker Connectors: Acceptable Models:

a. Neutrik NL4MP / NL4MPR

b. Amphenol NL4-compatible connectors

c. Approved Equal

J. MAIN L-ACOUSTICS SPEAKER CABLING – 12/2 NL4

1. All installed loudspeaker cabling serving the L-Acoustics A15 and KS21i loudspeakers shall be stranded copper 2-conductor cable, minimum 12/2 AWG, suitable for high-power low-impedance loudspeaker loads. Entire system shall support full output performance of A15-series enclosures in passive mode without audible loss, impedance instability, or power handling reduction.

2. All loudspeaker cabling shall be terminated using Neutrik NL4 or NL4-compatible connectors wired to L-Acoustics passive-mode specification (1+ / 1–). All terminations shall maintain secure strain relief, proper torque, and full continuity end-to-end.

3. Acceptable Cable Models:

a. Belden 5T00UP (12/2)

b. West Penn 25242B (12/2)

c. Approved Equal

4. Main Speaker Connectors: Acceptable Models:

a. Neutrik NL4MP / NL4MPR

b. Amphenol NL4-compatible connectors

c. Approved Equal

K. CEILING AND PENDANT SPEAKER CABLING – 16/2 (70-VOLT)

1. All ceiling loudspeaker cabling serving the distributed JBL 70-volt speaker systems shall be stranded copper 2-conductor cable, minimum 16/2 AWG. Cabling shall be plenum-rated (CMP) where installed in environmental airspaces and riser-rated elsewhere per code.

2. Entire system shall support full output performance of the connected JBL ceiling loudspeakers at all specified transformer tap settings without audible loss, voltage drop, or degradation of frequency response. Any instance of signal loss, polarity reversal, abnormal impedance, or continuity failure shall be corrected prior to certification.

3. Acceptable Cable Models:

a. West Penn 25291B (16/2 CMP)

b. Belden 6320UE (16/2 CMP)

c. Approved Equal

4. Ceiling Speaker Connectors: Acceptable Models:

a. Phoenix Contact Euroblock

b. Molex Eurostyle terminal blocks

c. Approved Equal

L. Wire not installed in equipment racks, not portable, or not installed in conduit shall be fire and plenum rated and meet all applicable codes.

M. Speaker cable: West Penn 25225 stranded 16AWG twisted pair for equipment rack internal wiring and from the equipment rack pull box to the loudspeaker drivers.

N. Microphone-level and line-level audio cable (installed in conduit, not portable): West Penn 291 stranded 22 AWG twisted pair with foils shield or approved equal.

O. DANTE Audio network cables shall be CAT6A. All Dante network inputs plates will 2 CAT 6A jacks on a single gang plate.

P. Digital Media cable shall be a Belden certified HDbaseT CAT cable solution for digital media applications.

Q. All HDMI cables for sources and displays shall be the locking style.

R. Other equipment control cables shall be stranded wire, appropriately shielded, of gauge and number of conductors required by the manufacturer for proper operation of the system or equipment item furnished.

S. Wire and cable for all other devices shall be supplied in accordance with the recommendations of the device manufacturer and the National Electrical Code. L. Acceptable cable manufacturers: Belden, Carol, General or West Penn.

2.18 JACK CONNECTORS AND WALLPLATES

A. All plate-mounted connectors shall be ground-insulated from the plates on which they are mounted.

B. All other jacks shall be installed on standard stainless steel finish plates. Nomenclature shall be engraved into the plate with 1/8” block letters filled with black paint. All mic jack locations shall be numbered consecutively, starting from one (1).

C. Unless otherwise specified, all jacks and connectors for the sound system shall be as follows:

1. Microphone and line input receptacles shall be 3-pin XLR-F with locking tab equivalent to Neutrik model NC3FP-1 or equal by Switchcraft or Studio 1 Unless Otherwise Noted.

2. Combination microphone/auxiliary input jack plates shall be impedance matching units suitable for interfacing one unbalanced high- or low-impedance source to a balanced low-impedance microphone preamplifier input. There shall be one ¼” 3-conductor phone jack marked “PROJ IN” and two RCA phono jacks marked “LINE IN L/R with a resistive mixing network to sum stereo line-level sources. A linear input level control will control the level of the auxiliary inputs. A “HUM CANCEL” rocker-type switch will selectively isolate the shields. A separate female XLR connector shall provide for a separate microphone input. There shall be no electrical connection between the impedance matching circuit and the microphone circuit. Provide Pro Co AVP-1V A/V interface jack plate assemblies or equal by Whirlwind or Conquest where shown on drawings.

3. Cable-end Microphone Connectors shall be 3-pin XLR equivalent to Neutrik model NC3XX or equal by Switchcraft or Calrad.

4. Furnish and install the required number of jacks and connectors as indicated on the drawings.

PART 3 - EXECUTION

3.1 INSTALLATION

A. All equipment shall be installed so as to provide reasonable safety to the operator.

B. All work shall be performed in accordance with the recommendations of the equipment manufacturers.

C. Furnish the system to facilitate expansion and servicing using modular, solid-state components. All equipment shall be designed and rated for continuous operation and shall be UL listed where applicable, or manufactured to UL standards. Furnish components, racks, wire, cabinetry, connectors, materials, parts, equipment and labor necessary for the complete installation of the systems, in full accordance with the recommendations of the equipment manufacturers and the requirements of the drawings and specifications.

D. Installation shall follow standard broadcast wiring and installation practice, and shall meet or exceed industry standards for such work, with particular attention given to any installation instructions in Parts 1 and 2 of these Specifications.

E. Equipment shall be held firmly in place with proper types of mounting hardware. All equipment affixed to the building structure must be self-supporting with a safety factor of at least six. All equipment shall be installed so as to provide reasonable safety to the operator. Supply adequate ventilation for all enclosed equipment items that produce heat.

F. All overhead or wall-mounted speaker systems shall be supported from the building structure utilizing the materials and methods required by the speaker manufacturer and providing a load-rated safety factor of 6X. All required installation material and labor shall be deemed included in these specifications.

G. Furnish the system to facilitate expansion and servicing using modular, solid-state components. All equipment shall be designed and rated for continuous operation and shall be UL listed where applicable, or manufactured to UL standards.

H. Observe proper circuit polarity and loudspeaker wiring polarity. No cables shall be wired with a polarity reversal between connectors with respect to either end. Special care shall be taken when wiring microphone cables, to insure that uniform polarity is maintained. Balanced audio connectors shall be wired as follows:

	Wire	Connector	Signal
1.	Black	Pin #3 or Ring	Lo or Neg
2.	Red or White	Pin #2 or Tip	Hi or Pos
3.	Bare	Pin #1 or Shield	Ground

J. Terminate all unused inputs and outputs with proper precision-shielded resistors. Buildout or terminate all link circuits containing active components to provide proper impedance matching. Record all pad values in the final documentation.

K. All audio circuits shall be balanced and floating, except as noted in the specifications or directed by the engineer at the time of final equalization and testing. Shields of audio cables shall be grounding at one the sending end only of the various active interconnected equipment items in the system.

L. Route cables and wiring within equipment racks and cabinetry according to function, separating wires of different signal levels (video, microphone level, line level, amplifier output, 120VAC, intercom, control, etc.) by as much physical distance as possible. Neatly arrange and bundle all cables loosely with plastic cable ties. Cables and wires shall be continuous lengths without splices.

M. All system wire, except spare wire, after being cut and stripped, shall have the wire strands twisted back to their original lay and be terminated by approved soldered or mechanical means. No unterminated wire ends will be accepted. Heatshrink type tubing shall be used to insulate and dress the ends of all ground or drain wires.

N. All cables in conduits shall be insulated from each other and from the conduit the entire length and shall not be spliced. All cables and wires are to be continuous lengths without splices.

O. All solder joints and terminations shall be made with rosin-core silver solder.

P. Temperature regulated soldering irons rated at least 60 watts shall be used for all soldering work. No soldering guns or temperature unregulated irons shall be used.

Q. Mechanical connections shall be made using approved connectors of the correct size and type for the connections. Wire nuts will not be accepted except in the case of distributed, constant-voltage speaker systems.

R. Each mechanical connector shall be attached using the proper size controlled-duty-cycle ratcheting crimp tool that has been approved by the manufacturer of the connectors. Conventional non-ratcheting type crimping tools are unacceptable, and shall not be used on the job site.

S. Label all wires in racks and at consoles as to destination and purpose. Clearly and permanently label all jacks, controls and connections with permanent engraved laminated plastic labels or by engraving and filling mounting plates, unless otherwise noted. Attach laminated plastic labels with contact cement. Embossed or printed label tape, and press-on or lift-off lettering systems will not be accepted. All labeling shall be completed prior to final system inspections. If permanent labels cannot be furnished prior to final system inspections, temporarily label all controls with write-on tape.

3.2 LABELING

A. Clearly and permanently label all jacks, controls and connections with engraved laminated plastic labels or with engraved and back-filled mounting plates. Attach laminated plastic labels with contact cement.

B. Identify and permanently label all wires and cables at every point of termination and connection point with industry-standard cable markers. All cable identifications shall be logged, marked on drawings where appropriate and included in the owners' manual.

3.3 CABINETS, CABLES, CONNECTORS AND MISCELLANEOUS EQUIPMENT

A. Equipment Cabinets

1. Locate freestanding equipment cabinet(s) where indicated and provide service access to both front and rear without having to move cabinets.
2. The 120 VAC power to the equipment racks shall be terminated inside the racks to plug mold plugstrips or quad convenience outlets.
3. All conduit systems shall be insulated from the equipment racks using non- metallic bushings or raceways.

4. Install equipment in cabinets using solid and vented panels and fans as required to provide adequate ventilation in accordance with industry standard principles of thermal management and recommendations of specific equipment manufacturers. Fill all unoccupied rack space with blank or ventilating panels finished to match cabinet color.
5. Connect all microphone, line level, DC control and speaker cables to equipment cabinets via approved audio terminal blocks. Use spade lugs if barrier strips are used. Do not buss commons together. Do not ground.
6. Locate patch panels and all frequently used controls at least 30" above floor.
7. Signal processing equipment with front panel controls that are to be permanently set (e.g. equalizers, limiters, digital delays) shall be furnished with security panels or sub-panel mounted behind blank panels. Provide plastic vision panels to allow viewing of operational indicators such as meters or clipping indicators.

B. Wiring and Interconnections

1. Observe proper circuit polarity and loudspeaker wiring polarity. No cables shall be wired with a polarity reversal between connectors with respect to either end. Special care shall be taken when wiring microphone cables, to ensure that uniform polarity is maintained. Balanced audio connectors shall be wired with shield at Pin #1, hi/positive at Pin #2.
2. Build-out all link circuits containing active components where necessary to provide proper impedance matching and optimum gain structure for maximum operating headroom and signal-to-noise ratio. Record all pad values in the final documentation.
3. All audio circuits shall be balanced and floating, except as noted in the specifications or directed by the Engineer at the time of final equalization and testing. Shields of audio cables installed between active interconnected equipment components shall be grounded at the sending end only.
4. All cables shall be installed in conduit except above accessible ceilings, where they shall be supported utilizing J-hooks or bridle rings on minimum 4 ft. centers. Provide an electrical wall box with conduit stubbed above accessible ceilings for all wall-mounted peripheral devices.
5. Separate conduits and/or cable harnesses shall be maintained for cables in the following categories:
    a. Levels below -20 dBm (microphone).
    b. Nominal levels from -20 dBm to +30 dBm (line).
    c. Loudspeaker
    d. Control
    e. Power
6. Group and route all cables within equipment cabinets according to type and function and separate according to signal levels. All cables shall be continuous lengths without splices.
7. All system wire shall be terminated by approved soldered or mechanical means. No unterminated wire ends will be accepted. Heat shrink type tubing shall be used to insulate and dress the ends of all ground or drain wires.
8. All solder joints and terminations shall be made with rosin-core silver solder.
9. Mechanical connections shall be made using approved connectors of the correct size and type for the connections. Wire nuts are not acceptable except in the case of distributed, constant-voltage speaker systems.

3.4 GROUNDING

A. Ground active components, equipment cabinets and audio line shields to independent audio system ground and to the ground buss in the power panel.

B. Ground all conduits ONLY to power system ground. Insulate all conduits and electrical boxes from sound system, including audio equipment cabinets and audio system ground.

C. Insulate all conductors, including shields, from conduit, backboxes and from each other for the entire conduit length.

D. Take such precautions as may be necessary to prevent and guard against electro-magnetic and electro-static hum and to install the equipment so as to provide normal and reasonable safety for the operator.

3.5 TESTING

A. The completed sound system is to be inspected and commissioned by an authorized person along with the owner.

B. The testing and equalization work shall be performed after the installation work has been completed, but prior to any use of the system.

C. The process of equalizing and testing the system may necessitate moving, adjusting or re-aiming certain loudspeakers. Adjustments shall be performed without claim for additional payment.

D. Coordinate as necessary to ensure a totally quiet room during the sound reinforcement systems testing and balancing period.

E. Prior to requesting systems acceptance testing, verify the following:

1. All systems are in first class working condition and free of short circuits, ground loops, parasitic oscillations, excessive system noise beyond published specifications of the equipment, hum, RF interference, or instability of any form.
2. All loudspeaker circuits have been tested, properly and are in perfect working order. Furnish impedance measurements of each circuit prior to final tests.
3. All equipment controls are labeled, even if unused
4. Operation manuals for every furnished equipment item are on hand at the job site.

F. Should the performance testing show that the Contractor has not properly completed the systems, the Contractor shall make all necessary corrections or adjustments, and a second demonstration shall be arranged at the Contractor's additional expense.

3.6 SYSTEM PERFORMANCE

A. After equalization and testing, the sound system shall meet or exceed the following specifications:

1. System shall be free of short circuits, ground loops, parasitic oscillation, excessive system noise, hum, RF interference and instability of any form.
2. Maximum SPL with band limited pink noise input to the system shall be 100dB before audible distortion or clipping occurs.
3. Seat to seat variation of SPL at 4kHz octave band pink noise shall be within a tolerance of plus or minus 3dB.
4. Acoustic response of the system shall be plus or minus 3dB along a line which is flat from 100Hz to 3000Hz and which rolls off at 2dB per octave to 20kHz.

3.7 TRAINING

A. The Contractor shall furnish the Owner's representatives with training necessary to properly operate the systems. Demonstrate in detail all functions of the systems.

B. The training phase shall be accompanied by complete as-built documentation and the custom Technical System Operation manual.

END OF SECTION 27 51 19.00

SECTION 28 31 11 – DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Fire-alarm control unit.
2. Manual fire-alarm boxes.
3. System smoke detectors.
4. Heat detectors.
5. Notification appliances.
6. Magnetic door holders.
7. Remote annunciator.
8. Addressable interface device.
9. Digital alarm communicator transmitter.
10. Fire alarm wire and cable.

1.2 DEFINITIONS

A. LED: Light-emitting diode.

B. NICET: National Institute for Certification in Engineering Technologies.

1.3 SYSTEM DESCRIPTION

A. Noncoded addressable system, with automatic sensitivity control of certain smoke detectors and multiplexed signal transmission, dedicated to fire-alarm service only. Fire alarm system shall utilize non-proprietary field devices such that maintenance activities such as replacement of pull station or strobes can be accomplished by Owner's personnel.

B. This is a delegated design. Contractor shall perform design of system and include all permitting and fees for local and State of Indiana review of fire alarm plans prior to commencement of construction activities.

C. This specification section is intended for both the full fire alarm replacement projects at Zionsville West Middle School, Union Elementary, Stonegate Elementary and Boone Meadow Elementary as well as limited renovation work as applicable at Zionsville Community High School.

1.4 SUBMITTALS

A. Shop Drawings: For fire-alarm system. Include plans, elevations, sections, details, and attachments to other work. Submit simultaneously with Product Data. Include the following as a minimum shop drawing requirement.
1. Submit to authorities having jurisdiction for approval, submittals reviewed and marked "No Exceptions Taken" by Architect.
2. Shop Drawings shall be prepared by persons with the following qualifications:
   a. Trained and certified by manufacturer in fire-alarm system design.
   b. NICET-certified fire-alarm technician, Level III minimum.
   c. Licensed or certified by authorities having jurisdiction.
3. Comply with recommendations in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter in NFPA 72.
4. Include voltage drop calculations for notification appliance circuits.
5. Include battery-size calculations.
6. Include performance parameters and installation details for each detector, verifying that each detector is listed for complete range of air velocity, temperature, and humidity possible when air-handling system is operating.

7. Include plans, sections, and elevations of heating, ventilating, and air-conditioning ducts, drawn to scale and coordinating installation of duct smoke detectors and access to them. Show critical dimensions that relate to placement and support of sampling tubes, detector housing, and remote status and alarm indicators. Locate detectors according to manufacturer's written recommendations.
8. Include 1/8-inch scale floor plans to indicate final outlet locations showing address of each addressable device. Show size and route of cable and conduits.
9. Show details of graphic maps.
10. Provide written Warranty as follows
    a. The Fire System shall have a 1 year warranty starting for the date of Beneficial Occupancy.
    b. Batteries shall have a full 1-year warranty and a 10-year pro rata warranty starting for the date of Beneficial Occupancy.

B. Quality Assurance/Control Submittals:
1. Product Data: For each type of product indicated.
2. Qualification Data: Provide Certification form, from the manufacturer, that the Installer and Persons preparing Shop Drawings are Qualified by the manufacturer. Submit qualifications simultaneously with Product Data.
3. Field quality-control reports.

1.5 CLOSEOUT DOCUMENTS

A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals:
1. Operation and Maintenance Data: For fire-alarm systems and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:
    a. Comply with the "Records" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.
    b. Provide "Record of Completion Documents" according to NFPA 72 article "Permanent Records" in the "Records" Section of the "Inspection, Testing and Maintenance" Chapter.
    c. Record copy of site-specific software.
    d. Provide "Maintenance, Inspection and Testing Records" according to NFPA 72 article of the same name and include the following:
        1) Frequency of testing of installed components.
        2) Frequency of inspection of installed components.
        3) Requirements and recommendations related to results of maintenance.
        4) Manufacturer's user training manuals.
    e. Manufacturer's required maintenance related to system warranty requirements.
    f. Abbreviated operating instructions for mounting at fire-alarm control unit.
2. Software and Firmware Operational Documentation:
    a. Software operating and upgrade manuals.
    b. Program Software Backup: On magnetic media or compact disk, complete with data files.
    c. Device address list.
    d. Printout of software application and graphic screens.
3. Extra Materials: Receipt for extra materials.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Personnel shall be trained and certified by manufacturer for installation of units required for this Project.
1. Installation shall be by personnel certified by NICET as fire-alarm Level II technician.
2. Distributors shall also be certified by the manufacturer.

B. Source Limitations for Fire-Alarm System and Components: Obtain fire-alarm system from single source from single manufacturer. Contractor shall confirm manufacturer as part of their bid.

C. Fire Alarm Wire and Cable Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
   1. Flame-Spread Index: 25 or less.
   2. Smoke-Developed Index: 50 or less.

D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

1.7 PROJECT CONDITIONS

A. Interruption of Existing Fire-Alarm Service: Do not interrupt fire-alarm service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary guard service according to requirements indicated:
   1. Notify Construction Manager no fewer than two weeks in advance of proposed interruption of fire-alarm service.
   2. Do not proceed with interruption of fire-alarm service without Construction Manager's written permission.

1.8 SEQUENCING AND SCHEDULING

A. Existing Fire-Alarm Equipment: While building is occupied by Owner prior to construction activities, maintain existing equipment fully operational. Existing system will be deactivated during construction. Coordinate with fire alarm monitoring company, Owner, and Construction Manager for duration of fire alarm outage during summer break.

B. Schedule interim checks of system during construction as required to validate new work and maintain schedule. Update Owner and CM with biweekly construction progress updates.

C. Equipment Removal: Remove existing disconnected fire-alarm equipment. Wiring shall be removed at Pleasant View. Wiring in good condition may be reused at Zionsville Middle School.

1.9 SOFTWARE SERVICE AGREEMENT

A. Comply with UL 864.

B. Technical Support: Beginning with Substantial Completion, provide software support for two years.

C. Upgrade Service: Update software to latest version at Project completion. Install and program software upgrades that become available within two years from date of Substantial Completion. Upgrading software shall include operating system. Upgrade shall include new or revised licenses for use of software.
   1. Provide 30 days' notice to Owner to allow scheduling and access to system.

1.10 EXTRA MATERIALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Lamps for Remote Indicating Lamp Units: Quantity equal to 10 percent of amount installed, but no fewer than 1 unit.
   2. Lamps for Strobe Units: Quantity equal to 10 percent of amount installed, but no fewer than 1 unit.
   3. Smoke Detectors, Fire Detectors: Quantity equal to 10 percent of amount of each type installed, but no fewer than 1 unit of each type.
   4. Detector Bases: Quantity equal to 2 percent of amount of each type installed, but no fewer than 1 unit of each type.
   5. Keys and Tools: One extra set for access to locked and tamperproofed components.
   6. Audible and Visual Notification Appliances: One of each type installed.

7. Fuses: Two of each type installed in the system.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Provide the following to match district standard:
   1. NOTIFIER; part of the Honeywell's Fire Systems Group, Onyx Series FACP
   2. EST, Edwards to match existing equipment at Zionsville Community High School

2.2 SYSTEMS OPERATIONAL DESCRIPTION

A. Fire-alarm signal initiation shall be by one or more of the following devices and systems:
   1. Manual stations.
   2. Heat detectors.
   3. Smoke detectors.
   4. Duct smoke detectors.
   5. Automatic sprinkler system water flow.
   6. Fire-extinguishing system operation, including kitchen hoods.
   7. Water flow switches
   8. Fire standpipe system.

B. Fire-alarm signal shall initiate the following actions:
   1. Continuously operate alarm notification appliances.
   2. Identify alarm at fire-alarm control unit and remote annunciators.
   3. Transmit an alarm signal to the remote alarm receiving station.
   4. Unlock electric door locks in designated egress paths.
   5. Release fire and smoke doors held open by magnetic door holders.
   6. Activate voice/alarm communication system.
   7. Switch designated heating, ventilating, and air-conditioning equipment controls to fire-alarm mode.
   8. Close smoke dampers in air ducts of designated air-handling duct systems.
   9. Transmit an alarm signal to building management system per air-handling systems zone.
   10. Recall elevators to primary or alternate recall floors by designated detectors.
   11. Activate elevator shunt-trip circuit breakers by designated detectors.
   12. Activate kitchen equipment shunt-trip circuit breakers on fire-extinguishing system operation.
   13. Activate emergency lighting control for theatrical lighting system.
   14. Activate emergency shutoffs for gas and fuel supplies, including emergency generators where required by local codes.
   15. Record events in the system memory.

C. Supervisory signal initiation shall be by one or more of the following devices and actions:
   1. Valve supervisory switch.
   2. Low-air-pressure switch of a dry-pipe sprinkler system.
   3. Elevator shunt-trip supervision.
   4. Kitchen equipment shunt-trip supervision.

D. System trouble signal initiation shall be by one or more of the following devices and actions:
   1. Open circuits, shorts, and grounds in designated circuits.
   2. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
   3. Loss of primary power at fire-alarm control unit.
   4. Ground or a single break in fire-alarm control unit internal circuits.
   5. Abnormal ac voltage at fire-alarm control unit.
   6. Break in standby battery circuitry.
   7. Failure of battery charging.
   8. Abnormal position of any switch at fire-alarm control unit or annunciator.
   9. Fire-pump power failure, including a dead-phase or phase-reversal condition.

10. Low-air-pressure switch operation on a dry-pipe or preaction sprinkler system.
11. First Responder Unit – Low battery (Supervisory).
12. First Responder Unit – Loss of power (Supervisory).

E. System Trouble and Supervisory Signal Actions: Initiate notification appliance and annunciate at fire-alarm control unit and remote annunciators.

2.3 FIRE-ALARM CONTROL UNIT

A. General Requirements for Fire-Alarm Control Unit:
1. Field-programmable, microprocessor-based, modular, power-limited design with electronic modules, complying with UL 864 and listed and labeled by an NRTL.
   a. System software and programs shall be held in flash electrically erasable programmable read-only memory (EEPROM), retaining the information through failure of primary and secondary power supplies.
   b. Include a real-time clock for time annotation of events on the event recorder and printer.
2. Addressable initiation devices that communicate device identity and status.
   a. Smoke sensors shall additionally communicate sensitivity setting and allow for adjustment of sensitivity at fire-alarm control unit.
   b. Temperature sensors shall additionally test for and communicate the sensitivity range of the device.
3. Addressable control circuits for operation of mechanical equipment.

B. Alphanumeric Display and System Controls: Arranged for interface between human operator at fire-alarm control unit and addressable system components including annunciation and supervision. Display alarm, supervisory, and component status messages and the programming and control menu.
1. Annunciator and Display: Liquid-crystal type, 2 line(s) of 40 characters, minimum.
2. Keypad: Arranged to permit entry and execution of programming, display, and control commands and to indicate control commands to be entered into the system for control of smoke-detector sensitivity and other parameters.

C. Circuits:
1. Initiating Device, Notification Appliance, and Signaling Line Circuits: NFPA 72, Class B.
   a. Initiating Device Circuits: Style A.
   b. Notification Appliance Circuits: Style Y.
   c. Signaling Line Circuits: Style 4.
   d. Install no more than 70 percent rated capacity of addressable devices on each signaling line circuit.
   e. Install no more than 70 percent rated capacity of notification appliances on each notification appliance circuit.
2. Serial Interfaces: One RS-232 or USB port for service.

D. Elevator Recall:
1. Smoke detectors at the following locations shall initiate automatic elevator recall.
   a. Elevator lobby detectors except the lobby detector on the designated floor.
   b. Smoke detector in elevator machine room.
   c. Smoke detectors in elevator hoistway.
2. Elevator lobby detectors located on the designated recall floors shall be programmed to move the cars to the alternate recall floor.
3. Water-flow alarm connected to sprinkler in an elevator shaft and elevator machine room shall shut down elevators associated with the location without time delay.
   a. Water-flow switch associated with the sprinkler in the elevator pit may have a delay to allow elevators to move to the designated floor.
4. Heat detectors in alarm installed in an elevator shaft and elevator machine room shall shut down elevators associated with the location without time delay.

E. Door Controls: Door hold-open devices that are controlled by smoke detectors at doors in smoke barrier walls shall be connected to fire-alarm system.

F. Remote Smoke-Detector Sensitivity Adjustment: Controls shall select specific addressable smoke detectors for adjustment, display their current status and sensitivity settings, and change those settings. Allow controls to be used to program repetitive, time-scheduled, and automated changes in sensitivity of specific detector groups. Record sensitivity adjustments and sensitivity-adjustment schedule changes in system memory, and print out the final adjusted values on system printer.

G. Transmission to Remote Alarm Receiving Station: Automatically transmit alarm, supervisory, and trouble signals to a remote alarm station.

H. Primary Power: 24-V dc obtained from 120-V ac service and a power-supply module. Initiating devices, notification appliances, signaling lines, trouble signals, supervisory and digital alarm communicator transmitters shall be powered by 24-V dc source.
   1. Alarm current draw of entire fire-alarm system shall not exceed 80 percent of the power-supply module rating.

I. Secondary Power: 24-V dc supply system with batteries, automatic battery charger, and automatic transfer switch.
   1. Backup Battery: Premium, valve-regulated, recombinant-sealed, lead-calcium battery; spill proof; with a warranty per PART 1 above. Provide a single-stage, constant-voltage-current, limited battery charger, comply with battery manufacturer's written instructions for battery terminal voltage and charging current recommendations for maximum battery life.
   2. Backup Power Supply Capacity: Comply with NFPA 72, but not less than 24 hours normal and 30 minutes alarm operation.

J. Instructions: Computer printout or typewritten instruction card mounted behind a plastic or glass cover in a stainless-steel or aluminum frame. Include interpretation and describe appropriate response for displays and signals. Briefly describe the functional operation of the system under normal, alarm, and trouble conditions.

2.4 MANUAL FIRE-ALARM BOXES

A. General Requirements for Manual Fire-Alarm Boxes: Comply with UL 38. Boxes shall be finished in red with molded, raised-letter operating instructions in contrasting color; shall show visible indication of operation; and shall be mounted on recessed outlet box. If indicated as surface mounted, provide manufacturer's surface back box.
   1. Single-action mechanism, pull-lever type; with integral addressable module arranged to communicate manual-station status (normal, alarm, or trouble) to fire-alarm control unit.
   2. Station Reset: Key- or wrench-operated switch.
   3. Indoor Protective Shield: Factory-fabricated clear plastic enclosure hinged at the top to permit lifting for access to initiate an alarm. Lifting the cover actuates an integral battery-powered audible horn intended to discourage false-alarm operation.

2.5 SYSTEM SMOKE DETECTORS

A. General Requirements for System Smoke Detectors:
   1. Comply with UL 268; operating at 24-V dc, nominal.
   2. Detectors shall be four-wire type. If detectors are UL listed with the Fire Alarm Control Panel for power, alarm and trouble using a 2 wire system, then 2 wire detectors may be used.
   3. Base Mounting: Detector and associated electronic components shall be mounted in a twist-lock module that connects to a fixed base. Provide terminals in the fixed base for connection to building wiring.
   4. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.

5. Integral Visual-Indicating Light: LED type indicating detector has operated and power-on status.
6. Remote Control: Unless otherwise indicated, detectors shall be analog-addressable type, individually monitored at fire-alarm control unit for calibration, sensitivity, and alarm condition and individually adjustable for sensitivity by fire-alarm control unit.
    a. Rate-of-rise temperature characteristic shall be selectable at fire-alarm control unit for 15 or 20 deg F per minute.
    b. Fixed-temperature sensing shall be independent of rate-of-rise sensing and shall be settable at fire-alarm control unit to operate at 135 or 155 deg F .
    c. Provide multiple levels of detection sensitivity for each sensor.

B. Photoelectric Smoke Detectors:
1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:
    a. Primary status.
    b. Device type.
    c. Present average value.
    d. Present sensitivity selected.
    e. Sensor range (normal, dirty, etc.).
3. **Multi-criteria detectors:**
    a. Detect smoke, heat and carbon monoxide in a single detector. Compatible with existing Edwards EST fire alarm panel. SIGA-OSHCD or equivalent.

C. Duct Smoke Detectors: Photoelectric type complying with UL 268A.
1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:
    a. Primary status.
    b. Device type.
    c. Present average value.
    d. Present sensitivity selected.
    e. Sensor range (normal, dirty, etc.).
3. Weatherproof Duct Housing Enclosure: NEMA 250, Type 4X; NRTL listed for use with the supplied detector.
4. Each sensor shall have multiple levels of detection sensitivity.
5. Sampling Tubes: Design and dimensions as recommended by manufacturer for specific duct size, air velocity, and installation conditions where applied.

2.6 HEAT DETECTORS

A. General Requirements for Heat Detectors: Comply with UL 521.

B. Heat Detector, Combination Type: Actuated by either a fixed temperature of 135 deg F or a rate of rise that exceeds 15 deg F per minute unless otherwise indicated.
1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

C. Heat Detector, Fixed-Temperature Type: Actuated by temperature that exceeds a fixed temperature of 190 deg F.
1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

2.7 CARBON MONOXIDE DETECTORS

A. Description: Listed for connection to fire-alarm system.
   1. Mounting: Adapter plate for outlet box mounting.
   2. Detector shall provide a means to test by introducing test carbon monoxide into the sensing cell.
   3. Detector shall provide alarm contacts and trouble contacts.
   4. Detector shall send trouble alarm when nearing end-of-life, power supply problems, or internal faults.
   5. Detector shall be listed to comply with UL 2075.
   6. Detectors shall be located, mounted, and wired according to manufacturer's written instructions.
   7. Test button simulates an alarm condition.

2.8 NOTIFICATION APPLIANCES

A. General Requirements for Notification Appliances: Connected to notification appliance signal circuits, zoned as indicated, with screw terminals for system connections, and shall be mounted on recessed outlet box. If indicated as surface mounted, provide manufacturer's surface back box.
   1. Combination Devices: Factory-integrated audible and visible devices in a single-mounting assembly, equipped for mounting as indicated and with screw terminals for system connections.

B. Horns: Electric-vibrating-polarized type, 24-V dc; with provision for housing the operating mechanism behind a grille. Comply with UL 464. Horns shall produce a sound-pressure level of 90 dBA, measured 10 feet from the horn, using the coded signal prescribed in UL 464 test protocol.

C. Visible Notification Appliances: Xenon strobe lights comply with UL 1971, with clear or nominal white polycarbonate lens mounted on an aluminum faceplate. The word "FIRE" is engraved in minimum 1-inch- high letters on the lens.
   1. Rated Light Output: 110 cd, unless indicated otherwise.
   2. Mounting: Wall mounted unless otherwise indicated.
   3. For units with guards to prevent physical damage, light output ratings shall be determined with guards in place.
   4. Flashing shall be in a temporal pattern, synchronized with other units.
   5. Strobe Leads: Factory connected to screw terminals.
   6. Mounting Faceplate: Factory finished, red.

D. Weatherproof Bells: Electric-vibrating, 24-V dc, under-dome type; with provision for housing operating mechanism behind bell. Bells shall produce a sound-pressure level of 94 dBA, measured 10 feet from bell. 10-inch size, unless otherwise indicated.

2.9 NOTIFICATION APPLIANCE CIRCUIT POWER SUPPLY UNITS

A. General Requirements for Notification Appliance Circuit Power Supply Unit:
   1. Power-limited design, complying with UL 864 and listed and labeled by an NRTL.

B. Notification Appliance Circuits: NFPA 72, Class B, Style Y.
   1. Install no more than 70 percent rated capacity of notification appliances on each notification appliance circuit.

C. Primary Power: 24-V dc obtained from 120-V ac service and a power-supply module. Initiating devices, notification appliances, trouble signals, and supervisory signals shall be powered by 24-V dc source.
   1. Alarm current draw of entire notification appliance circuit power supply unit shall not exceed 80 percent of the power-supply module rating.

D. Secondary Power: 24-V dc supply system with batteries, automatic battery charger, and automatic transfer switch.
   1. Backup Battery: Premium, valve-regulated, recombinant-sealed, lead-calcium battery; spill proof; with a full 1-year warranty and a pro rata 19-year warranty. With single-stage, constant-voltage-current, limited battery charger, comply with battery manufacturer's written instructions for battery terminal voltage and charging current recommendations for maximum battery life.
   2. Backup Power Supply Capacity: Comply with NFPA 72, but not less than 24 hours normal and 30 minutes alarm operation.

2.10 MAGNETIC DOOR HOLDERS

A. Products: Subject to compliance with requirements, provide one of the following products:
   1. Dorma-USA: EM508-24120
   2. Edwards Signaling: 1508-AQN5
   3. GE Security: 1508-AQN5
   4. Honeywell Notifier: FM996
   5. LCN Closers: SEM 7830/ SEM 1960
   6. Rixson Specialty Door Controls: 996/ 991
   7. Sargent Lock: 1560
   8. Siemens: SDH-3

B. Description: Units are equipped for wall mounting complete with matching doorplate.
   1. Electromagnet: Requires no more than 3 W to develop 25-lbf holding force.
   2. Wall-Mounted Units: Surface mounted at least 2.375-inches deep, with maximum 1.625-inch deep pin-pivoted door armature. The use of ball-jointed catches and extension links on door armatures is not permitted.
   3. Rating: 120-V ac.

C. Material and Finish: Brushed or painted aluminum.

2.11 REMOTE ANNUNCIATOR

A. Description: Annunciator functions shall match those of fire-alarm control unit for alarm, supervisory, and trouble indications. Manual switching functions shall match those of fire-alarm control unit, including acknowledging, silencing, resetting, and testing.
   1. Mounting: Flush or Surface as required cabinet, NEMA 250, Type 1.

B. Display Type and Functional Performance: Alphanumeric display and LED indicating lights shall match those of fire-alarm control unit. Provide controls to acknowledge, silence, reset, and test functions for alarm, supervisory, and trouble signals.
   1. Graphic Annunciator:
      a. Backbox: Cold rolled steel with welded and ground seams, finished with black polyester powder coating.
      b. Door: Satin finished stainless steel or brushed aluminum, with concealed piano hinge, secured by a key lock with no other visible fasteners.
      c. Graphic: Reversed printed polycarbonate lexan laminated to aluminum, with full color image, and LEDs indicating alarm, trouble, or supervisory condition, and fire alarm device type. Building detail shall be selected and color-coded as directed by Owner and Architect/Engineer.
      d. Provide keyed lamp test switch.
      e. Provide "power-on" LED indicator.
      f. Wiring: LED and switch wiring shall be neatly harnessed to designated terminal blocks located in annunciator backbox.
      g. Install alphanumeric display in face of graphic.
      h. Install graphic annunciator adjacent to alphanumeric display.
   2. Graphic Map:

a. Graphic: Full color image printed on the reverse side of a 10 mil polycarbonate Lexan laminated to a 1/8-inch rigid backing with a removable adhesive for future replacement.
b. Frame: Black anodized aluminum frame with concealed security hanging system to prevent unauthorized removal.
c. Location of fire-alarm control unit, main graphic map and other graphic maps shall be shown in red with "YOU ARE HERE" printed in red. Detection devices, nomenclature, and building detail shall be color coded as selected by Owner and Architect/Engineer.
d. Mounting: Adjacent to remote annunciator.

2.12 ADDRESSABLE INTERFACE DEVICE

A. Description: Microelectronic monitor module, NRTL listed for use in providing a system address for alarm-initiating devices for wired applications with normally open contacts.

B. Integral Relay: Capable of providing a direct signal to the following:
1. Circuit-breaker shunt trip for power shutdown.
2. Heating, ventilating, and air-conditioning equipment controllers for power shutdown.
3. Smoke dampers for closing.
4. Magnetic door holders, electric locks, coiling doors and grilles for releasing.
5. Building management system for equipment shutdown and alarm notification.
6. Gas and fuel solenoid valves for emergency shut-off.

C. Voltage Sensing Relay: Capable of detecting presence of 120 V ac for supervision of control power for shunt-trip circuit breakers.

2.13 DIGITAL ALARM COMMUNICATOR TRANSMITTER

A. Digital alarm communicator transmitter shall be acceptable to the remote central station and shall comply with UL 632 and be listed and labeled by an NRTL, and comply with NFPA 72, 2016 edition.

B. Dual-Path Communicator: Primary transmission channel for Internet Protocol (IP) communication connection and secondary transmission channel for wireless cellular communication, and shall comply with UL 864 and be listed and labeled by an NRTL, and comply with NFPA 72, 2016 edition. Wireless communications protocol shall be compatible with the Owner's wireless service provider communications protocol. A separate, roof mounted antenna for wireless cellular communication shall be provided as required if signal reception from internal antenna on communicator is not sufficient.

C. Functional Performance: Communicator units shall receive an alarm, supervisory, or trouble signal from fire-alarm control panel and automatically dial a preset number via for a remote central station via dedicated Internet Protocol (IP) communication. A secondary transmission channel via wireless cellular communicator shall also be employed. When contact is made with central station, signals shall be transmitted. If service on either channel is interrupted for longer than 45 seconds, transmitter shall initiate a local trouble signal and transmit the signal indicating loss of channel to the remote alarm receiving station over the remaining channel within 4 minutes. Transmitter shall automatically report communication service restoration to the central station. Local functions and display at the digital alarm communicator transmitter shall include the following:
1. Verification that both transmission channels are available.
2. Programming device.
3. LED display.
4. Manual test report function and manual transmission clear indication.
5. Communications failure with the central station or fire-alarm control panel.

D. Digital data transmission shall include the following:
1. Address of the alarm-initiating device.
2. Address of the supervisory signal.

3. Address of the trouble-initiating device.
4. Loss of ac supply or loss of power.
5. Low battery.
6. Abnormal test signal.
7. Communication bus failure.

E. Self-Test: Conducted automatically every 24 hours with report transmitted to central station.

2.14 SMOKE DAMPERS

A. Smoke dampers, if existing. Provide fire alarm interface device, smoke dampers, remote alarm indicator and control wiring as required to operate smoke dampers as required in system operational description above.

2.15 PATHWAYS

A. Support of Open Cabling: NRTL labeled for support of Category 6 cabling, designed to prevent degradation of cable performance and pinch points that could damage cable.
1. Support brackets with cable tie slots for fastening cable ties to brackets.
2. Lacing bars, spools, J-hooks, and D-rings.
3. Straps and other devices.
4. Cable Ties: Comply with Division 26 Section “Identification of Electrical Systems.”

B. Cable Trays: Comply with requirements in Division 26 Section "Cable Trays for Electrical Systems."

C. Conduit and Boxes: Comply with requirements in Division 26 Section "Raceway and Boxes for Electrical Systems."
1. Outlet boxes shall be no smaller than 2 inches wide, 3 inches high, and 2-1/2 inches deep.

2.16 FIRE ALARM WIRE AND CABLE

A. General Wire and Cable Requirements: NRTL listed and labeled as complying with NFPA 70, Article 760.

B. Signaling Line Circuits: Twisted, shielded pair, not less than No. 18 AWG.

C. Non-Power-Limited Circuits: Solid-copper conductors with 600-V rated, 75 deg C, color-coded insulation.
1. Low-Voltage Circuits: No. 16 AWG, minimum.
2. Line-Voltage Circuits: No. 12 AWG, minimum.
3. Multiconductor Armored Cable: NFPA 70, Type MC, copper conductors, Type TFN/THHN conductor insulation, copper drain wire, copper armor with red identifier stripe, NTRL listed for fire alarm and cable tray installation, plenum rated, and complying with requirements in UL 2196 for a 2-hour rating.

2.17 IDENTIFICATION PRODUCTS

A. Comply with UL 969 for a system of labeling materials, including label stocks, laminating adhesives, and inks used by label printers.

B. Comply with requirements in Division 26 Section "Identification for Electrical Systems."

2.18 DEVICE GUARDS

A. In Gymnasiums and other spaces subject to damage, provide device guards around devices. Guards for manual pull stations shall not impede operation of pull station. Refer to drawing for additional information.

B. Description: Welded wire mesh of size and shape for the manual station, smoke detector, gong, or other device requiring protection.
   1. Factory fabricated and furnished by manufacturer of device.
   2. Finish: Paint of color to match the protected device.

PART 3 - EXECUTION

3.1 INSTALLATION OF PATHWAYS

A. Comply with requirements in Division 26 Section "Raceway and Boxes for Electrical Systems." for installation of conduits and wireways.

3.2 FIRE ALARM WIRING INSTALLATION

A. Comply with NECA 1 and NFPA 72.

B. Wiring Method: Install wiring in raceway according to Division 26 Section "Raceway and Boxes for Electrical Systems," and cable tray except as follows: within consoles, cabinets, desks, and counters and except in accessible ceiling spaces where unenclosed wiring method may be used. Use NRTL-listed plenum cable in environmental air spaces, including plenum ceilings. Conceal raceway and cables except in unfinished spaces. All vertical cable exposed to abuse, inside walls or surface mounted up to 12 feet above finished floor, shall be in conduit.

C. Wiring within Enclosures: Separate power-limited and non-power-limited conductors as recommended by manufacturer. Install conductors parallel with or at right angles to sides and back of the enclosure. Bundle, lace, and train conductors to terminal points with no excess. Connect conductors that are terminated, spliced, or interrupted in any enclosure associated with the fire alarm system to terminal blocks. Mark each terminal according to the system's wiring diagrams. Make all connections with approved crimp-on terminal spade lugs, pressure-type terminal blocks, or plug connectors.

D. Cable Taps: Use numbered terminal strips in junction, pull, and outlet boxes, cabinets, or equipment enclosures where circuit connections are made.

E. Color-Coding: Color-code fire alarm conductors differently from the normal building power wiring. Use one color-code for alarm circuit wiring and another for supervisory circuits. Color-code audible alarm-indicating circuits differently from alarm-initiating circuits. Use different colors for visible alarm-indicating devices. Paint fire alarm system junction boxes and covers red.

F. Wiring to Remote Alarm Transmitting Device: 1-inch conduit between the fire alarm control panel and the transmitter. Install number of conductors and electrical supervision for connecting wiring as needed to suit monitoring function.

3.3 REMOVAL OF CONDUCTORS AND CABLES
   1. Remove abandoned conductors and cables. Refer to Division 26 Section " Electrical Demolition" Specification.

3.4 EQUIPMENT INSTALLATION

A. Comply with NECA 305.

B. Comply with NFPA 72 for installation of fire-alarm equipment.

C. Equipment Mounting: Install wall-mounted equipment, with tops of cabinets not more than 72 inches above the finished floor.

D. HVAC: Locate detectors not closer than 3 feet from air-supply diffuser on return-air opening.

E. Duct Smoke Detectors: Comply with NFPA 72 and NFPA 90A. Install sampling tubes so they extend the full width of duct.
   1. Provide for air-handling units with capacity of 2000 cfm or greater.
   2. Provide for variable air volume type fan-powered terminal units served by return air plenums with capacity of 2000 cfm or greater.
   3. Provide within 5 feet of smoke dampers.

F. Heat Detectors in Elevator Shafts: Coordinate temperature rating and location with sprinkler rating and location.

G. Remote Status and Alarm Indicators: Install near each smoke detector and each sprinkler water-flow switch and valve-tamper switch that is not readily visible from normal viewing position.
   1. Install flush in ceiling below duct smoke detectors, unless otherwise indicated.
   2. Install in public space near device they monitor. Do not install in normally unoccupied spaces.

H. Audible Alarm-Indicating Devices: Install not less than 6 inches below the ceiling. Install bells and horns on flush-mounted back boxes with the device-operating mechanism concealed behind a grille.

I. Visible Alarm-Indicating Devices: Install adjacent to each alarm bell or alarm horn and at least 6 inches below the ceiling.

J. Notification Appliance Circuit Power Supply Units: Provide quantity of units required for notification appliances indicated.
   1. Provide system smoke detector at each group of units.
   2. Provide 120 V, 20 A circuit to each unit.

K. Mechanical Equipment Rooms and Kitchens: Provide 190 deg F fixed heat detectors.

L. Device Location-Indicating Lights: Locate in public space near the device they monitor.

M. Fire-Alarm Control Unit: Surface mounted, with tops of cabinets not more than 72 inches above the finished floor.

N. Annunciator: Install with top of panel not more than 72 inches above the finished floor.

O. Wire Guards: Install wire guards on fire alarm devices located in gymnasia, multi-purpose rooms, stages, and shop areas.

P. Sprinkler Bell: Install weatherproof bell at fire department connections.

Q. Digital Alarm Communicator Transmitter: Where digital alarm communicator transmitter is not installed in fire-alarm control unit, provide 1-inch conduit between fire-alarm control unit and digital alarm communicator transmitter.

R. Devices Supported by Ceiling Systems/Mounted on Acoustic Ceiling Tiles: Support devices from ceiling system using tile bridges (fire alarm system manufacturer's tile bridge accessory if available from supplied fire alarm device manufacturer). Devices shall be installed tight to acoustic ceiling tiles, with no visible gaps between device faceplate and ceiling.

3.5 CONNECTIONS

A. For fire-protection systems related to overhead coiling fire doors and coiling counter fire doors in fire-rated walls and partitions and in smoke partitions, comply with requirements in Division 08 Section "Overhead Coiling Fire Doors" and Division 08 Section "Coiling Counter Fire Doors." Connect hardware and devices to fire-alarm system.

1. Verify that hardware and devices are NRTL listed for use with fire-alarm system in this Section before making connections.

B. Make addressable connections with a supervised interface device to the following devices and systems. Install the interface device less than 3 feet from the device controlled. Make an addressable confirmation connection when such feedback is available at the device or system being controlled.
   1. Smoke dampers in air ducts of designated air-handling duct systems.
   2. Air-handling unit controllers of designated air-handling systems.
   3. Variable air volume type fan-powered box controllers of designated air-handling systems.
   4. Unlock electric door locks in designated egress paths.
   5. Release magnetic door holders.
   6. Activate circuit breaker shunt-trip to elevator controller.
   7. Activate circuit breaker shunt-trip to designated kitchen equipment.
   8. Alarm-initiating connection to building management system of designated air-handling duct system.
   9. Alarm-initiating connection to elevator recall system and components.
   10. Alarm-initiating connection to activate theatrical lighting control.
   11. Alarm-initiating connection to activate emergency shutoffs for gas and fuel supplies.
   12. Alarm-initiating connection to overhead coiling fire doors and coiling counter fire doors.
   13. Supervisory connections at valve supervisory switches.
   14. Supervisory connections at low-air-pressure switch of each dry-pipe sprinkler system.
   15. Supervisory connections at elevator shunt trip breaker.
   16. Supervisory connections at kitchen equipment shunt trip breakers.
   17. Supervisory connections at fire-pump power failure including a dead-phase or phase-reversal condition.
   18. Supervisory connections at fire-pump engine control panel.
   19. Supervisory connections at first responder distributed antenna system.

3.6 IDENTIFICATION

A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."

B. Install framed instructions in a location visible from fire-alarm control unit.

3.7 FIRESTOPPING

A. Comply with requirements in Division 07 Section "Firestopping."

3.8 GROUNDING

A. Ground fire-alarm control unit and associated circuits; comply with IEEE 1100. An equipment grounding conductor shall be installed in the branch circuit from the main service ground to fire-alarm control unit.

3.9 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.

B. Tests and Inspections:
   1. Visual Inspection: Conduct visual inspection prior to testing.
      a. Inspection shall be based on completed Record Drawings and system documentation that is required by NFPA 72 in its "Completion Documents, Preparation" Table in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter.
      b. Comply with "Visual Inspection Frequencies" Table in the "Inspection" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72; retain the "Initial/Reacceptance" column and list only the installed components.

2. System Testing: Comply with "Test Methods" Table in the "Testing" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.
3. Factory-authorized service representative shall prepare the "Fire Alarm System Record of Completion" in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter in NFPA 72 and the "Inspection and Testing Form" in the "Records" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.

C. Reacceptance Testing: Perform reacceptance testing to verify the proper operation of added or replaced devices and appliances.

D. Fire-alarm system will be considered defective if it does not pass tests and inspections.

E. Prepare test and inspection reports.

F. Maintenance Test and Inspection: Perform tests and inspections listed for weekly, monthly, quarterly, and semiannual periods. Use forms developed for initial tests and inspections.

G. Annual Test and Inspection: One year after date of Substantial Completion, test fire-alarm system complying with visual and testing inspection requirements in NFPA 72. Use forms developed for initial tests and inspections.

3.10 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain fire-alarm system.

B. Coordinate with Owner to test installed multi-criteria sensors for usage with theatrical smoke. Adjust sensors and programming as required to avoid alarm under theatrical smoke usage.

END OF SECTION 28 31 11

SECTION 32 31 21 - DECORATIVE METAL GATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:
   1. Swing gates with decorative steel fence infill.
   2. Swing gate hardware.

B. Related Sections:
   1. Division 03 Section "Cast-in-Place Concrete."
   2. Division 08 Section "Door Hardware" for key cylinder.

1.3 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section “Quality Requirements,” to design chain-link fence, gate frameworks, and concrete foundations for gate supports.

B. Structural Performance: Chain-link fence and gate frameworks shall withstand the design wind loads and stresses for fence height(s) and water explosive conditions indicated according to ASCE/SEI 7.
   1. Design Wind Load: 25 psi, unless otherwise noted.
      a. Minimum Post Size and Maximum Spacing: Determine according to CLFMI WLG 2445, based on mesh size and pattern specified.

1.4 SUBMITTALS

A. Shop Drawings: For gates. Include plans, elevations, sections, details, and attachments to other work.

B. Samples: For each fence material and for each color specified.
   1. Color samples approximately 8 inches by 8 inches.

C. Quality Assurance/Control Submittals:
   1. Product Data: For each type of product indicated.
      a. Gates and hardware
   2. Qualification Data: For professional engineer.
   3. Delegated-Design Submittal: For fences and gates framework indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
      a. Delegated-design should include concrete foundations for gate supports.

1.5 CLOSEOUT DOCUMENTS

A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals:
   1. Maintenance Data: For gate operators to include in maintenance manuals.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.

B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code – Steel or AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."

C. UL Standard: Provide gate operators that comply with UL 325.

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

B. Interruption of Existing Utility Service: Do not interrupt utility services to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
   1. Notify Architect no fewer than two days in advance of proposed interruption of utility services.
   2. Do not proceed with interruption of utility services without Architect's written permission.

1.8 WARRANTY

A. Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of fences and gates that fail in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to, the following:
      a. Failure to comply with performance requirements.
      b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
   2. Warranty Period: Gates five (5) and infill components fifteen (15) years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Basis-of-Design: Barrier Gate System as manufactured by BASTEEL Perimeter Systems.

2.2 STEEL AND IRON

A. Plates, Shapes, and Bars: ASTM A 36/A 36M.

B. Tubing: ASTM A 500, cold formed steel tubing.

C. Galvanized-Steel Sheet: ASTM A 653/A 653M, structural quality, Grade 50, with G90 coating.

D. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, structural quality, Grade 50, with AZ60 coating.

E. Castings: Either gray or malleable iron unless otherwise indicated.
   1. Gray Iron: ASTM A 48/A 48M, Class 30.
   2. Malleable Iron: ASTM A 47/A 47M.

2.3 MISCELLANEOUS MATERIALS

A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

B. Concrete: Normal-weight, air-entrained, ready-mix concrete complying with requirements in Division 03 Section "Cast-in-Place Concrete" with a minimum 28-day compressive strength of 3000 psi, 3-inch slump, and 1-inch maximum aggregate size.

C. Nonshrink Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107 and specifically recommended by manufacturer for exterior applications.

2.4 SWING GATES

A. Gate Configuration and size: As indicated.
   1. Two gate locations required.

B. Gate Frame: Steel tubing, minimum of 2 inch x 4 inch x .073 inch wall (14 gauge) reinforced with 1 inch x 2 inch x .060 inch wall (16 gauge) minimum, 50,000 psi minimum yield strength steel tubing in accordance with ASTM A500, zinc coating in accordance with ASTM F1043B.

C. Gate Posts: Conform to ASTM A500.
   1. 6 inch x 6 inch steel, hot dip galvanized to minimum 1.8 oz. per square foot per side. Post
   2. Provide concrete foundation in accordance with Division 03 Section “Cast-in-Place Concrete”.
   3. Gate posts can be anchored to adjacent masonry wall where available for additional horizontal support.

D. Additional Rails or framing: Provide as required by gate size and configuration.

E. Heady duty gate hinge assembly shall be designed for continuous duty and shall utilize precision-ground pre-lubricated sealed bearing assemblies, shielded to protect against normal ambient environmental conditions.
   1. Size: 4 inch bearing.
   2. Hinge welded to gate frame.
   3. Provide hinge strap full perimeter of gate post and secured.

F. Hardware: Manufacturer’s standard hardware including exterior use hinges as required by size of gates, slide bolts, cane rods and lock box.
   1. Two heavy-duty industrial cane rod assemblies for each pair of gates consisting of 1 inch diameter stainless steel cane rod with heavy duty nylon guides.
      a. Provide stainless steel receivers at both open and closed positions for each gate for engaging cane rods.
   2. One heavy-duty stainless steel slid bolt assembly consisting of 1-inch diameter stainless steel slide bolt with provisions for padlocking in closed position.
   3. Locking shall be fabricated to accept padlock by others.

G. Galvanizing: For items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A 123/A 123M unless otherwise indicated. For hardware items, hot-dip galvanize to comply with ASTM A 153/A 153M.

2.5 FABRICATION

A. Gate frame, gate hinge assemblies, stainless steel cane rod, gate latch, posts, gate infill material and accessories shall be provided as integral components of an engineered gate system as detailed in Manufacturer shop drawings.
   1. Gate frame shall be designed and constructed so as to be rigid and self-supporting over the life of product without need for tension cables or turnbuckles to maintain overall squareness.
   2. Gate frame perimeter shall utilize miter cut corners and be free of sharp edges, cuts, bends and weld splatter prior to factory finish being applied.
   3. Gate frame welds shall utilize silicon bronze welding wire conforming to AWS A5.7/ER CUSI-A so as to inhibit corrosion.
   4. Infill materials shall be incased on four sides by gate frame perimeter.

2.6 METALLIC-COATED STEEL FINISHES

A. Galvanized Finish: Clean welds, mechanical connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

B. Surface Preparation: Clean surfaces with nonpetroleum solvent so surfaces are free of oil and other contaminants. After cleaning, apply a zinc-phosphate conversion coating suited to the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

C. High-Performance Coating: Manufacturer's two-coat thermocured paint system consisting of primer bottom coat and a fluoropolymer top coat. Fluoropolymer top coat shall contain not less than 70 percent polyvinylidene difluoride by weight, similar to Kyner 500 PVDF, complying with physical properties and coating performance requirements of AAMA 621.
   1. All exposed surfaces shall receive the high performance coating.
   2. Custom color as selected by Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, construction layout, and other conditions affecting performance of the Work.

B. Do not begin installation before final grading is completed unless otherwise permitted by Architect.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.
   1. Construction layout and field engineering are specified in Division 01 Section "Execution"

3.3 GATE INSTALLATION

A. Install gates according to manufacturer's written instructions.

B. Post Excavation: Drill or hand-excavate holes for posts in firm, undisturbed soil. Excavate holes to a diameter of not less than 4 times post size and a depth of not less than 24 inches plus 3 inches for each foot or fraction of a foot that fence height exceeds 4 feet.

C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.
   1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
   2. Concrete Fill: Place concrete around posts and sleeves and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
      a. Exposed Concrete, where noted: Extend 2 inches above grade. Finish and slope top surface to drain water away from post.
   3. Posts Set in Concrete, unless otherwise noted: Extend post to within 6 inches of specified excavation depth, but not closer than 3 inches to bottom of concrete.

D. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

3.4 ADJUSTING

A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

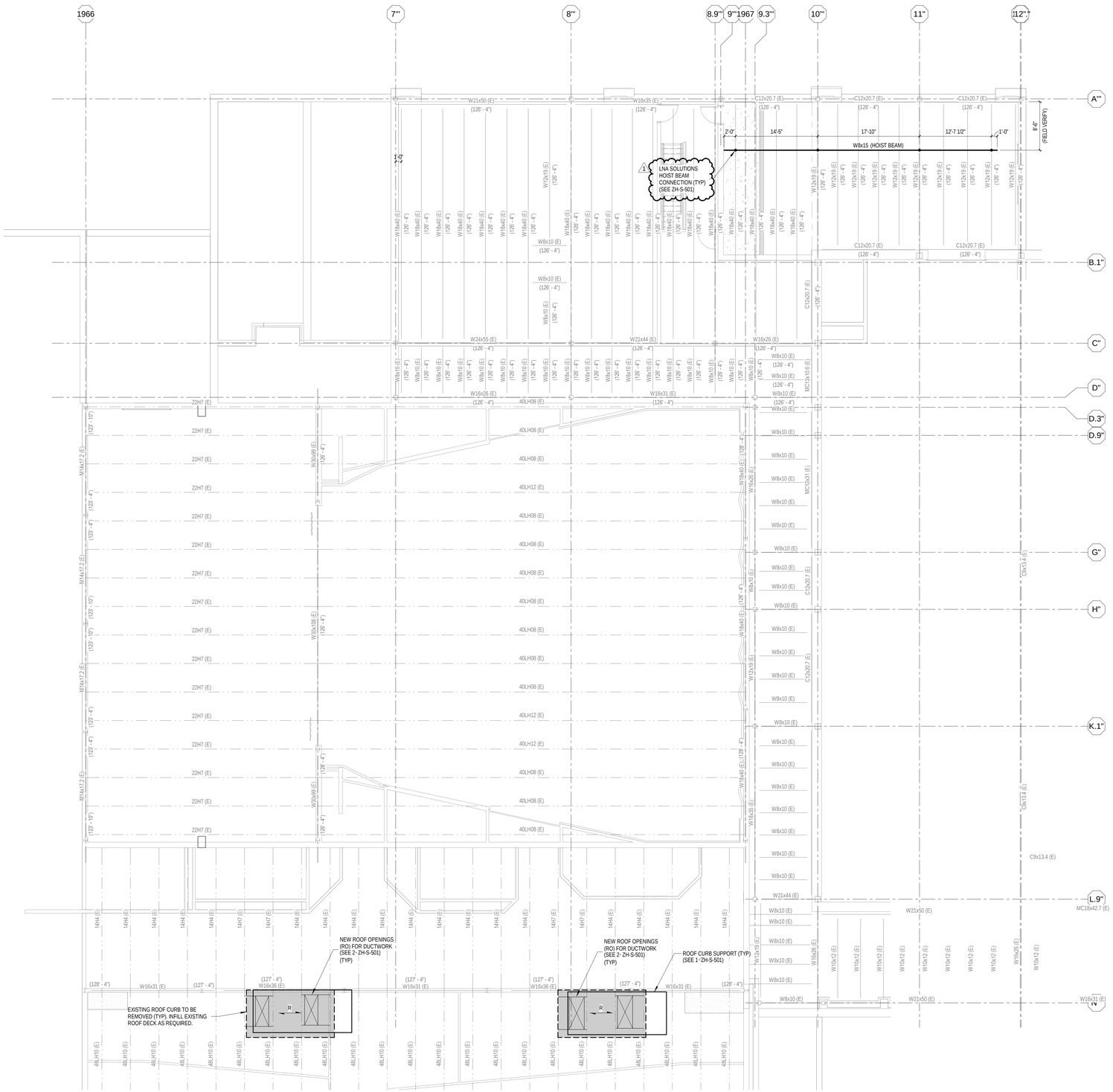
B. Lubricate hardware and other moving parts.

C. Touch-up painting: Where surfaces impacted during installation utilize manufacturer’s supplied touch-up paint in two coats.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's personnel to adjust, operate, and maintain gates.

END OF SECTION 32 31 19



UNIT A - PARTIAL ROOF FRAMING PLAN

1/8" = 1'-0"

PLAN NOTES:

1. REFERENCE ELEVATION = TOP OF EXISTING FINISH FLOOR = 100'-0".
2. TOP OF STEEL (T/STEEL) ELEVATION = SEE PLAN.

FRAMING PLAN NOTES:

1. SEE SHEET ZH-S-001 FOR GENERAL NOTES.
2. SEE SHEET ZH-S-501 STEEL FRAMING DETAILS. TYPICAL DETAILS MAY NOT BE CUT ON PLANS BUT APPLY UNLESS OTHERWISE NOTED.
3. SEE SHEET ZH-S-401 FOR MASONRY WALL BRACING REQUIREMENTS

BEAM LEGEND:

(S) INDICATES SLOPED BEAM. ELEVATIONS AT ENDS ARE TOP OF SLOPED BEAM AT CENTERLINE COLUMN OR AT INTERSECTION WITH OTHER BEAMS.

(E) INDICATES EXISTING FRAMING MEMBER.

RO INDICATES FRAME REQUIRED FOR ROOF VENT. SEE TYP OPENING FRAME (RO). (VERIFY LOCATION WITH ROOF PLAN)

F INDICATES DIRECTION OF FLOOR DECK SPAN (4 1/2" COMP. CONC., U.O.N.).

R INDICATES DIRECTION OF 1 1/2" ROOF DECK SPAN (WR20, U.O.N.).

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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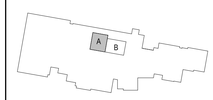
TLF Job No: 2025-363



KEY PLAN

ISSUED FOR BID

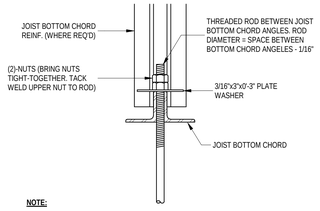
ISAAC A. CHARTON
REGISTERED
No. 10700103
STATE OF INDIANA
PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: TLF
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

UNIT A - PARTIAL ROOF FRAMING PLAN

ZH-S-202

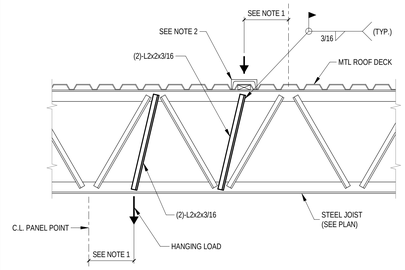


NOTE:

1. ALL HANGERS SHALL BE CONCENTRIC TO THE JOIST BOTTOM CHORD CENTERLINE. DO NOT CLAMP TO ONE SIDE OF THE JOIST BOTTOM CHORD FLANGE.

8 TYPICAL JOIST HANGER

SCALE: 3" = 1'-0"

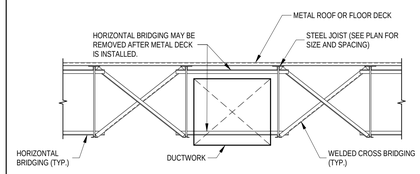


NOTES:

1. IF THIS DIMENSION IS MORE THAN 4" AND THE HANGER LOAD EXCEEDS 100 LBS, ADD (Z)-L2x2x3/16" AS SHOWN. WELD TO TOP AND BOTTOM CHORDS (FURNISHED AND INSTALLED BY MECH. CONTRACTOR).
2. INSTALL HARDWOOD BLOCKING TIGHT TO DECK OR C6x13 CHANNEL OVER THE ROOF DECK, WHERE CURB LOADS ARE APPLIED TO ROOF DECK.
3. ALL HANGERS SHALL BE CONCENTRIC TO THE JOIST BOTTOM CHORD CENTERLINE. DO NOT CLAMP TO ONE SIDE OF THE JOIST BOTTOM CHORD FLANGE.

4 TYPICAL JOIST REINFORCING AT CONCENTRATED LOADS

SCALE: 1" = 1'-0"

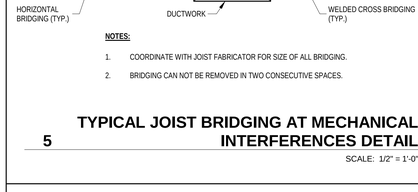


NOTES:

1. COORDINATE WITH JOIST FABRICATOR FOR SIZE OF ALL BRIDGING.
2. BRIDGING CAN NOT BE REMOVED IN TWO CONSECUTIVE SPACES.

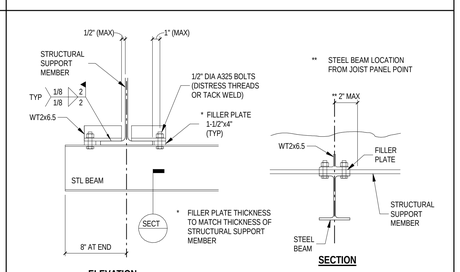
5 TYPICAL JOIST BRIDGING AT MECHANICAL INTERFERENCES DETAIL

SCALE: 1/2" = 1'-0"



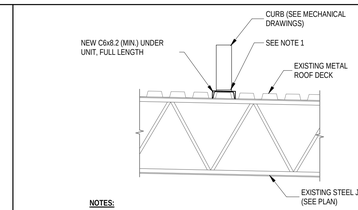
6 EQUIPMENT SUPPORT

N.T.S.



7 EQUIPMENT HANGER CONNECTION

N.T.S.

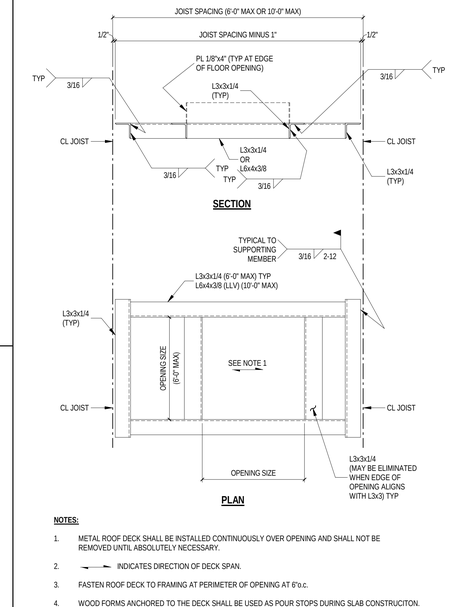


NOTES:

1. SHIM BETWEEN CHANNEL AND CURB AS REQUIRED.
2. PROVIDE JOIST TOP CHORD REINFORCING AS REQUIRED. SEE TYPICAL JOIST REINFORCING DETAIL ON SHEET ZH-S-501.
3. COORDINATE LOCATION OF CHANNELS WITH MECHANICAL ROOF TOP UNIT INSTALLER. PROVIDE ADDITIONAL C6 CHANNELS AS NECESSARY AND AT 2'-0"o.c. MAX. TO PROVIDE ADEQUATE SUPPORT FOR THE ENTIRE PERIMETER OF THE ROOF TOP UNIT CURB.

1 ROOF CURB SUPPORT

N.T.S.

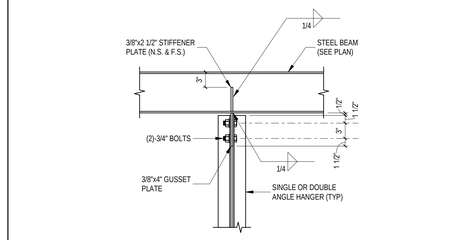


NOTES:

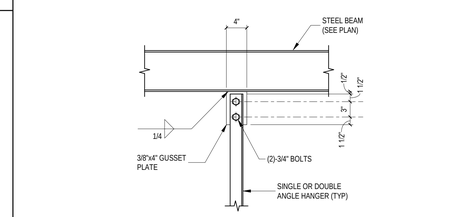
1. METAL ROOF DECK SHALL BE INSTALLED CONTINUOUSLY OVER OPENING AND SHALL NOT BE REMOVED UNTIL ABSOLUTELY NECESSARY.
2. INDICATES DIRECTION OF DECK SPAN.
3. FASTEN ROOF DECK TO FRAMING AT PERIMETER OF OPENING AT 6"o.c.
4. WOOD FORMS ANCHORED TO THE DECK SHALL BE USED AS POUR STOPS DURING SLAB CONSTRUCITON. METAL DECK SHALL NOT BE REMOVED FROM OPENING AREA UNTIL ABSOLUTELY NECESSARY.
5. FRAMES REQUIRED FOR HVAC EQUIPMENT - FINAL OPENING SIZE AND LOCATION TO BE DETERMINED FROM THE HVAC APPROVED SHOP DRAWINGS AND VERIFIED IN THE FIELD. MAXIMUM LOAD 800 POUNDS.

2 TYP OPENING FRAME (RD) (RV) (RH) (FO)

N.T.S.



GUSSET ACROSS FLANGE



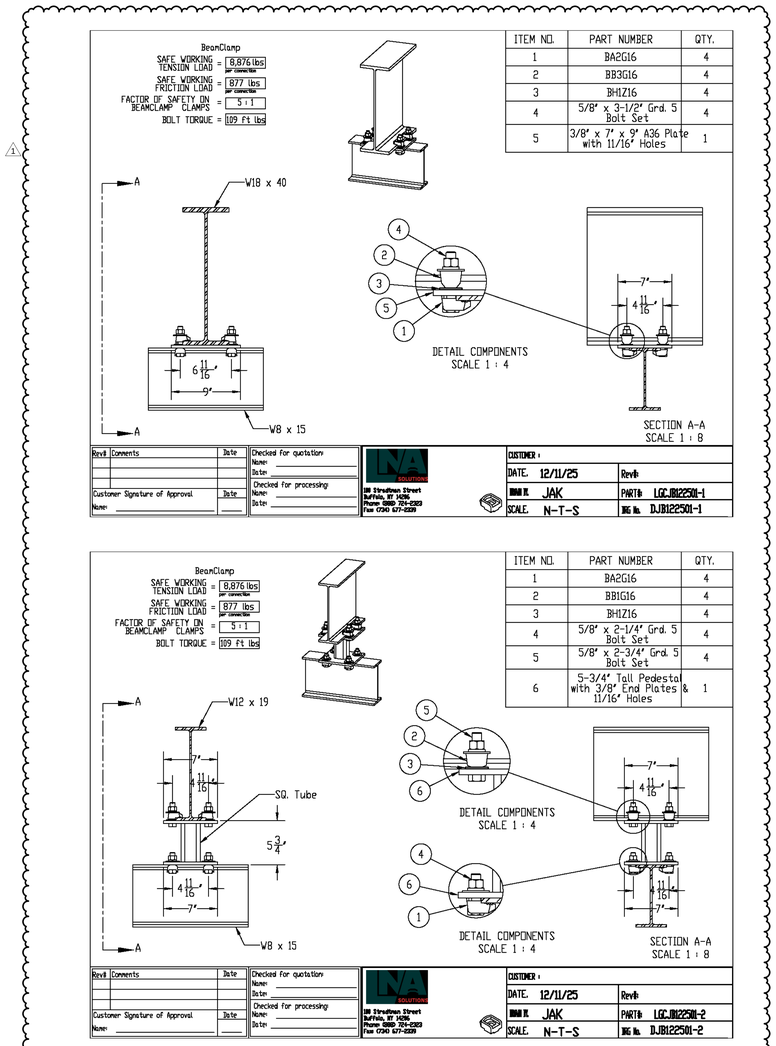
GUSSET ALONG WEB

NOTE:

1. SEE PLANS OR ELEVATION FOR HANGE ANGLE SIZE.

3 TYPICAL HANGER CONNECTION DETAIL

SCALE: 1" = 1'-0"



ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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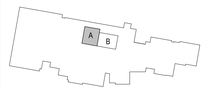


KEY PLAN

N

ISSUED FOR BID

TRACY A. CHARLTON
REGISTERED
No. 10700203
STATE OF INDIANA
PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: TLF
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

FRAMING DETAILS

ZH-S-501

ROOM LEGEND

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A101	C205	AUDITORIUM	4,393 SF
A102	C205G	SOUND BOOTH	144 SF
A103	C205B	STORAGE	129 SF
A104	C205 F	STORAGE	129 SF
A105	-	STAGE	3,703 SF
A106	C3	CORRIDOR	1,538 SF
A107	C141	REHEARSAL ROOM	1,223 SF
A108		MAKE-UP / DRESSING ROOM	1,996 SF
A109		TOILET / CHANGING ROOM	51 SF
A110		STAFF TOILET	51 SF
A111	C3 MZ	MEZZANINE ACCESS	118 SF
A112	C131	SCENE SHOP	1,170 SF
A113		RESTROOM	155 SF
A114	C1	CORRIDOR	1,914 SF
A115		WORKROOM	104 SF
A116	C143	OFFICE	107 SF
A117	C205C	STAGE PREP	188 SF
A118	C5	CORRIDOR	1,946 SF
A119	C205A	VIDEO PRODUCTION ROOM	190 SF
A120	C6	CORRIDOR	913 SF
A121	C4	CORRIDOR	4,045 SF
A122	C206F	VOCAL STORAGE	171 SF
A123	C206E	RISER STORAGE	263 SF
A124	C204F	BAND STORAGE/PERCUSSION	357 SF
A125		INSTRUMENTS	554 SF
A201		MEZZANINE ACCESS	219 SF
A202		MECHANICAL MEZZANINE	1,916 SF
A203		STORAGE	439 SF
A204		STORAGE	188 SF
B101	C203	PAC	7,593 SF
B102	C203C	STAGE	4,675 SF
B103		PIANO STORAGE	81 SF

ARCHITECTURAL PLAN GENERAL NOTES

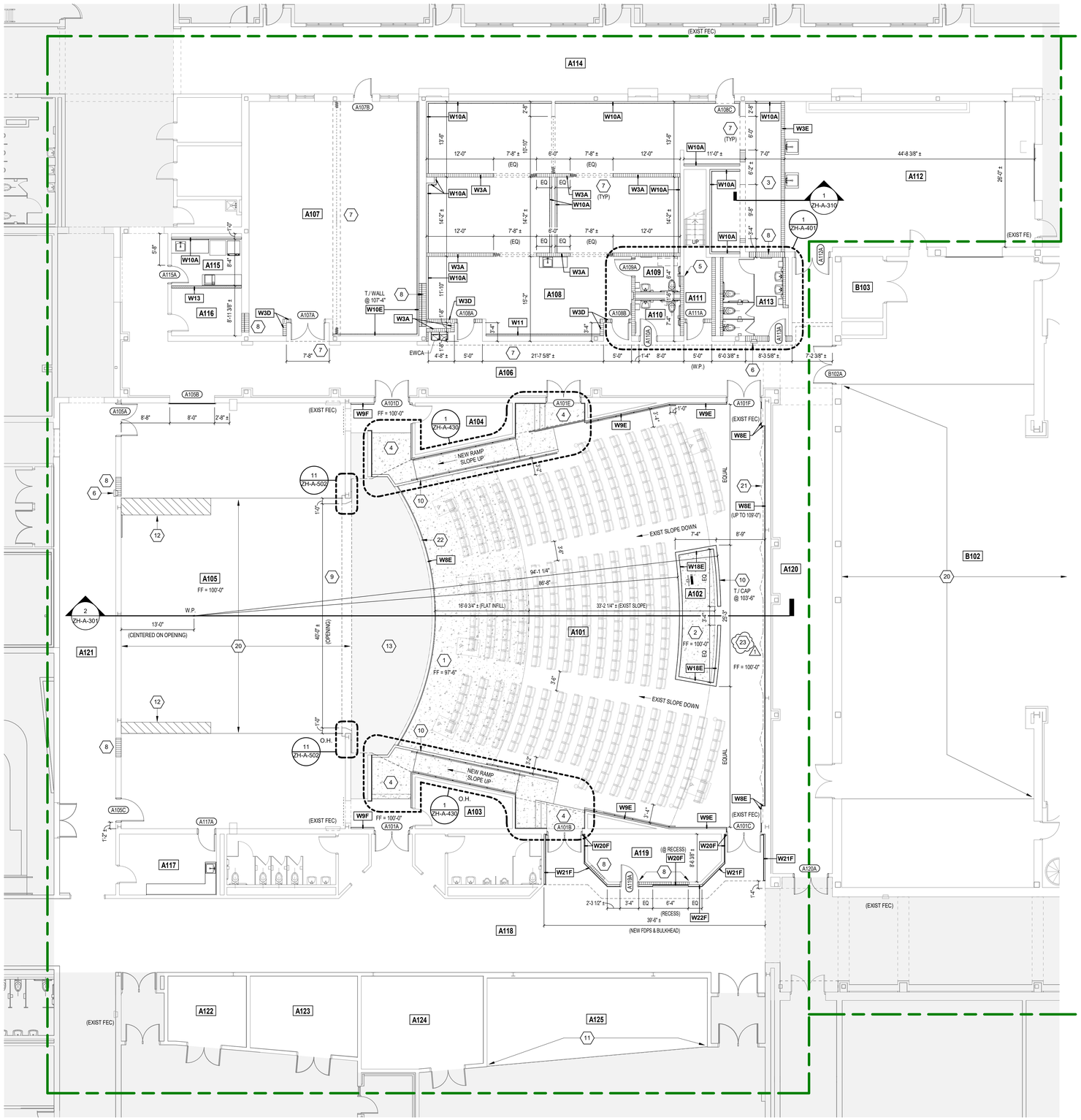
A. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.
B. WHERE DISSIMILAR FLOOR MATERIALS MEET, THEY SHALL DO SO UNDER THE CENTERLINE OF THE DOOR, UNLESS NOTED OTHERWISE.
C. THE BASE FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0".
D. ALL INTERIOR MASONRY WALLS THAT RUN TO UNDERSIDE OF DECK ABOVE SHALL HAVE A 2" JOINT (U.N.O.) AT THE DECK TO BE FILLED WITH FIRE STOPPING AT RATED WALLS PER PROJECT MANUAL, AND MINERAL WOOL AT THE NON-RATED WALLS, TO ALLOW FOR DEFLECTION.
E. FOR TYPICAL COMMON JOINT DETAILS AND CONSTRUCTION MOVEMENT JOINT DETAILS REFER TO DETAILS ON SHEET XX.
F. ALL DIMENSIONS ON FLOOR PLANS ARE TO FINISH FACE OF CMU, CONCRETE, BRICK OR FINISH FACE OF GWB AT METAL STUD WALLS, UNLESS NOTED OTHERWISE.
G. HINGE SIDE DOOR JAMB AT WALLS WILL TYPICALLY BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.
H. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSE, EXCEPT AT WINDOW JAMBS, BULKHEADS, WINDOW AND DOOR HEADS.
I. SEE REFLECTED CEILING PLANS FOR BULKHEAD LOCATIONS AND DETAIL REFERENCES.
J. REFER TO ROOM FINISH SCHEDULE OR PLAN AND EQUIPMENT PLANS FOR LOCATION AND EXTENT OF FINISH FLOOR MATERIALS.
K. PROVIDE WOOD BLOCKING, AS REQUIRED, WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.
L. REFER TO CODE PLANS FOR CODE INFORMATION AND FIRE RATED WALL LOCATIONS.
M. PROVIDE SPRAY FOAM INSULATION AND THERMAL BARRIER CONTINUOUS AT INTERSECTION OF EXTERIOR WALLS AND DECK.

ARCHITECTURAL PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

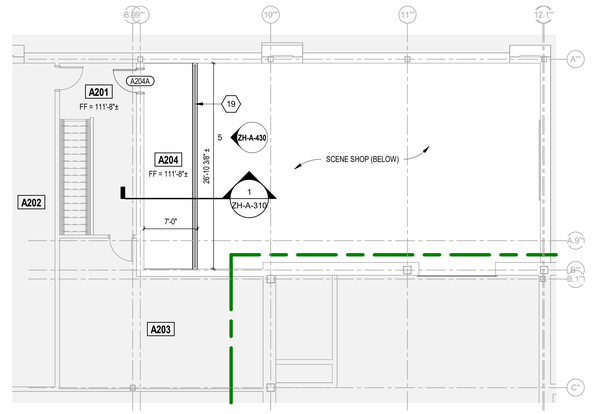
—— W### INDICATES WALL TYPE. REFER TO DRAWING ZH-A-501 FOR WALL THICKNESS, HEIGHT AND COMPOSITION.

1 HATCH INDICATES EXTENTS OF NEW CONCRETE FLOOR / INFILL. TO FLATTEN PORTION OF EXISTING SLOPED SLAB. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
2 HATCH INDICATES EXTENTS OF NEW CONCRETE FLOOR / INFILL. TO FLATTEN PORTION OF EXISTING SLOPED SLAB AT NEW SOUND BOOTH. FINAL SLAB ELEVATION SHOULD ALIGN WITH ADJACENT EXISTING FLOOR SLAB. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
3 PROVIDE NEW CONCRETE FLOOR SLAB ABOVE DRESSING ROOM. REFER TO 1/ZH-A-310 AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
4 HATCH INDICATES EXTENTS OF NEW CONCRETE FLOOR / INFILL. FINAL SLAB ELEVATION SHOULD ALIGN WITH ADJACENT EXISTING FLOOR SLAB (TYPICAL). REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
5 ALIGN FINISH FACES
6 REINSTALL EXISTING/SALVAGED FIRE EXTINGUISHER CABINET (FEC). REFER TO MOUNTING DETAIL
7 DASHED LINE INDICATES BULKHEAD ABOVE. REFER TO REFLECTED CEILING PLAN
8 INFILL EXISTING MASONRY OPENING WITH NEW MASONRY (MATCH EXISTING). NEW MASONRY TO MATCH AND ALIGN WITH BOND OF EXISTING WALL. TOOTH-IN NEW MASONRY (WHERE APPLICABLE)
9 DASHED LINES INDICATE NEW PROSCENIUM BULKHEAD ABOVE. REFER TO 7/ZH-A-520
10 PROVIDE KNEE WALL BRACE (TYPICAL AT ALL PARTIAL HEIGHT WALLS). REFER TO DETAIL 12/ZH-A-502
11 EXISTING GWB BULKHEAD TO REMAIN. EXTEND METAL STUDS AND GWB (MATCH EXISTING) TO BOTTOM OF EXISTING ROOF DECK, ALONG ENTIRE LENGTH OF BULKHEAD. PROVIDE ACOUSTICAL JOINT SEALANT AT INTERSECTION OF WALL AND ROOF DECK. PROVIDE NEW SOUND ATTENUATION IN EXISTING/NEW METAL STUD FRAMING, FULL HEIGHT AND WIDTH OF BULKHEAD
1 12 NEW CONCRETE FLOOR / INFILL AT SLAB DEMO. RECESS NEW CONCRETE TO ACCOMMODATE NEW STAGE FLOOR ASSEMBLY. PROVIDE NEW 2x4 WOOD SLEEPERS @ 1'-0" O.C. TO ALIGN WITH AND MATCH EXISTING SLEEPERS
13 PROVIDE NEW PIT FILLER DECKS ON TOP OF EXISTING PIT FILLER SUPPORT FRAMING (GRAY HATCH INDICATES EXTENTS). REFER TO AF SERIES DRAWINGS FOR ASSEMBLY INFORMATION. FINAL PIT FILLER ELEVATION SHALL ALIGN WITH ADJACENT STAGE FLOOR ELEVATION. FIELD VERIFY ALL EXISTING CONDITIONS. COORDINATE NEW OPENINGS IN DECK ASSEMBLY. REFER TO AF, E AND T SERIES DRAWINGS.
19 2" OD STEEL GUARDRAIL (HORIZONTALS / VERTICALS) WITH 3/4" DIA PICKETS (PAINT)
20 PROVIDE NEW FLOOR FINISH. PLYWOOD UNDERLAYMENT AND PLYWOOD SHEATHING ON EXISTING SLEEPERS. REFER TO FINISH PLAN FOR FLOOR FINISH / TRANSITION DETAILS. COORDINATE FLOOR OPENINGS WITH E AND T SERIES DRAWINGS.
21 DASHED LINE INDICATES WALL CONSTRUCTION (ABOVE). REFER TO DETAIL 7/ZH-AF202 AND INTERIOR ELEVATIONS
1 22 NEW WOOD TRIM CONTINUOUS ALONG FRONT OF STAGE, REFER TO DETAIL 14/ZH-A-502
23 AT NEW GWB AND METAL STUD WALL/FURRING LOCATIONS ALONG EXISTING PERIMETER CMU WALLS: NEW GWB AND METAL STUDS SHALL EXTEND UP TO EL. 121'-0" (TYP. UNO).



1 FIRST FLOOR ARCHITECTURAL PLAN - UNIT A

SCALE: 1/8" = 1'-0"



2 MEZZANINE ARCHITECTURAL PLAN

SCALE: 1/8" = 1'-0"

VERIFICATION NOTE

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SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

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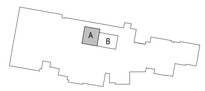
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204



KEY PLAN

ISSUED FOR BID

PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: KT
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

FIRST FLOOR AND MEZZANINE ARCHITECTURAL PLANS - UNIT A

ZH-A-11A

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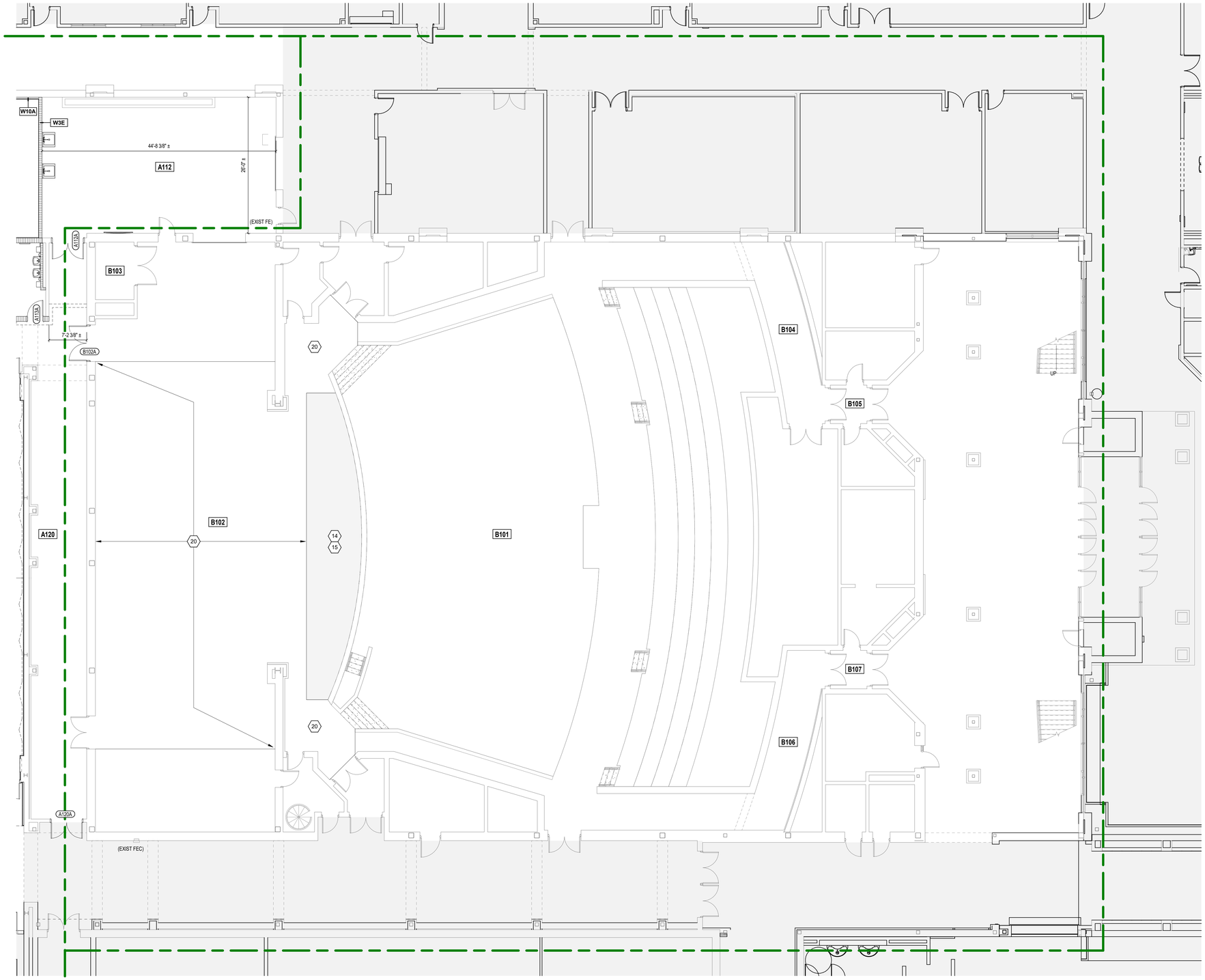
ROOM LEGEND

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A112	C131	SCENE SHOP	1,170 SF
A120	C6	CORRIDOR	913 SF
B101	C203	PAC	7,933 SF
B102	C203C	STAGE	4,675 SF
B103		PIANO STORAGE	81 SF
B104		PASSAGE	271 SF
B105		FOYER	51 SF
B106		PASSAGE	268 SF
B107		FOYER	51 SF



2 FIRST FLOOR ARCHITECTURAL PLAN - UNIT B

SCALE: 1/8" = 1'-0"

ARCHITECTURAL PLAN GENERAL NOTES

A. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.
B. WHERE DISSIMILAR FLOOR MATERIALS MEET, THEY SHALL DO SO UNDER THE CENTERLINE OF THE DOOR, UNLESS NOTED OTHERWISE.
C. THE BASE FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0".
D. ALL INTERIOR MASONRY WALLS THAT RUN TO UNDERSIDE OF DECK ABOVE SHALL HAVE A 2" JOINT (U.N.O.) AT THE DECK TO BE FILLED WITH FIRE STOPPING AT RATED WALLS PER PROJECT MANUAL, AND MINERAL WOOL AT THE NON-RATED WALLS, TO ALLOW FOR DEFLECTION.
E. FOR TYPICAL COMMON JOINT DETAILS AND CONSTRUCTION MOVEMENT JOINT DETAILS REFER TO DETAILS ON SHEET XX.
F. ALL DIMENSIONS ON FLOOR PLANS ARE TO FINISH FACE OF CMU, CONCRETE, BRICK OR FINISH FACE OF GWB AT METAL STUD WALLS, UNLESS NOTED OTHERWISE.
G. HINGE SIDE DOOR JAMB AT WALLS WILL TYPICALLY BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.
H. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSE, EXCEPT AT WINDOW JAMBS, BULKHEADS, WINDOW AND DOOR HEADS.
I. SEE REFLECTED CEILING PLANS FOR BULKHEAD LOCATIONS AND DETAIL REFERENCES.
J. REFER TO ROOM FINISH SCHEDULE OR PLAN AND EQUIPMENT PLANS FOR LOCATION AND EXTENT OF FINISH FLOOR MATERIALS.
K. PROVIDE WOOD BLOCKING, AS REQUIRED, WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.
L. REFER TO CODE PLANS FOR CODE INFORMATION AND FIRE RATED WALL LOCATIONS.
M. PROVIDE SPRAY FOAM INSULATION AND THERMAL BARRIER CONTINUOUS AT INTERSECTION OF EXTERIOR WALLS AND DECK.

ARCHITECTURAL PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

—— W### INDICATES WALL TYPE. REFER TO DRAWING ZH-A-501 FOR WALL THICKNESS, HEIGHT AND COMPOSITION.

14 PROVIDE NEW FLOOR FINISH, PLYWOOD UNDERLAYMENT AND PLYWOOD SHEATHING ON EXISTING SLEEPERS AT ORCHESTRA PIT LIFT (GRAY HATCH INDICATES EXTENTS, FIELD VERIFY). RETAIN ALL EXISTING FLOOR SLEEVES, OPENINGS AND PENETRATIONS THROUGH EXISTING ORCHESTRA PIT LIFT FOR RE-USE IN NEW CONSTRUCTION. REFER TO FINISH PLAN FOR FLOOR FINISH / TRANSITION DETAILS

15 EXISTING FACE-MOUNTED 1x WOOD TRIM AT PERIMETER OF ORCHESTRA PIT OPENING, TO REMAIN (TYPICAL). SMOOTH ROUGH EDGES OF TRIM AND PAINT IN-PLACE. REFER TO DETAIL 6/ZH-AF601

20 PROVIDE NEW FLOOR FINISH, PLYWOOD UNDERLAYMENT AND PLYWOOD SHEATHING ON EXISTING SLEEPERS. REFER TO FINISH PLAN FOR FLOOR FINISH / TRANSITION DETAILS. COORDINATE FLOOR OPENINGS WITH E AND T SERIES DRAWINGS.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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1000 Mulberry St.
Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

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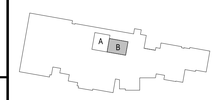

KEY PLAN

N

ISSUED FOR BID

PAULA A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: KT
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

FIRST FLOOR ARCHITECTURAL PLAN - UNIT B

ZH-A-11B

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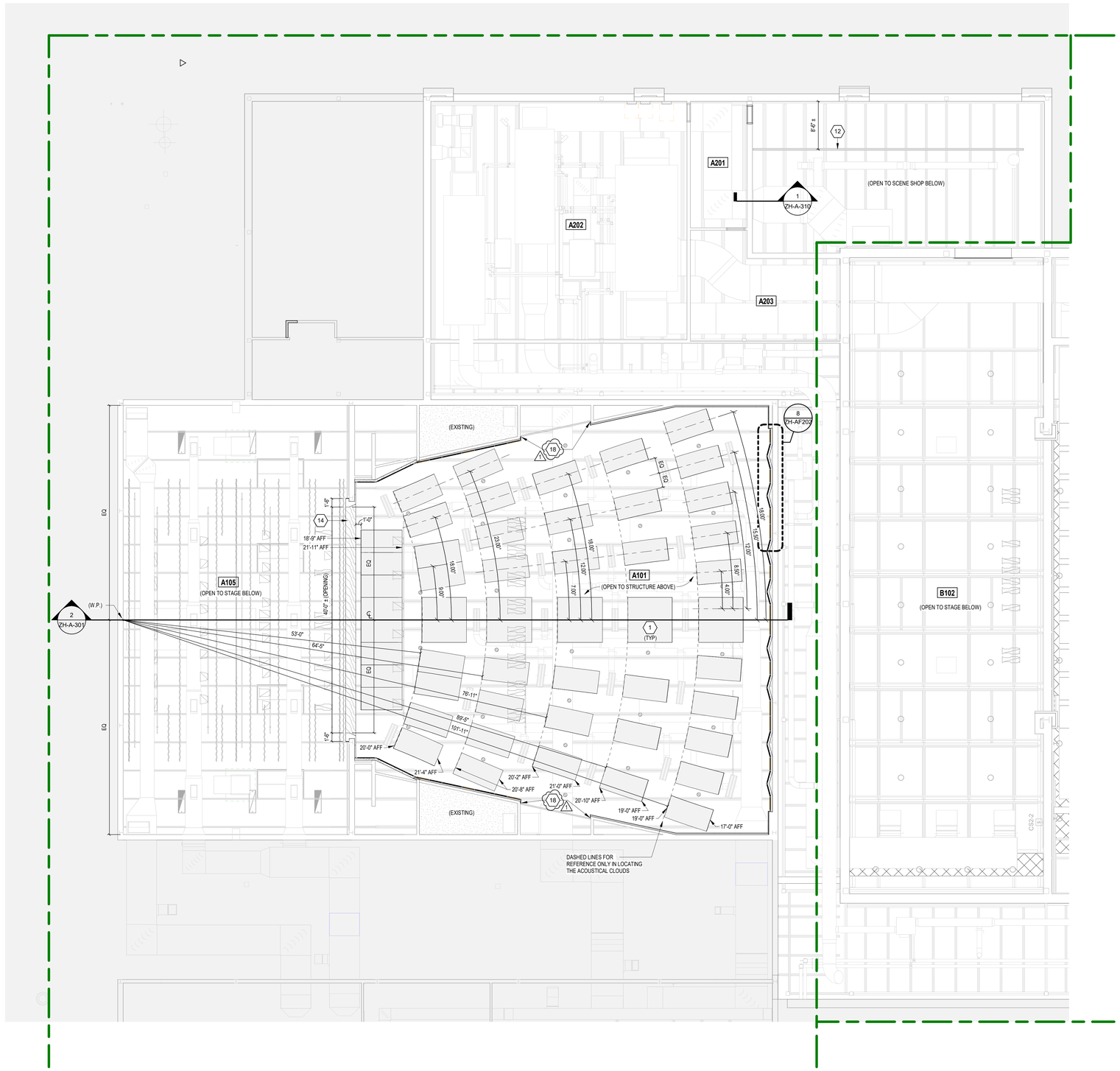
ROOM LEGEND

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A101	C205	AUDITORIUM	4,393 SF
A105	-	STAGE	3,703 SF
A201		MEZZANINE ACCESS	219 SF
A202		MECHANICAL MEZZANINE	1,916 SF
A203		STORAGE	439 SF
A204		STORAGE	188 SF
B101	C203	PAC	7,933 SF
B102	C203C	STAGE	4,675 SF



1 SECOND FLOOR REFLECTED CEILING PLAN - UNIT A

SCALE: 1/8" = 1'-0"

REFLECTED CEILING PLAN NOTES

A. PROVIDE REVEAL DRYWALL TRIM AT ALL LOCATIONS WHERE GYPSUM WALL BOARD (GWB) ABUTS A DISSIMILAR MATERIAL. TYPICAL UNLESS NOTED OTHERWISE. REFER TO DETAIL ??-A9.1.

B. BULKHEAD FRAMING SHALL BE ATTACHED TO STRUCTURAL SUPPORTS AND NOT TO THE ROOF DECK

REFLECTED CEILING NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1 NEW CURVED 4'X8' ACOUSTICAL CLOUDS (TYPICAL). AC-1

12 NEW 1/2 TON ELECTRIC TROLLEY HOIST ASSEMBLY AND STEEL HOIST BEAM. REFER TO STRUCTURAL AND ELECTRICAL DRAWINGS FOR MORE INFORMATION. COORDINATE FINAL HOIST/BEAM LOCATION WITH EXISTING LIGHTING AND DUCTWORK, FIELD VERIFY

14 NEW PROSCENIUM BULKHEAD. REFER TO 9/ZH-A-501

18 AT EXISTING GWB BULKHEAD, EXTEND GWB UP TO B./ STEEL JOISTS WITH NEW GWB ON EXISTING METAL STUDS (ALIGN AND MATCH EXISTING)

REFLECTED CEILING PLAN LEGEND

- 10'-4" — INDICATES ELEVATION HEIGHT
- XX'-XX" — INDICATES CEILING HEIGHT
- LIGHT FIXTURE - REFER TO ELECTRICAL DRAWINGS
- LIGHT FIXTURE - REFER TO ELECTRICAL DRAWINGS
- LIGHT FIXTURE - REFER TO ELECTRICAL DRAWINGS
- CLOCK - REFER TO TECHNOLOGY DRAWINGS
- MECHANICAL DIFFUSER - REFER TO MECHANICAL DRAWINGS
- MECHANICAL RETURN AIR GRILLE - REFER TO MECHANICAL DRAWINGS
- CEILING MOUNTED MECHANICAL UNIT - REFER TO MECHANICAL DRAWINGS
- MECHANICAL UNIT HEATER - REFER TO MECHANICAL DRAWINGS
- (C) RECESSED CEILING SPEAKER
- (M) MOTION DETECTOR
- CEILING MOUNTED EXIT LIGHT
- (CAM) CEILING MOUNTED CAMERA
- (W) WIRELESS ACCESS POINT (WAP)
- CJ CONTROL JOINT IN GYPSUM BOARD CEILING OR BULKHEAD
- (S) SOUND REINFORCEMENT SPEAKER
- (H) FIRE ALARM HEAT DETECTOR
- (F) FIRE ALARM HORN STROBE
- (S) FIRE ALARM SPEAKER STROBE
- (V) FIRE ALARM STROBE
- (P) FIRE ALARM SMOKE DETECTOR
- OCCUPANCY SENSOR
- ACOUSTICAL CEILING TILE (ACT)
- ACOUSTICAL CEILING TILE (ACT)
- GYPSUM WALL BOARD BULKHEAD / CEILING

VERIFICATION NOTE

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ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

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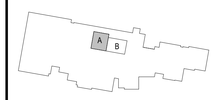

KEY PLAN

ISSUED FOR BID

PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: KT
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

SECOND FLOOR REFLECTED CEILING PLAN - UNIT A

ZH-AC12A

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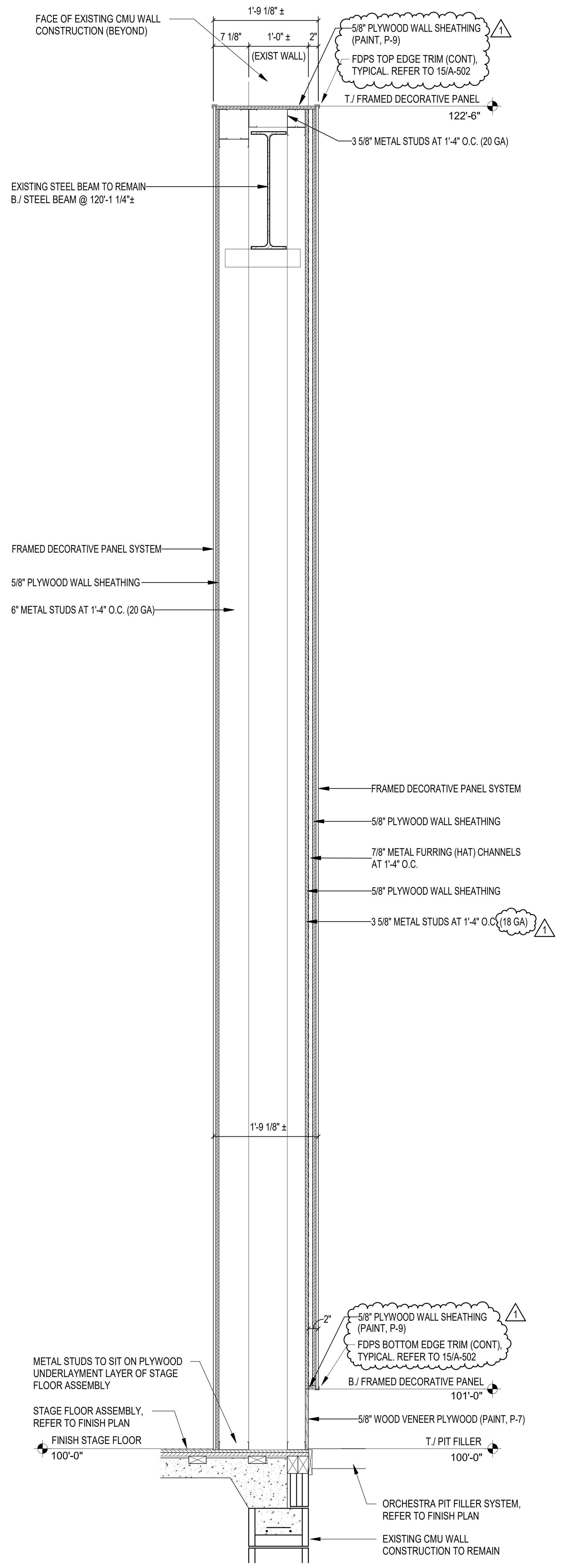
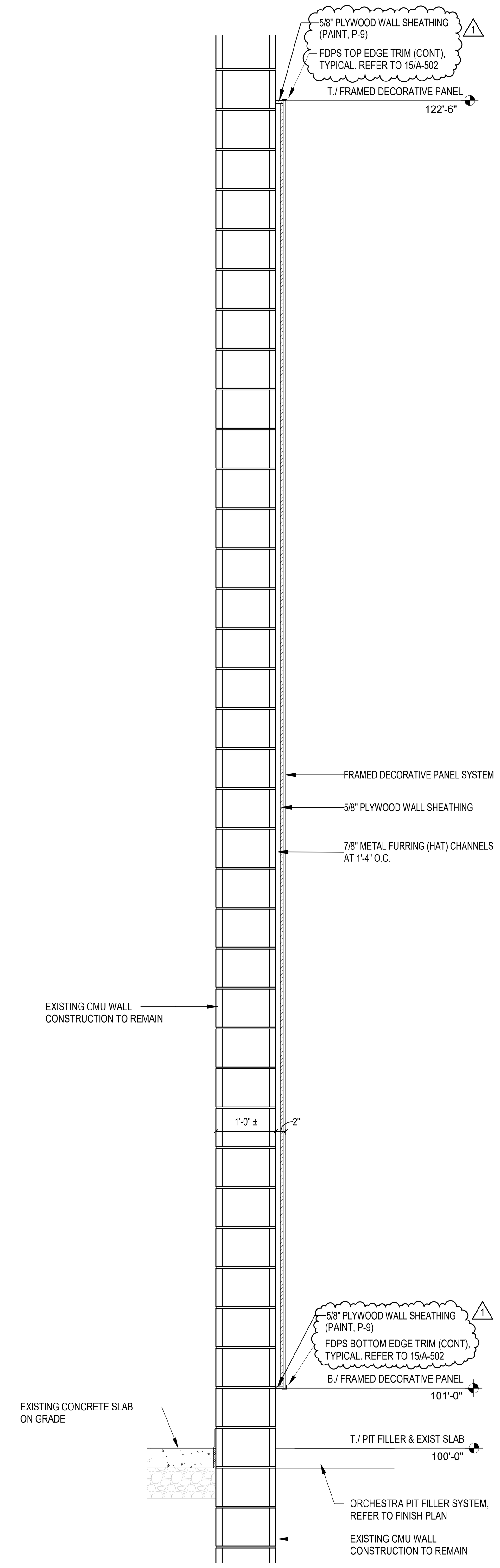
GENERAL NOTES

A. COORDINATE ALL LINTEL AND BOND BEAM REQUIREMENTS WITH STRUCTURAL DRAWINGS AND PROJECT MANUAL.
B. REFER TO THE STRUCTURAL DRAWINGS FOR ALL FOUNDATION AND FOOTING CONDITIONS.
C. PROVIDE HORIZ. JOINT REINFORCING, TIES, AND OTHER ANCHORAGE/REINFORCEMENT ITEMS AS REQ'D. PER PROJECT MANUAL.
D. WALL INSULATION PENETRATIONS: PROVIDE SPRAY POLYURETHANE INSULATION OR SEALANT AROUND ALL PENETRATIONS OF THE WALL INSULATION BY PIPING, CONDUITS, FRAMING, STRUCTURE, ETC.



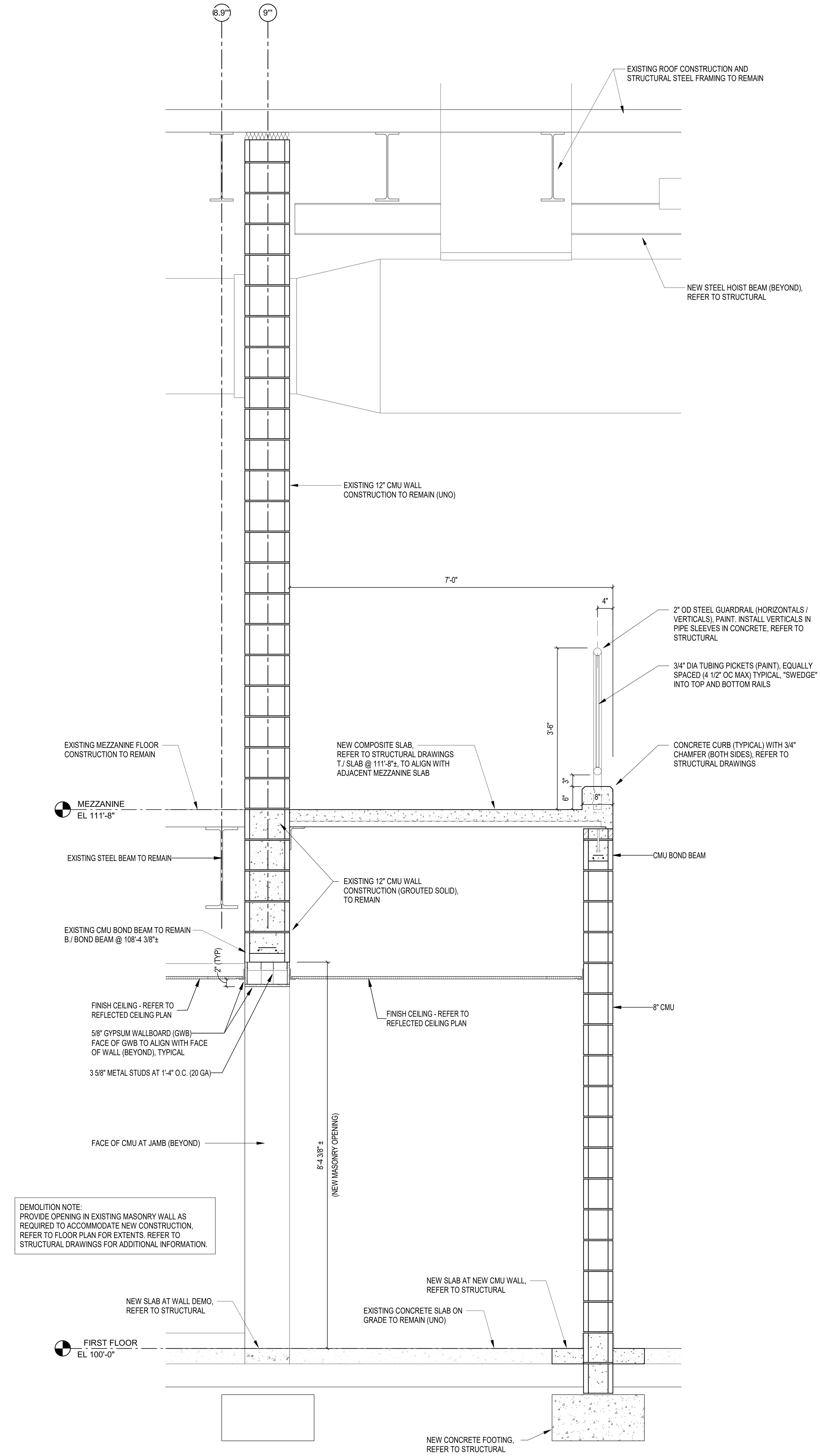
3 SECTION - PROSCENIUM

SCALE: 3/4" = 1'-0"



2 SECTION - PROSCENIUM (@ CMU)

SCALE: 3/4" = 1'-0"



1 WALL SECTION

SCALE: 3/4" = 1'-0"

ZIONSVILLE COMMUNITY SCHOOLS

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ARCHITECT

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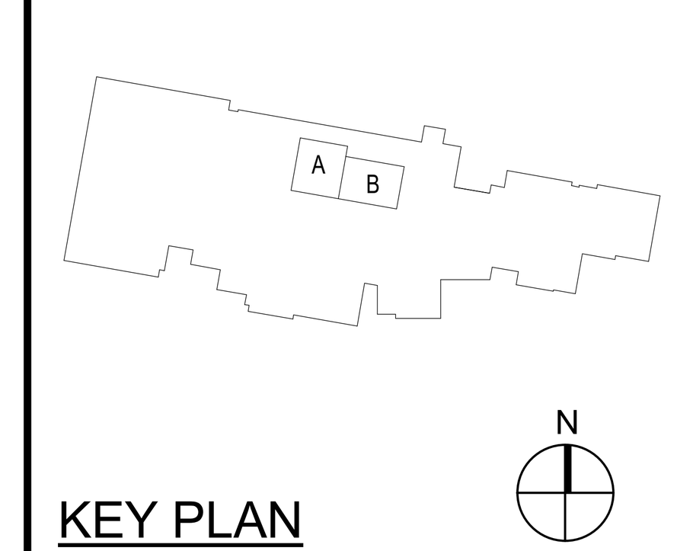

KEY PLAN

ISSUED FOR BID

PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: KT
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

VERIFICATION NOTE

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WALL SECTIONS

ZH-A-310

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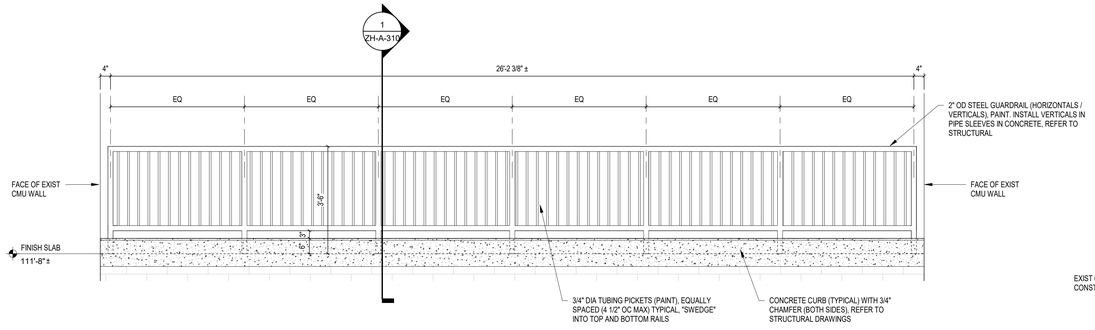
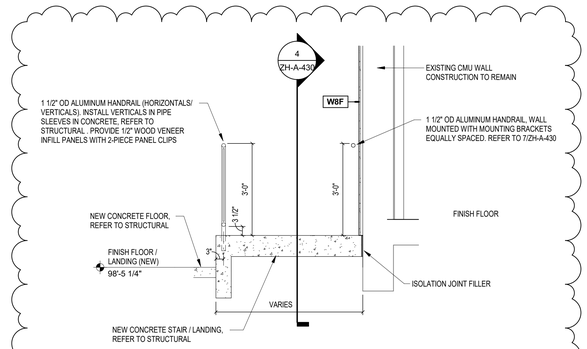


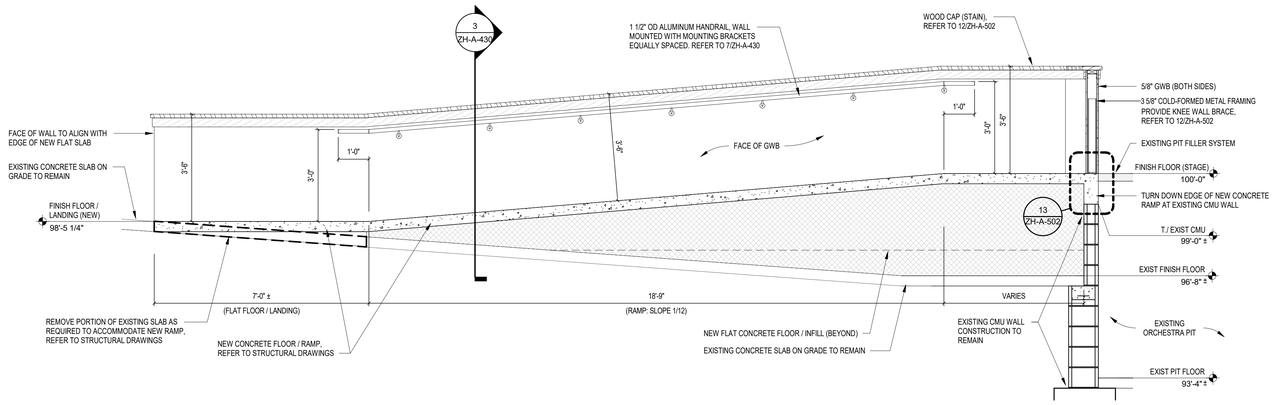
5 ELEVATION - STORAGE (A204) GUARDRAIL

SCALE: 1/2" = 1'-0"



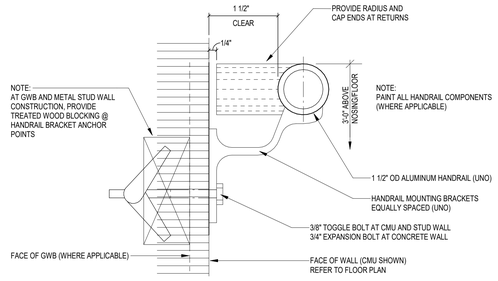
6 SECTION - AUDITORIUM STAIR

SCALE: 1/2" = 1'-0"



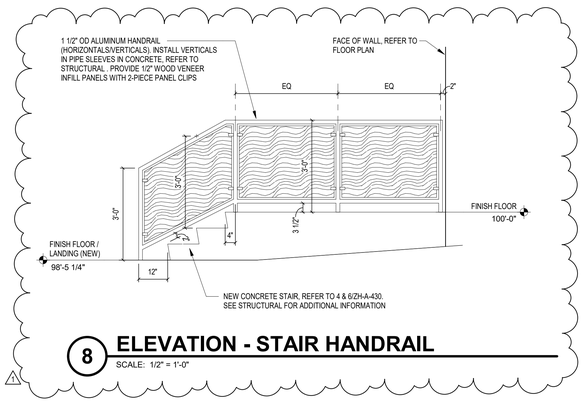
2 SECTION - RAMP TO STAGE

SCALE: 1/2" = 1'-0"



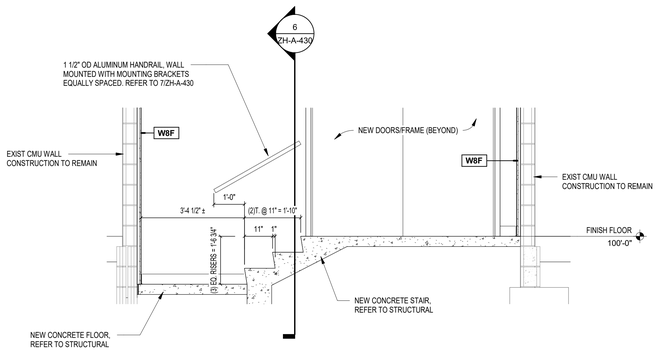
7 HANDRAIL TERMINATION - WALL MOUNT

SCALE: 6" = 1'-0"



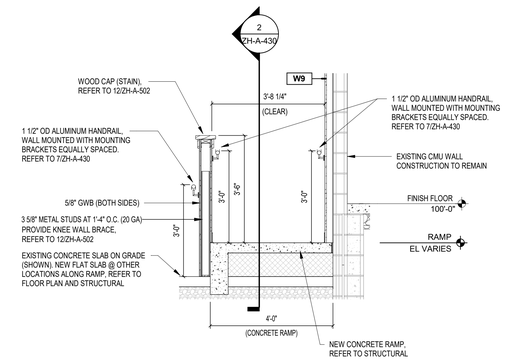
8 ELEVATION - STAIR HANDRAIL

SCALE: 1/2" = 1'-0"



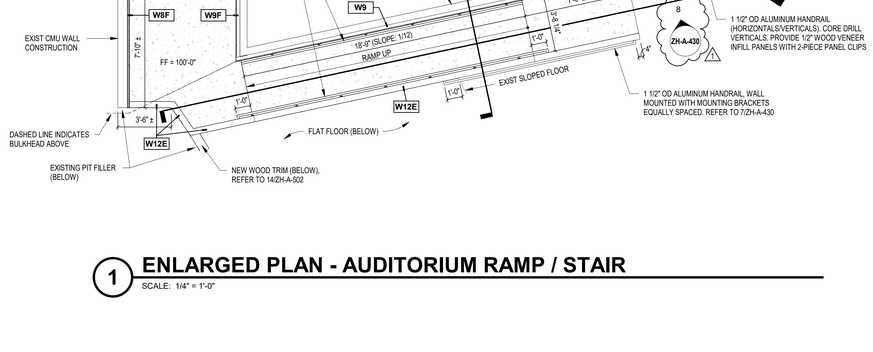
4 SECTION - AUDITORIUM STAIR

SCALE: 1/2" = 1'-0"



3 SECTION - RAMP TO STAGE

SCALE: 1/2" = 1'-0"



1 ENLARGED PLAN - AUDITORIUM RAMP / STAIR

SCALE: 1/4" = 1'-0"

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2026 IMPROVEMENTS

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ARCHITECT

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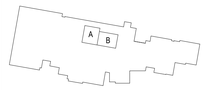

KEY PLAN

N

ISSUED FOR BID

PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM

DRAWN BY: KT

PROJECT NUMBER: 224035.00

PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

VERIFICATION NOTE

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VERTICAL CIRCULATION

ZH-A-430

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ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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1000 Mulberry St.
Zionsville, IN 46077

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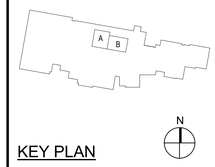

KEY PLAN

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PROJECT MANAGER: JM
DRAWN BY: KT
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

DETAILS

ZH-A-502

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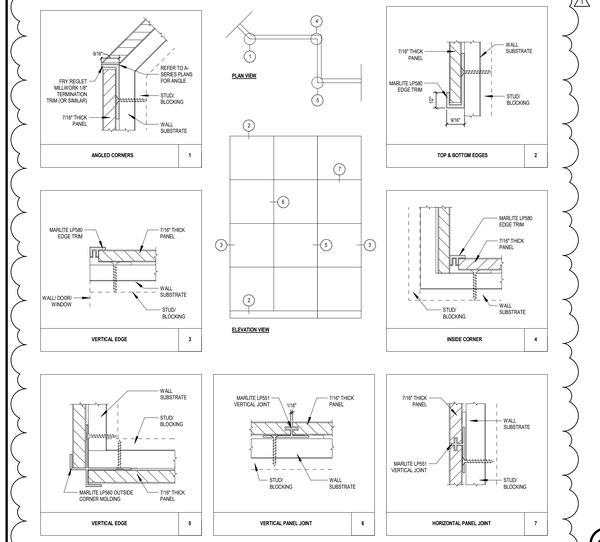
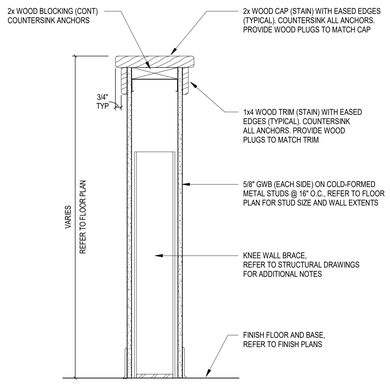
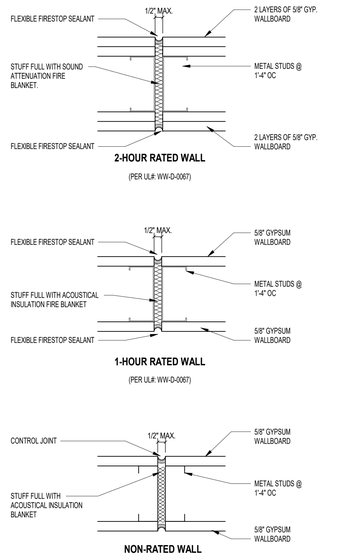


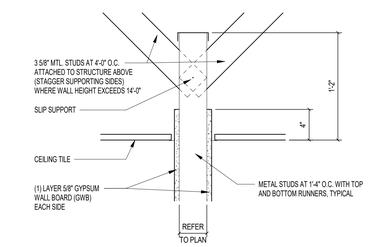
15 **FDPS DETAILS**
SCALE: 6" = 1'-0"



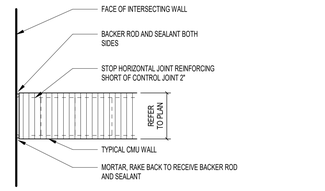
12 **KNEE WALL BRACE**
SCALE: 1 1/2" = 1'-0"



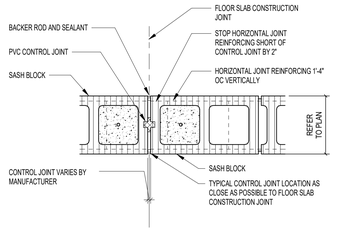
9 **STUD WALL CONTROL JOINTS**
NOT TO SCALE



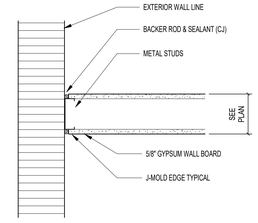
4 **GYPSUM WALLBOARD WALL**
NOT TO SCALE



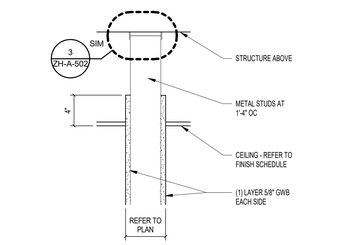
1 **TYPICAL CONTROL JOINT**
NOT TO SCALE



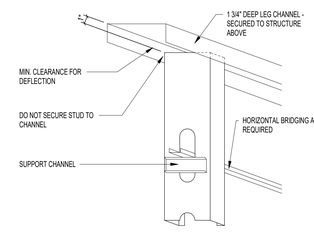
5 **TYPICAL CONTROL JOINT**
NOT TO SCALE



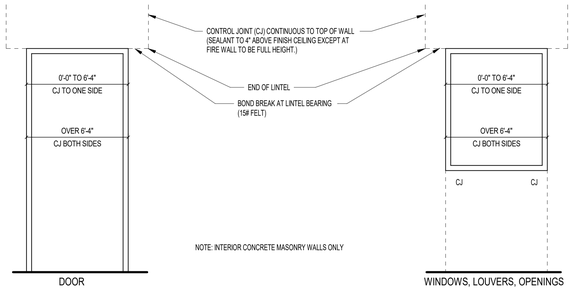
2 **TYPICAL CONTROL JOINT**
NOT TO SCALE



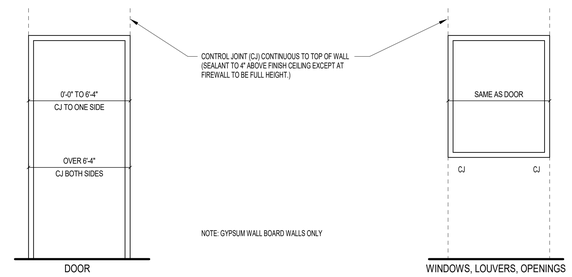
6 **GYPSUM WALLBOARD WALL**
NOT TO SCALE



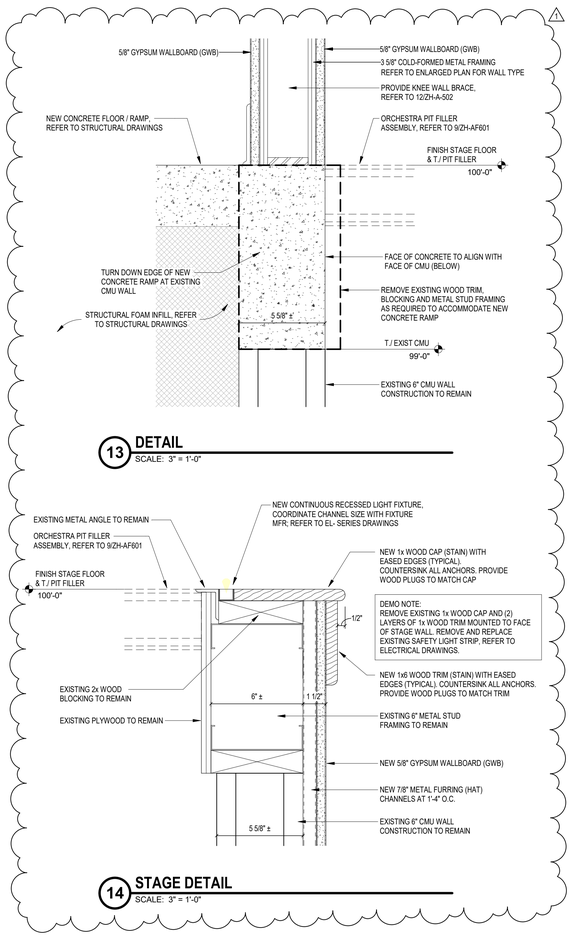
3 **METAL STUDS**
NOT TO SCALE



7 **TYPICAL PLACEMENT OF CONTROL JOINTS IN CMU WALLS AT OPENINGS**
NOT TO SCALE

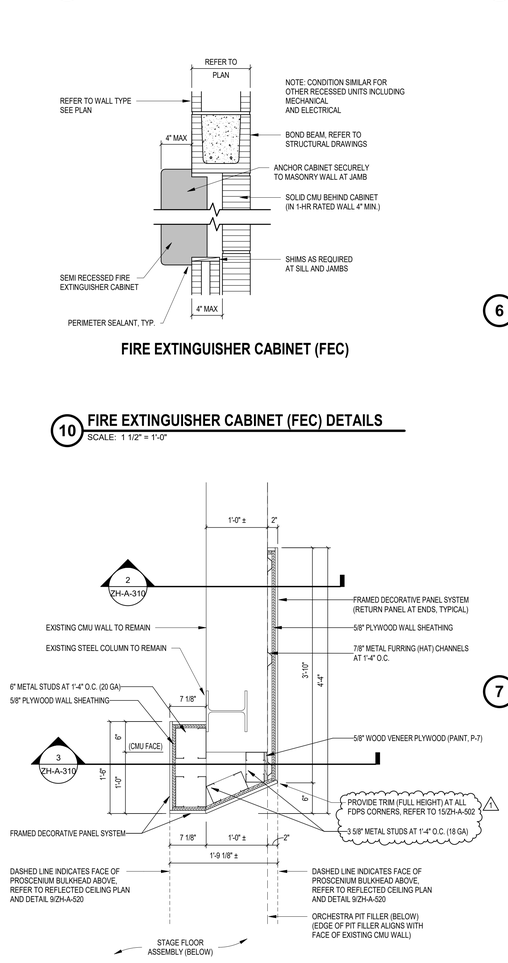


8 **TYPICAL PLACEMENT OF CONTROL JOINTS IN GWB AT OPENINGS**
NOT TO SCALE



13 **DETAIL**
SCALE: 3" = 1'-0"

14 **STAGE DETAIL**
SCALE: 3" = 1'-0"



10 **FIRE EXTINGUISHER CABINET (FEC) DETAILS**
SCALE: 1 1/2" = 1'-0"

11 **PLAN DETAIL - PROSCENIUM WRAP**
SCALE: 1" = 1'-0"

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

317.848.0966 WWW.FHAI.COM
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204

KEY PLAN

N

ISSUED FOR BID

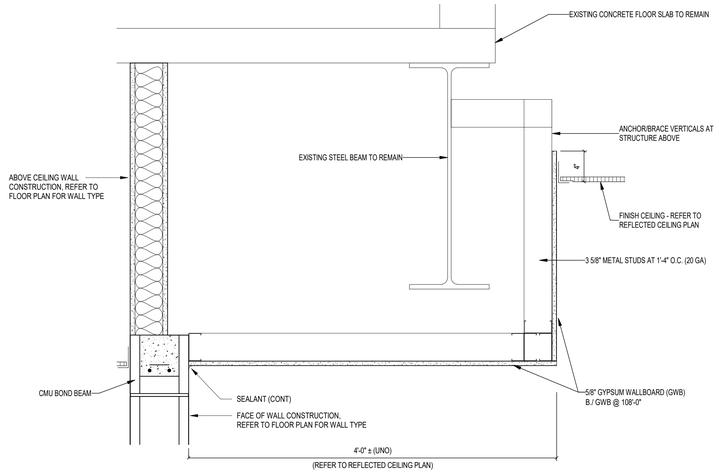
PAULA A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: KT
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

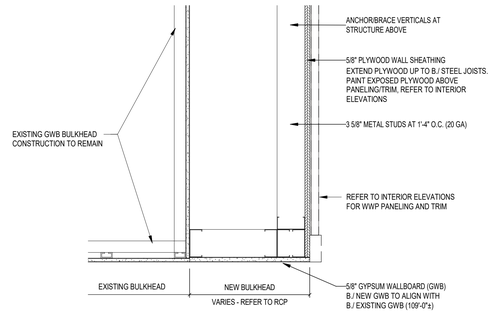
REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

CEILING DETAILS

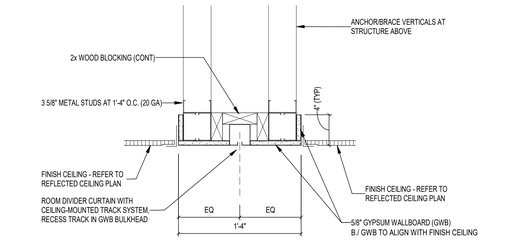
ZH-A-520



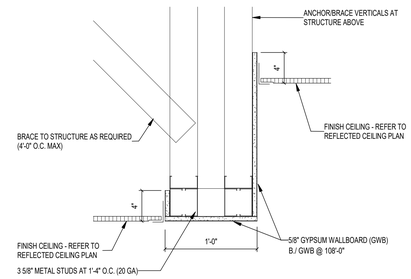
8 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"



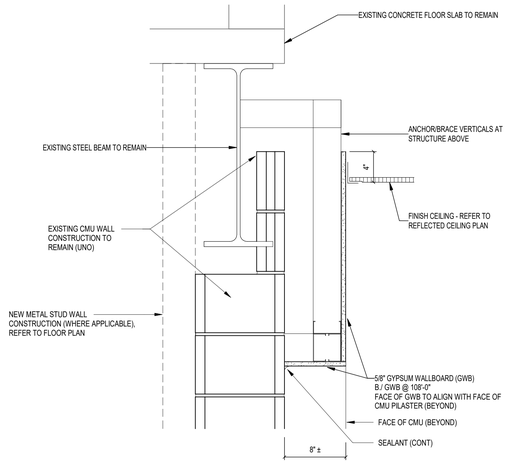
5 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"



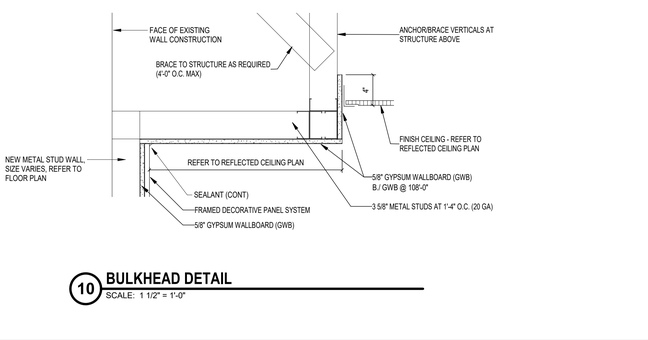
1 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"



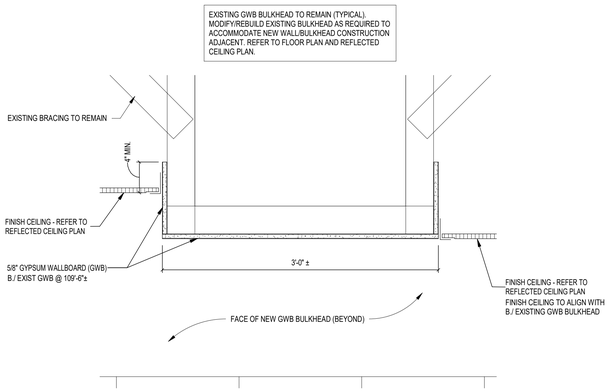
6 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"



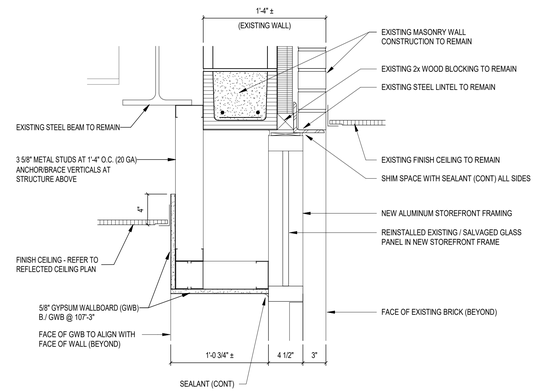
2 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"



9 PROSCENIUM BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"

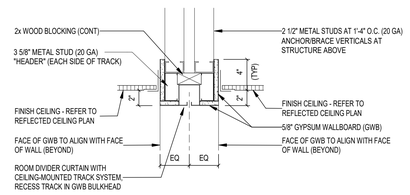


7 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"



3 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"

10 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"



4 BULKHEAD DETAIL
SCALE: 1 1/2" = 1'-0"

DOOR AND FRAME SCHEDULE

DOOR MARK	DOORS		FRAME						FIRE RATING	HARDWARE		STC RATING	REMARKS	DOOR MARK
						DETAILS								
	DOOR SIZE (WxH)	DOOR TYPE	FRAME MATERIAL	FRAME ELEVATION	JAMB DEPTH	HEAD	JAMB	SILL		SET NO.	KEYSIDE ROOM			
A101A	PR 3'-0" x 7'-2"	F WD	HM	HM3	8 3/4"	14/ZH-A-620	15/ZH-A-620	-		3.1	A118	45	2,3, 2.4	A101A
A101B	PR 3'-0" x 7'-2"	F WD	HM	HM3	8 3/4"	16/ZH-A-620	17/ZH-A-620	-		3.0	A118	45	2,3, 2.4	A101B
A101C	PR 3'-0" x 7'-2"	F WD	HM	HM3	8 3/4"	16/ZH-A-620	17/ZH-A-620	-		3.0	A118	45	2,3, 2.4	A101C
A101D	PR 3'-0" x 8'-10"	F WD	HM	HM3	10 3/4"	12/ZH-A-620	13/ZH-A-620	-		4.0	A106	45	2.4	A101D
A101E	PR 3'-0" x 8'-10"	F WD	HM	HM3	10 3/4"	12/ZH-A-620	13/ZH-A-620	-		4.0	A106	45	2.4	A101E
A101F	PR 3'-0" x 8'-10"	F WD	HM	HM3	10 3/4"	12/ZH-A-620	13/ZH-A-620	-		4.0	A106	45	2.4	A101F
A105A	PR 2'-10" x 8'-10"	F WD	HM	HM3	1'-0 3/4"	7/ZH-A-620	5/ZH-A-620, 8/ZH-A-620	-	45	9.0	A121		2.4	A105A
A105B	8'-0" x 9'-0"	OHCD	STL	-	2"	20/ZH-A-620	21/ZH-A-620	-	45	18.0	A106		2.1	A105B
A105C	4'-0" x 7'-0"	F WD	HM	HM2	1'-0 3/4"	3/ZH-A-620	4/ZH-A-620, 5/ZH-A-620	-	45	10.0	A121			A105C
A107A	PR 3'-0" x 6'-10"	F WD	HM	HM3	8 3/4"	3/ZH-A-620	2/ZH-A-620, 5/ZH-A-620	-		8.0	A106	45		A107A
A107B	3'-0" x 7'-2"	F WD	AL	AL1	4 1/2"	3/ZH-A-520 SIM	11/ZH-A-620	-		2.0	A114	45	2.4	A107B
A108A	3'-0" x 6'-10"	F WD	HM	HM1	8 3/4"	1/ZH-A-620	2/ZH-A-620	-		6.0	A106			A108A
A108B	3'-0" x 6'-10"	F WD	HM	HM1	8 3/4"	1/ZH-A-620	2/ZH-A-620	-		6.0	A106			A108B
A108C	3'-0" x 7'-2"	F WD	AL	AL1	4 1/2"	3/ZH-A-520	11/ZH-A-620	-		1.0	A114		2.4	A108C
A109A	3'-0" x 6'-10"	F WD	HM	HM1	8 3/4"	1/ZH-A-620	2/ZH-A-620	-		13.0	A108			A109A
A110A	3'-0" x 6'-10"	F WD	HM	HM1	1'-0 3/4"	3/ZH-A-620	4/ZH-A-620	-		14.0	A106			A110A
A111A	3'-0" x 6'-10"	F WD	HM	HM1	8 3/4"	1/ZH-A-620	2/ZH-A-620	-		5.0	A106			A111A
A112A	PR 3'-0" x 6'-10"	N1 WD	HM	HM3	1'-0 3/4"	3/ZH-A-620	4/ZH-A-620	-	45	12.0	A106			A112A
A113A	3'-0" x 6'-10"	F WD	HM	HM1	1'-0 3/4"	1/ZH-A-620	2/ZH-A-620	-		17.0	A106			A113A
A115A	3'-0" x 6'-10"	N WD	HM	HM1	8 3/4"	3/ZH-A-620	4/ZH-A-620	-		15.0	A106			A115A
A117A	3'-0" x 7'-0"	F WD	HM	HM2	1'-0 3/4"	7/ZH-A-620	5/ZH-A-620	-	45	16.0	A105		2.4	A117A
A119A	3'-0" x 6'-10"	F PL	HM	HM1	11 1/2"	18/ZH-A-620	19/ZH-A-620	-		11.0	A118			A119A
A120A	PR 3'-0" x 6'-10"	N WD	HM	HM3	8 3/4"	-	-	-		-	A120		2.5	A120A
A204A	3'-0" x 7'-2"	F HM	HM	F1	1'-0 3/4"	3/ZH-A-620	4/ZH-A-620	-	45	19.0 ⚠1	A201			A204A
B102A	PR 3'-4" x 8'-10"	F HM	HM	HM3	8 3/4"	10/ZH-A-620	9/ZH-A-620	-	90	7.0	A106			B102A

DOOR SCHEDULE REMARKS

2.1 See Division 08 Section "Overhead Coiling Doors" for fire-rated service doors.

2.2 See Division 08 Section "Overhead Coiling Grilles".

2.3 Hardware mullion by Division 08 Section "Door Hardware". Mullion to be field-painted to match frame finish.

2.4 Provide new door and frame in existing wall opening. Field verify existing opening size prior to fabricating new door and frame.

2.5 Existing/salvaged door(s) and hardware reinstalled in existing frame. Field verify existing conditions.

GENERAL NOTES AND LEGEND

DOOR MATERIAL

HM	-	HOLLOW METAL DOOR
AL	-	ALUMINUM DOOR
WD	-	WOOD DOOR
PL	-	PLASTIC-LAMINATE-FACED WOOD DOOR

FRAME MATERIAL

HM	-	HOLLOW METAL FRAME
AL	-	ALUMINUM FRAME
STL	-	STEEL FRAME

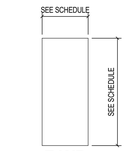
GENERAL

ETR	-	EXISTING TO REMAIN
PR	-	PAIR
SIM	-	SIMILAR
OHCD	-	OVERHEAD COILING DOOR
OHCG	-	OVERHEAD COILING GRILLE

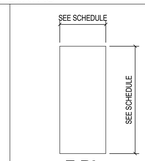
FIRE RATING IN MINUTES

20	-	20 MINUTE
45	-	C LABEL 3/4 HOUR (INTERIOR); E LABEL 3/4 HOUR (EXTERIOR)
60	-	B LABEL 1 HOUR
90	-	B LABEL 1-1/2 HOUR (INTERIOR); D LABEL 1-1/2 HOUR (EXTERIOR)
180	-	A LABEL 3 HOUR
S	-	S LABEL (SMOKE) I.E. 20/S, ETC.

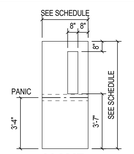
WOOD DOORS



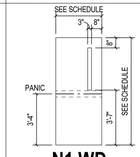
F WD
FLUSH DOOR



F PL
PLASTIC-LAMINATE-FACED WOOD DOOR

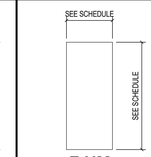


N WD
NARROW LITE

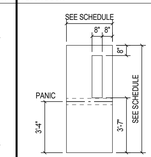


N1 WD
NARROW LITE FIRE DOOR FOR (B60 &B90) 3 x 33

HM DOORS

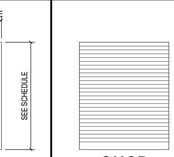


F HM
FLUSH DOOR

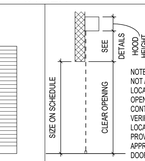


N HM
NARROW LITE

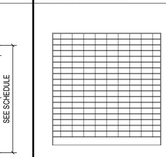
OTHER



OHCD
OVERHEAD COILING DOOR

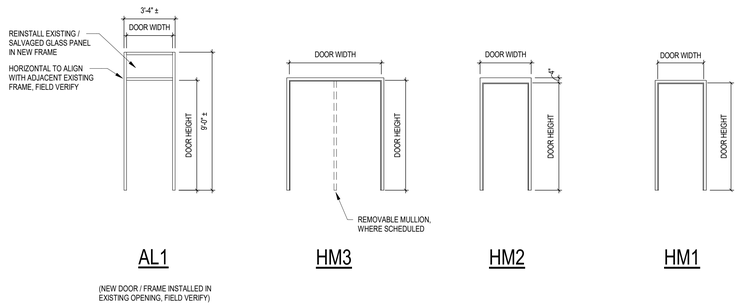


OVERHEAD COILING DOORS AND GRILLES - FACE MOUNTED SECTION



OHCG
OVERHEAD COILING GRILLE

1. THE BOTTOM OF GLASS LITES FOR ALL DOORS, EXCEPT FULL GLASS DOORS, MUST BE AT A MINIMUM OF 43" ABOVE FINISH FLOOR TO ALLOW FOR EXIT DEVICE MOUNTING. THIS LOCATION WILL ELIMINATE GLASS AND EXIT DEVICE INTERFERENCE. IT WILL ALSO ELIMINATE THE USE OF EXIT DEVICE SHIM KITS TO RAISE THE DEVICE OVER THE GLASS BEAD.
2. THE TOP DOOR RAIL DIMENSIONS, AS SHOWN ON THE DOOR TYPES, ARE REQUIRED FOR MOUNTING CLOSERS WITHOUT THE USE OF A DROP PLATE. THESE DIMENSIONS WILL ALSO PREVENT THE CLOSERS FROM BEING SEEN THROUGH THE GLASS ON THE OUTSIDE.
3. THE BOTTOM DOOR RAIL HEIGHT DIMENSION SHALL BE 10" TO CONFORM WITH VARIOUS STATE A.D.A. BARRIER FREE CODES.
4. THE STANDARD MOUNTING HEIGHT FOR EXIT DEVICES IS 40" TO CENTERLINE ABOVE FINISH FLOOR.
5. GLASS LITE SIZE, AREA AND LOCK-TO-LITE CUTOUTS, AS SHOWN ON DOOR TYPES, CONFORM WITH MANUFACTURERS LIFETIME WARRANTY AND FIRE RATED REQUIREMENTS.



AL1

(NEW DOOR / FRAME INSTALLED IN EXISTING OPENING, FIELD VERIFY)

HM3

HM2

HM1

FRAME ELEVATIONS

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. ALL DIMENSIONS SHOWN ARE NOMINAL (UNO). FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION / INSTALLATION.
2. REFER TO DOOR AND FRAME SCHEDULE FOR ADDITIONAL INFORMATION.
3. REFER TO DOOR SCHEDULE FOR NEW DOORS / FRAMES INSTALLED IN EXISTING WALL OPENINGS. FIELD VERIFY ALL CONDITIONS.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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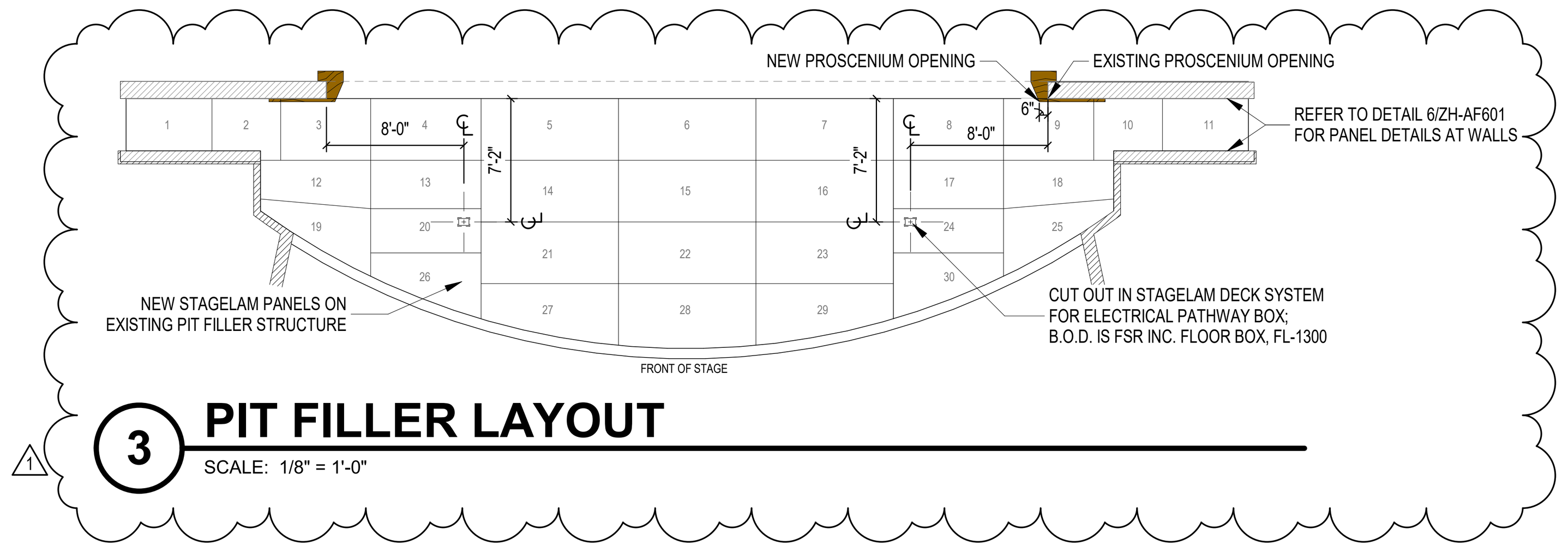
REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

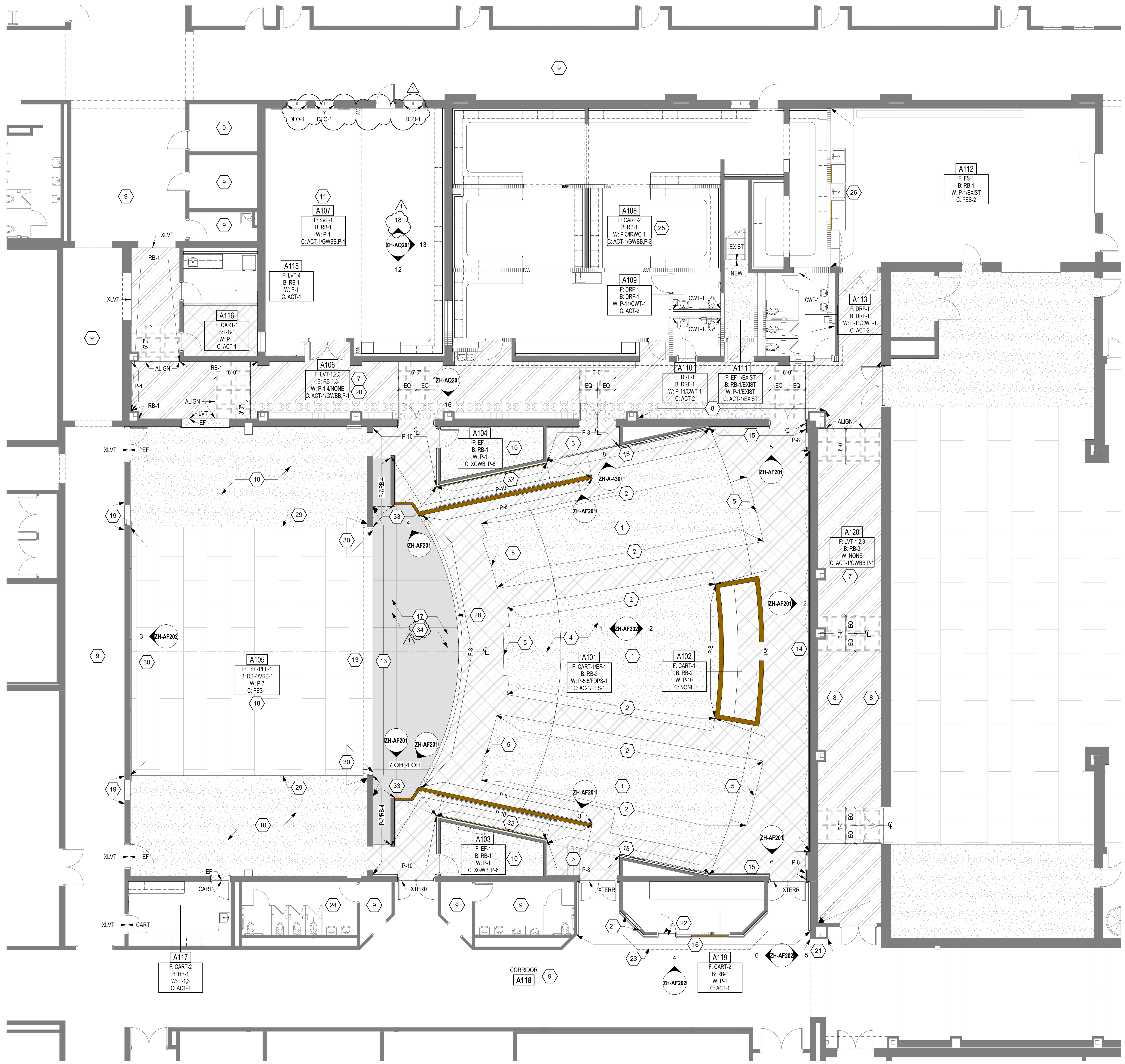
DOOR AND FRAME SCHEDULE, DOOR TYPES AND FRAME ELEVATIONS

ZH-A-601



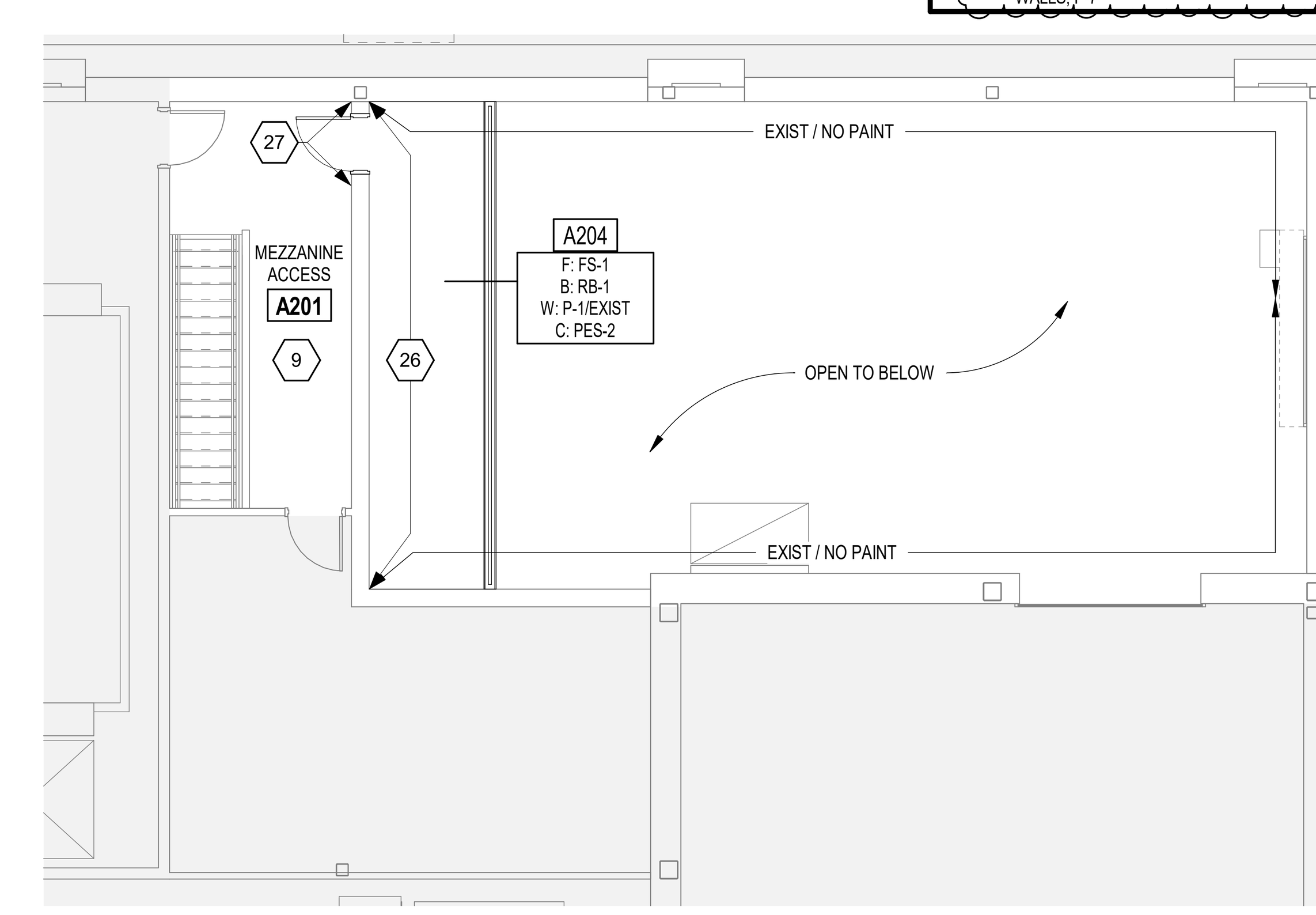
3 PIT FILLER LAYOUT

SCALE: 1/8" = 1'-0"



1 FIRST FLOOR FINISH PLAN - UNIT A

SCALE: 1/8" = 1'-0"



2 MEZZANINE FINISH PLAN

SCALE: 1/8" = 1'-0"

ROOM LEGEND

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A101	C205	AUDITORIUM	4,393 SF
A102	C205G	SOUND BOOTH	144 SF
A103	C205B	STORAGE	129 SF
A104	C205 F	STORAGE	129 SF
A105	-	STAGE	3,703 SF
A106	C3	CORRIDOR	1,538 SF
A107	C141	REHEARSAL ROOM	1,223 SF
A108		MAKE-UP / DRESSING ROOM	1,996 SF
A109		TOILET / CHANGING ROOM	51 SF
A110		STAFF TOILET	51 SF
A111	C3 MZ	MEZZANINE ACCESS	118 SF
A112	C131	SCENE SHOP	1,170 SF
A113		RESTROOM	155 SF
A114	C1	CORRIDOR	1,914 SF
A115		WORKROOM	104 SF
A116	C143	OFFICE	107 SF
A117	C205C	STAGE PREP	188 SF
A118	C5	CORRIDOR	1,946 SF
A119	C205A	VIDEO PRODUCTION ROOM	190 SF
A120	C6	CORRIDOR	913 SF
A121	C4	CORRIDOR	4,045 SF
A122	C206F	VOCAL STORAGE	171 SF
A123	C206E	RISER STORAGE	263 SF
A124	C204F	BAND STORAGE/PERCUSSION	357 SF
A125		INSTRUMENTS	554 SF
A201		MEZZANINE ACCESS	219 SF
A202		MECHANICAL MEZZANINE	1,916 SF
A203		STORAGE	439 SF
A204		STORAGE	188 SF
B101	C203	PAC	7,933 SF
B102	C203C	STAGE	4,675 SF
B103		PIANO STORAGE	81 SF

GENERAL FINISH NOTES

A. FIXED CASEWORK AND TACKBOARDS SHALL REMAIN IN PLACE (UNO). NEW WALL FINISHES SHALL BE INSTALLED AROUND THESE ITEMS.
B. SEALANT SHALL BE APPLIED AT ALL MATERIAL TRANSITIONS, BACKSPLASHES, AND DOOR FRAMES. ALL LOCATIONS WHERE NEW FINISH ABUTS A DISSIMILAR MATERIAL.
C. REMOVE AND REINSTALL EXISTING DEVICE FACEPLATES, SWITCH FACEPLATES, TECHNOLOGY FACEPLATES, AND CLOCKS.
D. EXISTING ITEMS TO REMAIN AND NEW FINISHES APPLIED AROUND INCLUDE BUT NOT LIMITED TO THERMOSTATS, AND FIRE EXTINGUISHER CABINETS (UNO).
E. RESILIENT TRANSITION STRIP BETWEEN NEW FLOOR FINISH AND EXISTING FLOOR FINISH.
F. PROVIDE NEW RESILIENT TRANSITION STRIPS AT EXPOSED EDGE OF NEW FLOOR FINISH TO EXISTING FLOOR FINISH.
G. PAINT ALL SIDES (VERT. AND HORZ.) OF BULKHEAD/SOFFIT COLOR INDICATED (UNO).
H. EXISTING INTERIOR DOOR FRAMES ARE TO REMAIN. DO NOT PAINT.
I. PAINT ALL NEW INTERIOR DOOR FRAMES TO MATCH EXISTING DOOR FRAME COLOR. PAINT ON ALL FACES (PAINT CODE #5.12).
J. PATCH AND REPAIR ALL HOLES AND IMPERFECTIONS, TO RECEIVE NEW FINISHES.

FLOOR PATTERN/FINISH KEY NOTES (X)

1 NEW EF-1 EPOXY COATING UNDER SEATS, REPAIR AS REQUIRED FROM PREVIOUS SEAT REMOVAL
2 INSTALL RMA-1 LIGHTED TRANSITION STRIP AT CARPET TERMINATION; REFER TO DETAIL 1/ZH-AF601
3 INSTALL RSA-1 LIGHTED STAIR NOSING
4 NEW CURVED ACOUSTICAL CEILING CLOUDS, AC-1; PAINT ALL EXPOSED STRUCTURE, DUCTS, ETC, PES-1
5 INSTALL RMA-2 UNLIT TRANSITION STRIP AT CARPET TERMINATION; REFER TO DETAIL 2/ZH-AF601
6 REPLACE EXISTING LINOLEUM FLOORING WITH NEW 1/4" THICK STAGELAM FLOORING PANELS, TSF-1; REFER TO DETAIL 8/ZH-AF601; ALIGN PANEL SEAMING WITH CENTER STAGE AS SHOWN
7 INSTALL NEW LVT FLOORING IN MONOLITHIC LAY, IN PATTERN SHOWN (1)
8 DO NOT PAINT EXISTING MURALS UNLESS OTHERWISE NOTED
9 NO FINISH WORK IN THIS ROOM UNLESS NOTED OTHERWISE
10 APPLY NEW EPOXY COATING, EF-1, ON EXISTING EXPOSED CONCRETE FLOOR
11 NEW ACOUSTICAL WALL PANELS IN THIS ROOM, AWT-1; REFER TO ELEVATIONS
12 INSTALL RSA-1 LIGHTED STAIR NOSING ON ALL BALCONY STAIRS; REFER TO ZH-AF21B AND DETAIL 3/ZH-AF601
13 FDPS-1 FRAMED DECORATIVE PANEL SYSTEM PROSCENIUM SURROUND, REFER TO ELEVATIONS AND DETAIL 11/ZH-A-502
14 PAINT WAINSCOT, P-8; INSTALL 3-DIMENSIONAL WWP-1 PANELS WITH 2X STAINED TRIM, AWT-2 AND AWT-3 PANELS; REFER TO 1/ZH-AF201 AND 8-11/ZH-AF202
15 PAINT WAINSCOT, P-8; PAINT P-5 AND INSTALL AWT-2 PANELS ABOVE; REFER TO ELEVATION
16 INSTALL FRAMED DECORATIVE PANEL SYSTEM, FDPS-1, FROM BASE TO CEILING; REFER TO ELEVATIONS & ZH-A-11A
17 INSTALL NEW WENGER DECK ASSEMBLY WITH STAGELAM TOP LAYER ON EXISTING WENGER PORTABLE PIT FILLER STRUCTURE; REFER TO DETAILS 3/ZH-AF11A & 6&9/ZH-AF601. INCLUDE NEW FRAMED OPENINGS IN DECK ASSEMBLY FOR POWER ACCESS; REFER TO E- AND T- SERIES DRAWINGS (1)
18 INSTALL NEW STAGELAM ASSEMBLY, TSF-1; REFER TO DETAIL 9/ZH-AF601; ALIGN PANEL SEAMING WITH CENTER STAGE AS SHOWN
19 PAINT WALL, P-1, AND INSTALL RESILIENT BASE, RB-1, WHERE DOORS WERE INFILLED
20 INSTALL RB-3 ON ALL WALLS IN CORRIDOR EXCEPT WHERE RB-1 IS NOTED
21 INSTALL 4"H PRECAST TERRAZZO BASE, ETB-1
22 PATCH TERRAZZO FLOORING WHERE WALL AND COVED BASE WAS REMOVED
23 PAINT ALL SIDES OF NEW GWBB, P-4
24 REMOVE AND REINSTALL EXISTING ACT CEILING TILES, GRID, AND LIGHTING AS REQUIRED FOR INSTALLATION OF NEW MECHANICAL EQUIPMENT; NO OTHER FINISH WORK IN THIS ROOM
25 INSTALL IRWC-1 BELOW COUNTERTOP ON GWB WALLS ONLY
26 PAINT INDICATED WALL ONLY, P-1
27 PAINT AS REQUIRED WHERE INFILL OCCURS AT NEW DOOR FRAME; WALL PAINT COLOR TO MATCH EXISTING
28 NEW WOOD TRIM; STAIN TO MATCH NEW WALL PANELS
29 TRANSITION FROM STAGELAM, TSF-1, TO EPOXY, EF-1; REFER TO DETAIL 4/ZH-AF601
30 TERMINATE TSF-1 SHORT OF WALL TO ALLOW FOR FLOORING EXPANSION, REFER TO DETAIL 7/ZH-AF601
31 TRANSITION FROM STAGELAM, TSF-1, TO EPOXY, EF-1; REFER TO DETAIL 5/ZH-AF601
32 PAINT WAINSCOT, P-10; PAINT P-5 AND INSTALL WWP-1 PANELS WITH 2X STAINED TRIM ABOVE; REFER TO ELEVATION
33 INSTALL WWP-2 PANELS WITH 2X PAINTED TRIM; REFER TO ELEVATION
34 INSTALL FS-1 FLOOR SEALER ON PIT FLOOR AND PAINT PIT WALLS, P-7 (1)

FLOOR FINISH LEGEND

EF-1
LVT-2
CART-1
LVT-3
LVT-1
TSF-1

VERIFICATION NOTE

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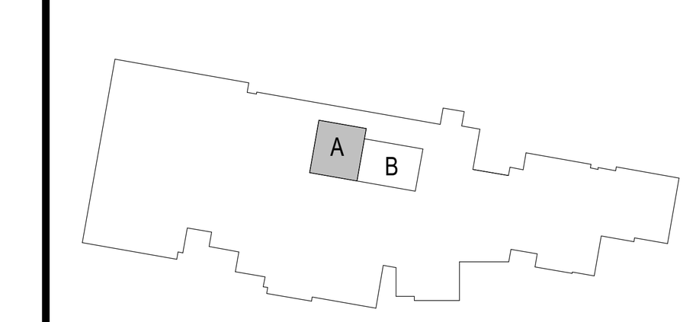
ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ARCHITECT

FANNING HOWEY
317.848.0966 WWW.FHAI.COM
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204



KEY PLAN

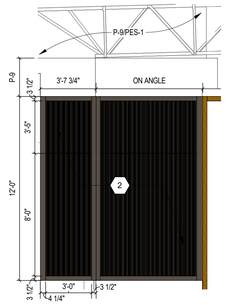
ISSUED FOR BID

PROJECT MANAGER: JM
DRAWN BY: AML
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

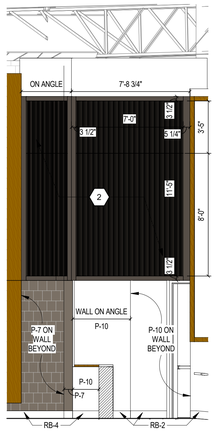
REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

FIRST FLOOR FINISH PLAN - UNIT A

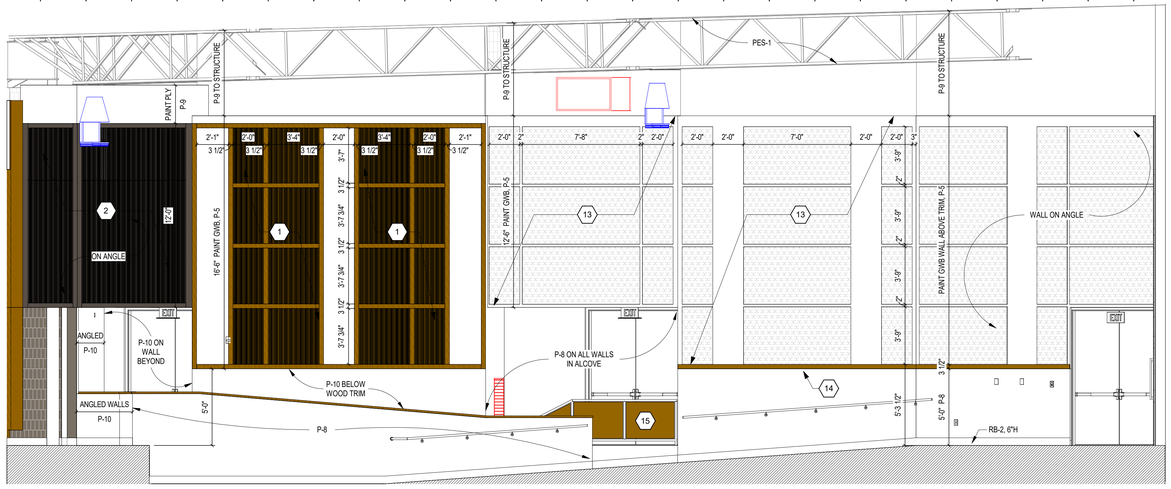
ZH-AF11A



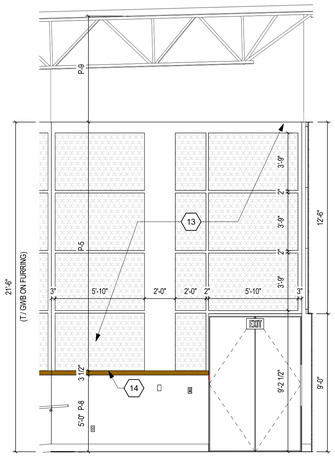
7 NORTHWEST BULKHEAD - B
SCALE: 1/4" = 1'-0"



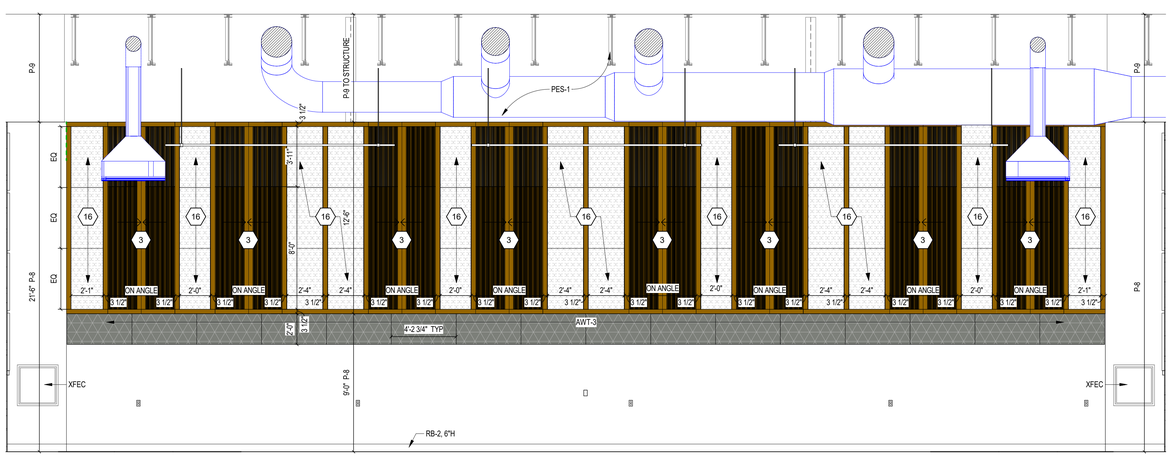
4 NORTHWEST BULKHEAD - A
SCALE: 1/4" = 1'-0"



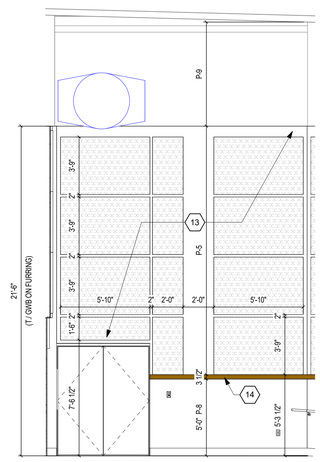
1 AUDITORIUM - NORTH SIDE WALL
SCALE: 1/4" = 1'-0"



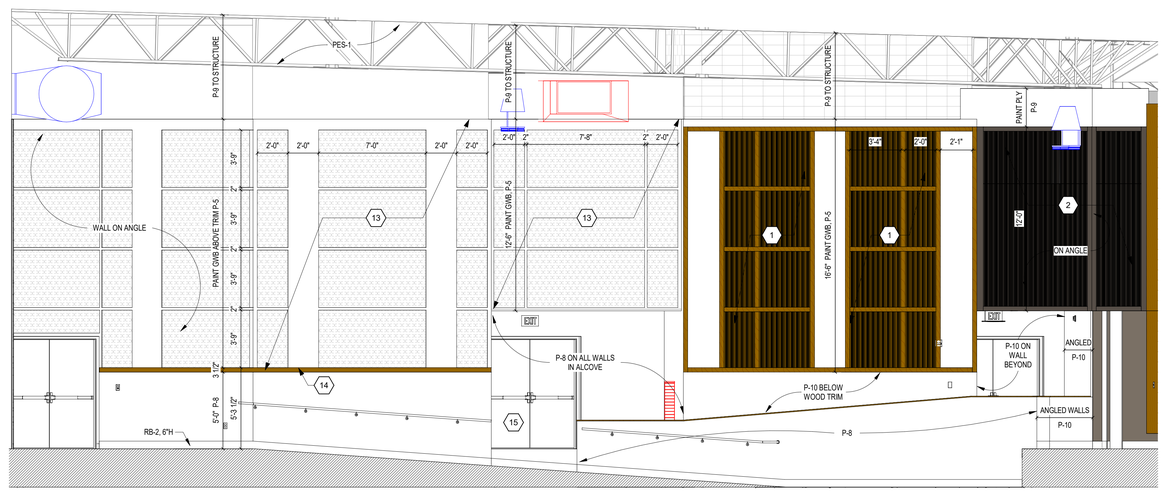
5 NORTHEAST CORNER
SCALE: 1/4" = 1'-0"



2 AUDITORIUM - EAST 2
SCALE: 1/4" = 1'-0"



6 SOUTHEAST CORNER
SCALE: 1/4" = 1'-0"



3 AUDITORIUM - SOUTH SIDE WALL
SCALE: 1/4" = 1'-0"

INTERIOR ELEVATION NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1. WWP-1 PANELING WITH 2X4 TRIM, ALL STAINED AS NOTED ON ZH-AF601; REFER TO DETAIL 9/ZH-AF202
2. WWP-2 PANELING WITH 2X4 TRIM, ALL PAINTED AS NOTED ON ZH-AF601; REFER TO DETAIL 9/ZH-AF202
3. WWP-1 PANELING WITH 2X4 TRIM ON ANGLE, ALL MATERIAL TO BE STAINED AS NOTED ON ZH-AF601; INSTALL INSULATION BEHIND AS NOTED ON DETAIL 8&11/ZH-AF202
4. FDPS-1 STAGE SURROUND; REFER TO DETAIL 11/ZH-A-502
5. AC-1 ACOUSTICAL CLOUDS
6. MAIN STAGE CURTAIN AND VALANCE, REFER TO ZH-E-402
7. INSTALL NEW TERRAZZO COVE BASE WHERE DOOR WAS INFILLED, ETB-1
8. INSTALL NEW PRECAST TERRAZZO BASE, ETB-1
9. REINSTALL EXISTING DEDICATION PLAQUE
10. INSTALL NEW DEDICATION PLAQUE
11. ELECTRIC PROJECTION SCREEN, ATTACHED TO STRUCTURE ABOVE
12. NEW WOOD TRIM, REFER TO DETAIL 14/ZH-A-502
13. PAINT GWB WALL, P-5; INSTALL AWT-2 PANELS AS SHOWN
14. INSTALL 2X4 WAINSCOT TRIM WITH EASED EDGES; STAIN AS NOTED ON ZH-AF601
15. NEW RAILING, INFILL PANEL TO BE STAINED TO MATCH WOOD TRIM; REFER TO DETAIL 8/ZH-A-430
16. AWT-2 ACOUSTICAL PANELS WITH 2X4 STAINED TRIM; REFER TO DETAILS 8&10/ZH-AF202

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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Zionsville, IN 46077

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ARCHITECT

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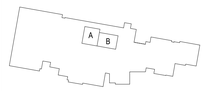

KEY PLAN

N

ISSUED FOR BID

PAULA A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: AML
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

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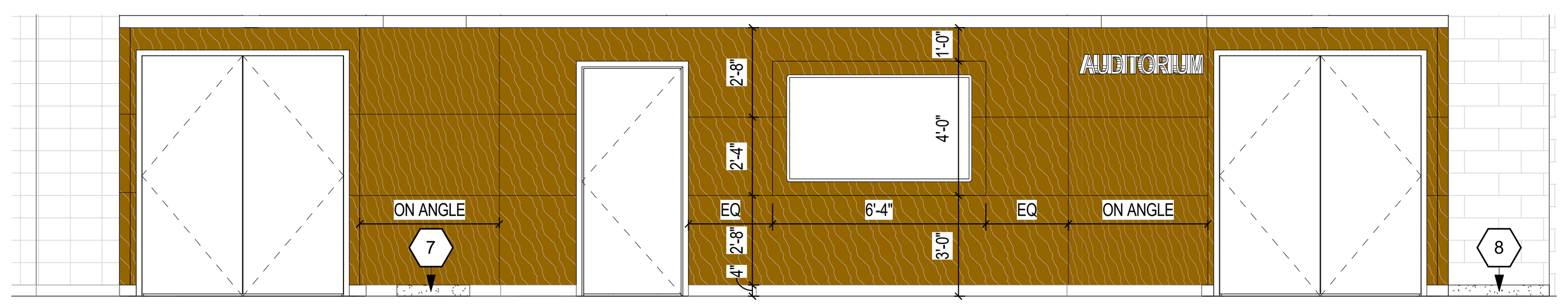
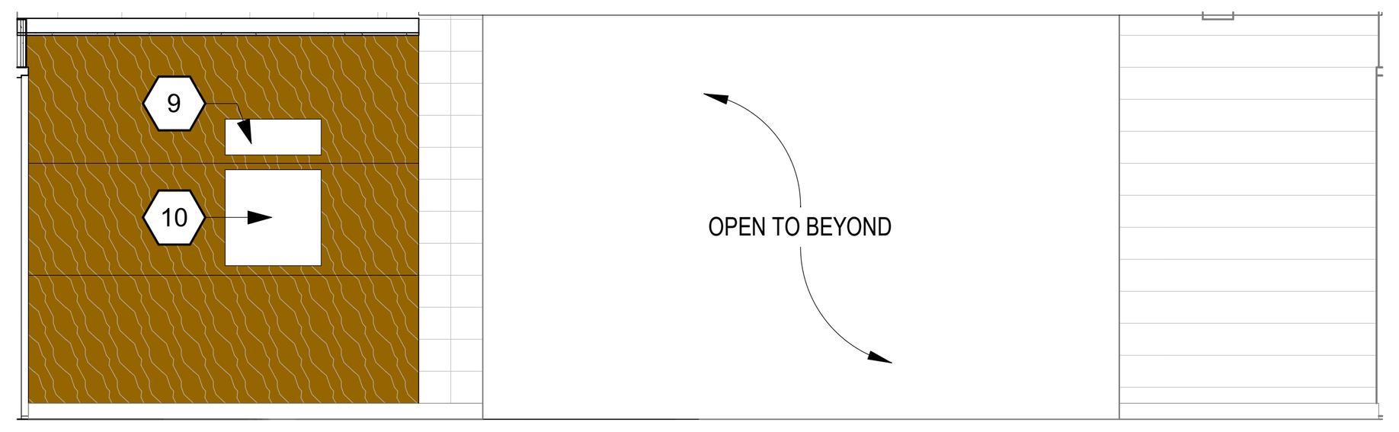
INTERIOR ELEVATIONS

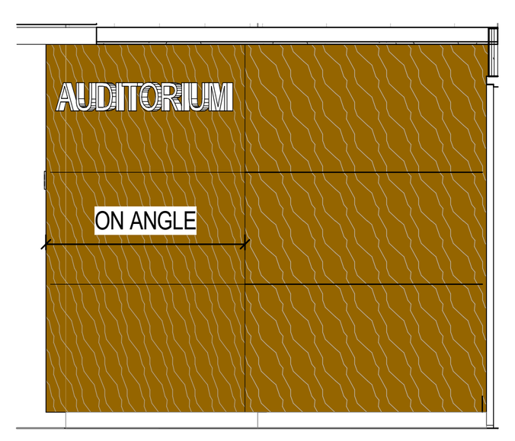
ZH-AF201



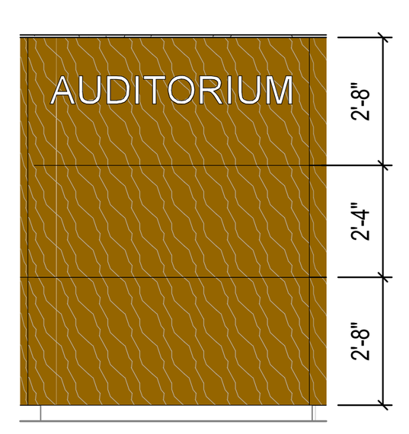
4 LOBBY AREA ACCENT - NORTH
SCALE: 1/4" = 1'-0"



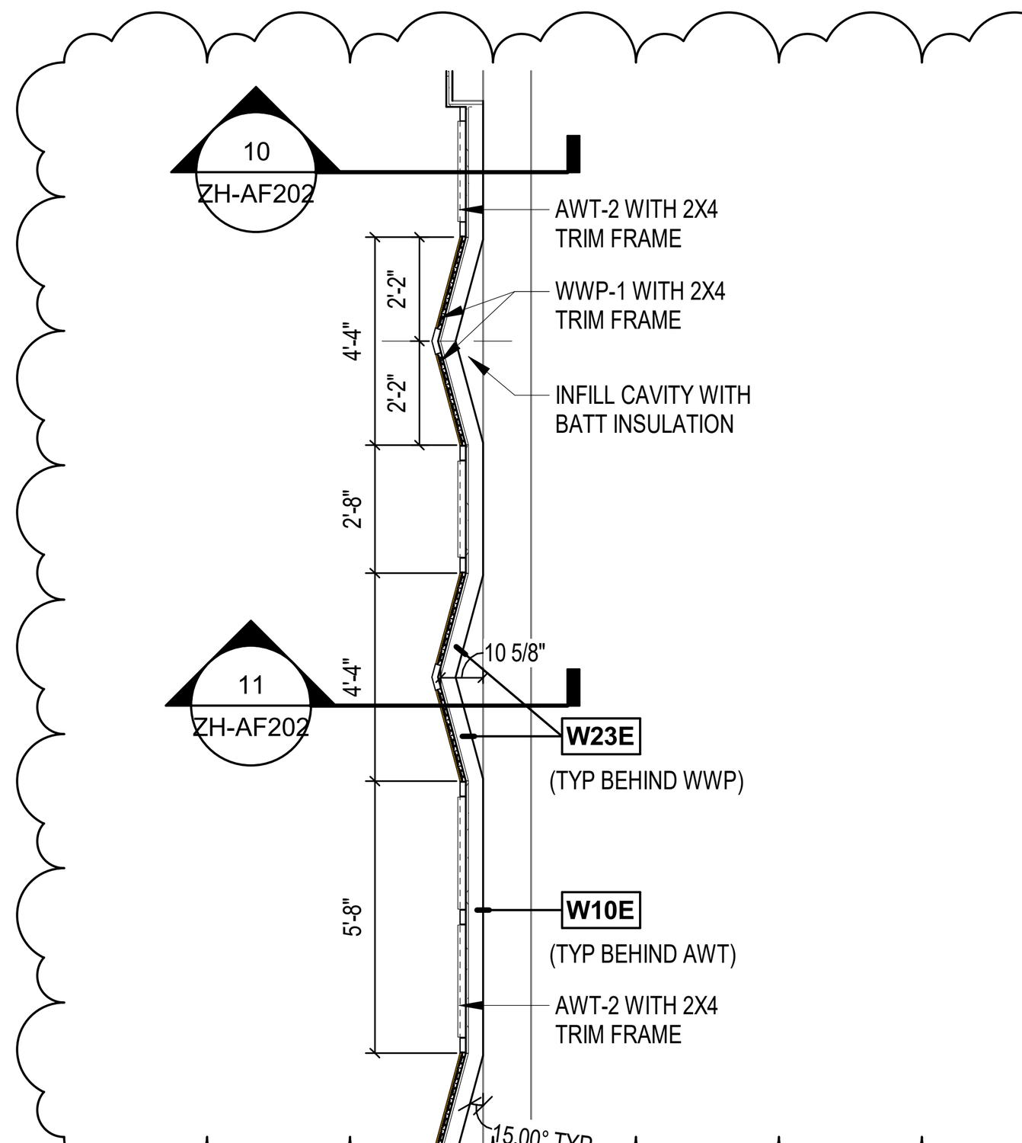
5 LOBBY AREA ACCENT - EAST
SCALE: 1/4" = 1'-0"



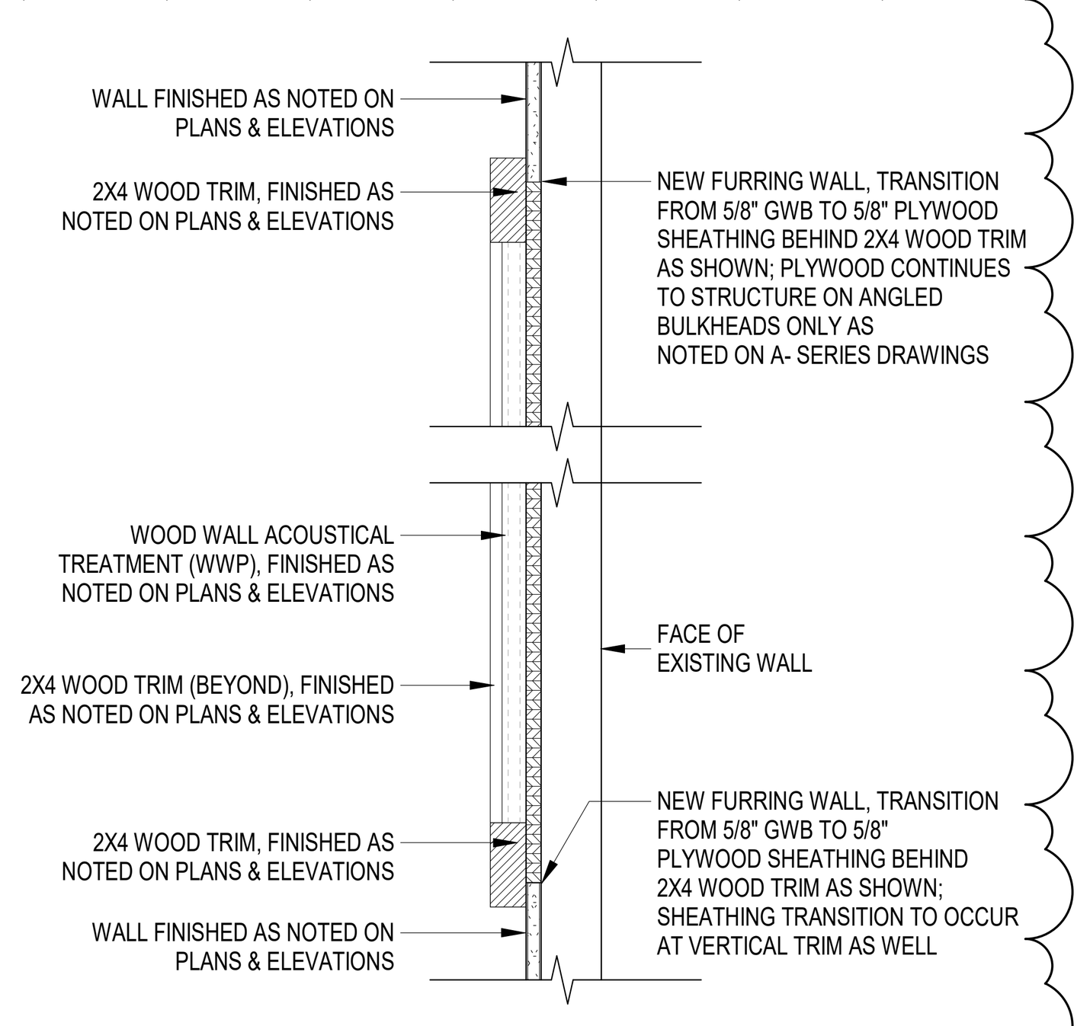
6 LOBBY AREA ACCENT - WEST 1
SCALE: 1/4" = 1'-0"



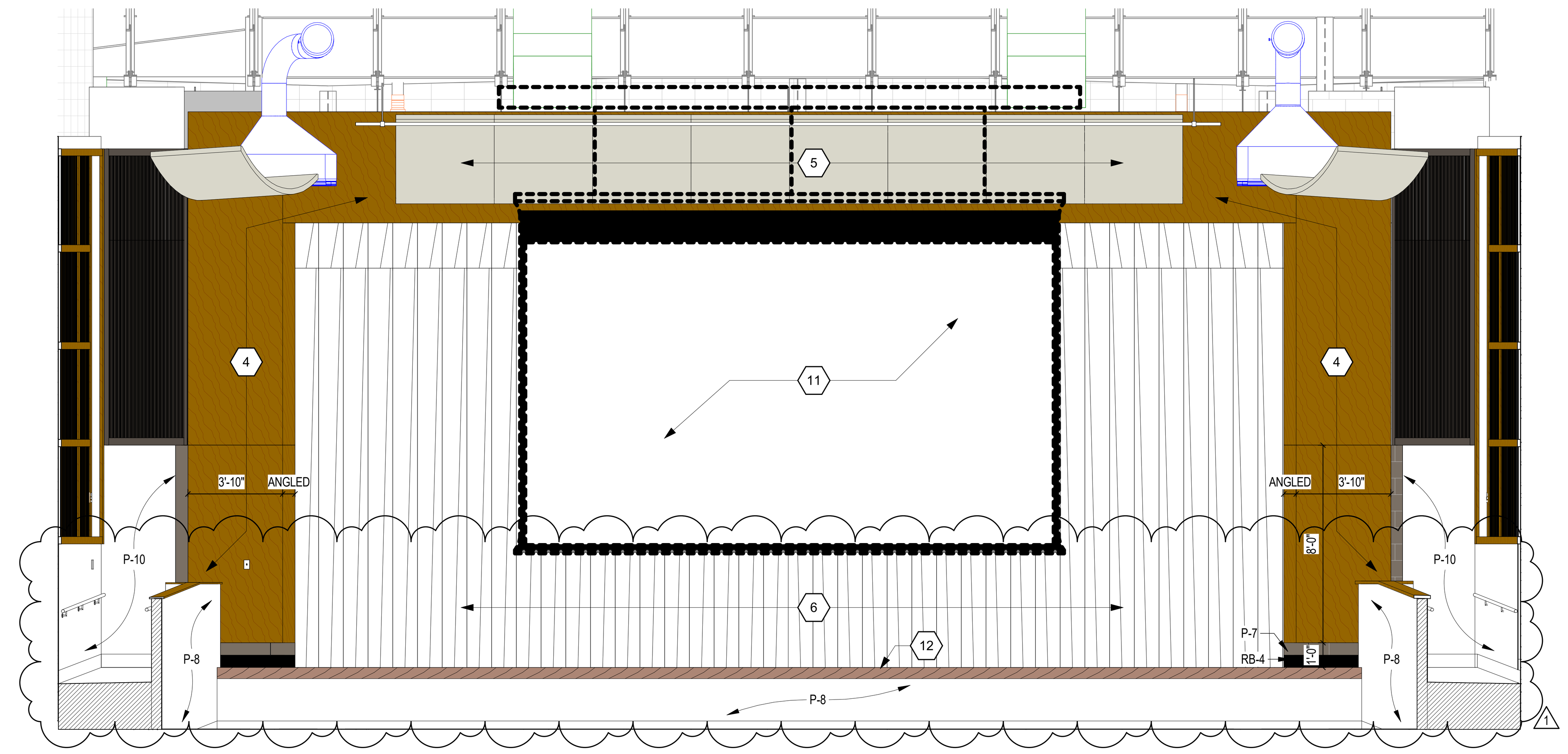
7 LOBBY AREA ACCENT - WEST 2
SCALE: 1/4" = 1'-0"



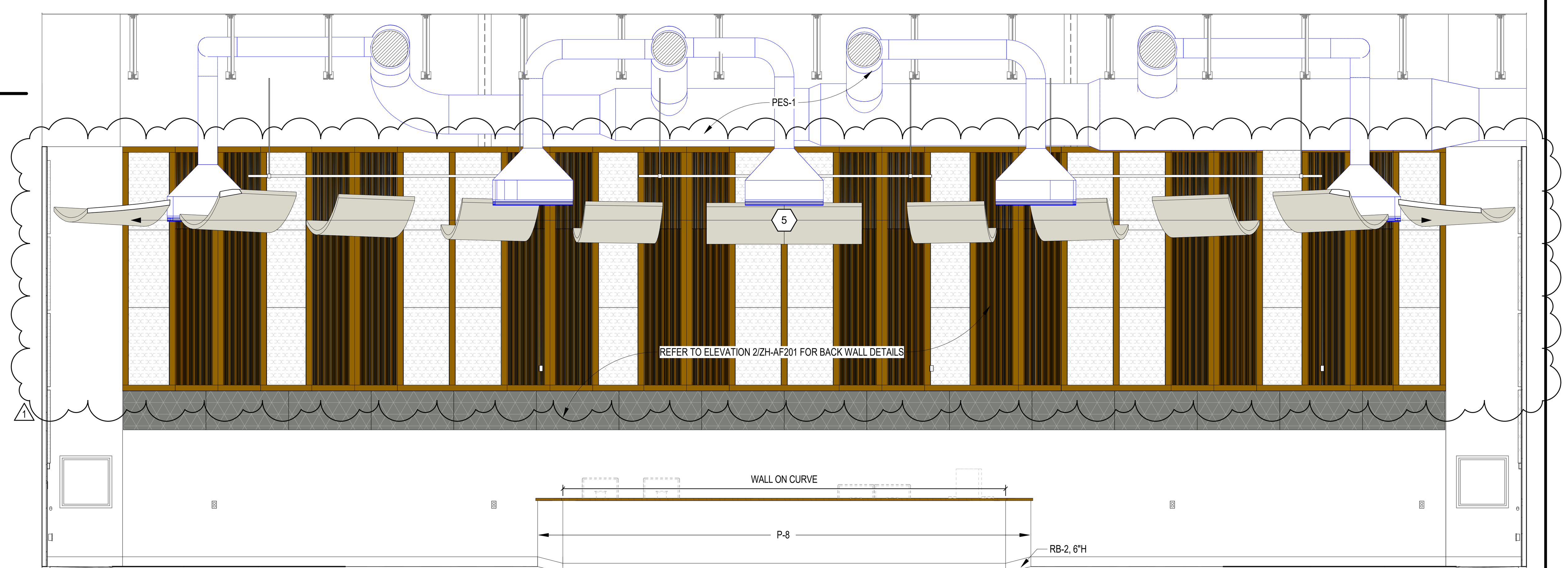
8 BACK WALL CONSTRUCTION DETAIL
SCALE: 1/4" = 1'-0"



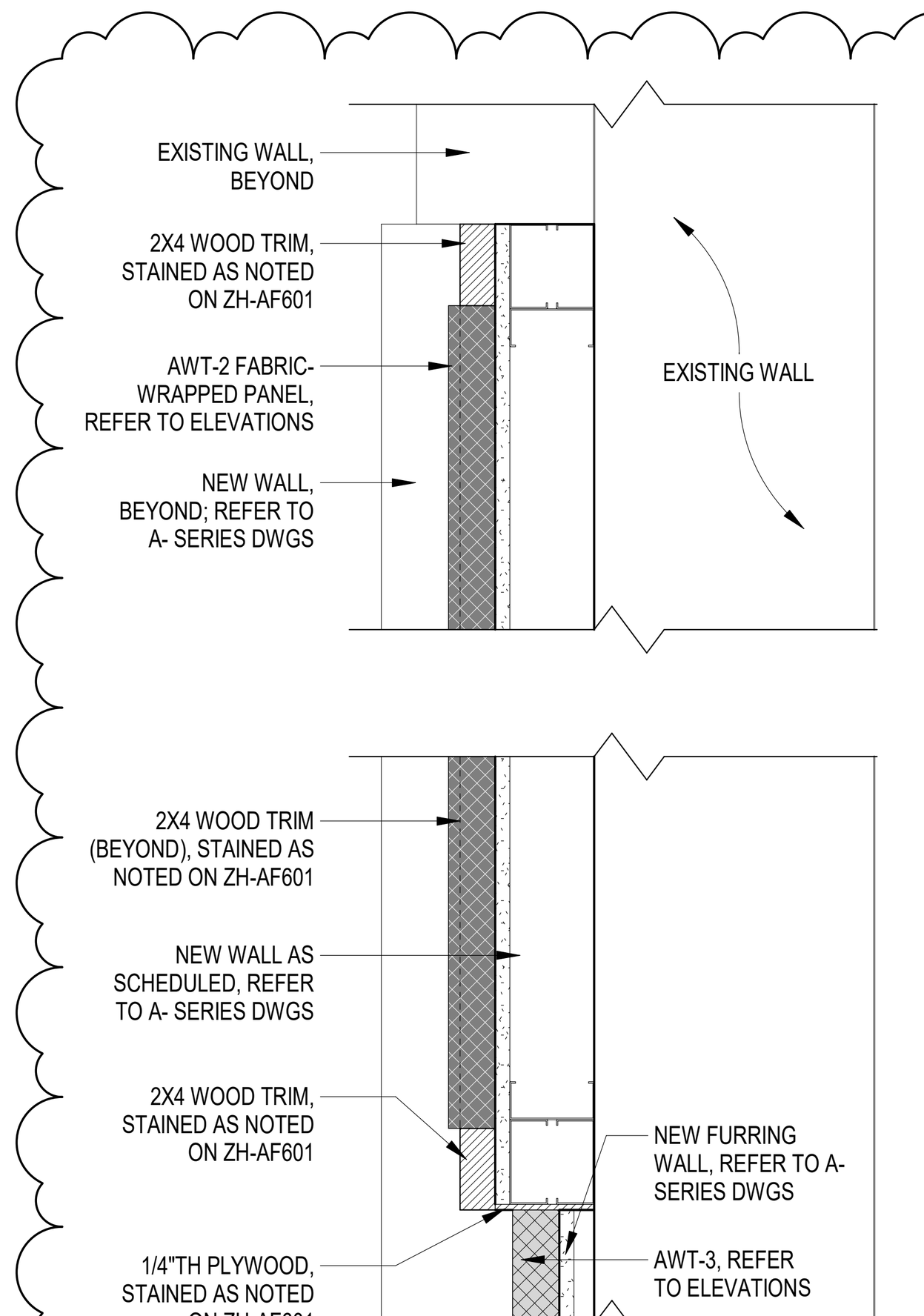
9 WWP DETAIL
SCALE: 1 1/2" = 1'-0"



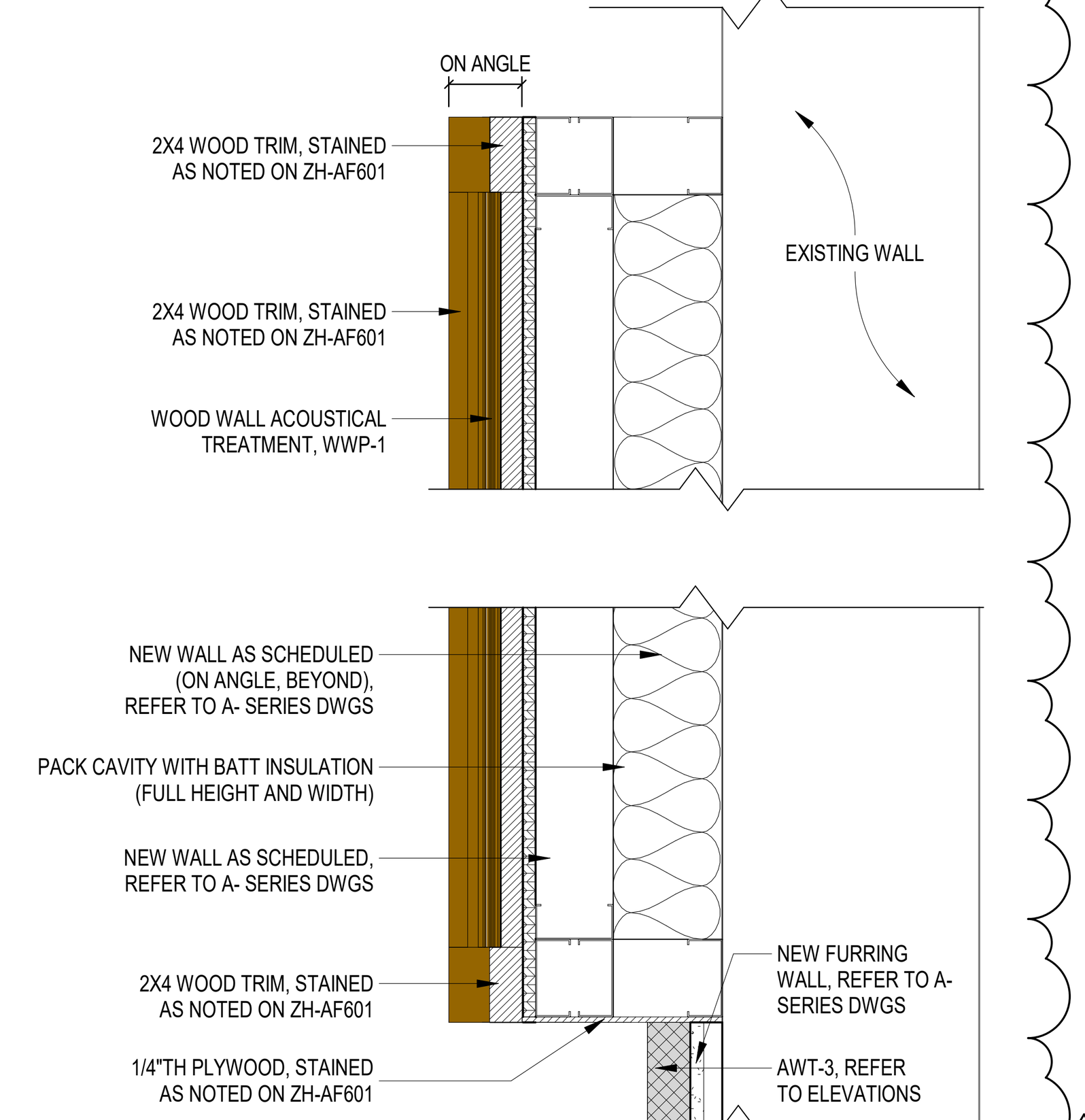
1 AUDITORIUM - WEST
SCALE: 1/4" = 1'-0"



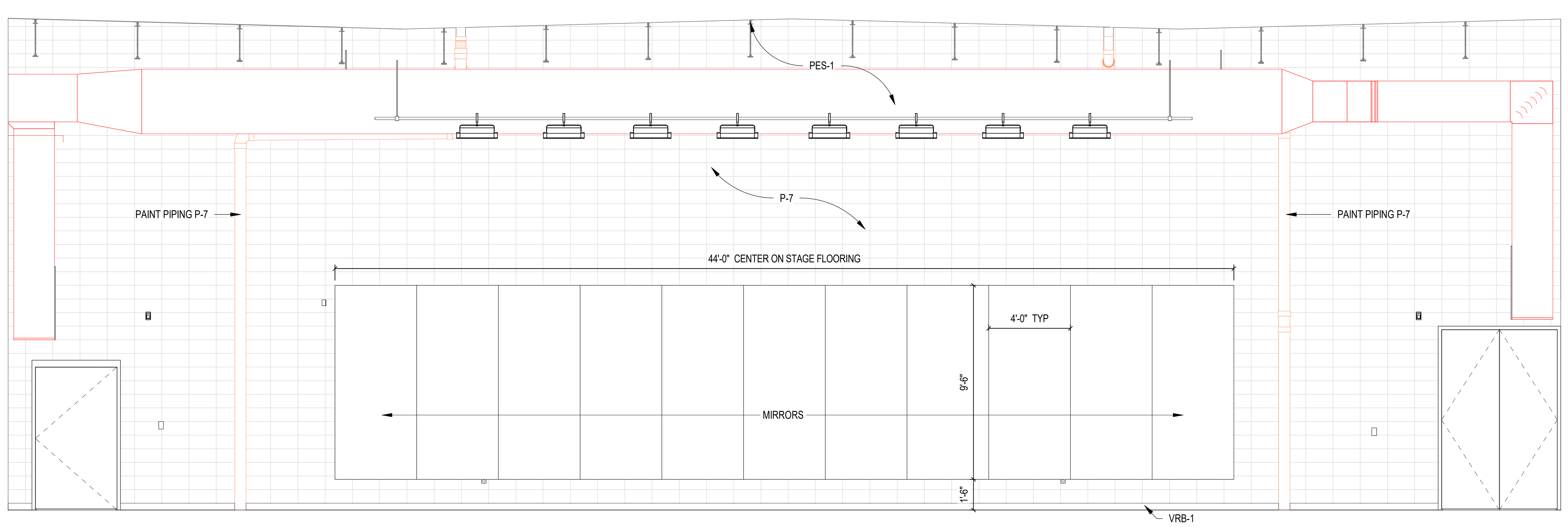
2 AUDITORIUM - EAST 1
SCALE: 1/4" = 1'-0"



10 BACK WALL - SECTION A
SCALE: 1 1/2" = 1'-0"



11 BACK WALL - SECTION B
SCALE: 1 1/2" = 1'-0"



3 STAGE - WEST
SCALE: 1/4" = 1'-0"

INTERIOR ELEVATION NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1. WWP-1 PANELING WITH 2X4 TRIM, ALL STAINED AS NOTED ON ZH-AF601; REFER TO DETAIL 9/ZH-AF202
2. WWP-2 PANELING WITH 2X4 TRIM, ALL PAINTED AS NOTED ON ZH-AF601; REFER TO DETAIL 9/ZH-AF202
3. WWP-1 PANELING WITH 2X4 TRIM, ON ANGLE; ALL MATERIAL TO BE STAINED AS NOTED ON ZH-AF601; INSTALL INSULATION BEHIND AS NOTED ON DETAIL 8&11/ZH-AF202
4. FDPS-1 STAGE SURROUND; REFER TO DETAIL 11/ZH-A-502
5. AC-1 ACOUSTICAL CLOUDS
6. MAIN STAGE CURTAIN AND VALANCE, REFER TO ZH-E-402
7. INSTALL NEW TERRAZZO COVE BASE WHERE DOOR WAS INFILLED, ETB-1
8. INSTALL NEW PRECAST TERRAZZO BASE, ETB-1
9. REINSTALL EXISTING DEDICATION PLAQUE
10. INSTALL NEW DEDICATION PLAQUE
11. ELECTRIC PROJECTION SCREEN, ATTACHED TO STRUCTURE ABOVE
12. NEW WOOD TRIM, REFER TO DETAIL 14/ZH-A-502
13. PAINT GWB WALL, P-5; INSTALL AWT-2 PANELS AS SHOWN
14. INSTALL 2X4 WAINSCOT TRIM WITH EASED EDGES; STAIN AS NOTED ON ZH-AF601
15. NEW RAILING, INFILL PANEL TO BE STAINED TO MATCH WOOD TRIM; REFER TO DETAIL 8/ZH-A-430
16. AWT-2 ACOUSTICAL PANELS WITH 2X4 STAINED TRIM; REFER TO DETAILS 8&10/ZH-AF202

VERIFICATION NOTE

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2026 IMPROVEMENTS

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ARCHITECT

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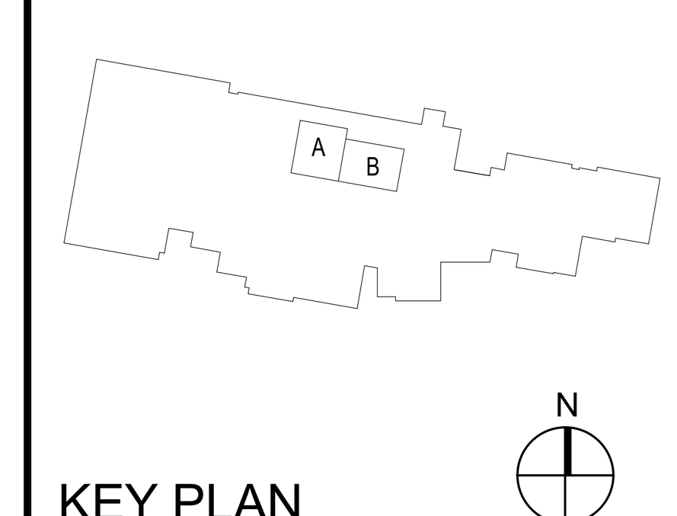

KEY PLAN

ISSUED FOR BID

PAUL A. MILLER
REGISTERED
No. AR10800161
STATE OF
INDIANA
ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: AML
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

INTERIOR ELEVATIONS

ZH-AF202

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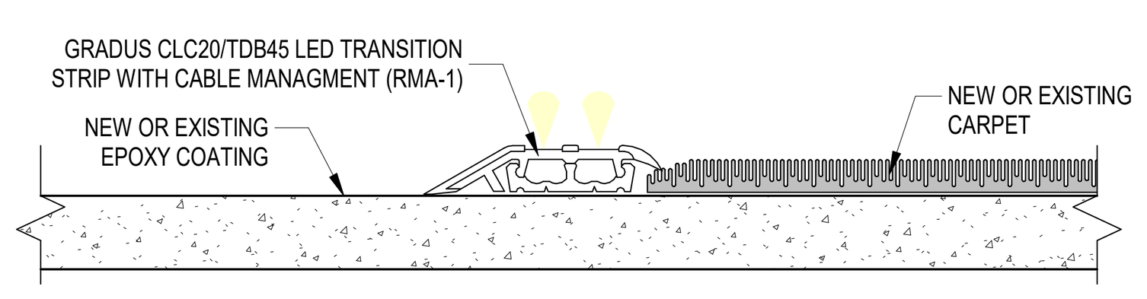
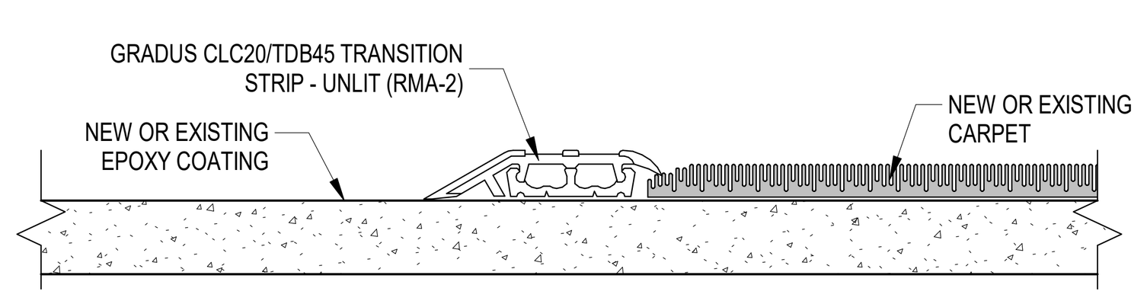
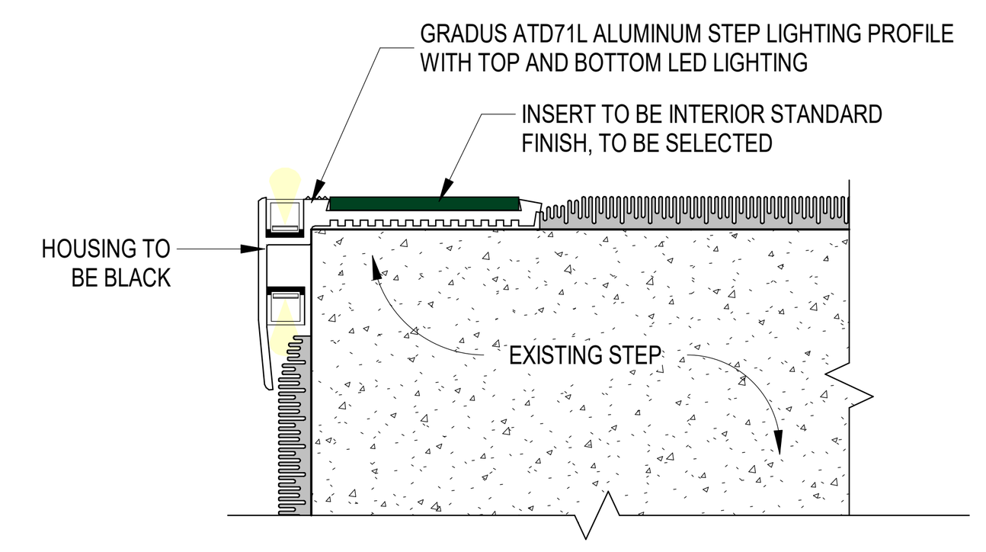


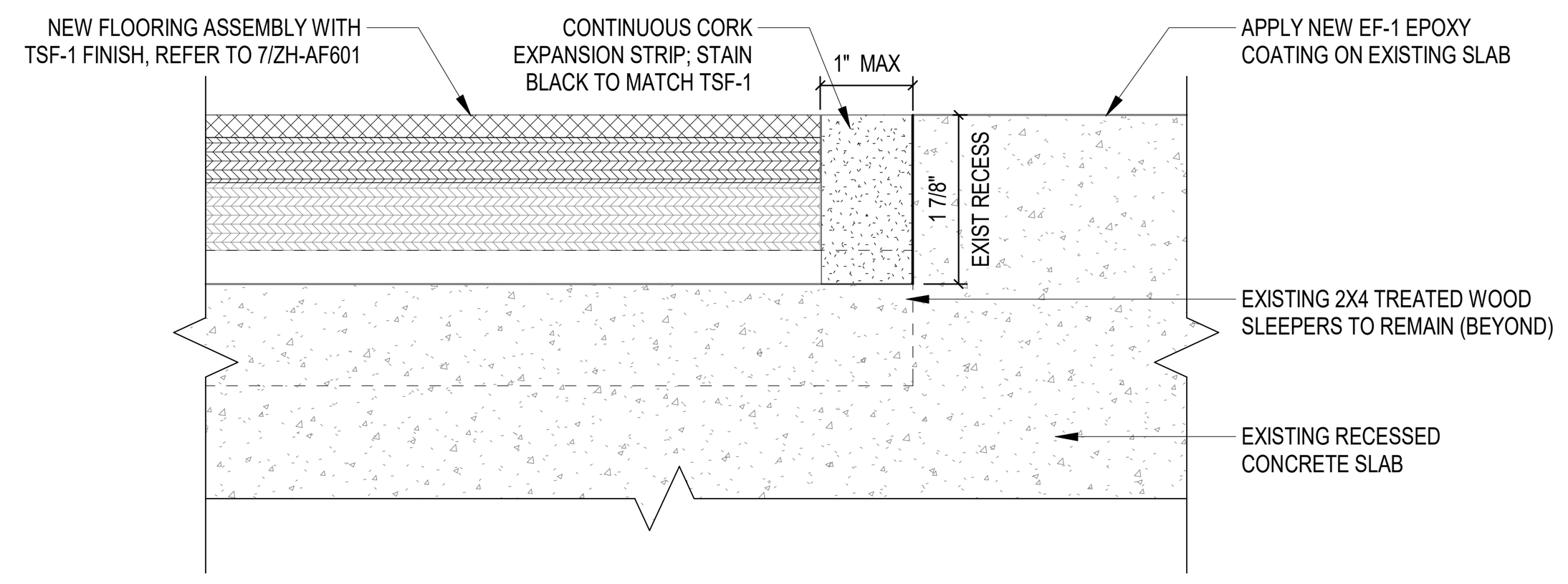
1 RMA-1 DETAIL
NOT TO SCALE



2 RMA-2 DETAIL
NOT TO SCALE



3 RSA-1 DETAIL
NOT TO SCALE



4 AUDITORIUM STAGELAM TRANSITION
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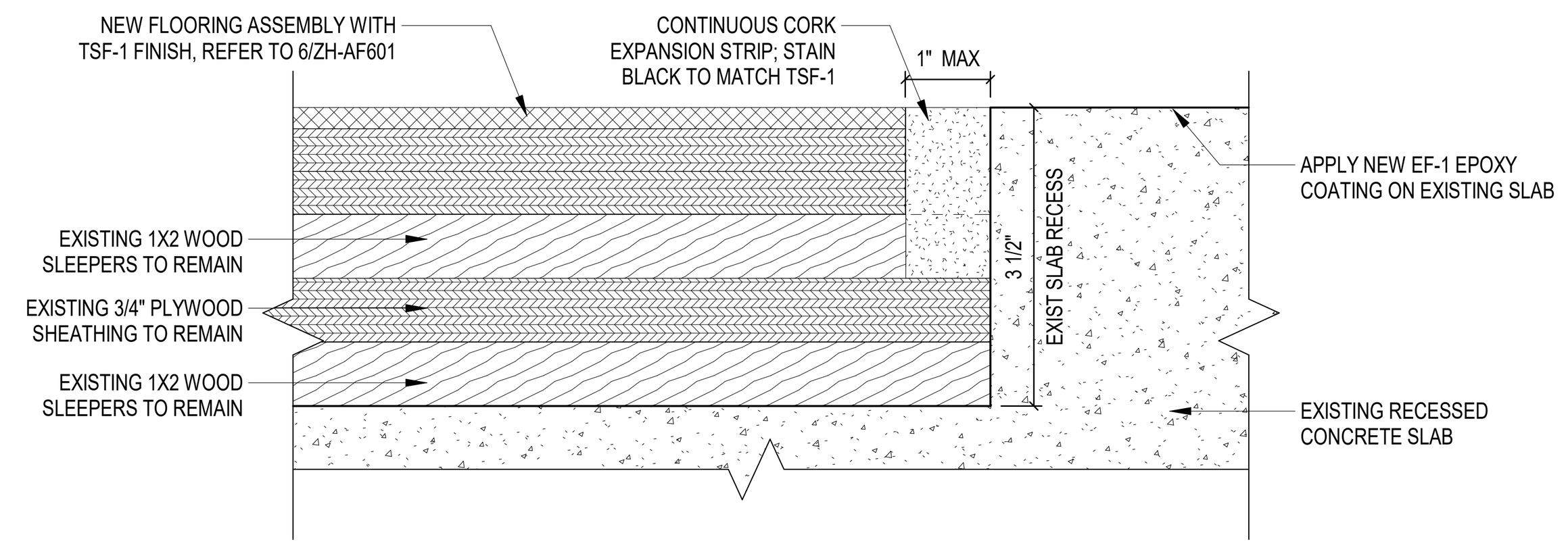
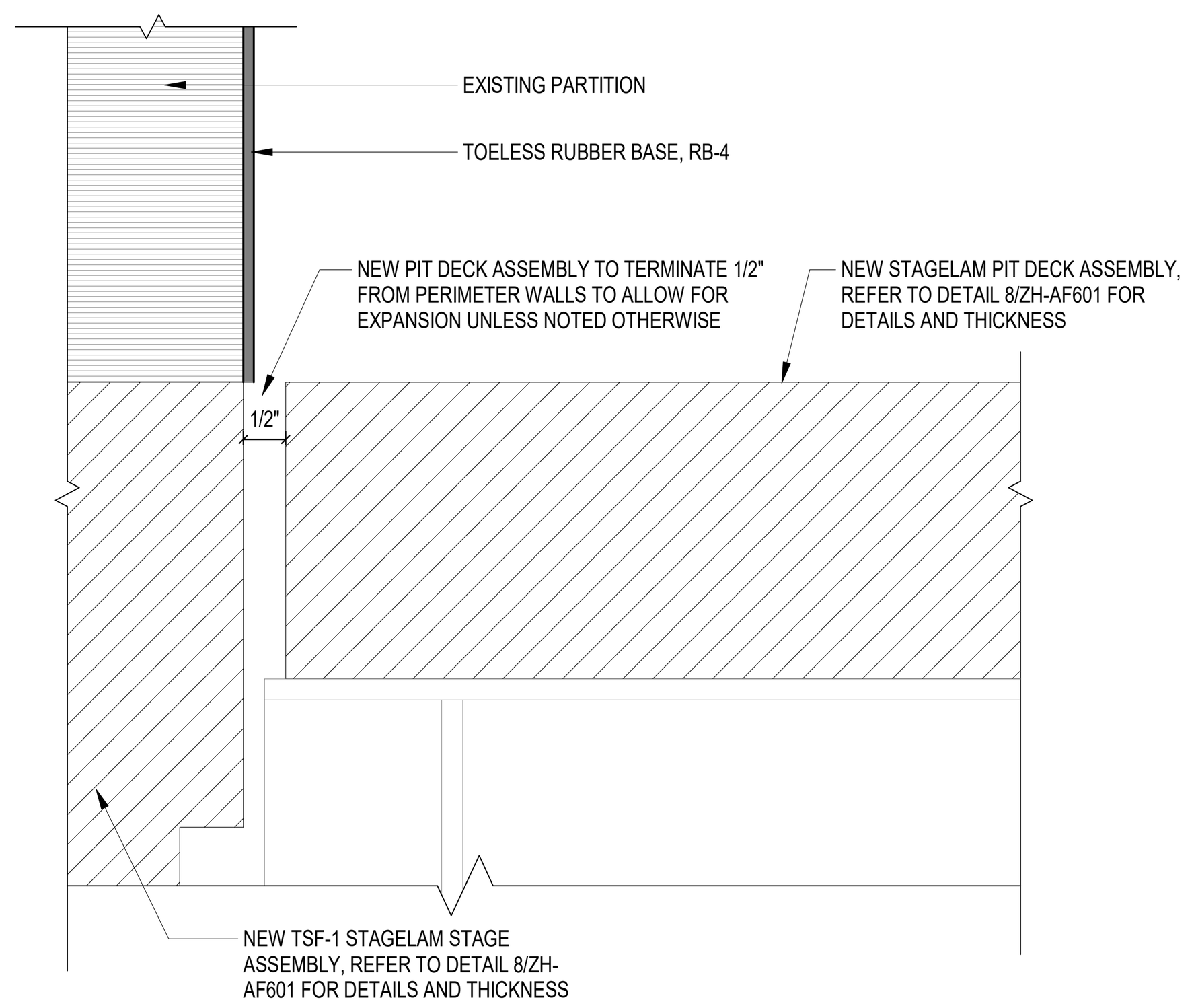
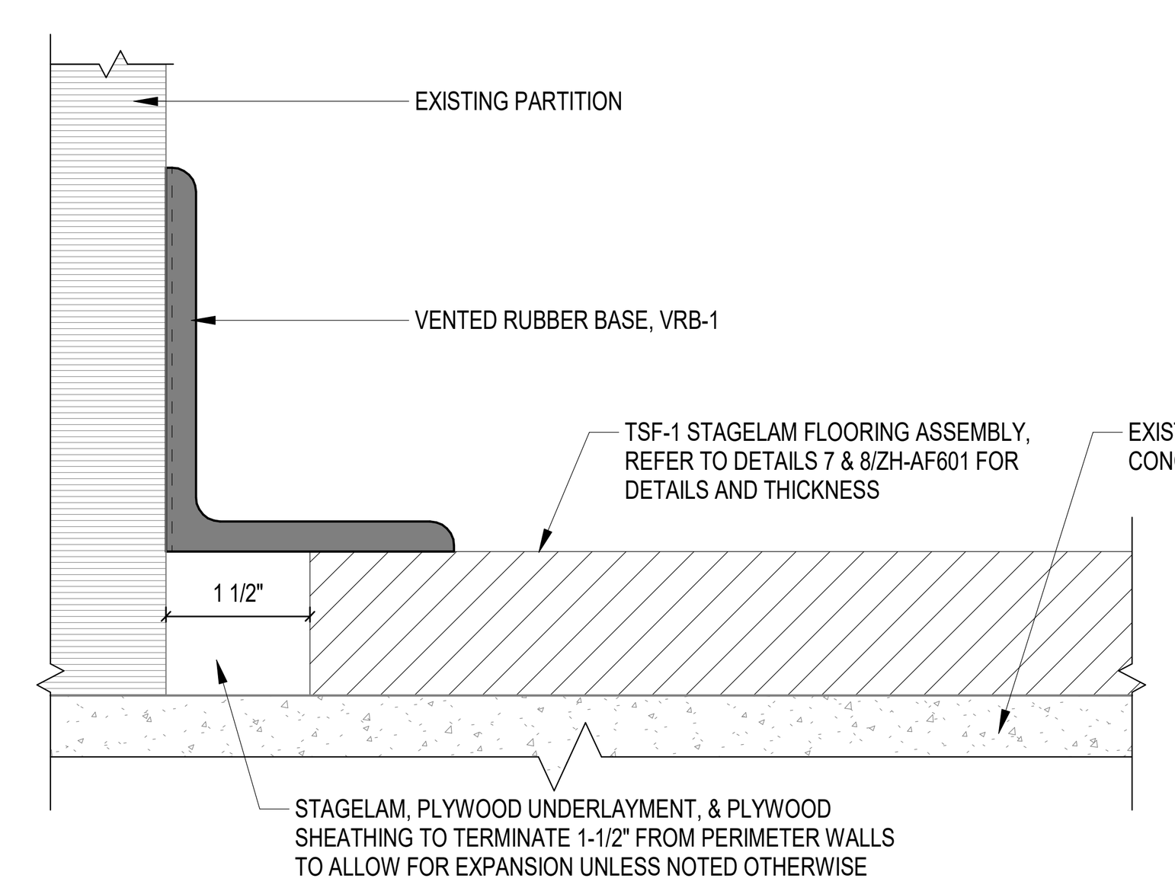


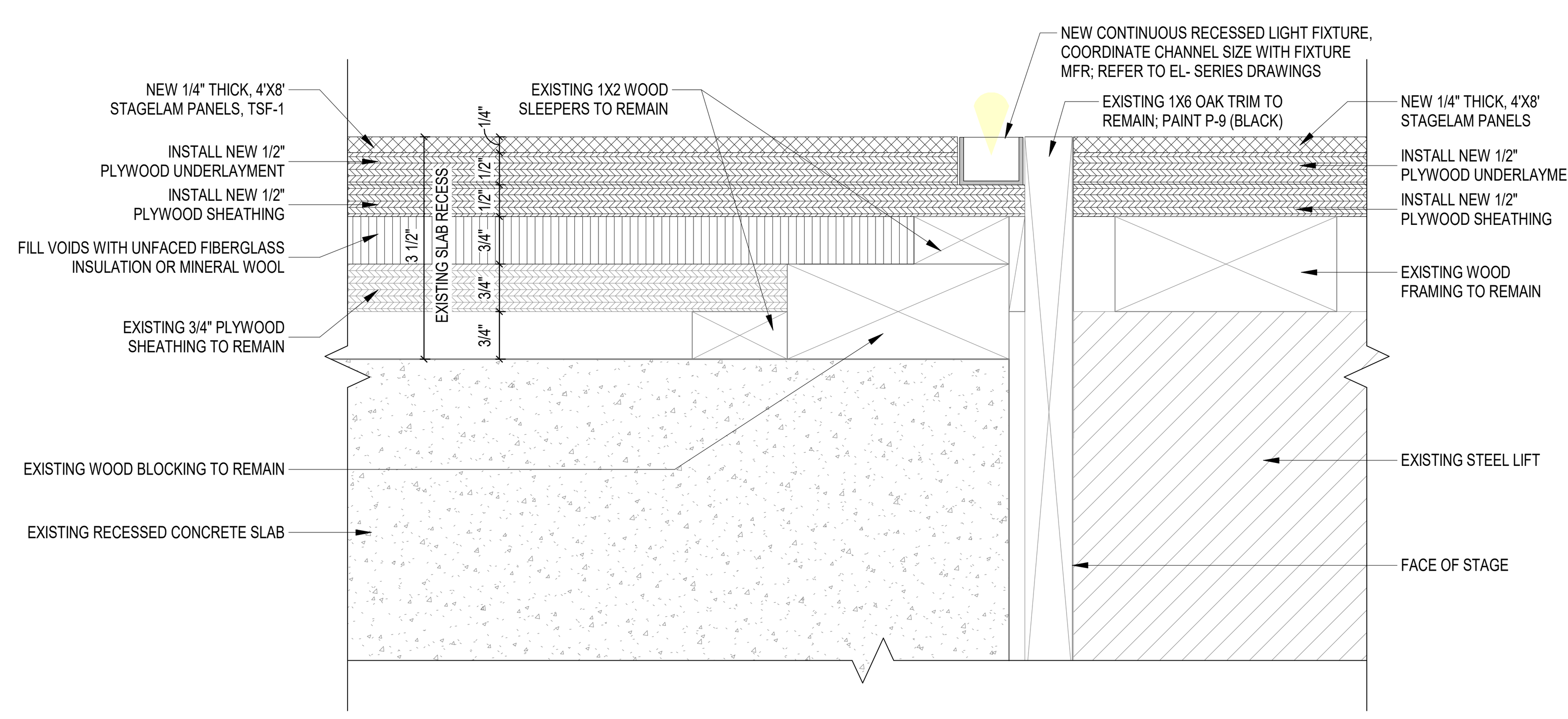
5 PAC STAGELAM TRANSITION STRIP
SCALE: 6" = 1'-0"



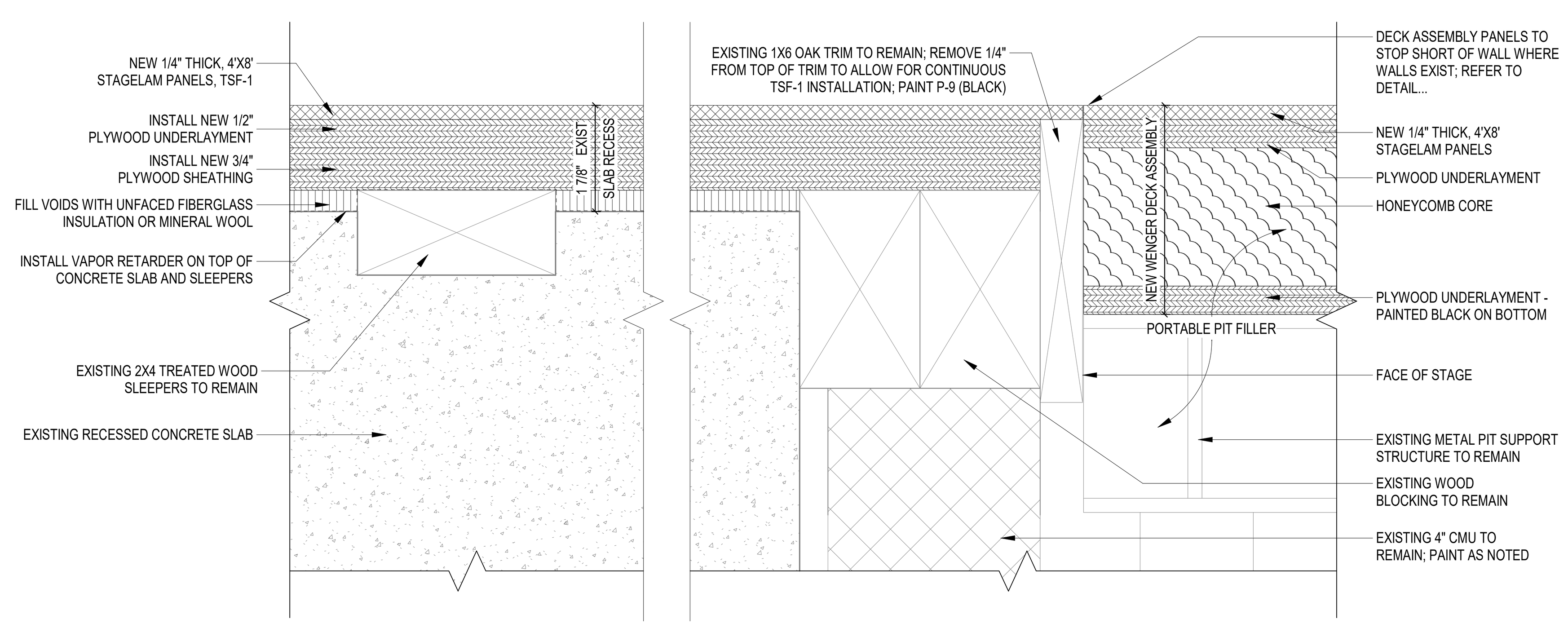
6 AUDITORIUM PIT PERIMETER DETAIL
SCALE: 6" = 1'-0"



7 STAGELAM PERIMETER BASE DETAIL
SCALE: 6" = 1'-0"



8 PAC STAGE & PIT DETAIL
SCALE: 6" = 1'-0"



9 AUDITORIUM STAGE & PIT DETAIL
SCALE: 6" = 1'-0"

LIST OF FINISHES

REFER TO AF ARCH. DWG. SHEETS

FLOOR MATERIALS

CARPET TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CART-1	MANNINGTON / SPIN REMIX / DISC RMX	OUTLAW 15229 / 12"X36"
CART-2	J+J INVISION / KINETEX / URBAN AVENUE	METROPOLITAN 1843-2841 / 24"X24"

DECORATIVE RESINOUS FLOORING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
DRF-1	REFER TO SPECIFICATIONS	50% F3080 LANAI GRAY, 25% F1360 FOREST GREEN 15% F9958 ALPACA WHITE, 10% F5920 CYBERSPACE

EPOXY PIGMENTED FLOORING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
EF-1	REFER TO SPECIFICATIONS	TO BE SELECTED

EPOXY TERRAZZO FLOORING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
ETF-1	REFER TO SPECIFICATIONS	40% GEORGIA WHITE #2, 40% GEORGIA WHITE #1, 10% VERDE ALPI #2, 10% VERDE ALPI #1, 10% POOL MIX MATRIX: TERROXY 39B-2T GLACIER GRAY

FLOOR SEALER

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
FS-1	REFER TO SPECIFICATIONS	CLEAR

LUXURY VINYL TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
LVT-1	PATCRAFT / ADMIX	SUNDIAL 00130 / 18"X36"
LVT-2	PATCRAFT / ADMIX	DOVE SHELL 00720 / 18"X36"
LVT-3	PATCRAFT / ADMIX	SEA URCHIN 00590 / 18"X36"
LVT-4	MANNINGTON "AMTICO STONE"	BASILICA SHELL AR0SBS41 / 18"X48"

RESILIENT STAIR NOSING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RSA-1	GRADUS / ATD71L	BLACK HOUSING, COLOR OF VISUALLY IMPAIRED STRIP TO BE SELECTED

SHEET VINYL FLOORING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
SVF-1	HARLEQUIN FLOORS / STUDIO	FOG

THEATER STAGE FLOORING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
TSF-1	STAGELAM	BLACK / 1/4" THICK

BASE MATERIALS

DECORATIVE RESINOUS FLOORING (INTEGRAL COVE BASE)

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
DRF-1	REFER TO SPECIFICATIONS	50% F3080 LANAI GRAY, 25% F1360 FOREST GREEN 15% F9958 ALPACA WHITE, 10% F5920 CYBERSPACE

EPOXY TERRAZZO BASE (INTEGRAL COVE & PRECAST)

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
ETB-1	REFER TO SPECIFICATIONS	35% GEORGIA WHITE #2, 35% GEORGIA WHITE #1, 10% POOL MIX, 5% CARDIFF GREEN #2, 5% CARDIFF GREEN #1, 5% PURE WHITE #2, 5% PURE WHITE #1, 5% RAVEN BLACK #2, 5% RAVEN BLACK #1 MATRIX: TERROXY 39B-2T GLACIER GRAY

RESILIENT BASE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RB-1	JOHNSONITE-TARKETT	GREY 48 / 4"H COVE
RB-2	JOHNSONITE-TARKETT	TO BE SELECTED / 6"H COVE
RB-3	JOHNSONITE-TARKETT	GREY 48 / 6"H COVE
RB-4	JOHNSONITE-TARKETT	TO BE SELECTED / 6"H TOELESS

VENTED RESILIENT BASE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
VRB-1	JOHNSONITE-TARKETT	BLACK

WALL FINISHES

ACOUSTICAL WALL TILES

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
AWT-1 (REHEARSAL)	REFER TO SPECIFICATIONS CARNEGIE / XOREL / METEOR	2" THICK FABRIC WRAPPED PANEL COLOR TO BE SELECTED
AWT-2 (AUDITORIUM)	REFER TO SPECIFICATIONS CARNEGIE / XOREL / WICKER MATTE	2" THICK FABRIC WRAPPED PANEL COLOR TO BE SELECTED
AWT-3 (AUDITORIUM)	REFER TO SPECIFICATIONS CARNEGIE / XOREL / STRIE	2" THICK FABRIC WRAPPED PANEL COLOR TO BE SELECTED

CERAMIC WALL TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CWT-1	PLATFORM SURFACES / MAT & MORE	WHITE DECO / 10"X30"

FRAMED DECORATIVE PANEL SYSTEM

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
FDPS-1	MARLITE / SIEVA	PREMIUM LAMINATE, TO BE SELECTED

IMPACT RESISTANT WALLCOVERING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
IRWC-1	CONSTRUCTION SPECIALTIES / ACROVYN WALL PROTECTION	COLOR TO BE SELECTED / 0.40" THICK

PAINT

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
P-1 (FIELD)	SHERWIN WILLIAMS	SW7009 PEARLY WHITE
P-2 (DOOR FRAMES)	BENJAMIN MOORE	1652 NAVY MASTERPIECE
P-3 (ACCENT)	SHERWIN WILLIAMS	TO BE SELECTED (MATCH IRWC-1)
P-4 (SCHOOL GREEN)	PPG PAINTS	PPG1138-7 MIDNIGHT CLOVER
P-5 (AUDITORIUM)	SHERWIN WILLIAMS	TO BE SELECTED
P-6 (CEILINGS)	SHERWIN WILLIAMS	SW7006 EXTRA WHITE
P-7 (STAGE)	SHERWIN WILLIAMS	TO BE SELECTED
P-8 (AUD ACCENT)	WOLF GORDON - SCUFFMASTER BURNISHED METALLIC	CUSTOM MATCH SW7061 NIGHT OWL WITH METALLIC TOPCOAT / GOH-34965536
P-9 (BLACK)	SHERWIN WILLIAMS	SW6258 TRICORN BLACK
P-10 (AUD ACCENT)	SHERWIN WILLIAMS	SW7061 NIGHT OWL
P-11 (RR)	SHERWIN WILLIAMS	TO BE SELECTED

WOOD ACOUSTICAL WALL TREATMENT

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
WWP-1	KINETICS / HIGH TONES	STAIN TO BE SELECTED
WWP-2	KINETICS / HIGH TONES	PAINT COLOR TO BE SELECTED

CEILING FINISHES

ACOUSTICAL CEILING TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
ACT-1	ARMSTRONG / SCHOOL ZONE FINE FISSURED #1713	WHITE / 24" X 24" / SQUARE EDGE
ACT-2	~~ARMSTRONG / TUNDRA #391~~	WHITE / 24" X 24" / SQUARE EDGE
ACT-3	ARMSTRONG / ULTIMA HIGH-NRC #1940 (1)	WHITE / 24" X 24" / SQUARE EDGE

ACOUSTICAL CLOUDS

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
AC-1	RPG / MONORADIAL G PANEL	CUSTOM COLOR, TO BE SELECTED

GYPSUM WALLBOARD BULKHEADS

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION

GWBB - REFER TO REFLECTED CEILING PLANS AND PROJECT MANUAL FOR BULKHEAD TYPE AND HEIGHT. REFER TO FINISH PLANS FOR COLOR SELECTION.

PAINTED EXPOSED STRUCTURE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
PES-1	SHERWIN WILLIAMS	SW6258 TRICORN BLACK
PES-1	SHERWIN WILLIAMS	SW7006 EXTRA WHITE

MISCELLANEOUS FINISHES

REFER TO A8 ARCH. DWG. SHEETS

INTERIOR WOOD DOORS/ INTERIOR WOOD TRIM

- STAIN ALL WOOD DOORS, WOOD TRIM, ETC. TO MATCH EXISTING -MARSHFIELD, CUSTOM STAIN #146342C
- WOOD SPECIES TO BE PLAIN SLICED RED OAK.
- PROVIDE WOOD STAIN SAMPLES FOR VERIFICATION.

GROUT

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
GT-1 (CWT)	REFER TO SPECIFICATIONS	

RESILIENT MOLDING ACCESSORIES

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RMA-1	GRADUS / CLC20/-TDB45 LED TRANSITION	BLACK
RMA-2	GRADUS / CLC20/-TDB45 UNLIT TRANSITION	BLACK

DECORATIVE FILM OVERLAY

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
DFO-1	3M / FASARA GLASS FILM	FROSTED CRYSTAL

MATERIAL & FINISH GENERAL NOTES

A. REFER TO FINISH AF SERIES FINISH PLANS FOR MATERIALS, PATTERNS, AND COLORS. REFER TO ZCHS-AQ601 FOR ADDITIONAL FINISHES.
B. (VRB) VENTED RUBBER BASE AT ALL WOOD FLOORS.
C. CENTER TILE AND PATTERN IN ROOM UNLESS OTHERWISE INDICATED ON FINISH PLANS.
D. ALIGN EDGE OF FINISHED FLOOR MATERIAL WITH EDGE OF WALL OR CASEWORK.
E. COORDINATE CONTROL JOINTS IN CONCRETE SLABS WITH STRUCTURAL DRAWINGS.
F. REFER TO FLOOR PLANS, RESTROOM ENLARGED PLANS, AND PLUMBING DRAWINGS FOR FLOOR DRAIN LOCATIONS.
G. (RB) RUBBER BASE AT ALL EF, LVT, CART, SVF, AND FS LOCATIONS.
H. FLOOR FINISH MATERIAL TRANSITIONS SHALL OCCUR UNDER THE CENTER OF THE DOOR UNLESS OTHERWISE NOTED WHERE FLOORING MATERIAL CHANGES FROM ROOM TO ROOM.
I. DO NOT PAINT MURALS UNLESS OTHERWISE NOTED.
J. PAINT ALL WALLS UNLESS OTHERWISE NOTED.
K. EXTEND FLOOR MATERIAL AND PATTERN UNDER ALL OPEN TO THE FLOOR COUNTERTOPS AND FURNITURE.
L. CART-1 TO BE INSTALLED IN VERTICAL ASHLAR METHOD.
M. CART-2 TO BE INSTALLED IN MONOLITHIC INSTALLATION METHOD.

PAINT TYPE GENERAL NOTES

A. UNDER SECTION 099123 - INTERIOR PAINTING, PAINT EXPOSED PIPES, DUCTWORK, BREACHING, CONDUIT, INSULATED PIPES, CONDUIT HANGERS, SUPPORTS, BRACING, ETC., WHICH OCCURS IN SPACES DESIGNATED TO BE PAINTED IN PART OR WHOLE.

B. PAINTING AND FINISHING OF EXTERIOR SURFACES AS DESIGNATED. DETAILS SHALL BE UNDER THE WORK SECTION 0991113 - EXTERIOR PAINTING.

C. ALL GYPSUM BOARD WALLS SHALL BE PAINTED WITH INTERIOR PAINT TYPE #9.22 (SEMI-GLOSS) UNLESS OTHERWISE NOTED.

D. ALL GYPSUM BOARD CEILINGS AND SOFFITS SHALL BE PAINTED WITH PAINT TYPE #9.21 (FLAT) UNLESS OTHERWISE NOTED.

E. PAINT ALL NON-INTEGRALLY COLORED CMU WALLS WITH INTERIOR PAINT TYPE #4.14 (SEMI-GLOSS), UNLESS OTHERWISE NOTED.

F. IN ROOMS ________ PAINT WITH PAINT CODE #4.224 (EPOXY). REFER TO SECTION 099600 - HIGH PERFORMANCE COATINGS.

G. IN ROOMS ________ PAINT WITH PAINT CODE #4.222 (EPOXY). REFER TO SECTION 099600 - HIGH PERFORMANCE COATINGS.

H. IN ROOMS ________ PAINT WITH PAINT CODE #9.211 (EPOXY). REFER TO SECTION 099600 - HIGH PERFORMANCE COATINGS.

I. ALL FERROUS METAL (EXCLUDING STRUCTURE) SHALL BE PAINTED INTERIOR PAINT TYPE #5.12.

J. ALL GALVANIZED METAL (EXCLUDING STRUCTURE) SHALL BE PAINTED INTERIOR PAINT TYPE #5.32.

K. ALL EXPOSED STEEL (FERREOUS) STRUCTURE SHALL BE PAINTED INTERIOR PAINT TYPE #5.11.

L. ALL EXPOSED GALVANIZED-METAL STRUCTURE SHALL BE PAINTED INTERIOR PAINT TYPE #5.31.

M. ALL ABUSE RESISTANT ACOUSTICAL WALL PANELS (AR-AWT) SHALL BE PAINTED WITH INTERIOR PAINT CODE #11.0.

N. ALL WALLS ARE TO RECEIVE AN EGGSHELL FINISH AND ALL CEILINGS/BULKHEADS ARE TO RECEIVE A FLAT FINISH.

PAINT COLOR GENERAL NOTES

A. ALL INTERIOR WALLS SHALL BE PAINTED P-1, UNLESS OTHERWISE INDICATED ON FINISH PLANS OR INTERIOR ELEVATIONS.

B. PAINT ALL EXPOSED STEEL ON STAIRS, RAILS, AND STRINGERS P-?.

C. PAINT ALL GWB SOFFITS P-6 UNLESS OTHERWISE NOTED ON FINISH PLANS OR INTERIOR ELEVATIONS.

D. PAINT ALL SIDES (HORIZ. AND VERT.) OF SOFFIT INDICATED COLOR, UNLESS OTHERWISE NOTED.

E. PAINT ALL PAINTED EXPOSED CEILINGS AND GYPSUM BOARD CEILINGS P-6 UNLESS OTHERWISE NOTED ON FINISH PLANS, CEILING PLANS, OR INTERIOR ELEVATIONS.

F. ALL INTERIOR HOLLOW METAL FRAMES AND DOOR FRAMES TO BE PAINTED P-2 UNLESS OTHERWISE NOTED.

G. ALL EXPOSED INTERIOR STEEL COLUMNS SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR, UNLESS OTHERWISE NOTED ON INTERIOR ELEVATIONS OR FINISH PLANS.

H. STAIN ALL WOOD TRIM/ RAILS/ ETC. TO MATCH DOORS.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ARCHITECT
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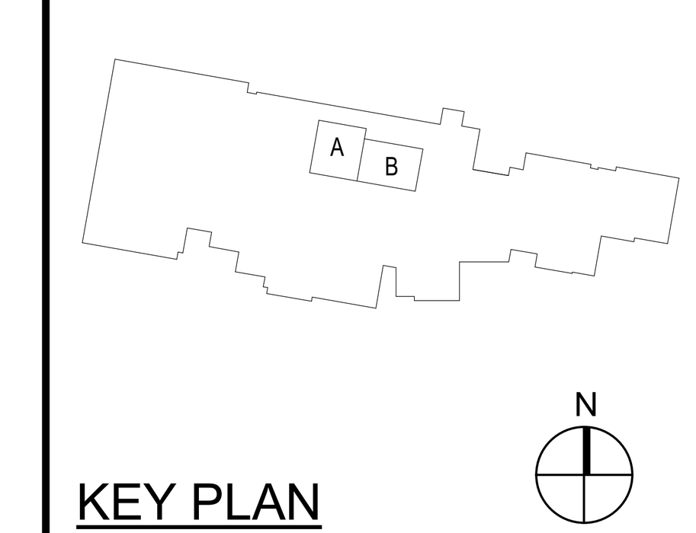
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204



KEY PLAN

ISSUED FOR BID

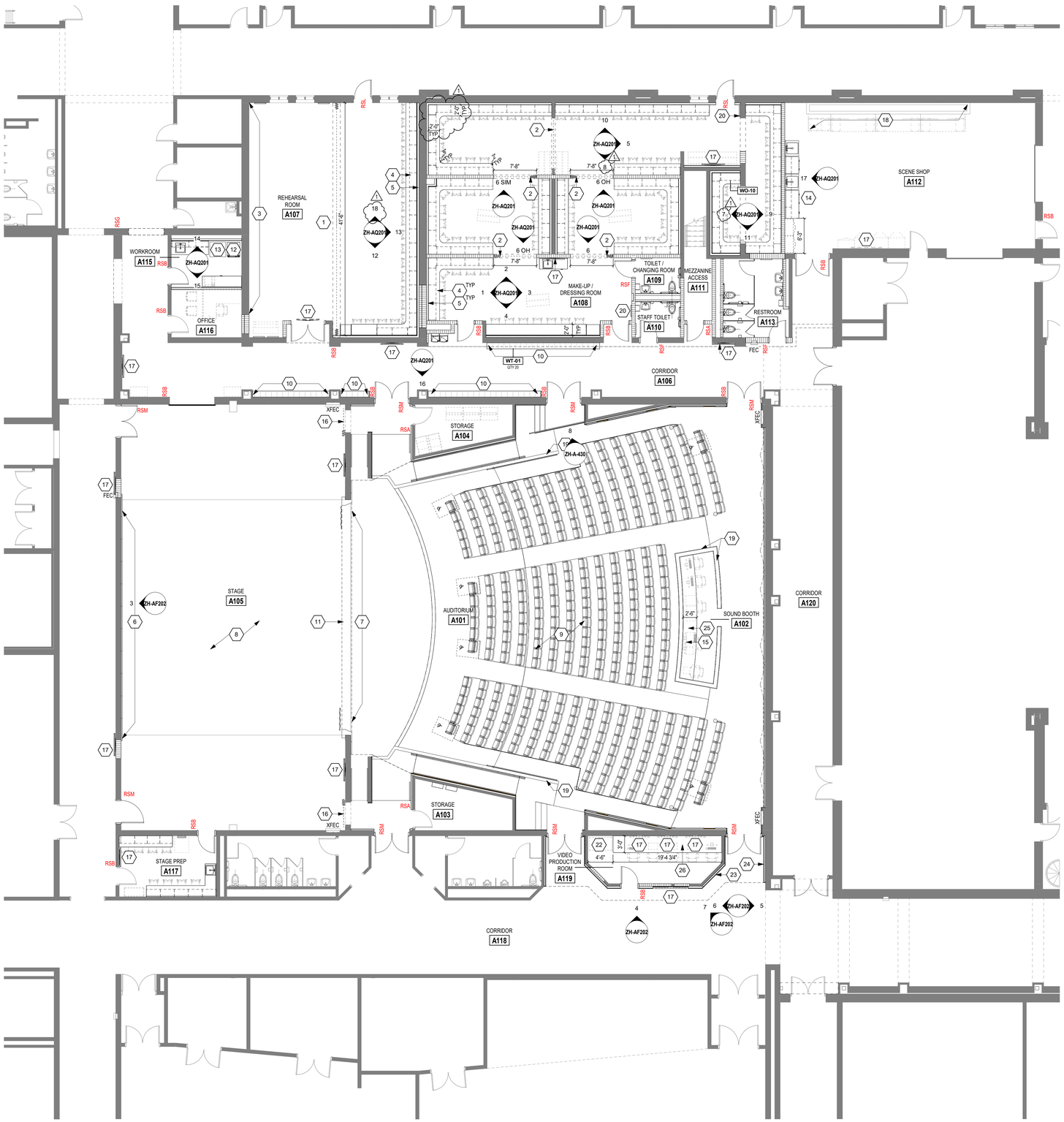
PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: AML
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

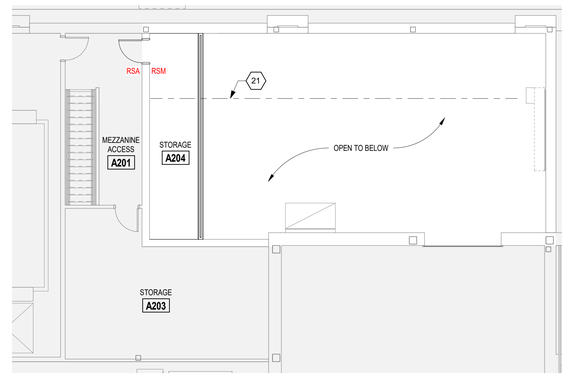
LIST OF FINISHES AND DETAILS

ZH-AF601



1 FIRST FLOOR EQUIPMENT PLAN - UNIT A

SCALE: 1/8" = 1'-0"



2 MEZZANINE EQUIPMENT PLAN

SCALE: 1/8" = 1'-0"

ROOM LEGEND

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A101	C205	AUDITORIUM	4,393 SF
A102	C205G	SOUND BOOTH	144 SF
A103	C205B	STORAGE	129 SF
A104	C205 F	STORAGE	129 SF
A105	-	STAGE	3,703 SF
A106	C3	CORRIDOR	1,538 SF
A107	C141	REHEARSAL ROOM	1,223 SF
A108		MAKE-UP / DRESSING ROOM	1,996 SF
A109		TOILET / CHANGING ROOM	51 SF
A110		STAFF TOILET	51 SF
A111	C3 MZ	MEZZANINE ACCESS	118 SF
A112	C131	SCENE SHOP	1,170 SF
A113		RESTROOM	155 SF
A114	C1	CORRIDOR	1,914 SF
A115		WORKROOM	104 SF
A116	C143	OFFICE	107 SF
A117	C205C	STAGE PREP	188 SF
A118	C5	CORRIDOR	1,946 SF
A119	C205A	VIDEO PRODUCTION ROOM	190 SF
A120	C6	CORRIDOR	913 SF
A121	C4	CORRIDOR	4,045 SF
A122	C206F	VOCAL STORAGE	171 SF
A123	C206E	RISER STORAGE	263 SF
A124	C204F	BAND STORAGE/PERCUSSION	357 SF
A125		INSTRUMENTS	554 SF
A201		MEZZANINE ACCESS	219 SF
A202		MECHANICAL MEZZANINE	1,916 SF
A203		STORAGE	439 SF
A204		STORAGE	188 SF
B101	C203	PAC	7,933 SF
B102	C203C	STAGE	4,675 SF
B103		PIANO STORAGE	81 SF

EQUIPMENT GENERAL NOTES

A. ALL COUNTERTOPS TO HAVE CONTINUOUS 4" HIGH BACKSPLASHES AND ENDSPLASHES UNLESS NOTED OTHERWISE.
B. HIDDEN LINES ( ) INDICATE ITEMS TO BE PART OF LOOSE EQUIPMENT PACKAGE OR BY OWNER, NOT INCLUDED IN CONSTRUCTION CONTRACTS. DASHED LINES ( ) INDICATE OVERHEAD ITEMS (INCLUDED IN CONSTRUCTION CONTRACTS).
C. (TB) INDICATES 4' HIGH TACK BOARD LENGTH AS INDICATED. REFER TO MOUNTING HEIGHT DRAWING.
D. (XTB) INDICATES EXISTING TACK BOARDS TO REMAIN.
E. PROVIDE FILLER STRIPS BETWEEN CASEWORK UNITS AND WALL OR BETWEEN ANY UNIT AS REQUIRED. EXTEND COUNTER TO FACE OF WALL OR ADJACENT TALL CABINET.
F. ALL CASEWORK DOORS AND DRAWERS SHALL BE LOCKABLE.
G. ALL EXPOSED ENDS AND BACKS OF CASEWORK SHALL BE FINISHED.
H. CASEWORK INSTALLER SHALL CUT CASEWORK AS REQUIRED FOR PLUMBING/ELECTRICAL LINES.
I. CASEWORK INSTALLER SHALL CAULK BETWEEN COUNTERS, BACKSPLASHES, AND WALLS.
J. ALL WALL-MOUNTED CASEWORK SHALL BE MOUNTED WITH THE TOP AT 7'-0" AFF UNLESS OTHERWISE NOTED.
K. REFER TO LIST OF FINISHES FOR COLOR SELECTIONS.

EQUIPMENT NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1 NEW 12'-0"H OVERALL SC-1 STAGE CURTAIN ON TRACK, REFER TO 1/ZH-A-520
2 NEW 8'-0"H OVERALL SC-1 STAGE CURTAIN ON TRACK. TRACK TO BE RECESSED IN GWB BULKHEAD; REFER TO 4/ZH-A-520
3 EXISTING MIRRORS TO REMAIN
4 PL-2 COUNTERTOP/BACKSPLASH WITH RAKKS EH-1818 COUNTERTOP SUPPORTS; REFER TO DETAILS 1&2/ZH-AQ501
5 MIRROR FROM BACKSPLASH TO CASEWORK ABOVE, REFER TO ELEVATIONS
6 NEW 9'-6"H MIRRORS, MOUNTED AT 11'-0"AFF, MIRRORS TO BREAK AT PIPES AS SHOWN IN ELEVATION
7 NEW STAGE CURTAIN AND VALANCE; REFER TO ZH-E-402
8 REPLACE ALL PIPE BATTENS & TRAVELER CURTAINS; ADD ADDITIONAL ROW OF PIPE BATTEN AND CURTAIN; REFER TO ZH-E-402
9 NEW FIXED AUDITORIUM SEATING; 407 SEAT CAPACITY INCLUDING REMOVABLE SEATS; REFER TO ZH-AQ601 FOR DETAILS
10 NEW 12"X36"X12" 2-TIER PL-4 LAMINATE LOCKERS WITH SSM-4 COUNTERTOPS; REFER TO CASEWORK SCHEDULE AND 7/ZH-AQ501
11 NEW PROJECTION SCREEN & PROJECTOR
12 STACKED RESIDENTIAL-STYLE WASHER AND DRYER, BY OWNER
13 REFRIGERATOR WITH ICE MAKER, BY OWNER
14 NEW UPPER AND LOWER METAL CASEWORK WITH BUTCHER BLOCK COUNTERTOP AND BACKSPLASH
15 NEW SSM-3 COUNTERTOP
16 NEW 10'-0"H OVERALL SC-2 STAGE CURTAIN ON WALL-MOUNTED TRACK
17 NEW MONITOR, BY OWNER
18 EXISTING PAINTING STRUCTURE AND WORKBENCHES TO REMAIN
19 NEW WOOD WALL CAP (STAIN); REFER TO DETAIL 12/ZH-A-502
20 NEW 6'-6"H MIRROR, MOUNTED AT 7'-0"AFF
21 NEW 1/2 TON ELECTRIC TROLLEY HOIST SYSTEM, REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION. COORDINATE FINAL LOCATION WITH EXISTING LIGHTING AND DUCTWORK, FIELD VERIFY
22 VIDEO EQUIPMENT RACKS, BY OWNER
23 7"H DIMENSIONAL LETTERS; REFER TO ELEVATION
24 INSTALL NEW DEDICATION PLAQUE AND REINSTALL EXISTING DEDICATION PLAQUE; REFER TO ELEVATION
25 SSM-3 COUNTERTOP WITH RAKKS EH-1924 COUNTERTOP SUPPORTS; REFER TO DETAIL 8/ZH-AQ501
26 SSM-3 COUNTERTOP WITH OPEN KNEESPACE BELOW; RADIUS OUTSIDE CORNER

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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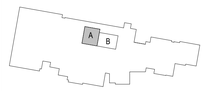

KEY PLAN

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ISSUED FOR BID

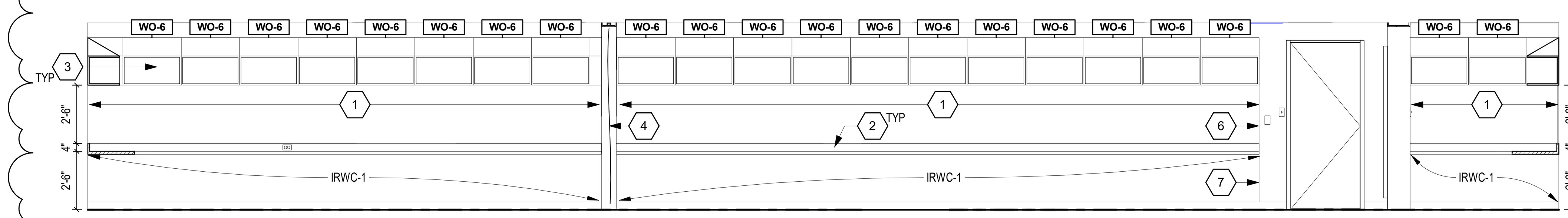
PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: AML
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

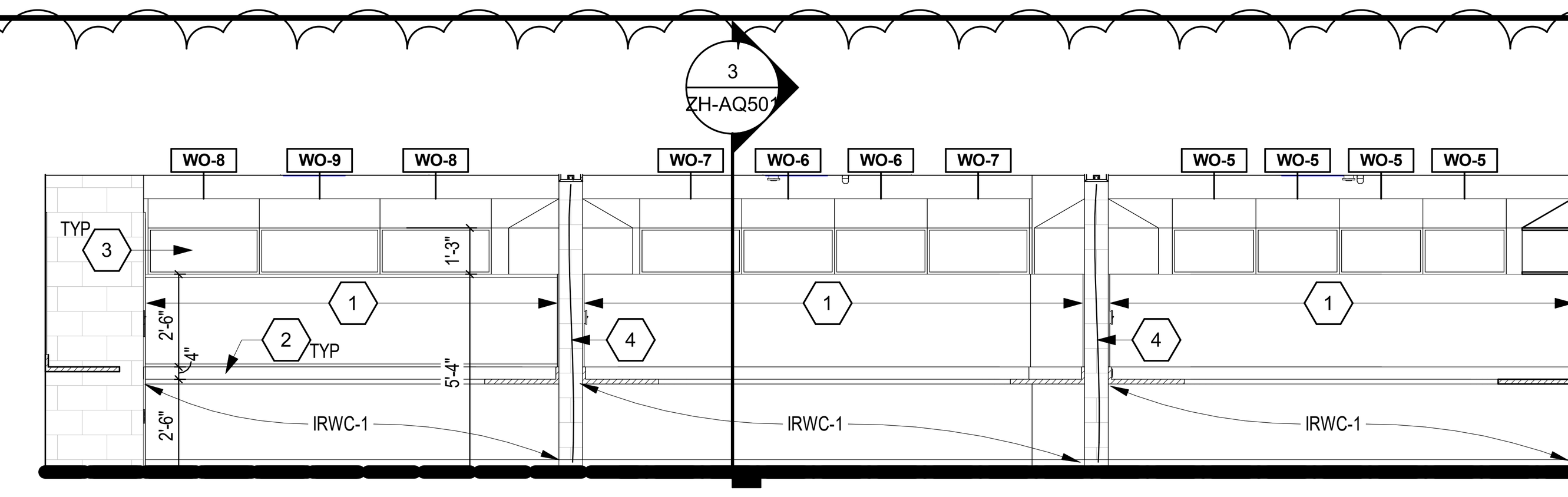
REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

FIRST FLOOR EQUIPMENT PLAN - UNIT A

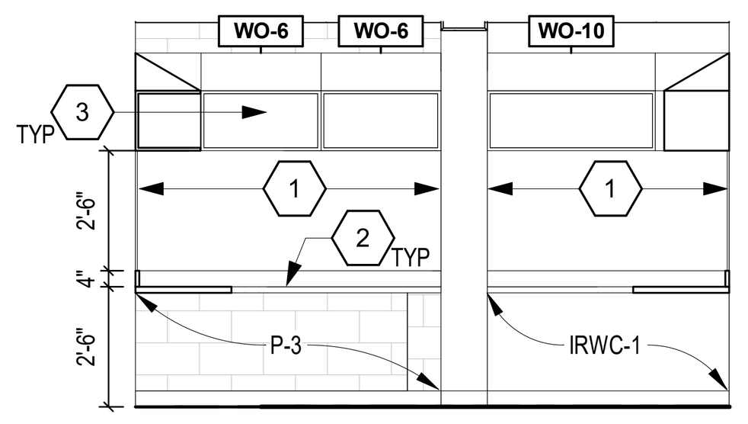
ZH-AQ11A



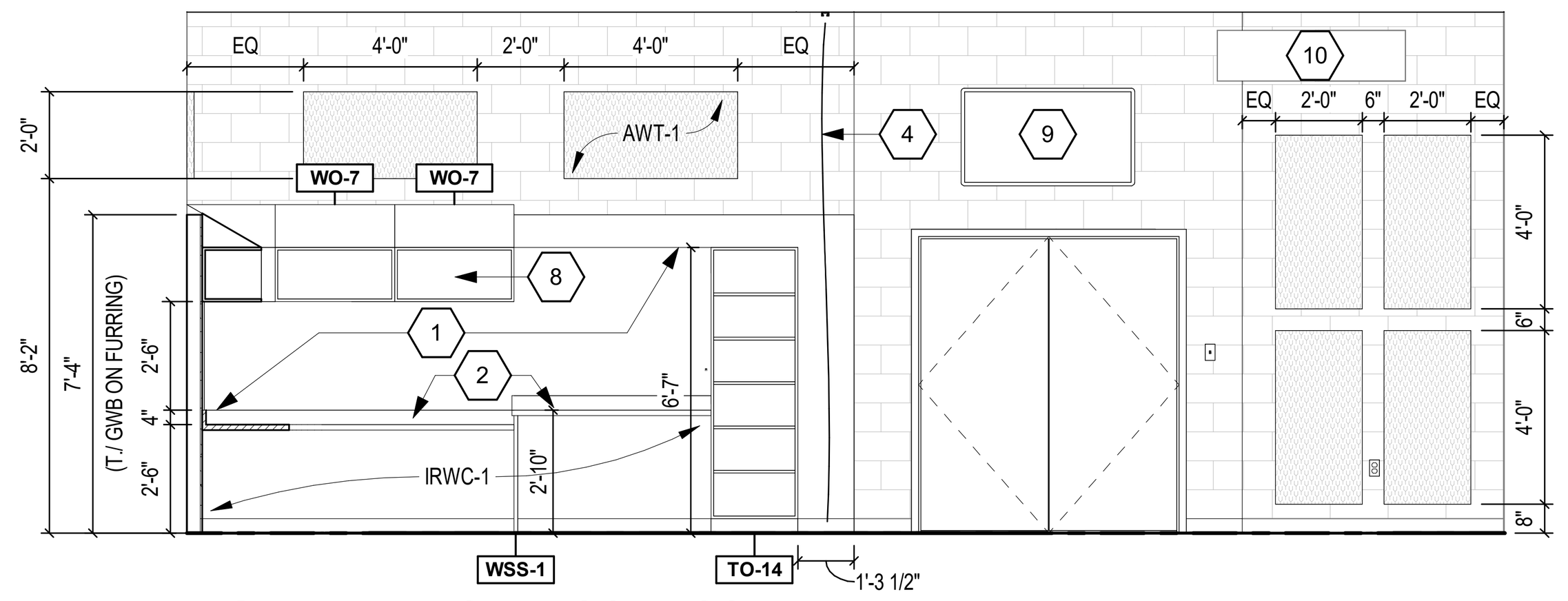
10 MAIN DRESSING - NORTH B
SCALE: 1/4" = 1'-0"



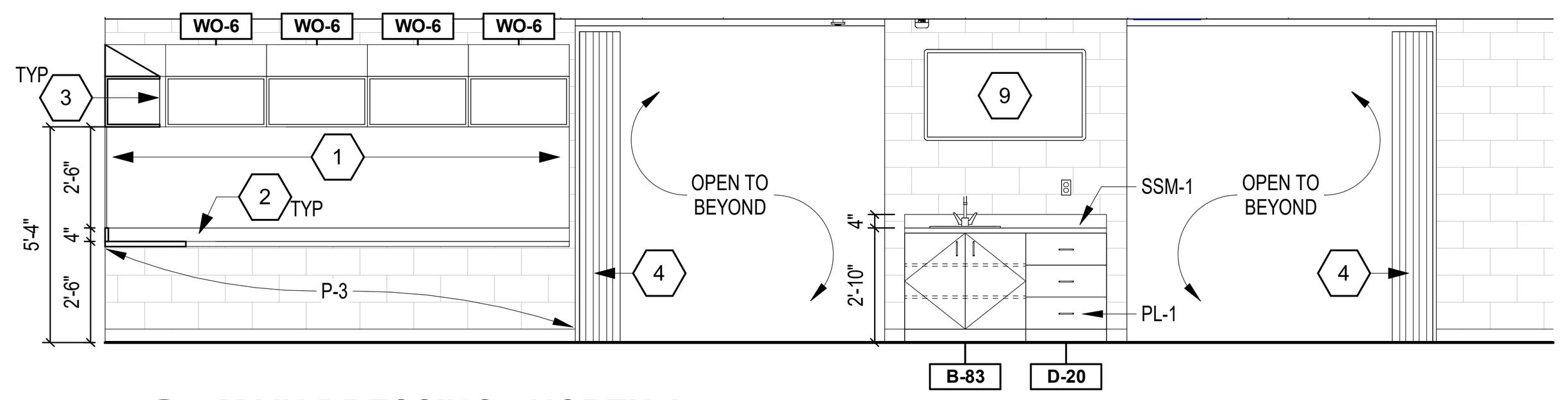
1 MAIN DRESSING - WEST A
SCALE: 1/4" = 1'-0"



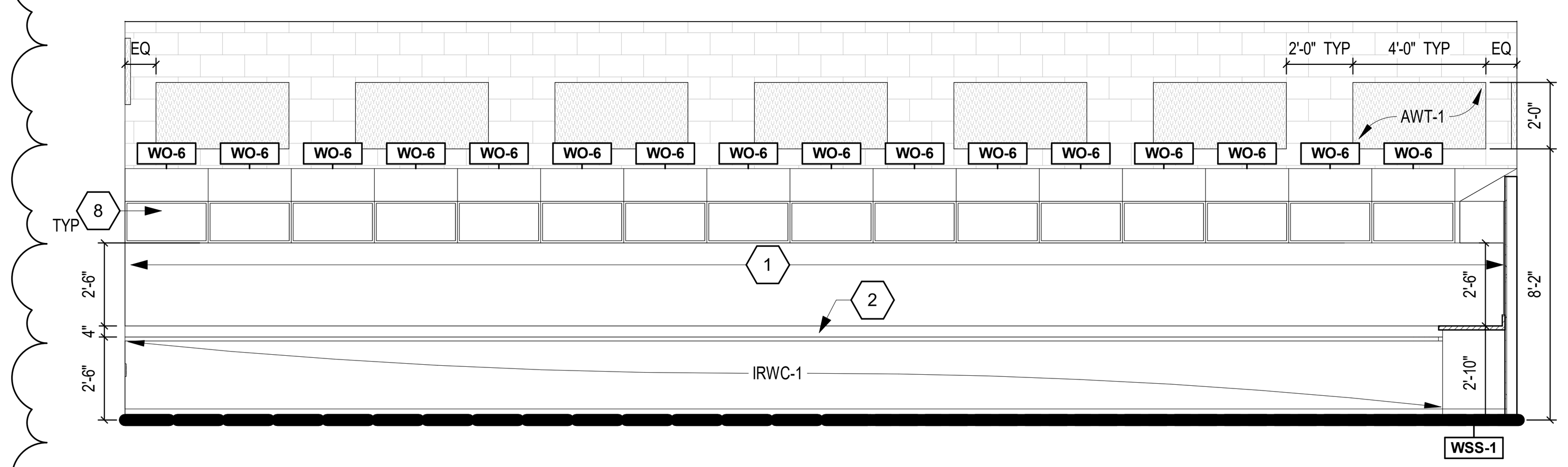
11 MAIN DRESSING - SOUTH D
SCALE: 1/4" = 1'-0"



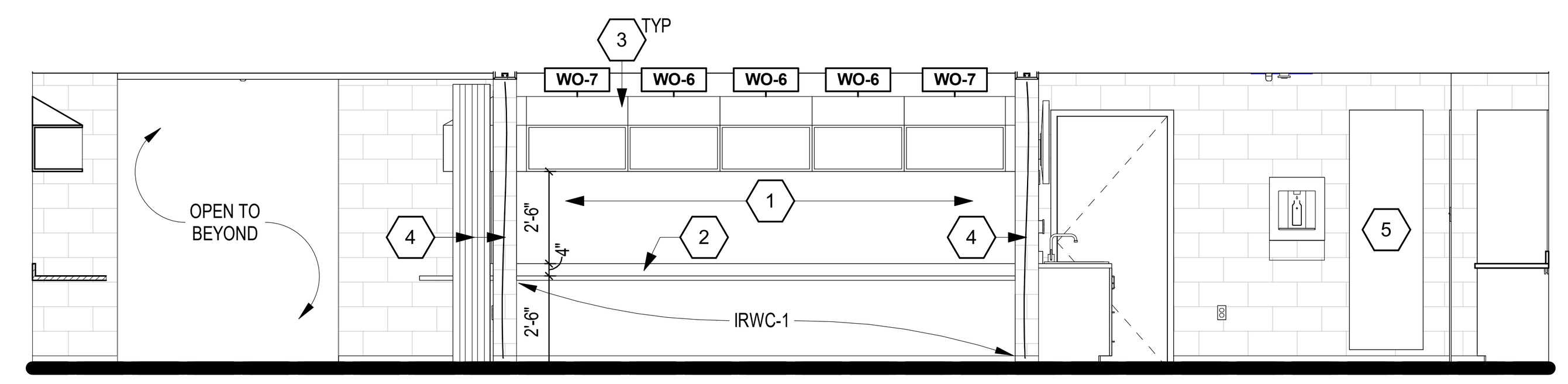
12 REHEARSAL ROOM - SOUTH
SCALE: 1/4" = 1'-0"



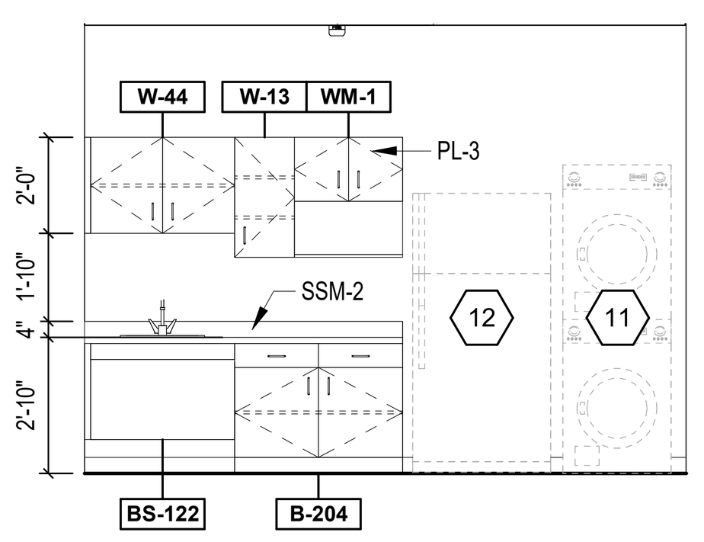
2 MAIN DRESSING - NORTH A
SCALE: 1/4" = 1'-0"



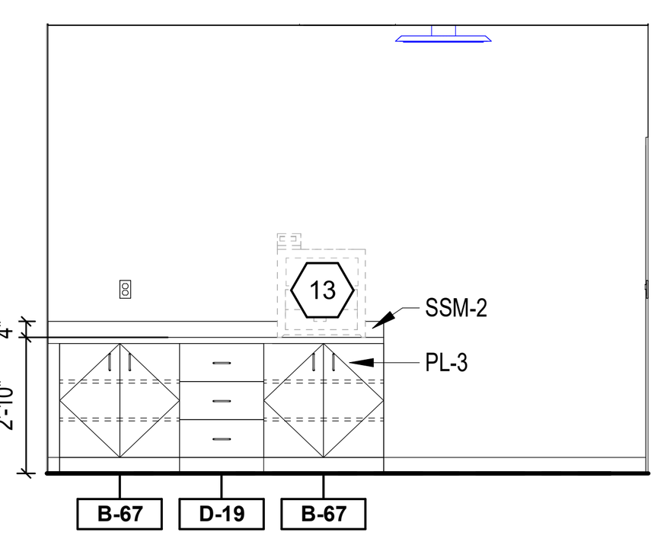
13 REHEARSAL ROOM - EAST
SCALE: 1/4" = 1'-0"



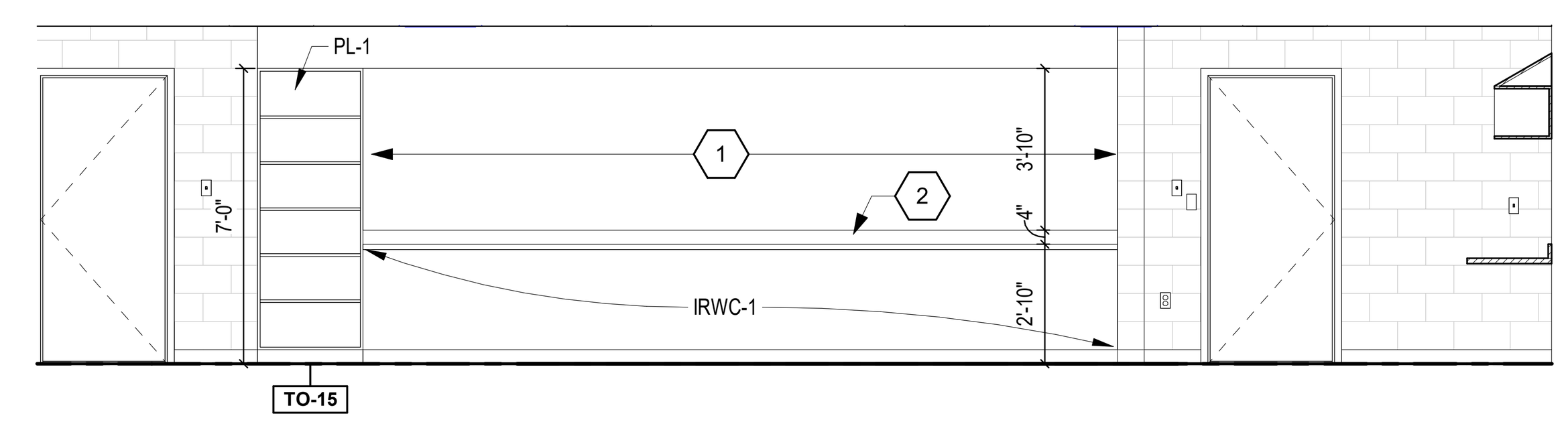
3 MAIN DRESSING - EAST A
SCALE: 1/4" = 1'-0"



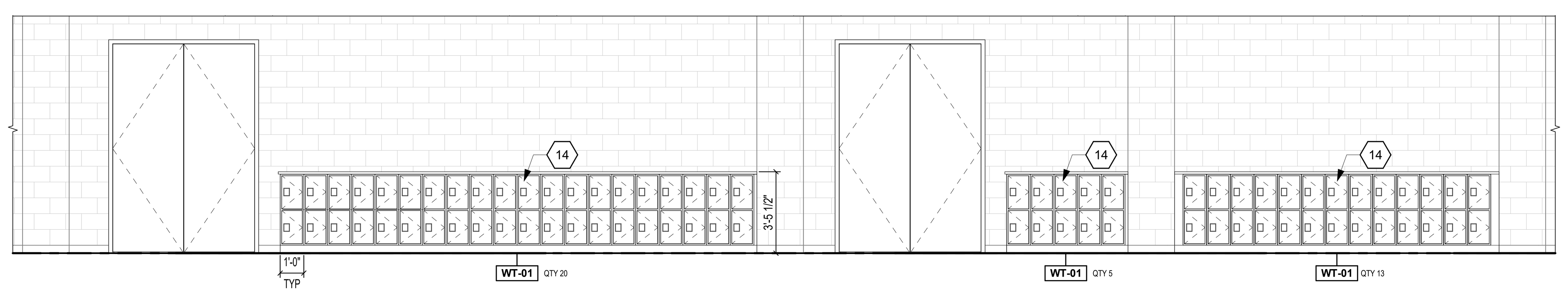
14 WORKROOM - NORTH
SCALE: 1/4" = 1'-0"



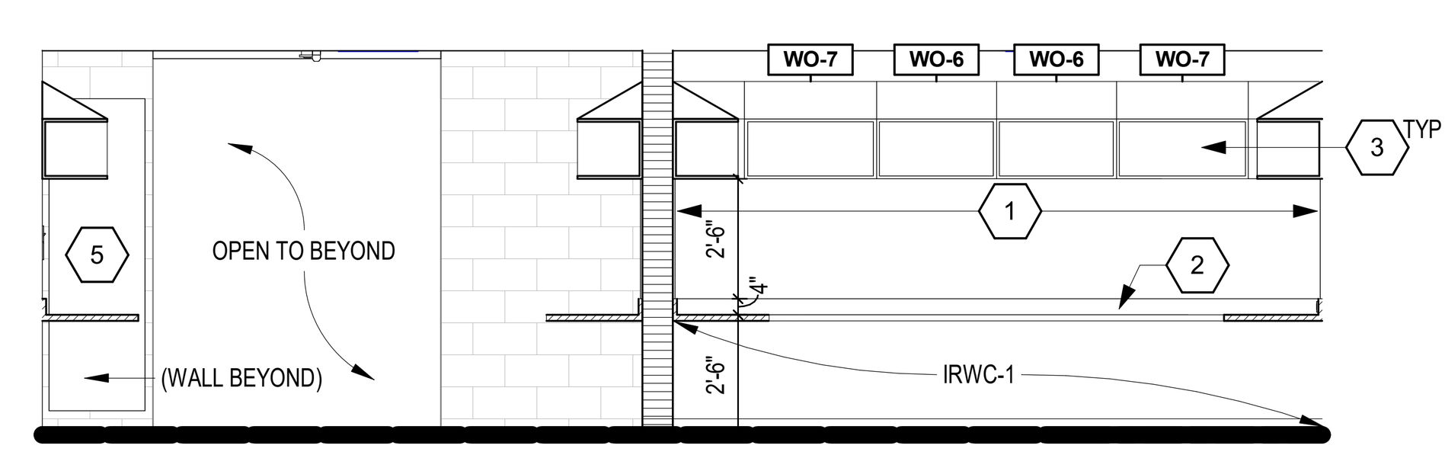
15 WORKROOM - SOUTH
SCALE: 1/4" = 1'-0"



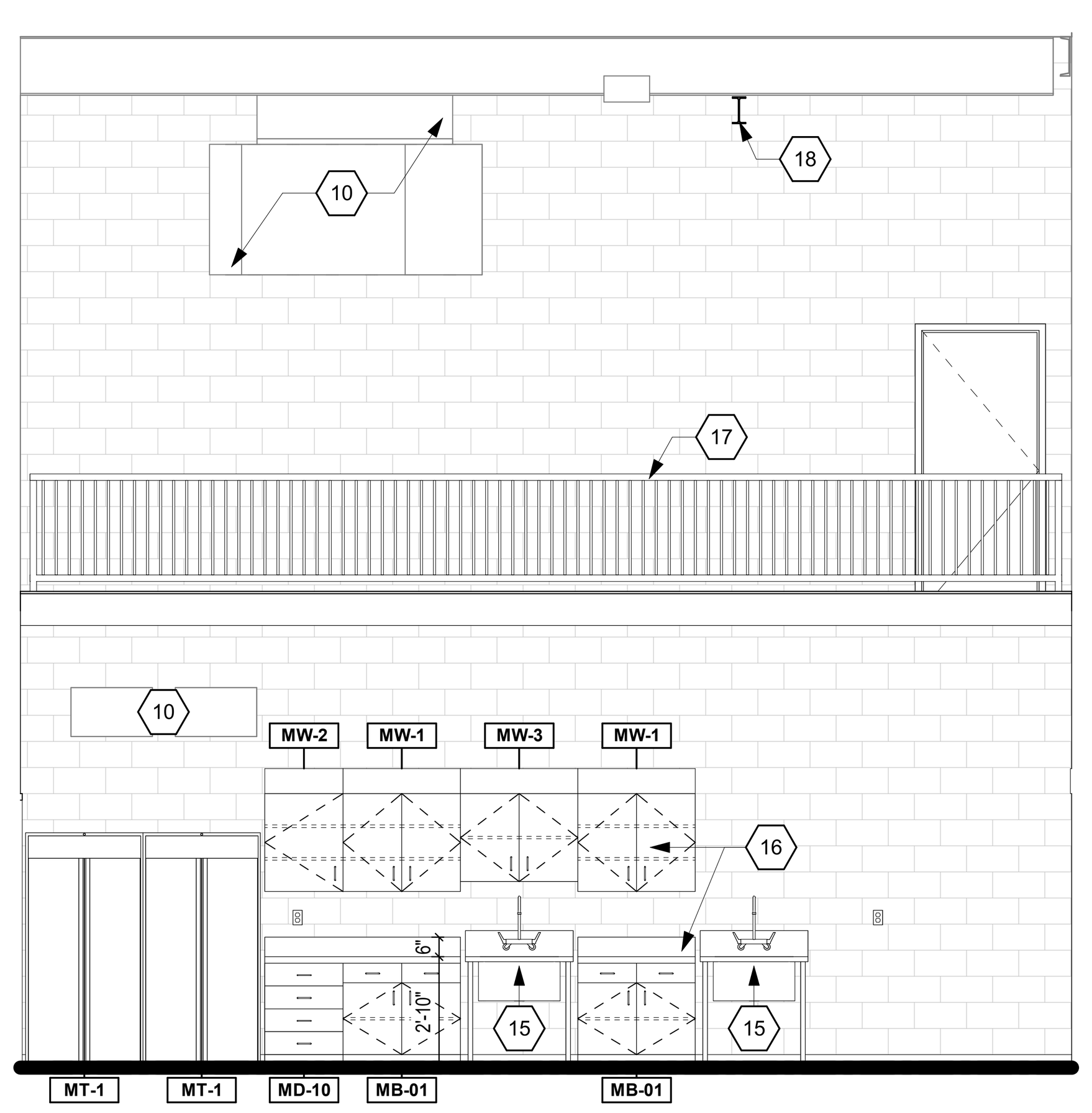
4 MAIN DRESSING - SOUTH A
SCALE: 1/4" = 1'-0"



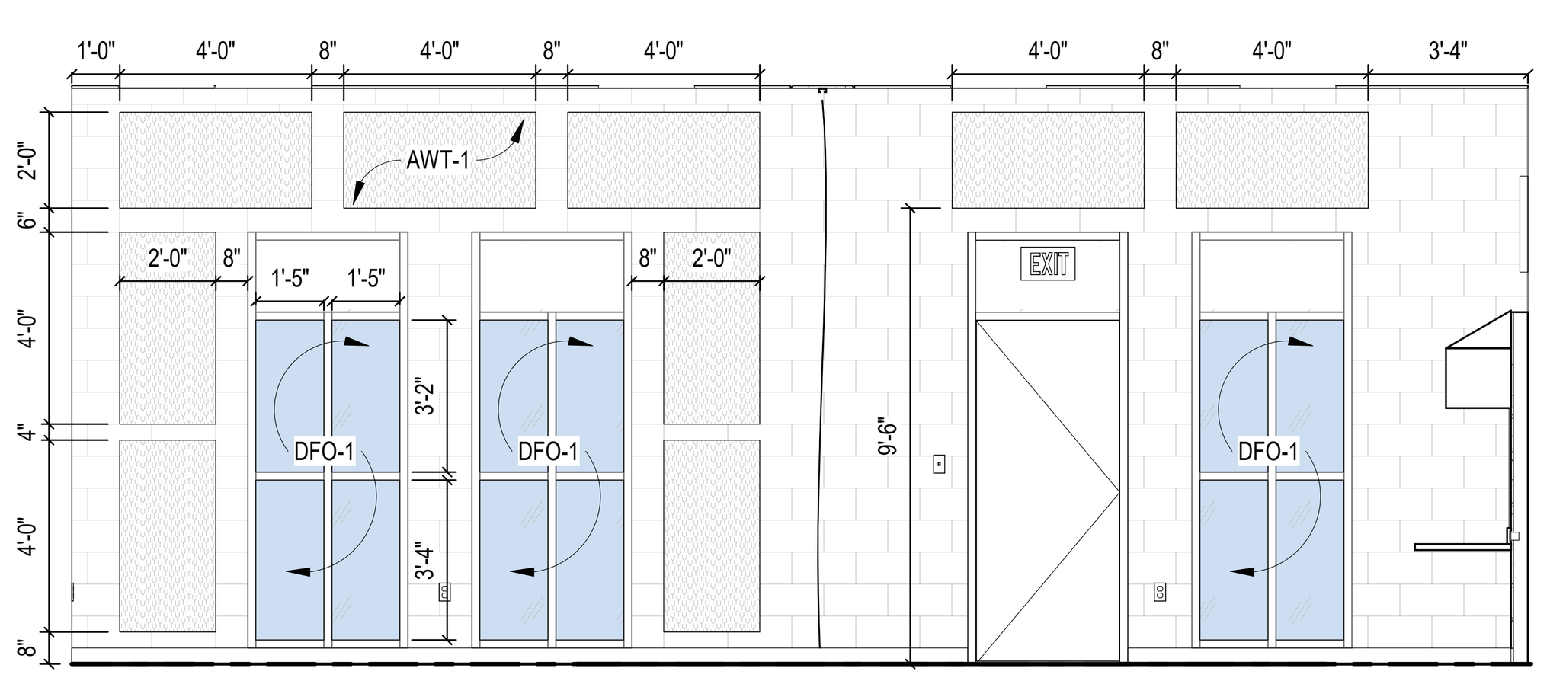
16 CORRIDOR A106
SCALE: 1/4" = 1'-0"



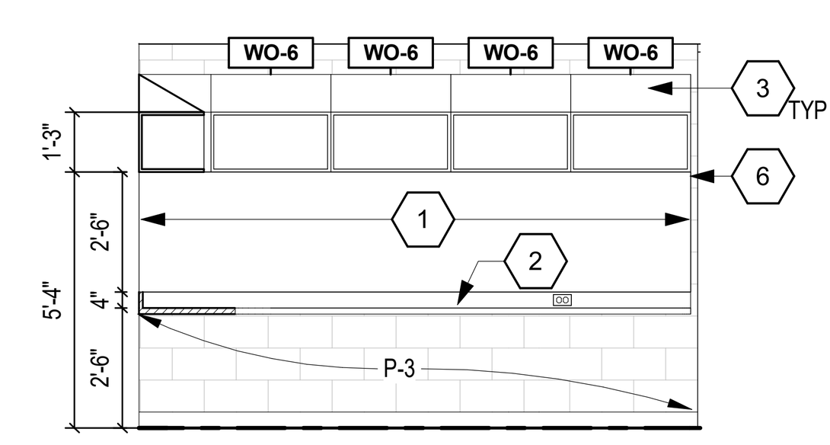
5 MAIN DRESSING - EAST B
SCALE: 1/4" = 1'-0"



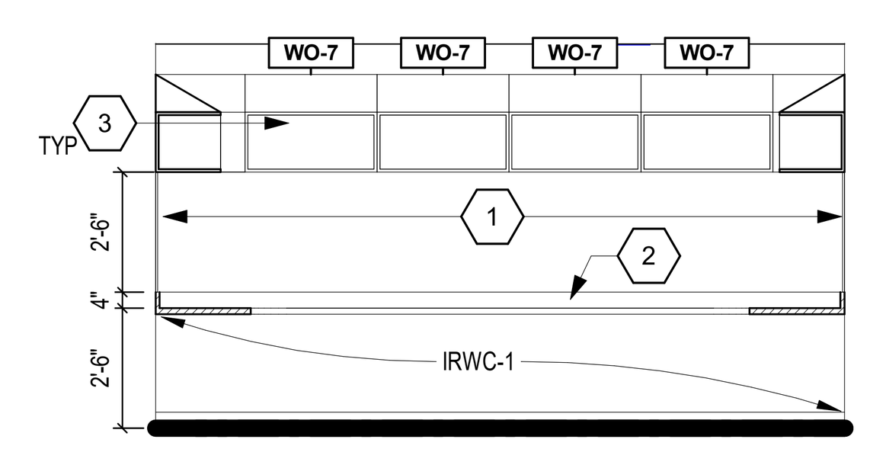
17 SCENE SHOP CASEWORK
SCALE: 1/4" = 1'-0"



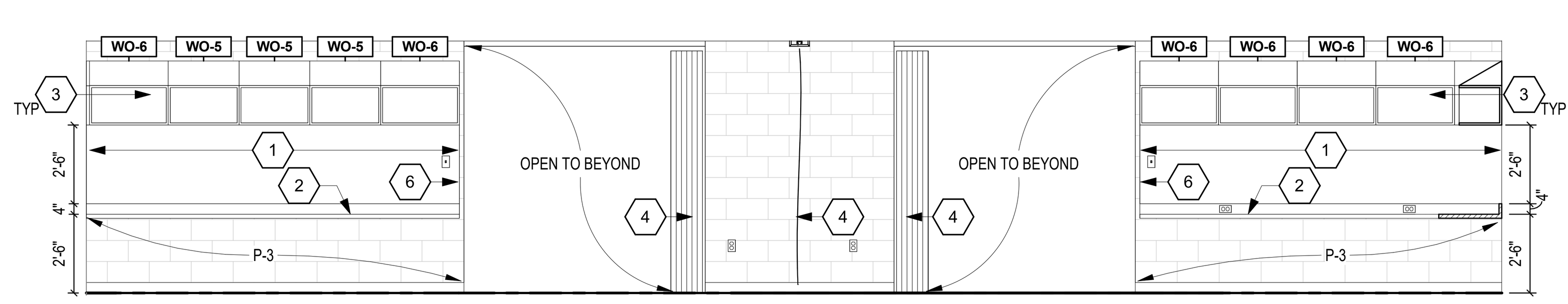
18 REHEARSAL - NORTH
SCALE: 1/4" = 1'-0"



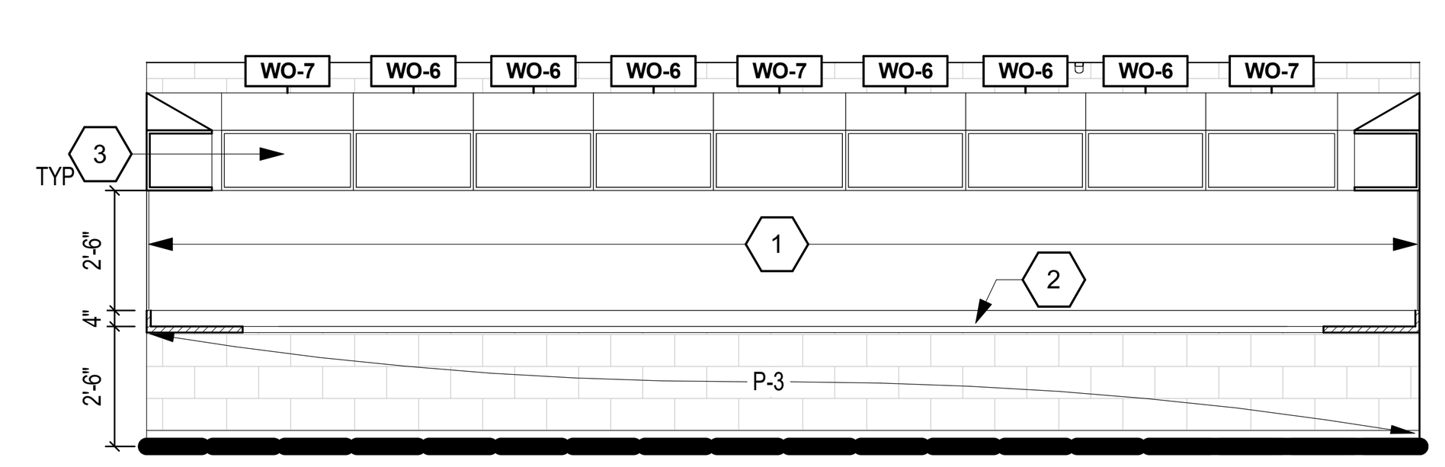
6 MAIN DRESSING - SOUTH B
SCALE: 1/4" = 1'-0"



7 MAIN DRESSING - WEST B
SCALE: 1/4" = 1'-0"



8 MAIN DRESSING - SOUTH C
SCALE: 1/4" = 1'-0"



9 MAIN DRESSING - EAST C
SCALE: 1/4" = 1'-0"

EQUIPMENT ELEVATION NOTES (X)

1 CONTINUOUS WALL MIRROR WITH LIGHT FIXTURE AT TOP AND BOTTOM; REFER TO DETAILS ON ZH-AQ601
2 PL-2 LAMINATE COUNTERTOP AND BACKSPLASH, REFER TO DETAIL 1 OR 2/ZH-AQ501 FOR SUPPORT BRACKETS & 4/ZH-AQ501 FOR BACKSPLASH DETAIL
3 PL-1 OPEN WALL CUBBIES WITH FINISHED INTERIOR & FINISHED BOTTOM; REFER TO DETAIL 5/ZH-AQ501
4 NEW CURTAIN AND TRACK, REFER TO ZH-AQ11A
5 MIRROR, REFER TO ZH-AQ11A
6 ALIGN MIRROR TO EDGE OF CASEWORK
7 ALIGN IRWC WITH EDGE OF CASEWORK; INCLUDE VERTICAL TRIM
8 PL-1 OPEN WALL CUBBIES WITH FINISHED INTERIOR & FINISHED BOTTOM; SLOPED TOP TO CONCEAL TOP OF FURRING WALL, REFER TO DETAIL 6/ZH-AQ501
9 TV MONITOR, BY OWNER
10 MECHANICAL DUCT, REFER TO M- SERIES DWGS
11 STACKED RESIDENTIAL-STYLE WASHER AND DRYER, BY OWNER
12 REFRIGERATOR WITH ICE MAKER, BY OWNER
13 PRINTER, BY OWNER
14 2-TIER PLASTIC LAMINATE LOCKERS, PL-4, WITH SSM-4 COUNTERTOP; REFER TO DETAIL 7/ZH-AQ501
15 FREESTANDING SINK, REFER TO PLUMBING DRAWINGS
16 METAL CASEWORK WITH BUTCHER BLOCK COUNTERTOP AND BACKSPLASH
17 NEW RAILING, REFER TO A- SERIES DWGS
18 NEW STRUCTURE TO SUPPORT NEW TROLLEY HOIST SYSTEM, REFER TO ZH-AQ11A & STRUCTURAL DWGS FOR ADDITIONAL INFORMATION

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

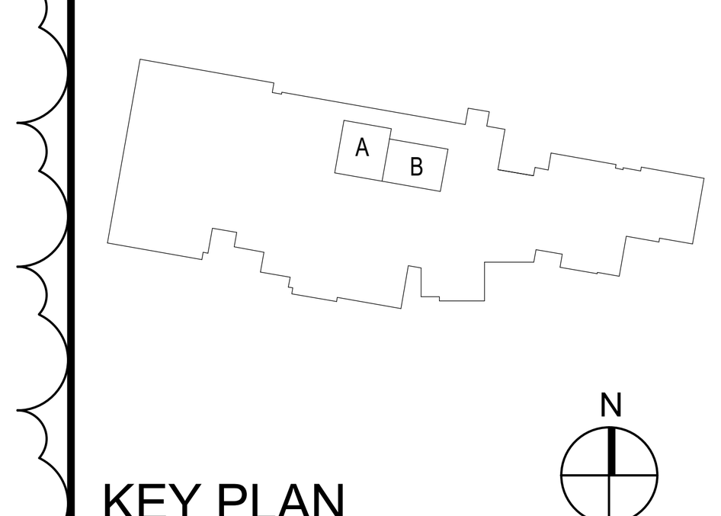
ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ZIONSVILLE
COMMUNITY SCHOOLS

ARCHITECT
FANNING HOWEY
317.848.0966 WWW.FHAI.COM
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204



KEY PLAN

ISSUED FOR BID

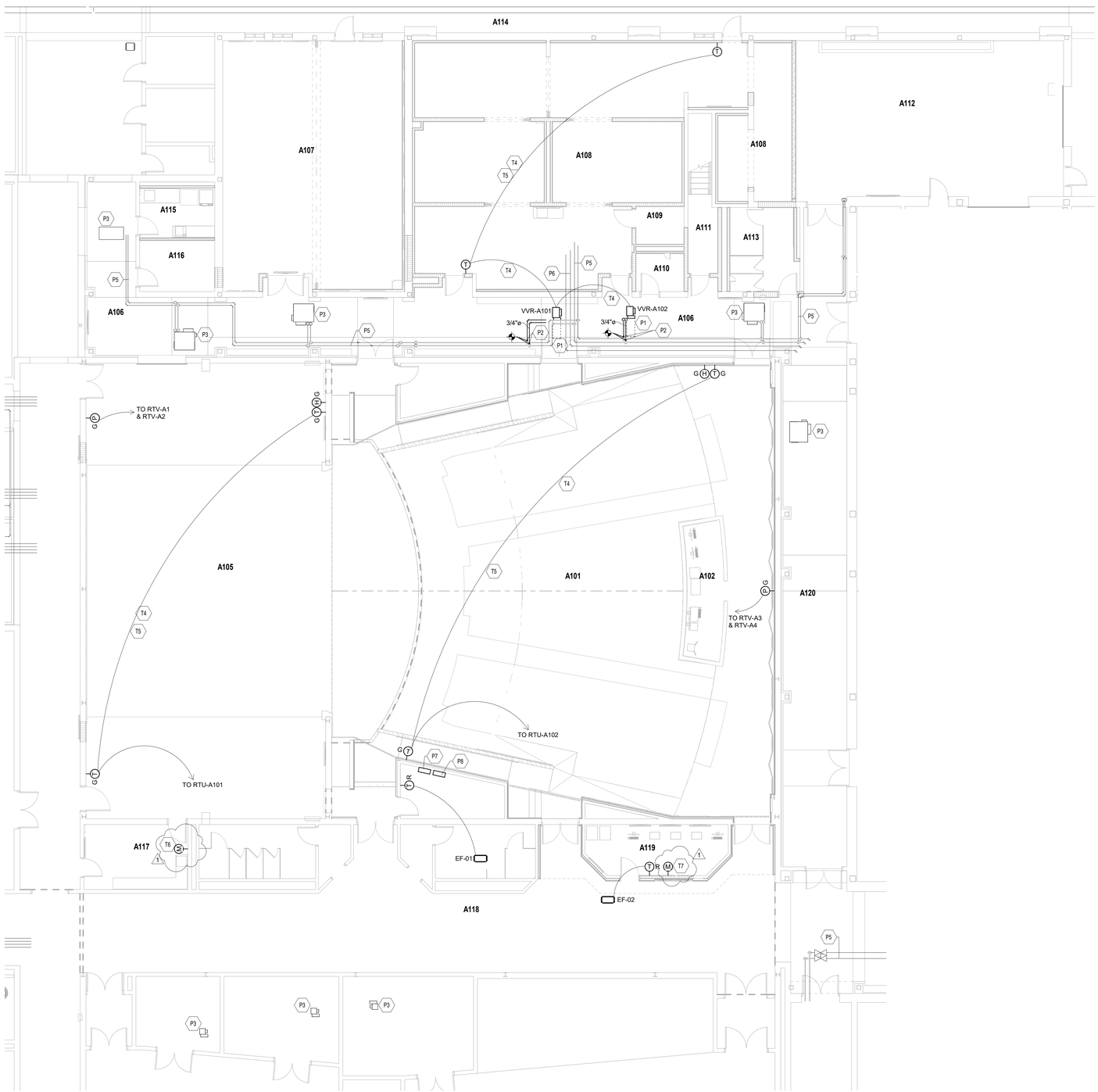
PAUL A. MILLER
REGISTERED
No. AR10800161
STATE OF
INDIANA
ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: AML
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.22.2025

CASEWORK ELEVATIONS

ZH-AQ201



UNIT A - FIRST FLOOR MECHANICAL PIPING AND CONTROLS PLAN

SCALE: 1/8" = 1'-0"

ROOM LEGEND

ROOM NO.	ROOM NAME	AREA (SF)
A101	AUDITORIUM	4393 SF
A102	SOUND BOOTH	144 SF
A103	STORAGE	129 SF
A104	STORAGE	129 SF
A105	STAGE	3703 SF
A106	CORRIDOR	1538 SF
A107	REHEARSAL ROOM	1223 SF
A108	MAKE-UP / DRESSING ROOM	1996 SF
A109	TOILET / CHANGING ROOM	51 SF
A110	STAFF TOILET	51 SF
A111	MEZZANINE ACCESS	118 SF
A112	SCENE SHOP	1170 SF
A113	RESTROOM	155 SF
A114	CORRIDOR	1914 SF
A115	WORKROOM	104 SF
A116	OFFICE	107 SF
A117	STAGE PREP	188 SF
A118	CORRIDOR	1946 SF
A119	VIDEO PRODUCTION ROOM	190 SF
A120	CORRIDOR	913 SF
A121	CORRIDOR	4045 SF
A122	VOCAL STORAGE	171 SF
A123	RISER STORAGE	263 SF
A124	BAND STORAGE/PERCUSSION	357 SF
A125	INSTRUMENTS	554 SF

HVAC PIPING & CONTROLS PLAN GENERAL NOTES

A. ALL PIPING AND VALVES SHALL BE CONCEALED ABOVE THE CEILING AND WITHIN WALLS, UNLESS OTHERWISE NOTED.
B. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS RELATED TO EQUIPMENT QUALITY, CONSTRUCTION AND FINISH OF MATERIALS.
C. ARRANGE PIPING, ETC. TO ALLOW FOR EASY ACCESS TO COILS, VALVES, DAMPERS AND CONTROLS. KEEP AREAS ADJACENT TO ACCESS PANELS FREE AND CLEAR OF ANY OPSTRUCTIONS.
D. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT.
E. HYDRONIC SUPPLY AND RETURN PIPING SHALL BE THE SAME SIZE UNLESS OTHERWISE NOTED.
F. DIVISION 23 CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILINGS TO DO WORK ABOVE THE CEILINGS AND REINSTALL THOSE CEILINGS AFTER COMPLETION OF WORK. IF ANY CEILING PADS OR GRIDS ARE DAMAGED, THIS CONTRACTOR SHALL REPLACE WITH NEW TO MATCH EXISTING.
G. REFER TO SPECIFICATION SECTION 230900 AND 230992 FOR TEMPERATURE CONTROL SPECIFICATION AND SEQUENCE OF OPERATIONS.
H. ALL THERMOSTATS/SENSORS TO BE MOUNTED WITH BOTTOM AT 44" AFF UNLESS OTHERWISE NOTED. COORDINATE EXACT LOCATION WITH ALL TRADES.

HVAC PIPING PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

NO.	DESCRIPTION
P1	DASHED LINE INDICATES APPROXIMATE CLEARANCE REQUIRED IN FRONT OF CONTROL PANEL TO VARIABLE VOLUME TERMINAL.
P2	CONNECT TO EXISTING PIPING. MAKE MODIFICATIONS AS NECESSARY.
P3	EXISTING EQUIPMENT TO REMAIN.
P5	EXISTING HEATING WATER PIPE TO REMAIN.
P6	EXISTING CHILLED WATER PIPE TO REMAIN.
P7	APPOXIMATE LOCATION OF TEMPERATURE CONTROL PANEL FOR RTU-A101. COORDINATE WITH ALL TRADES.
P8	APPROIMATE LOCATION OF TEMPERATURE CONTROL PANEL FOR RTU-A102. COORDINATE WITH ALL TRADES.
T4	TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE INTERCONNECTING WIRING BETWEEN THERMOSTATS AND EQUIPMENT.
T5	PROVIDE INTERCONNECTING WIRING BETWEEN THERMOSTATS FOR AVERAGING SPACE TEMPERATURE.
T6	APPROXIMATE LOCATION OF CARBON MONOXIDE DETECTOR TO READ SUPPLY AIR FROM RTU-A101.
T7	APPROXIMATE LOCATION OF CARBON MONOXIDE DETECTOR TO READ SUPPLY AIR FROM RTU-A102.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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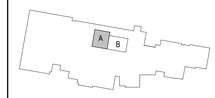
1000 Mulberry St.
Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

317.848.0966 WWW.FHAI.COM
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204



KEY PLAN

ISSUED FOR BID

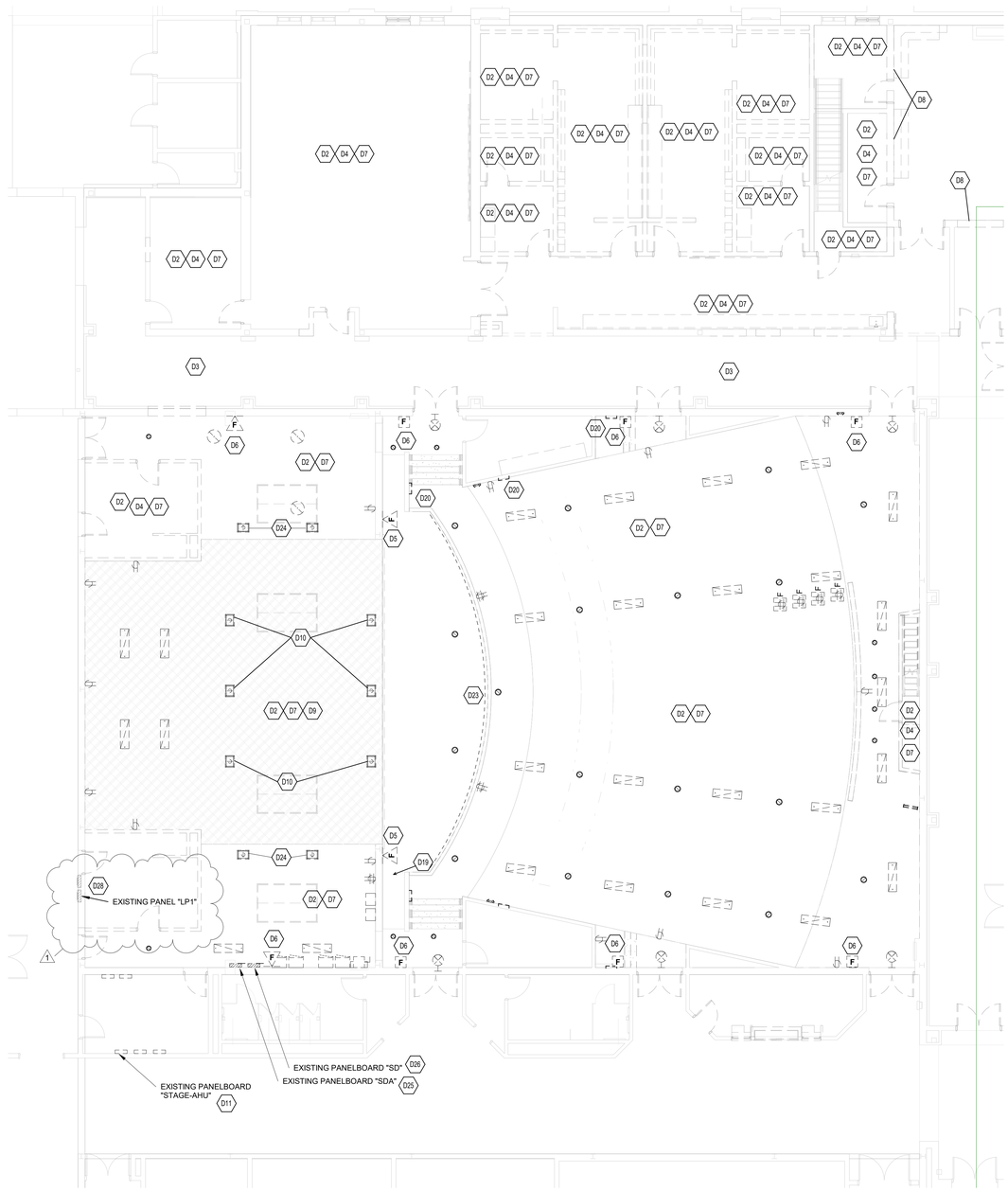
MARK Z. HOFF REGISTERED No. PE 12000001 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: ECG
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	Addendum 1	12.22.2025

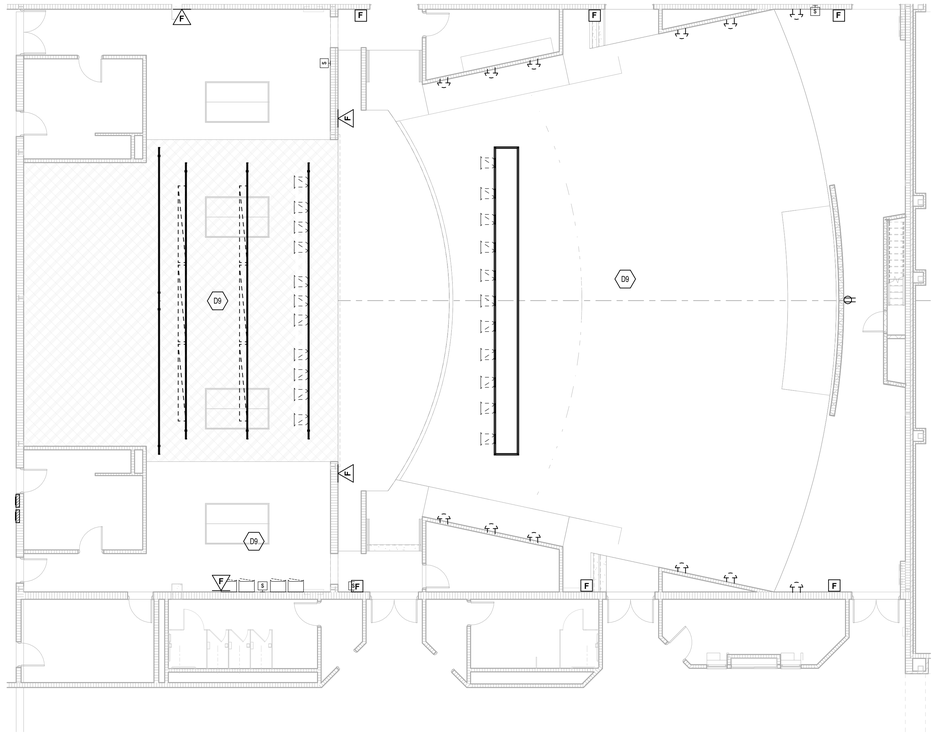
FIRST FLOOR MECHANICAL PIPING AND CONTROLS PLAN - UNIT A

ZH-MP11A



FIRST FLOOR ELECTRICAL DEMO PLAN - UNIT A

SCALE: 1/8" = 1'-0"



FIRST FLOOR THEATRICAL DEMO PLAN - UNIT A

SCALE: 1/8" = 1'-0"

DEMOLITION GENERAL NOTES

1. REFER TO ELECTRICAL SPECIFICANTS SECTIONS 260005 "ELECTRICAL DEMOLITION" FOR ADDITIONAL REQUIREMENTS THAT APPLY TO THIS DRAWING SHEET.
2. REMOVE ELECTRICAL EQUIPMENT COMPLETE

SHEET KEYNOTES	
D2	DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES AND LIGHT SWITCHES IN THIS ROOM. EXISTING LIGHTING CIRCUITS ARE TO REMAIN IN PLACE FOR NEW LIGHTING. REFER TO SHEET "ZCHS-EL11A" FOR ADDITIONAL REQUIREMENTS.
D3	EXISTING LIGHT FIXTURES AND FIRE ALARM DEVICES MOUNTED IN THE EXISTING CEILING ARE TO BE SUPPORTED IN PLACE WHILE THE EXISTING CEILING IS BEING REMOVED AND THE NEW CEILING IS BEING INSTALLED.
D4	EXISTING FIRE ALARM AND SMOKE DETECTION DEVICES IN THIS ROOM ARE TO BE DISCONNECTED AND REMOVED. INDICATOR DEVICES ARE TO BE REUSED FOR THE NEW FLOORPLAN LAYOUT. REFER TO SHEET "ZCHS-EF11A" FOR NEW LOCATION AND ADDITIONAL REQUIREMENTS.
D5	EXISTING FIRE ALARM DEVICE AT THIS LOCATION IS TO BE DISCONNECTED AND REMOVED. DEVICE IS TO BE REUSED. REFER TO SHEET "ZCHS-EF11A" FOR NEW LOCATION AND ADDITIONAL REQUIREMENTS.
D6	EXISTING FIRE ALARM DEVICE AT THIS LOCATION IS TO BE REMOVED FOR RENOVATION AND REINSTALLED AT INDICATED LOCATION AS SHOWN ON SHEET "ZH-EF110".
D7	DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL DEVICES IN THIS ROOM.
D8	DISCONNECT AND REMOVE ANY EXISTING ELECTRICAL DEVICES IN THIS PORTION OF THE EXISTING WALL THAT IS BEING REMOVED.
D9	DISCONNECT AND REMOVE ALL EXISTING THEATRICAL LIGHTING AND EQUIPMENT IN THIS ROOM.
D10	DISCONNECT AND REMOVE EXISTING THEATRICAL FLOOR BOX AT THIS LOCATION. CONDUITS TO BE REUSED AND EXTENDED IF APPLICABLE.
D11	EXISTING PANELBOARD TO BE RELOCATED. EXTEND FEEDERS AND CONDUIT TO NEW LOCATION. REFER TO SHEET "ZH-EP11A" FOR ADDITIONAL INFORMATION.
D19	EXISTING CONDUIT RUN THROUGH TEMPORARY STRUCTURE UNDER PIT COVER IS TO BE REMOVED AND REROUTED AT BOTTOM OF FIRST RISER TO ALLOW REMOVAL OF PIT COVER AND ACCESS TO STAIRS.
D20	DISCONNECT AND REMOVE STEP LIGHT AND ITS COVER.
D23	DISCONNECT AND REMOVE EXISTING STAGE EDGE SAFETY STRIP. CONDUITS AND CONDUCTORS TO REMAIN FOR NEW FIXTURE.
D24	DISCONNECT AND REMOVE EXISTING FLOOR BOX AT THIS LOCATION. REMOVE WIRING BACK TO SOURCE. CAP CONDUITS AND FILL FLOOR POCKET FLUSH WITH ADJACENT SLAB.
D25	DISCONNECT AND REMOVE EXISTING PANELBOARD "SDA". REMOVE ALL WIRING AND CONDUITS BACK TO SOURCE.
D26	EXISTING PANELBOARD "SD" TO BE REPLACED WITH NEW PANELBOARD "SD" AT NEW LOCATION. EXTENDED FEEDERS AND CONDUIT TO NEW LOCATION. REFER TO SHEET "ZH-EP11A" FOR MORE INFORMATION.
D28	DISCONNECT AND REMOVE EXISTING PANEL "LP1". EXTEND AND CONNECT EXISTING CIRCUIT 1 FOR THE HALLWAY LIGHTS TO YHN12-2. REMOVE ALL OTHER EXISTING CIRCUIT WIRING AND CONDUITS. REMOVE PANEL FEEDERS BACK TO SOURCE AND UPDATE CIRCUIT DIRECTORIES ACCORDINGLY.

VERIFICATION NOTE

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SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

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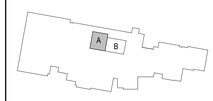
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204



KEY PLAN

N

ISSUED FOR BID

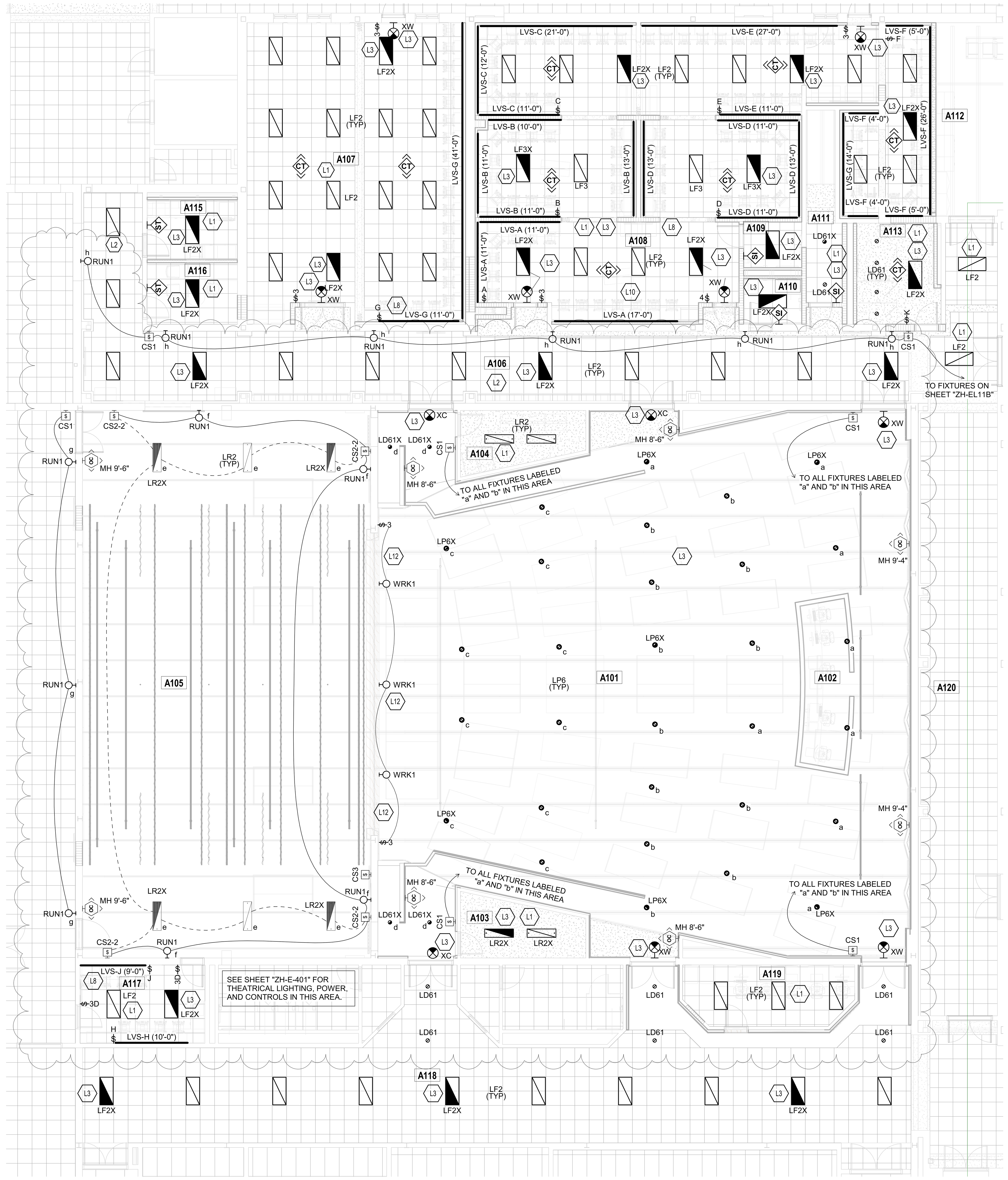
BRIAN W. BUTLER REGISTERED No. PE 19939 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: ANE
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	Addendum 1	12.22.2025

FIRST FLOOR ELECTRICAL DEMO PLAN - UNIT A

ZH-ED11A



FIRST FLOOR LIGHTING PLAN - UNIT A

SCALE: 1/8" = 1'-0"

ROOM LEGEND			
ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A101	C205	AUDITORIUM	4393 SF
A102	C205G	SOUND BOOTH	144 SF
A103	C205B	STORAGE	129 SF
A104	C205 F	STORAGE	129 SF
A105	-	STAGE	3703 SF
A106	C3	CORRIDOR	1538 SF
A107	C141	REHEARSAL ROOM	1223 SF
A108		MAKE-UP / DRESSING ROOM	1996 SF
A109		TOILET / CHANGING ROOM	51 SF
A110		STAFF TOILET	51 SF
A111	C3 MZ	MEZZANINE ACCESS	118 SF
A112	C131	SCENE SHOP	1170 SF
A113		RESTROOM	155 SF
A114	C1	CORRIDOR	1914 SF
A115		WORKROOM	104 SF
A116	C143	OFFICE	107 SF
A117	C205C	STAGE PREP	188 SF
A118	C5	CORRIDOR	1946 SF
A119	C205A	VIDEO PRODUCTION ROOM	190 SF
A120	C6	CORRIDOR	913 SF
A121	C4	CORRIDOR	4045 SF
A122	C206F	VOCAL STORAGE	171 SF
A123	C206E	RISER STORAGE	263 SF
A124	C204F	BAND STORAGE/PERCUSSION	357 SF
A125		INSTRUMENTS	554 SF

LIGHTING PLAN GENERAL NOTES

1. GENERATOR TRANSFER DEVICE TO TAKE FIXTURE TO 100% IN EMERGENCY CONDITION.
2. FINALCONNECTION TO RECESSED LUMINAIRES SHALL BE WITH FLEXIBLE METALLIC CONDUIT, MC CABLE OR MANUFACTURED WIRING SYSTEM.
3. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATION OF LUMINAIRES. COORDINATE LOCATION OF LUMINAIRES, LOUDSPEAKERS, DIFFUSERS, GRILLES, AND OTHER CEILING INSTALLED ELEMENTS WITH THEIR RESPECTIVE INSTALLERS.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND ROOM FINISH SCHEDULE TO DETERMINE PROPER TYPE OF LUMINAIRE TRIM REQUIRED FOR CEILING TYPE PRIOR TO ORDERING LUMINAIRES. PROVIDE LUMINAIRES COMPATIBLE WITH CEILING TYPE.
5. RECESSED LUMINAIRE IN GRID CEILING SYSTEMS SHALL BE PROVIDED WITH SEISMIC CLIPS OR PROVIDE ATTACHMENT TO CEILING GRID SYSTEM AND SUPPORTED PER PROJECT MANUAL AND DETAIL **"3E/E-ZCHS-E-501"**.
6. WHERE TWO SWITCHES ARE SHOWN ON PLAN CONNECTED TO THE SAME LIGHT FIXTURE, CONTRACTOR SHALL WIRE TO PROVIDE MULTI-LEVEL LIGHTING. ONE SWITCH SHALL ENERGIZE THE INBOARD LAMPS AND ONE SWITCH SHALL ENERGIZE THE OUTBOARD LAMPS. ALL ROOMS SHALL BE WIRED THE SAME.
7. LUMINAIRE TYPE IS SHOWN ONLY ONCE, AS "TYP." IN EVERY ROOM. PROVIDE SAME TYPE OF LUMINAIRE THROUGH-OUT SAME ROOM UNLESS OTHERWISE INDICATED.
8. PROVIDE NO. 10 AWG, MINIMUM, CONDUCTORS FOR EXIT SIGNS AND SECURITY LIGHT CIRCUITS.

SHEET KEYNOTES	
L1	WIRE NEW LIGHTING IN THIS ROOM TO THE EXISTING LIGHTING CIRCUIT IN THIS AREA.
L2	RE-INSTALL EXISTING LIGHT FIXTURES IN THIS CORRIDOR IN THEIR EXISTING LOCATION AFTER NEW CEILING IS INSTALLED.
L3	EMERGENCY LIGHT FIXTURES AND EXIT SIGNS ARE TO BE WIRED TO NEAREST EXISTING EMERGENY LIGHTING CIRCUIT IN THIS AREA.
L8	OCCUPANCY SENSORS AND SWITCHES IN THIS ROOM TO CONTROL ALL CEILING LIGHT FIXTURES WHILE LOCAL SWITCHES CONTROL MIRROR LIGHTS. REFER TO ARCHITECTURAL DRAWINGS FOR INSTALLATION OF MIRROR LIGHTS AT TOP AND BOTTOM OF MIRRORS IN THIS AREA.
L10	CONNECT ALL MIRROR LIGHTS TO CIRCUIT 1LN30-8.
L12	MOUNT WORK LIGHT FIXTURES TO WALL IN PIT AT 5'-6" FROM BOTTOM OF PIT. COORDINATE LOCATION WITH TEMPORARY STRUCTURE OF PIT COVER. SWITCH HEIGHTS MEASURED FROM BOTTOM OF PIT.

DEVICES SHALL BE INSTALLED AT LOCATIONS SHOWN ON DRAWINGS. LOCATIONS OF DEVICES SHALL BE COORDINATED WITH OTHER ELECTRICAL DEVICES/CASEWORK/ARCHITECTURAL FEATURES AND OTHER TRADES PRIOR TO ROUGH-IN. IF RELOCATION OF DEVICES IS REQUIRED DUE TO LACK OF COORDINATION BETWEEN ELECTRICAL DRAWINGS AND OTHER TRADES, ANY ASSOCIATED COSTS SHALL BE RESPONSIBILITY OF ELECTRICAL CONTRACTOR.

ALL LIGHT FIXTURES INSTALLED IN LAY-IN TYPE CEILINGS SHALL BE SUPPORTED AT TWO CORNERS OF THE LIGHT FIXTURE, PER DETAIL "3E" AND ALSO ATTACHED TO THE CEILING GRID AT EACH CORNER USING SEISMIC CLIPS OR SCREWS. SEE SPECIFICATION SECTION 265100 FOR ADDITIONAL REQUIREMENTS.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

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Zionsville, IN 46077

ARCHITECT

FANNING HOWEY

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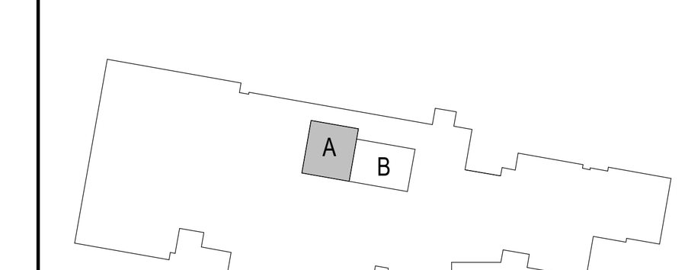

KEY PLAN

N

ISSUED FOR BID

BRIAN W. BUTLER REGISTERED No. PE 11600305 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: ANE
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	Addendum 1	12.22.2025

FIRST FLOOR LIGHTING PLAN - UNIT A

ZH-EL11A

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ROOM LEGEND			
ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A203		STORAGE	439 SF

SECOND FLOOR LIGHTING PLAN - UNIT B

SCALE: 1/8" = 1'-0"

LIGHTING PLAN GENERAL NOTES

1. GENERATOR TRANSFER DEVICE TO TAKE FIXTURE TO 100% IN EMERGENCY CONDITION.
2. FINALCONNECTION TO RECESSED LUMINAIRES SHALL BE WITH FLEXIBLE METALLIC CONDUIT, MC CABLE OR MANUFACTURED WIRING SYSTEM.
3. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATION OF LUMINAIRES. COORDINATE LOCATION OF LUMINAIRES, LOUDSPEAKERS, DIFFUSERS, GRILLES, AND OTHER CEILING INSTALLED ELEMENTS WITH THEIR RESPECTIVE INSTALLERS.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND ROOM FINISH SCHEDULE TO DETERMINE PROPER TYPE OF LUMINAIRE TRIM REQUIRED FOR CEILING TYPE PRIOR TO ORDERING LUMINAIRES. PROVIDE LUMINAIRES COMPATIBLE WITH CEILING TYPE.
5. RECESSED LUMINAIRE IN GRID CEILING SYSTEMS SHALL BE PROVIDED WITH SEISMIC CLIPS OR PROVIDE ATTACHMENT TO CEILING GRID SYSTEM AND SUPPORTED PER PROJECT MANUAL AND DETAIL **"3E/E-ZCHS-E-501"**.
6. WHERE TWO SWITCHES ARE SHOWN ON PLAN CONNECTED TO THE SAME LIGHT FIXTURE, CONTRACTOR SHALL WIRE TO PROVIDE MULTI-LEVEL LIGHTING. ONE SWITCH SHALL ENERGIZE THE INBOARD LAMPS AND ONE SWITCH SHALL ENERGIZE THE OUTBOARD LAMPS. ALL ROOMS SHALL BE WIRED THE SAME.
7. LUMINAIRE TYPE IS SHOWN ONLY ONCE, AS "TYP." IN EVERY ROOM. PROVIDE SAME TYPE OF LUMINAIRE THROUGH-OUT SAME ROOM UNLESS OTHERWISE INDICATED.
8. PROVIDE NO. 10 AWG, MINIMUM, CONDUCTORS FOR EXIT SIGNS AND SECURITY LIGHT CIRCUITS.

SHEET KEYNOTES	
L3	EMERGENCY LIGHT FIXTURES AND EXIT SIGNS ARE TO BE WIRED TO NEAREST EXISTING EMERGENY LIGHTING CIRCUIT IN THIS AREA.
L9	WIRE NEW HOUSE LIGHTING IN THIS ROOM TO THE EXISTING HOUSE LIGHTING CIRCUITS.
L11	INSTALL NEW LIGHT FIXTURES IN THIS AREA IN SAME LOCATION AS DEMOED FIXTURES.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

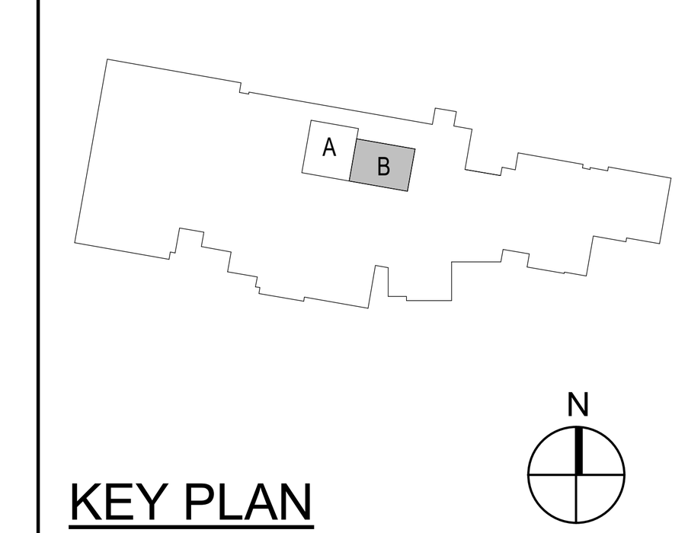
2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ARCHITECT

FANNING HOWEY

317.848.0966 WWW.FHAI.COM
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204



KEY PLAN

ISSUED FOR BID

BRIAN W. BUTLER REGISTERED No. PE... STATE OF ... PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: ANE
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	Addendum 1	12.22.2025

SECOND FLOOR LIGHTING PLAN - UNIT B

ZH-EL12B

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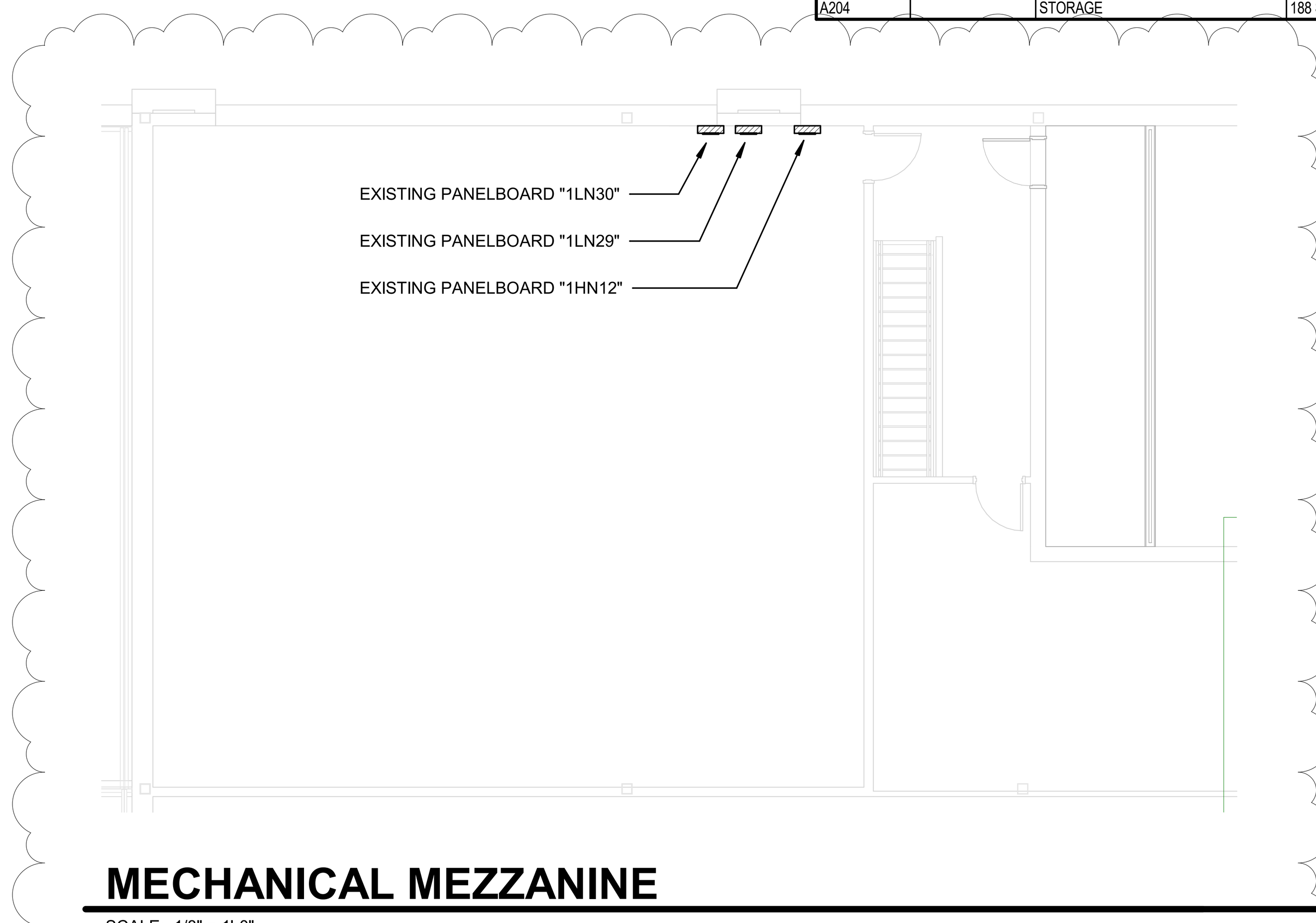
ZIONSVILLE COMMUNITY SCHOOLS

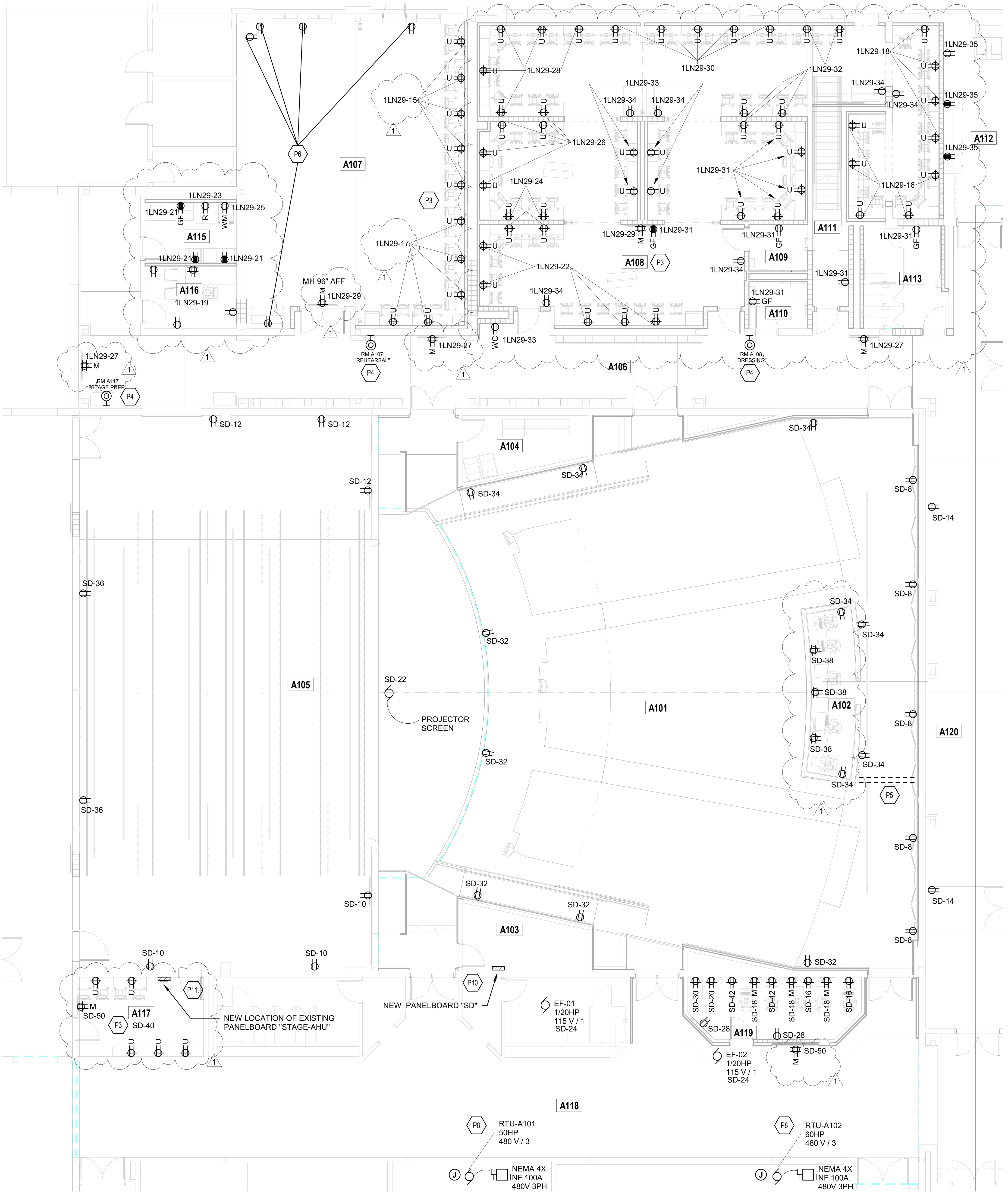
2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077



MECHANICAL MEZZANINE

SCALE: 1/8" = 1'-0"



FIRST FLOOR POWER PLAN - UNIT A

SCALE: 1/8" = 1'-0"

ROOM LEGEND			
ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A101	C205	AUDITORIUM	4393 SF
A102	C205G	SOUND BOOTH	144 SF
A103	C205B	STORAGE	129 SF
A104	C205 F	STORAGE	129 SF
A105	-	STAGE	3703 SF
A106	C3	CORRIDOR	1538 SF
A107	C141	REHEARSAL ROOM	1223 SF
A108		MAKE-UP / DRESSING ROOM	1996 SF
A109		TOILET / CHANGING ROOM	51 SF
A110		STAFF TOILET	51 SF
A111	C3 MZ	MEZZANINE ACCESS	118 SF
A112	C131	SCENE SHOP	1170 SF
A113		RESTROOM	155 SF
A114	C1	CORRIDOR	1914 SF
A115		WORKROOM	104 SF
A116	C143	OFFICE	107 SF
A117	C205C	STAGE PREP	188 SF
A118	C5	CORRIDOR	1946 SF
A119	C205A	VIDEO PRODUCTION ROOM	190 SF
A120	C6	CORRIDOR	913 SF
A121	C4	CORRIDOR	4045 SF
A122	C206F	VOCAL STORAGE	171 SF
A123	C206E	RISER STORAGE	263 SF
A124	C204F	BAND STORAGE/PERCUSSION	357 SF
A125		INSTRUMENTS	554 SF
A201		MEZZANINE ACCESS	219 SF
A202		MECHANICAL MEZZANINE	1916 SF
A203		STORAGE	439 SF
A204		STORAGE	188 SF

POWER PLAN GENERAL NOTES

1. PROVIDE REVISED TYPED PANELBOARD DIRECTORIES FOR EACH PANELBOARD ADDED OR MODIFIED DURING CONSTRUCTION. FIELD VERIFY EXISTING CIRCUIT INFORMATION WITH OWNER'S ASSISTANCE TO ENSURE FINAL DIRECTORY IS ACCURATE. UNUSED SPARE BREAKERS SHALL BE IN THE OFF POSITION.
2. VIDEO PROJECTOR RECEPTACLE TO BE MOUNTED ABOVE WALL MOUNTED PROJECTOR BRACKET, 96" A.F.F. UNO.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.
4. LABEL ALL NEW AND EXISTING RECEPTACLES WITH THE PANEL NAME AND CIRCUIT NUMBER ON THE FACE OF EACH COVER PLATE WITH A TYPED LAMINATED LABEL.
5. PROVIDE "GFCI PROTECTED" LABEL ON COVER PLATE FOR ANY GFCI PROTECTED DEVICE.
6. CONTRACTOR SHALL INCREASE CIRCUIT CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP DUE TO EXCESSIVE CIRCUIT LENGTHS. IN NO CASE SHALL VOLTAGE DROP EXCEED NFPA 70 (N.E.C.) REQUIREMENTS.
7. REFER TO MECHANICAL PLANS FOR LOCATION OF MECHANICAL EQUIPMENT. LOCATE DISCONNECT SWITCHES PER NEC.
8. REFER TO "CONTROL SCHEMATICS" MECHANICAL DRAWINGS FOR ADDITIONAL CONTROL WIRING AND CONTROL CONNECTIONS.
9. ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, SHALL BE BONDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR. MAINTAIN MECHANICAL/ELECTRICAL BONDS OF METALLIC RACEWAY SYSTEM.
10. EXISTING BACK BOXES AND CONDUITS FROM EXISTING RECEPTACLES MAY BE REUSED IF AVAILABLE IN SAME LOCATION.

SHEET KEYNOTES	
P3	ALL HORIZONTAL COUNTERTOP RECEPTACLES MOUNTED AT 2'-7" AFF.
P4	PILOT LIGHT. RED LED INDICATOR TO BE ON WHEN ANY HORIZONTAL COUNTERTOP RECEPTACLES IN THE INDICATED ROOM HAVE A LOAD CONNECTED TO THEM. SEE PILOT LIGHT DETAIL FOR ADDITIONAL INFORMATION.
P5	TRENCH AT LOCATION AND RUN (4) 1 INCH CONDUITS TO BOOTH.
P6	EXISTING RECEPTACLES TO REMAIN. REPLACE FACEPLATE WITH NEW.
P8	CONNECT NEW RTU TO EXISTING CIRCUIT IN "STAGE AHU" PANEL. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF RTU. CONNECT UNIT CONVENIENCE RECEPTACLE AND LIGHTING TO CIRCUIT SD-20.
P10	NEW PANELBOARD "SD" AT THIS LOCATION TO BE FED BY EXISTING FEEDERS FROM DEMOED PANELBOARD "SD". EXTEND EXISTING FEEDERS AND CONDUIT TO NEW LOCATION. ANY EXISTING BRANCH CIRCUIT CONDUITS THAT ARE REUSED ARE TO BE RUN TO NEW LOCATION.
P11.	EXTEND EXISTING FEEDERS AND CONDUIT TO NEW LOCATION.

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

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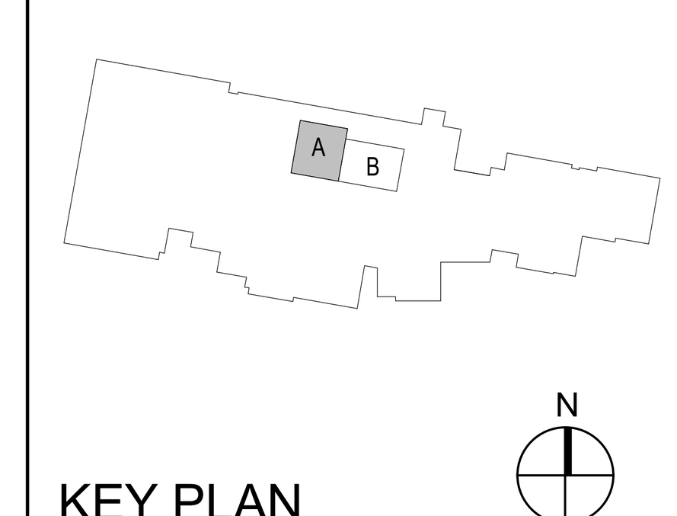

KEY PLAN

ISSUED FOR BID

BRIAN W. BUTLER REGISTERED No. PE 11600305 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: ANE
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	Addendum 1	12.22.2025

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

FIRST FLOOR POWER PLAN - UNIT A

ZH-EP11A

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ROOM LEGEND			
ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A101	C205	AUDITORIUM	4393 SF
A102	C205G	SOUND BOOTH	144 SF
A103	C205B	STORAGE	129 SF
A104	C205 F	STORAGE	129 SF
A105	-	STAGE	3703 SF
A106	C3	CORRIDOR	1538 SF
A107	C141	REHEARSAL ROOM	1223 SF
A108		MAKE-UP / DRESSING ROOM	1996 SF
A109		TOILET / CHANGING ROOM	51 SF
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A111	C3 MZ	MEZZANINE ACCESS	118 SF
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A113		RESTROOM	155 SF
A114	C1	CORRIDOR	1914 SF
A115		WORKROOM	104 SF
A116	C143	OFFICE	107 SF
A117	C205C	STAGE PREP	188 SF
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A120	C6	CORRIDOR	913 SF
A121	C4	CORRIDOR	4045 SF
A122	C206F	VOCAL STORAGE	171 SF
A123	C206E	RISER STORAGE	263 SF
A124	C204F	BAND STORAGE/PERCUSSION	357 SF
A125		INSTRUMENTS	554 SF
B101	C203	PAC	7933 SF
B102	C203C	STAGE	4675 SF
B103		PIANO STORAGE	81 SF

FIRE ALARM PLAN GENERAL NOTES

1. ALL NEW FIRE ALARM DEVICES TO BE CONNECTED TO THE EXISTING FIRE ALARM SYSTEM.
2. COORDINATE WITH EXISTING EQUIPMENT. PROVIDE PROGRAMMING AND TESTING AS REQUIRED.
3. FIRE ALARM LAYOUT IS SHOWN FOR COVERAGE AREA ONLY. CONTRACTOR SHALL PROVIDE DEVICES AS REQUIRED FOR COMPLETE COVERAGE.
4. TESTING OF MULTI-TRIP DETECTION DEVICES WITH SHOW CONDITIONS SHALL BE COORDINATED AFTER INSTALLATION WITH OWNER.

SHEET KEYNOTES	
F1	EXISTING FIRE ALARM DEVICE AT THIS LOCATION IS TO REMAIN IN PLACE.
F2	NEW LOCATION OF EXISTING FIRE ALARM DEVICE. RECONNECT TO EXISTING FIRE ALARM SYSTEM.
F3	PROVDE A NEW FIRE ALARM DEVICE AT THIS LOCATION. CONNECT NEW DEVICE TO EXISTING FIRE ALARM SYSTEM.
F4	DISCONNECT FIRE ALARM EQUIPMENT FROM EXISTING SMOKE VENTS ABOVE STAGE AND RECONNECT TO NEW SMOKE VENTS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
F5	REPLACE EXISTING SMOKE DETECTOR DEVICE WITH MULTI-TRIP DETECTOR IN SAME LOCATION.
F6	CARBON MONOXIDE SENSOR PROVIDED BY OTHER IN THIS ROOM IS TO BE INTEGRATED WITH THE FIRE ALARM SYSTEM. REFER TO SHEET ZH-MP11A FOR ADDITIONAL INFORMATION.

FIRST FLOOR FIRE ALARM PLAN - UNIT A

SCALE: 1/8" = 1'-0"

ARCHITECT

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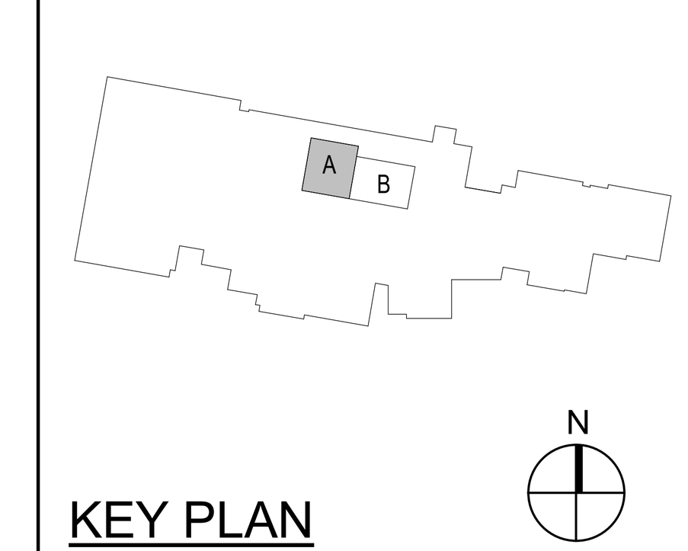

KEY PLAN

ISSUED FOR BID

BRIAN W. BUTLER REGISTERED No. PE 11600305 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: ANE
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	Addendum 1	12.22.2025

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

FIRST FLOOR FIRE ALARM PLAN

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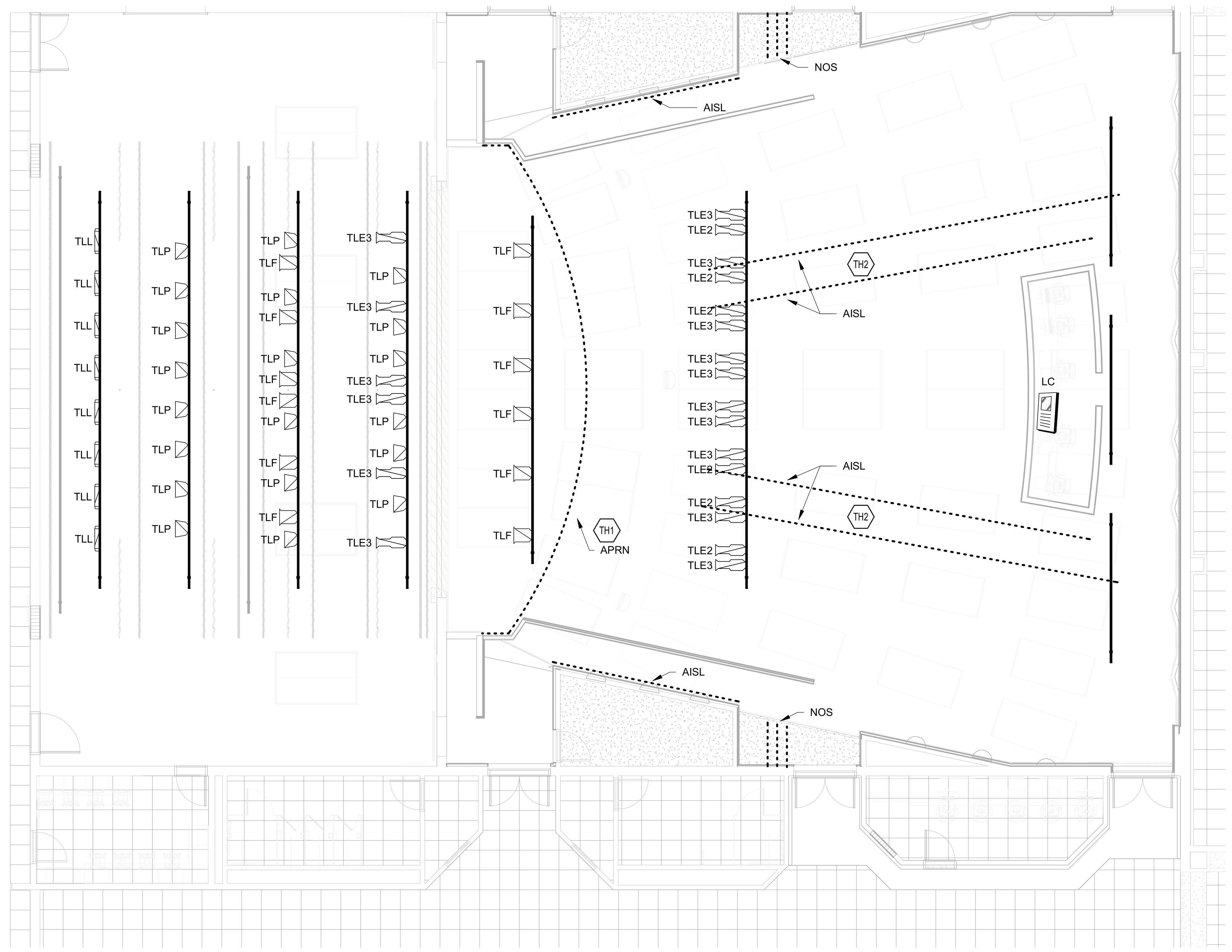
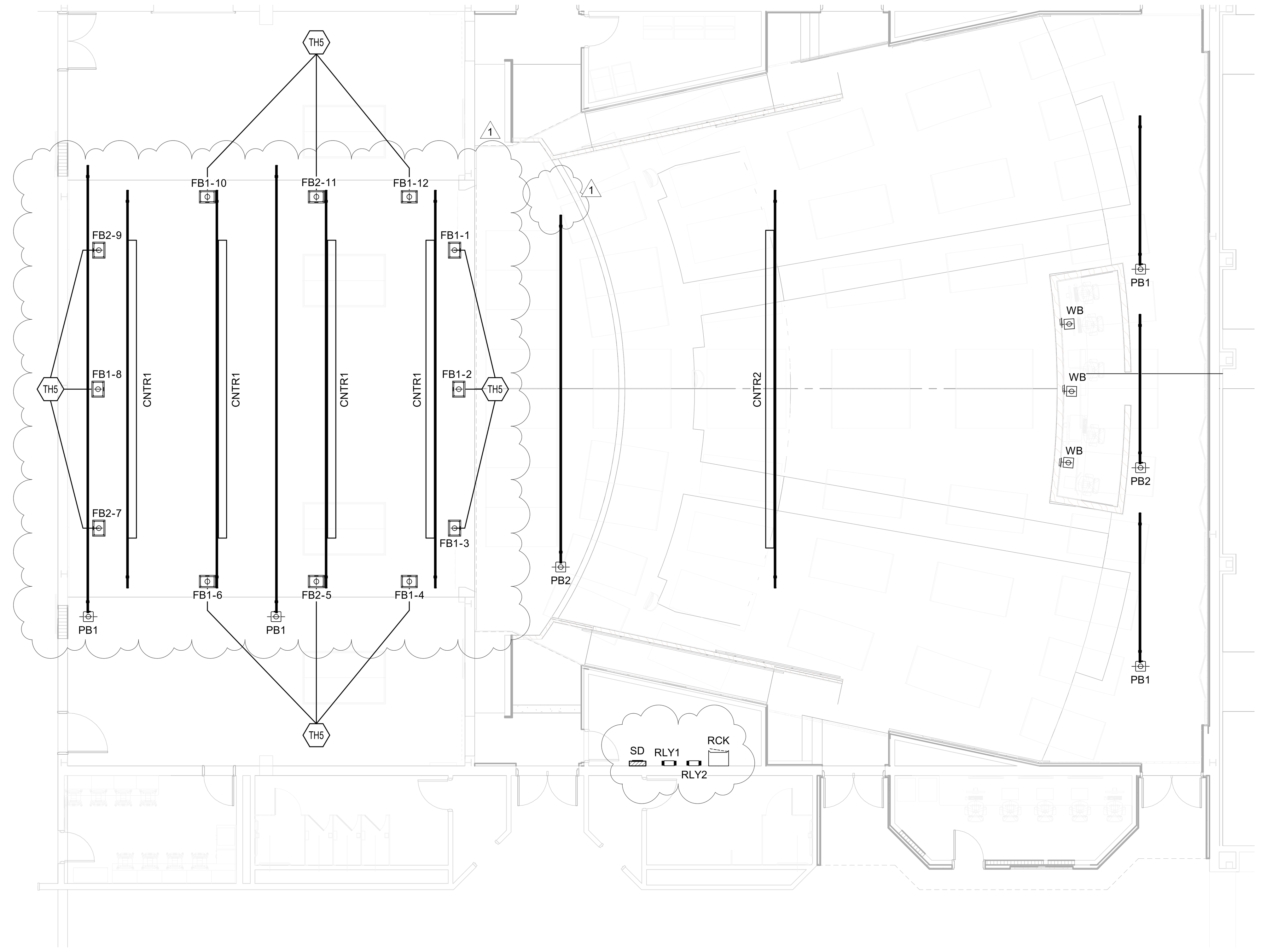


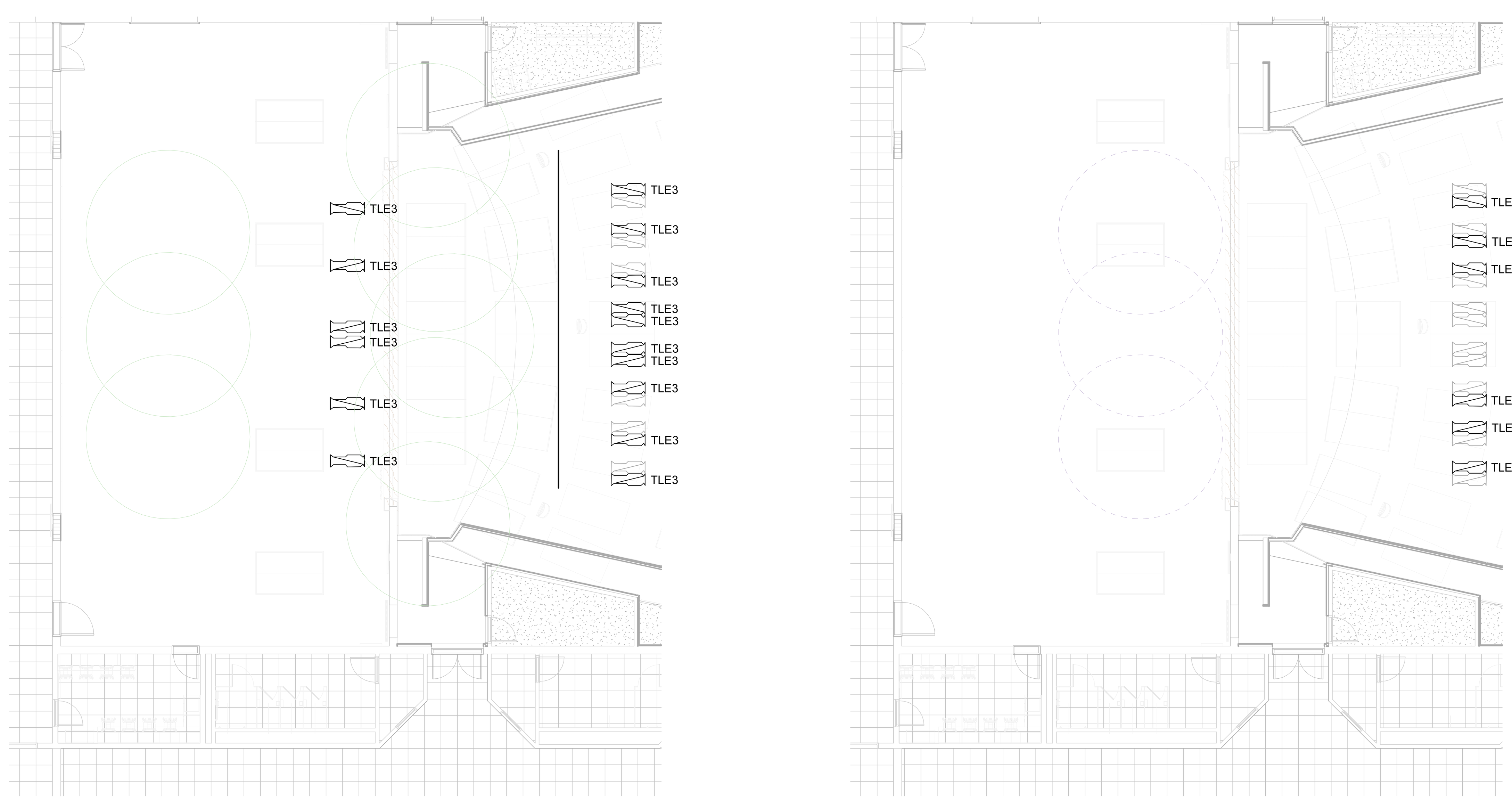
THEATRICAL LIGHTING - AUDITORIUM

SCALE: 1/8" = 1'-0"



THEATRICAL POWER AND CONTROLS - AUDITORIUM

SCALE: 1/8" = 1'-0"



THEATRICAL LIGHTING FOCUS - AUDITORIUM

SCALE: 3/32" = 1'-0"

THEATRICAL PLAN GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.
2. PROVIDE REVISED TYPED PANELBOARD DIRECTORIES FOR EACH PANELBOARD ADDED OR MODIFIED DURING CONSTRUCTION. FIELD VERIFY EXISTING CIRCUIT INFORMATION WITH OWNER'S ASSISTANCE TO ENSURE FINAL DIRECTORY IS ACCURATE. UNUSED SPARE BREAKERS SHALL BE IN THE OFF POSITION.
3. LABEL EACH RECEPTACLE WITH THE PANEL NAME AND CIRCUIT NUMBER ON THE FACE OF EACH COVER PLATE WITH A TYPED LAMINATED LABEL.
4. CONTRACTOR SHALL INCREASE CIRCUIT CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP DUE TO EXCESSIVE CIRCUIT LENGTHS. IN NO CASE SHALL VOLTAGE DROP EXCEED NFPA 70 (N.E.C.) REQUIREMENTS.
5. ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, SHALL BE BONDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR. MAINTAIN MECHANICAL/ELECTRICAL BONDS OF METALIC RACEWAY SYSTEM.
6. CONTRACTOR SHALL VERIFY PROPER TYPE OF LUMINAIRE TRIM REQUIRED FOR CEILING TYPE PRIOR TO ORDERING LUMINARIES AND PROVIDE LUMINARIES COMPATIBLE WITH CEILING TYPE.
7. LUMINAIRE TYPE IS SHOWN ONLY ONCE, AS "TYP", IN EVERY ROOM. PROVIDE SAME TYPE OF LUMINAIRE THROUGHOUT SAME ROOM UNLESS OTHERWISE INDICATED.
8. GENERATOR TRANSFER DEVICE TO TAKE FIXTURE TO 100% IN EMERGENCY CONDITION.

SHEET KEYNOTES	
TH1	APRON EDGE SAFETY LIGHTS ARE TO BE INSTALLED 0'-3" FROM STAGE EDGE AND FLUSH IN FLOOR.
TH2	AISLE STRIP LIGHTS ARE TO BE INSTALLED AT CARPET TRANSITION.
TH5	NEW FLOOR POCKETS IN NEW STAGE FLOOR. REUSE AND EXTEND EXISTING CONDUITS AS APPLICABLE.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ZIONSVILLE Community Schools

ARCHITECT

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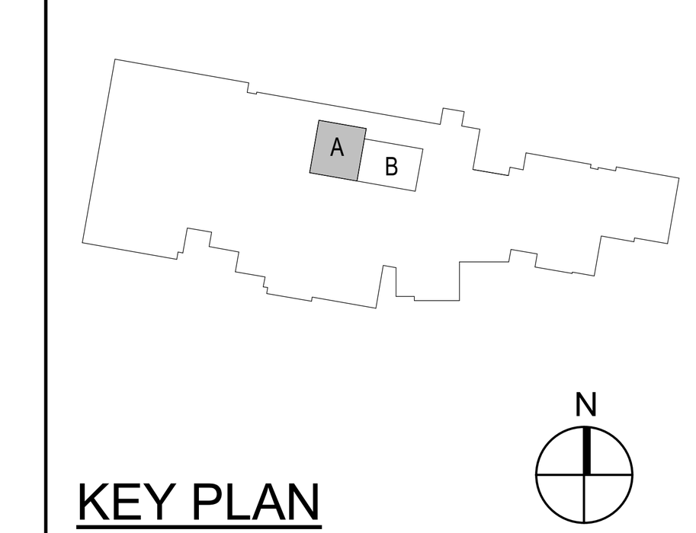


KEY PLAN

ISSUED FOR BID

BRIAN W. BUTLER REGISTERED No. PE 11600305 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM

DRAWN BY: ANE

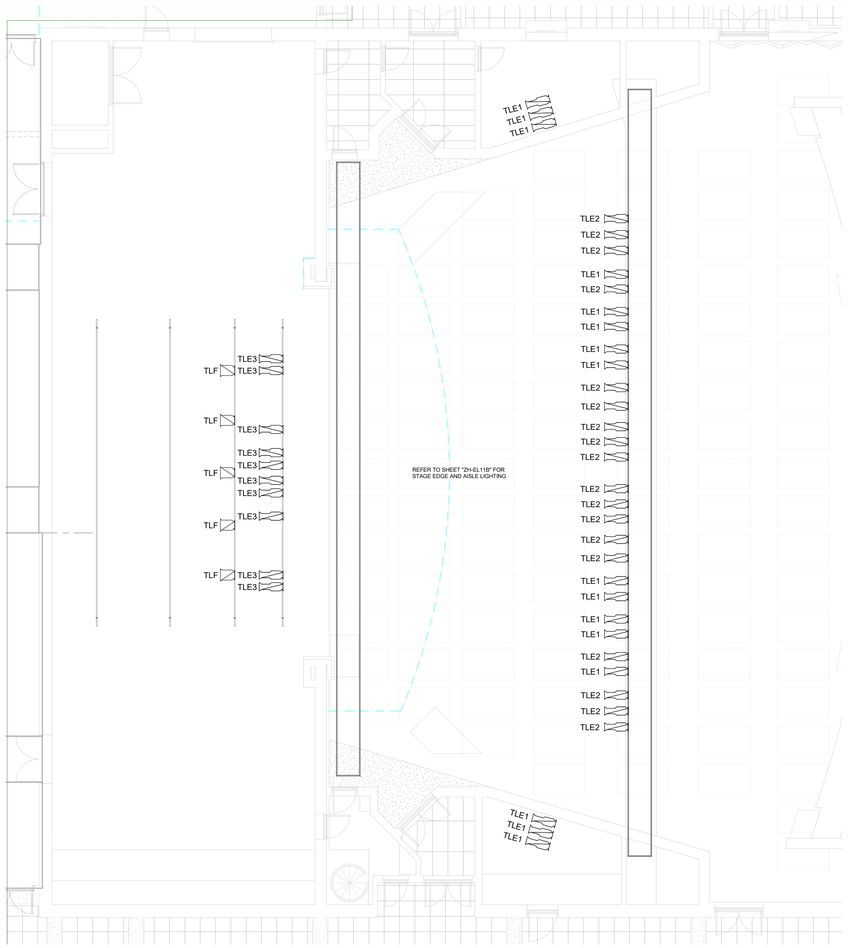
PROJECT NUMBER: 224035.00

PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	Addendum 1	12.22.2025

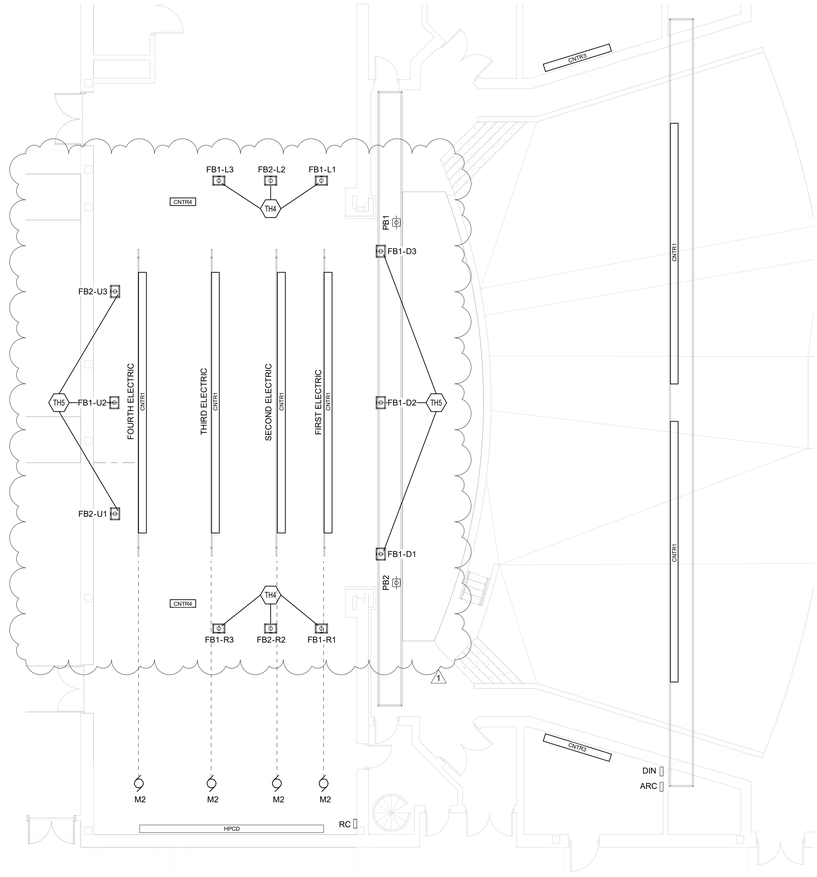
THEATRICAL LIGHTING PLANS - AUDITORIUM

ZH-E-401



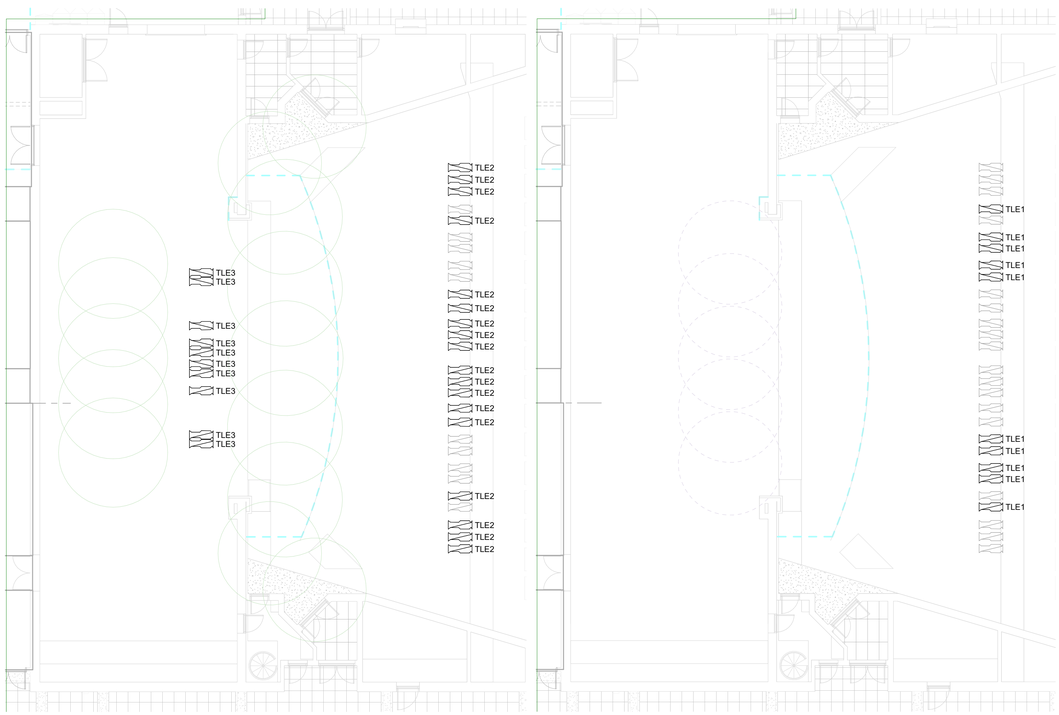
THEATRICAL LIGHTING - PAC

SCALE: 1/8" = 1'-0"



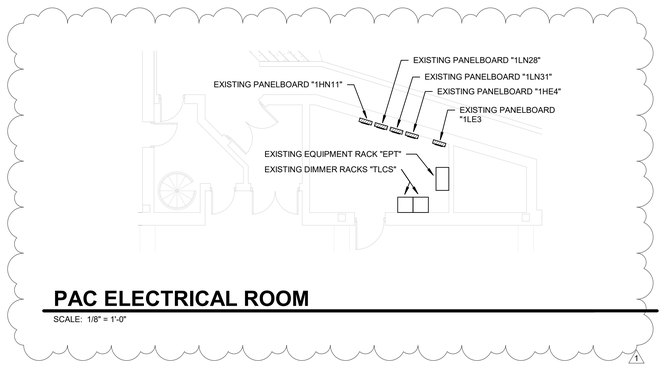
THEATRICAL POWER PLAN - PAC

SCALE: 1/8" = 1'-0"



THEATRICAL LIGHTING FOCUS - PAC

SCALE: 3/32" = 1'-0"



PAC ELECTRICAL ROOM

SCALE: 1/8" = 1'-0"

THEATRICAL PLAN GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.
2. PROVIDE REVISED TYPED PANELBOARD DIRECTORIES FOR EACH PANELBOARD ADDED OR MODIFIED DURING CONSTRUCTION. FIELD VERIFY EXISTING CIRCUIT INFORMATION WITH OWNER'S ASSISTANCE TO ENSURE FINAL DIRECTORY IS ACCURATE. UNUSED SPARE BREAKERS SHALL BE IN THE OFF POSITION.
3. LABEL EACH RECEPTACLE WITH THE PANEL NAME AND CIRCUIT NUMBER ON THE FACE OF EACH COVER PLATE WITH A TYPED LAMINATED LABEL.
4. CONTRACTOR SHALL INCREASE CIRCUIT CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP DUE TO EXCESSIVE CIRCUIT LENGTHS. IN NO CASE SHALL VOLTAGE DROP EXCEED NFPA 70 (N.E.C.) REQUIREMENTS.
5. ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, SHALL BE BONDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR. MAINTAIN MECHANICAL/ELECTRICAL BONDS OF METALIC RACEWAY SYSTEM.
6. CONTRACTOR SHALL VERIFY PROPER TYPE OF LUMINAIRE TRIM REQUIRED FOR CEILING TYPE PRIOR TO ORDERING LUMINARIES AND PROVIDE LUMINARIES COMPATIBLE WITH CEILING TYPE.
7. LUMINAIRE TYPE IS SHOWN ONLY ONCE, AS "TYP", IN EVERY ROOM. PROVIDE SAME TYPE OF LUMINAIRE THROUGHOUT SAME ROOM UNLESS OTHERWISE INDICATED.
8. GENERATOR TRANSFER DEVICE TO TAKE FIXTURE TO 100% IN EMERGENCY CONDITION.

SHEET KEYNOTES

TH4	PROVIDE NEW FLOOR BOX COVER AND FACE PLATE IN EXISTING FLOOR POCKET.
TH5	NEW FLOOR POCKETS IN NEW STAGE FLOOR. REUSE AND EXTEND EXISTING CONDUITS AS APPLICABLE.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

ZIONSVILLE HIGH SCHOOL
1000 Mulberry St.
Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

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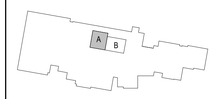


KEY PLAN

N

ISSUED FOR BID

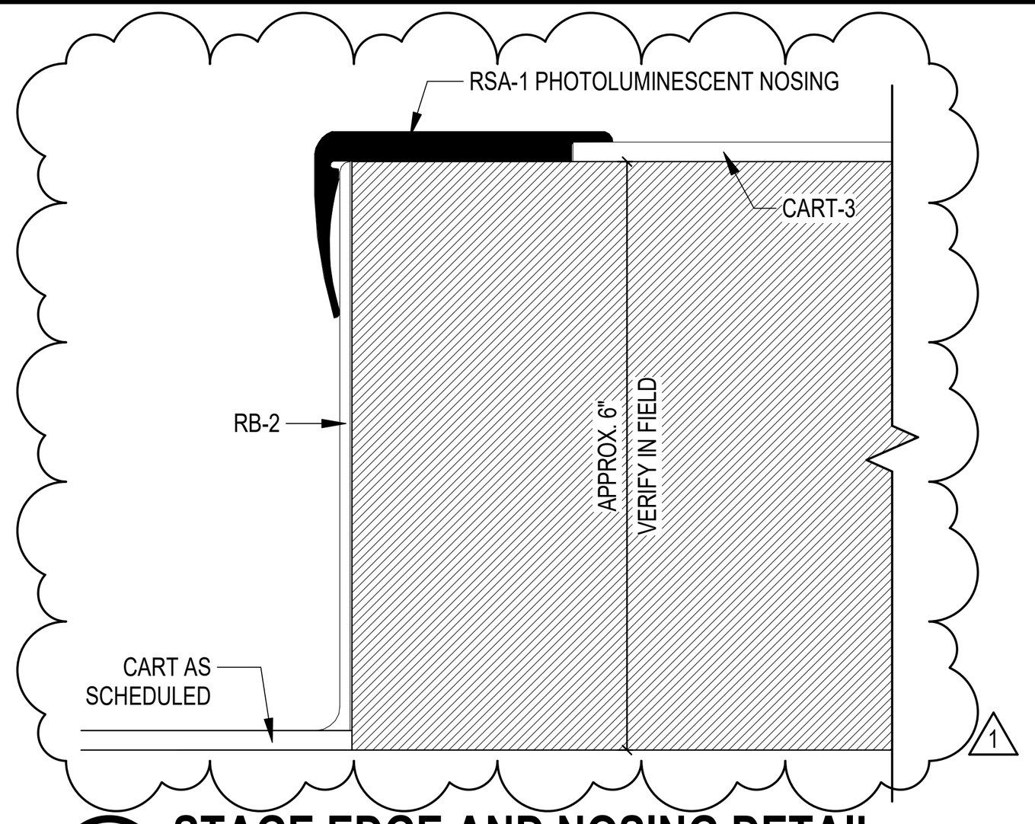
BRIAN W. BUTLER REGISTERED No. PE19900008 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: ANE
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

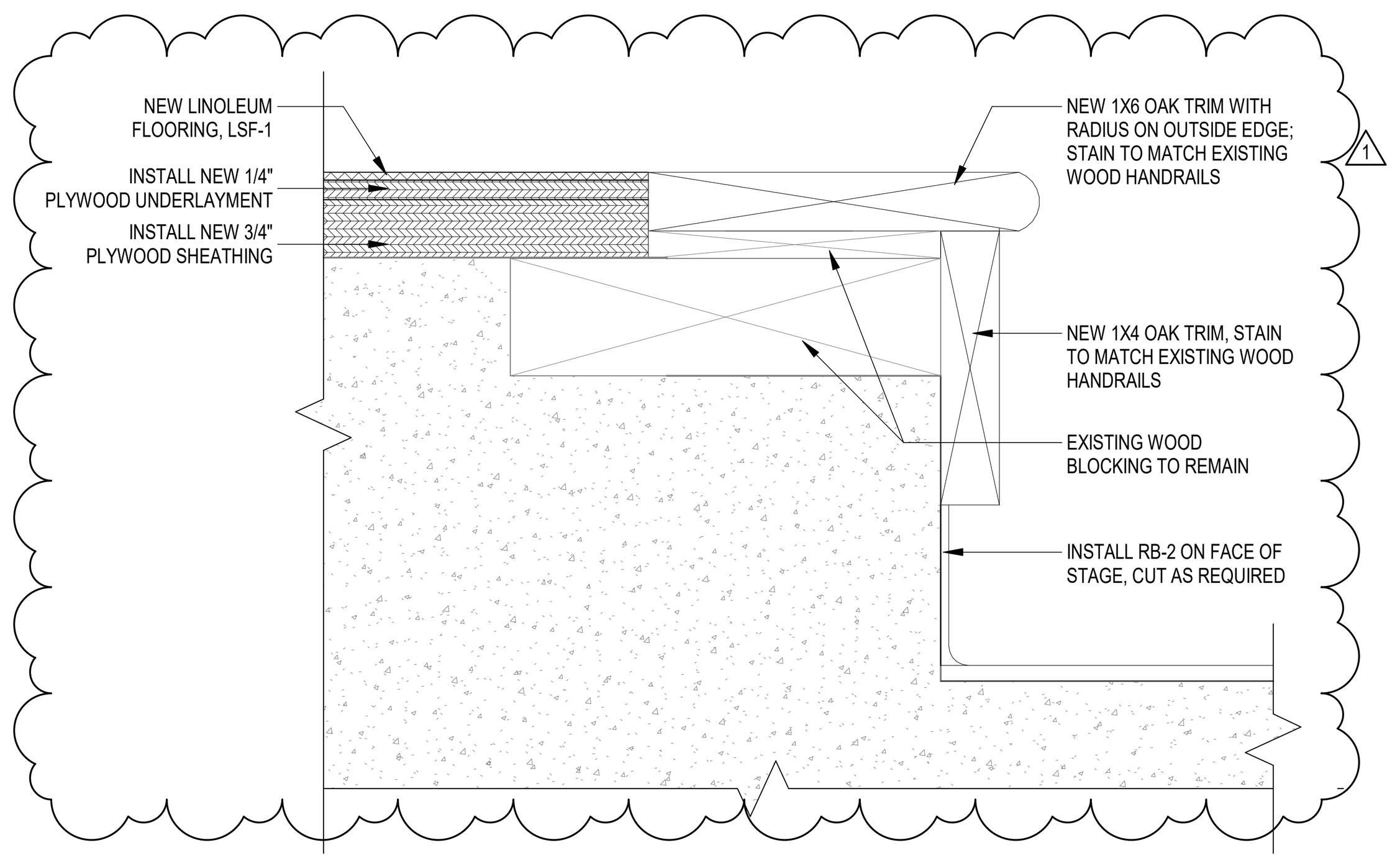
REV. NO.	DESCRIPTION	DATE
1	Addendum 1	12.22.2025

THEATRICAL PLANS - PAC

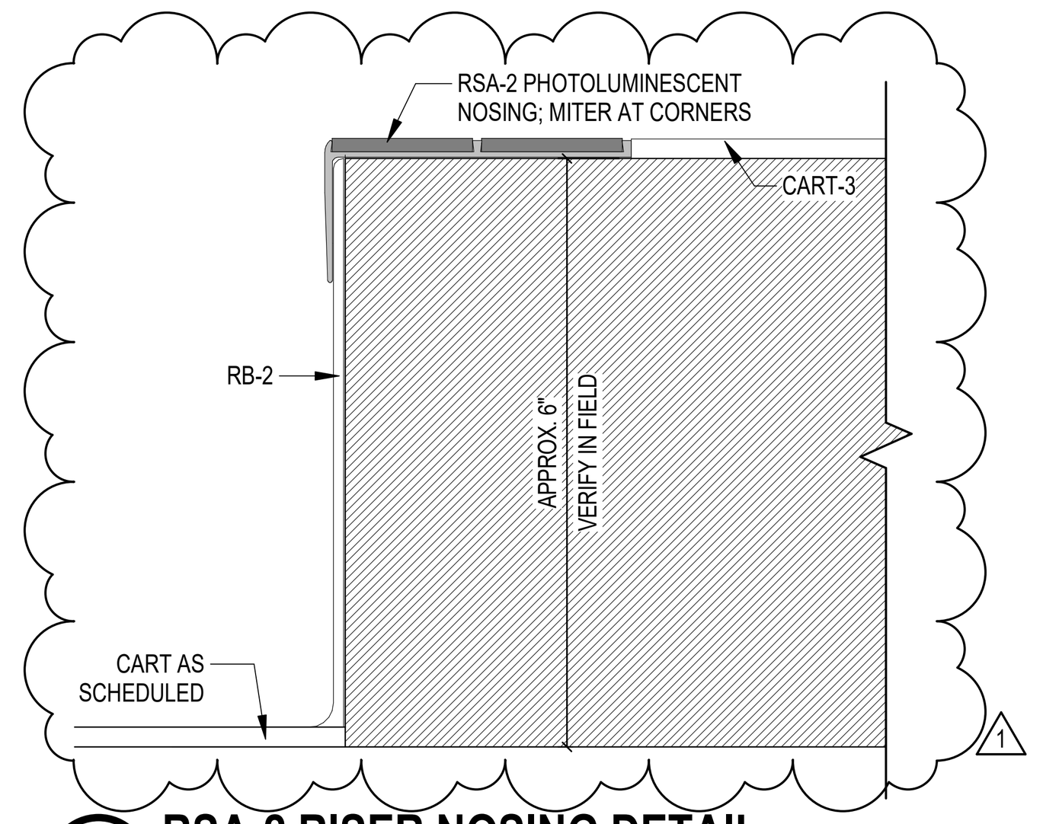
ZH-E-403



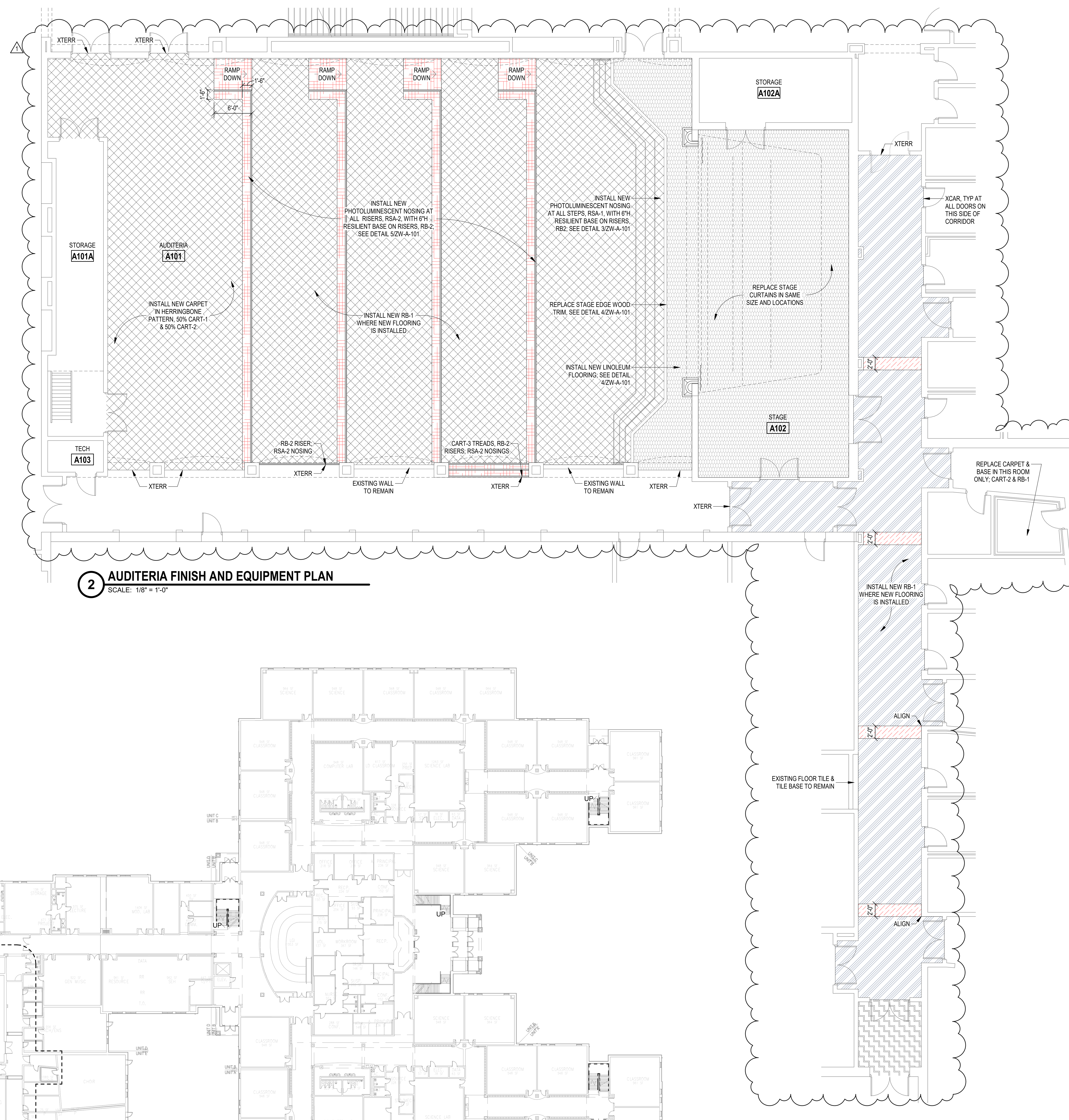
3 **STAGE EDGE AND NOSING DETAIL**
SCALE: 6" = 1'-0"



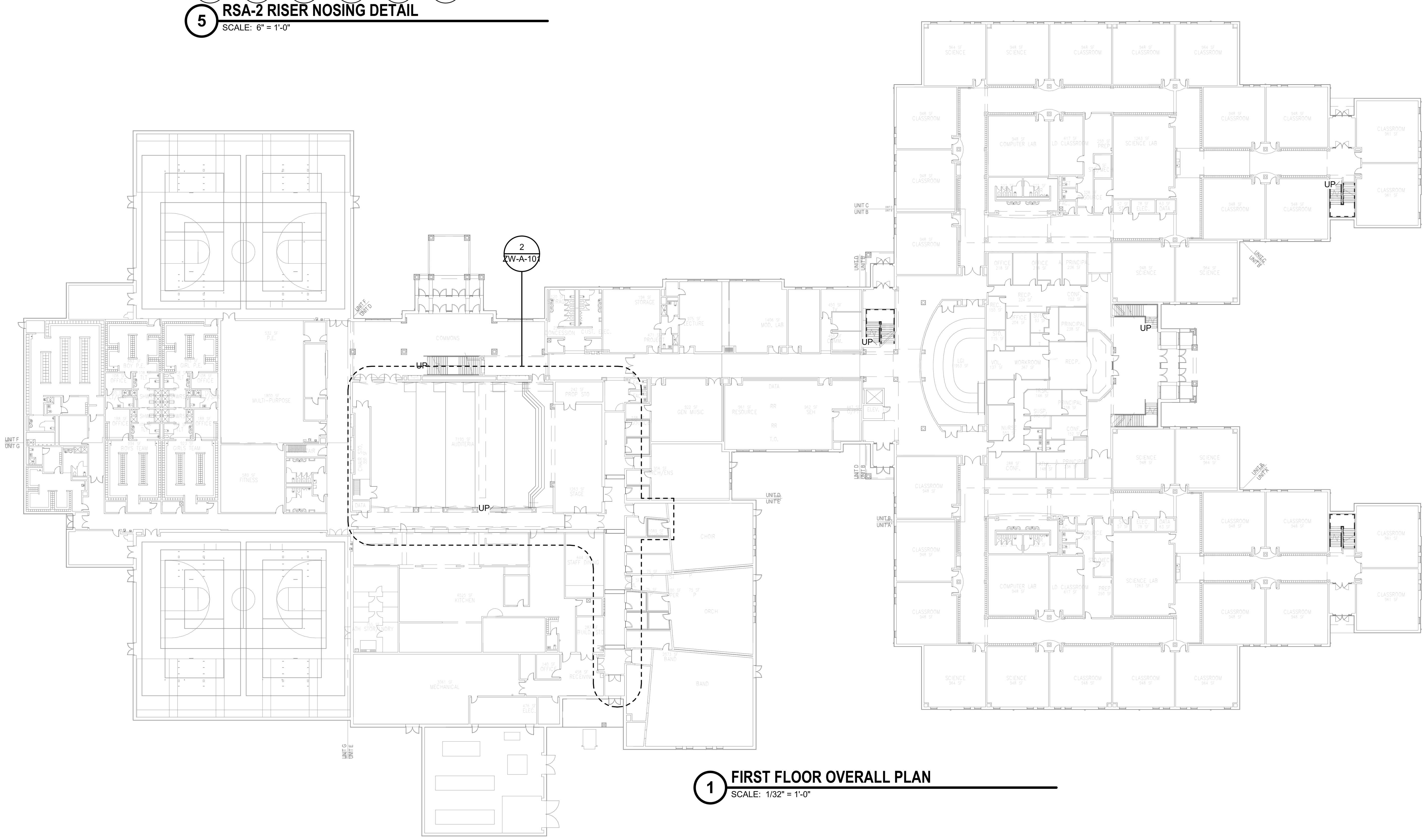
4 **STAGE FLOORING DETAIL**
SCALE: 6" = 1'-0"



5 **RSA-2 RISER NOSING DETAIL**
SCALE: 6" = 1'-0"



2 **AUDITERIA FINISH AND EQUIPMENT PLAN**
SCALE: 1/8" = 1'-0"



1 **FIRST FLOOR OVERALL PLAN**
SCALE: 1/32" = 1'-0"

ROOM LEGEND - FIRST FLOOR

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
A101		AUDITERIA	5,642 SF
A101A		STORAGE	371 SF
A102		STAGE	1,745 SF
A102A		STORAGE	246 SF
A103		TECH	44 SF

GENERAL FINISH NOTES

A. FIXED CASEWORK AND TACKBOARDS SHALL REMAIN IN PLACE (UNO). NEW WALL FINISHES SHALL BE INSTALLED AROUND THESE ITEMS.
B. INSTALL NEW RESILIENT TRANSITION STRIP BETWEEN NEW FLOOR FINISH AND EXISTING FLOOR FINISH.
C. PROVIDE NEW RESILIENT TRANSITION STRIPS AT EXPOSED EDGE OF NEW FLOOR FINISH TO EXISTING FLOOR FINISH.

LIST OF FINISHES

CART-1 (CARPET TILE)
MANUFACTURER: J+J FLOORING
PRODUCT: KINETEX
STYLE: SOUNDTRACK (1847)
COLOR: REMIX (3021)

CART-2 (CARPET TILE)
MANUFACTURER: J+J FLOORING
PRODUCT: KINETEX
STYLE: SOUNDTRACK (1847)
COLOR: ALBUM (3017)

CART-3 (CARPET TILE)
MANUFACTURER: J+J FLOORING
PRODUCT: KINETEX
STYLE: SOUNDTRACK (1847)
COLOR: CD (3024)

ECT-1 (WALK-OFF CARPET TILE)
MANUFACTURER: INTERFACE
PRODUCT: STEP REPEAT
STYLE: SR899
COLOR: IRON 104936

LSF-1 (LINOLEUM SHEET FLOORING)
MANUFACTURER: FORBO
PRODUCT: MARMOLEUM
STYLE: CONCRETE
COLOR: TO BE SELECTED

LVT-1 (LUXURY VINYL TILE)
MANUFACTURER: MANNINGTON
PRODUCT: UNITERRUPTED
STYLE: STONE
COLOR: TO BE SELECTED

RB-1 (RESILIENT BASE)
MANUFACTURER: JOHNSONITE
COLOR: MATCH EXISTING
SIZE: 4"H COVE BASE

RB-2 (RESILIENT BASE)
MANUFACTURER: JOHNSONITE
COLOR: TO BE SELECTED
SIZE: 6"H COVE BASE

RSA-1 (RESILIENT STAIR ACCESSORY)
MANUFACTURER: JOHNSONITE
PRODUCT: SAFE-T-FIRST NOSING
STYLE: PVIRCNN-XX-A
COLOR: TO BE SELECTED

RSA-2 (RESILIENT STAIR ACCESSORY)
MANUFACTURER: GRADUS
PRODUCT: ALUM NOSING HE2 WITH PHOTOLUMINESCENT INSIGHT
COLOR: TO BE SELECTED

FLOOR FINISH LEGEND

CART-1 AND CART-2 50/50 MIX, HERRINGBONE
CART-3
LVT-1
ECT-1
LVT-2
LSF-1

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

Zionsville Community Schools

2026 IMPROVEMENTS

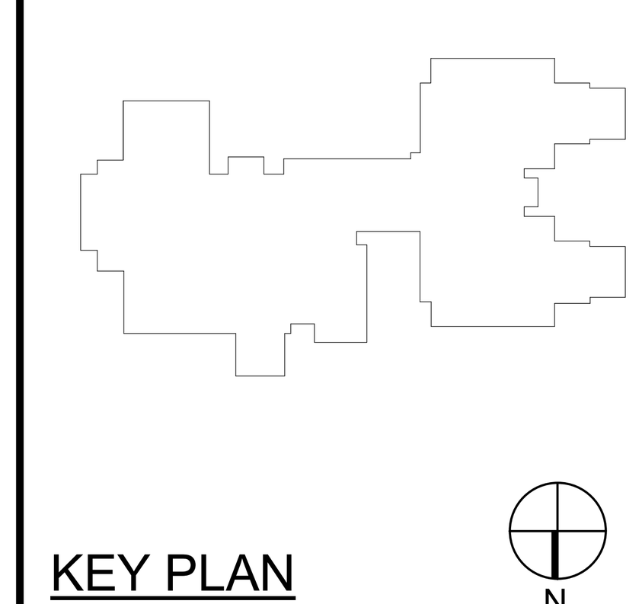
ZIONSVILLE WEST MIDDLE SCHOOL
5565 S 700 E
Whitestown, IN 46075

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY
317.848.0966 WWW.FHAI.COM
350 E. NEW YORK ST, INDIANAPOLIS, IN 46204

KEY PLAN



ISSUED FOR BID

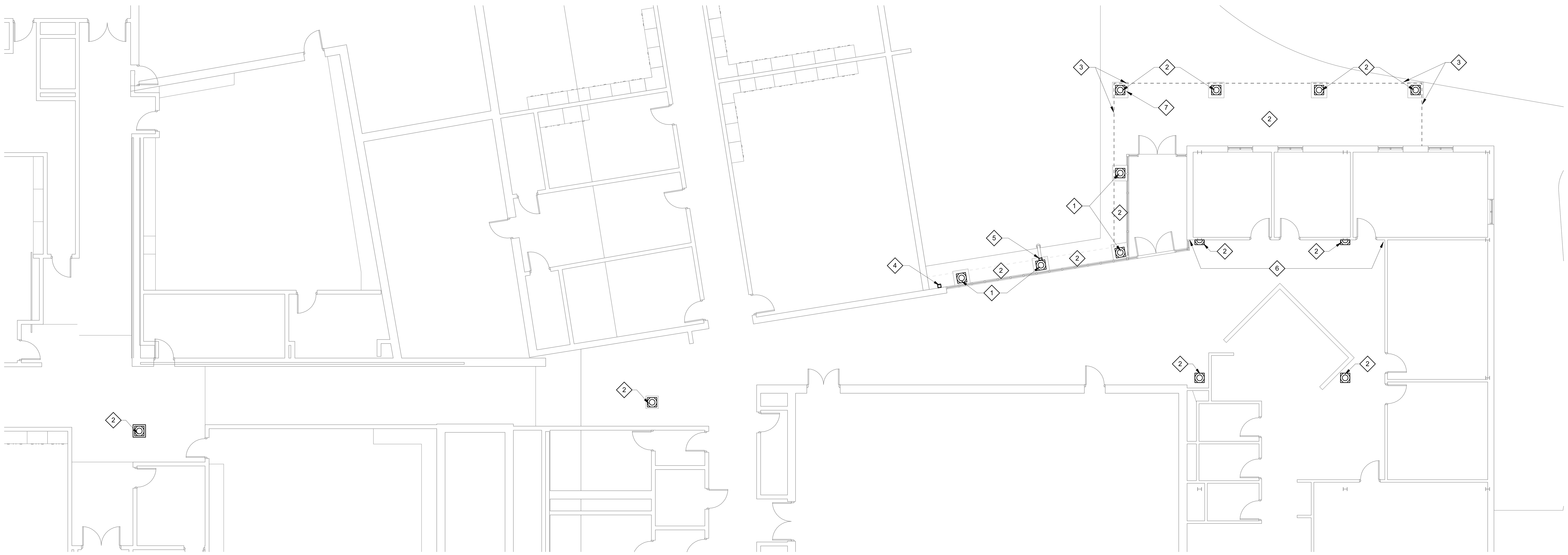
PAUL A. MILLER
REGISTERED
No. AR10800161
STATE OF INDIANA
ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: AML
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

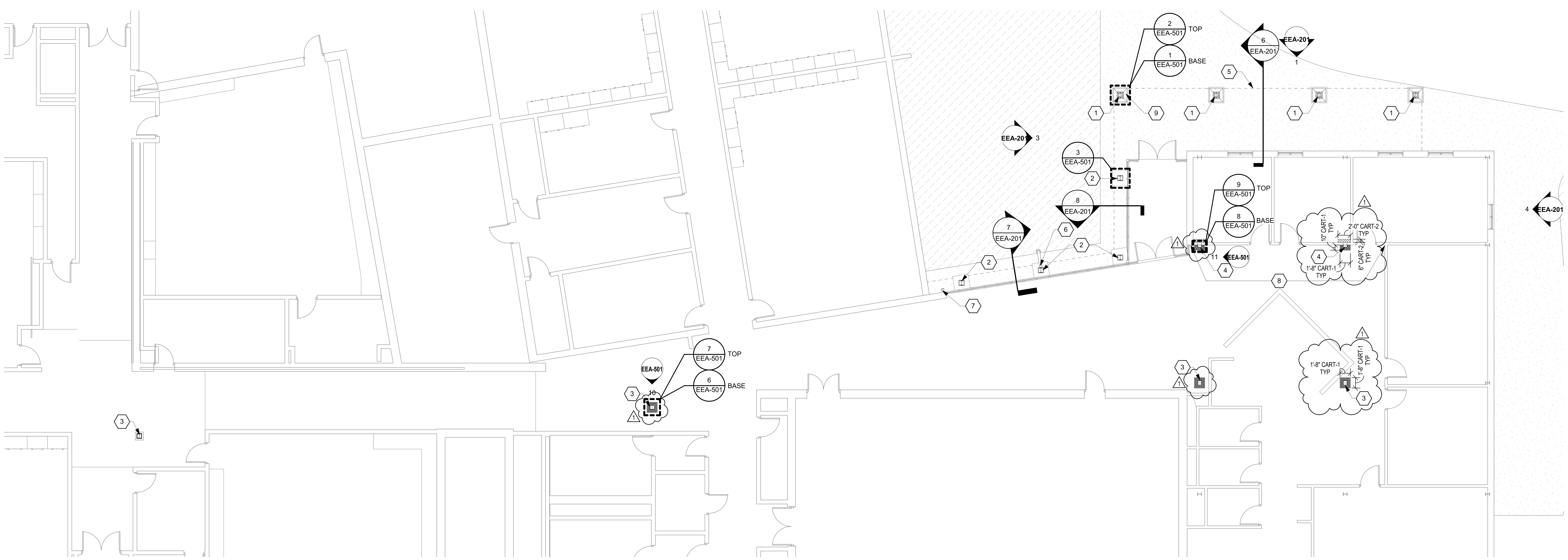
REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	12.22.2025

STAGE FINISH & EQUIPMENT PLAN

ZW-A-101



2 DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



1 ARCHITECTURAL FLOOR PLAN
SCALE: 1/8" = 1'-0"

ARCHITECTURAL PLAN GENERAL NOTES

A. ALL DIMENSIONS ON FLOOR PLANS ARE TO FINISH FACE OF CMU, CONCRETE, BRICK OR FINISH FACE OF GWB AT METAL STUD WALLS, UNLESS NOTED OTHERWISE.

ARCHITECTURAL DEMOLITION GENERAL NOTES

A. DEMOLITION IS TO FOLLOW ESTABLISHED CONSTRUCTION SEQUENCE. CONTRACTOR IS TO VERIFY THEIR WORK IN THE FIELD WITH THE DEMOLITION DRAWINGS, NEW CONSTRUCTION DRAWINGS, AND THE EXISTING IN-FIELD CONDITIONS. REPORT DISCREPANCIES TO THE ARCHITECT.
B. AFTER THE DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH AND FLUSH WITH EXISTING CONDITIONS.
C. MATERIALS OF DEMOLITION SHALL BE DISPOSED OF OFF-SITE UNLESS OTHERWISE DIRECTED BY OWNER.
D. ITEMS TO BE PATCHED. REMOVE ALL LOOSE OR DAMAGED MATERIAL. REFINISH TO LIKE NEW CONDITION, OR IF CONDITION WARRANTS REPLACE IN ENTIRETY.
E. ITEMS TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY.
F. AFTER REMOVAL OF ITEMS, THE EXISTING WALL SURFACES (IF EXPOSED) SHALL BE REPAIRED/PATCHED AS REQUIRED TO RECEIVE NEW FINISHES.

DEMOLITION PLAN NOTES (X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1. DEMOLISH AND REMOVE EXISTING COLUMN WRAP
2. DEMOLISH AND REMOVE EXISTING SOFFIT. EXISTING FRAMING TO BE REUSED FOR NEW SOFFIT
3. DEMOLISH AND REMOVE EXISTING EIFS CANOPY CLADDING ABOVE
4. DEMOLISH AND REMOVE EXISTING DOWNSPOUT AND CONDUCTOR
5. DEMOLISH AND REMOVE EXISTING DOWNSPOUT
6. REMOVE WALLPAPER, ADHESIVE, AND ALL RESIDUE. REPAIR WALL AS REQUIRED AND PREP TO RECEIVE NEW PAINT
7. REMOVE ADO BUTTON. SALVAGE FOR REINSTALLATION INTO NEW COLUMN COVER.

ARCHITECTURAL PLAN NOTES (X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1. COLUMN COVER "A", SEE DETAILS 1, 2, AND 4/EEA-501
2. COLUMN COVER "B", SEE DETAILS 3 AND 5/EEA-501
3. INTERIOR COLUMN COVER, SEE DETAILS 6, 7, AND 10/EEA-501.
4. INTERIOR HALF COLUMN COVER, SEE DETAILS 8, 9, AND 11/EEA-501. PROVIDE NEW CARPET BASE ALONG WALL BETWEEN EXISTING TO REMAIN AND FACE OF NEW COLUMN COVER.
5. DASH LINE INDICATES ROOF CANOPY OVERHANG
6. NEW FORMED METAL DOWNSPOUT AND DRAIN LEADER. SIZE TO MATCH REMOVED DOWNSPOUT AND DRAIN LEADER DIMENSIONS.
7. REPLACE EXISTING DOWNSPOUT AND CONDUCTOR WITH SLOPED BOTTOM. DOWNSPOUT TO MATCH EXISTING IN DIMENSIONS.
8. PRIME AND PAINT WALL P-1
9. REINSTALL ADO BUTTON INTO BRICK PORTION OF NEW COLUMN COVER. PROVIDE NEW IF EXISTING WAS DAMAGED DURING REMOVAL. EXTEND EXISTING CONDUIT AND WIRING AS REQUIRED.

LIST OF FINISHES

FLOOR FINISHES
- CART-1 (CARPET TILE - CORRIDOR)
  MFR: MANNINGTON
  PATTERN: FAN FOLD
  COLOR: MOUSE 12394
  SIZE: 24"X24"
- CART-2 (CARPET TILE - OFFICE)
  MFR: MANNINGTON
  PATTERN: GOOGIE / PHENOMENA
  COLOR: HELMETRON 13634
  SIZE: 24"X24"

BASE FINISHES
- CARB-1 (CARPET BASE - MATCH EXISTING)
  MFR: MANNINGTON
  PATTERN: FAN FOLD
  COLOR: MOUSE 12394
  SIZE: 8"H / BOUND TOP EDGE

WALL FINISHES
- P-1 (FIELD PAINT)
  MFR: SHERWIN WILLIAMS
  COLOR: TO BE SELECTED
- P-2 (COLUMN ACCENT)
  MFR: SHERWIN WILLIAMS
  COLOR: TO BE SELECTED

CEILING FINISHES
- ACT-1 (ACOUSTICAL CEILING TILE)
  MFR: ARMSTRONG
  STYLE: MATCH EXISTING
  COLOR: WHITE
  SIZE: 24"X24"

MISCELLANEOUS FINISHES
- WOOD TRIM
  SPECIES: RED OAK, TO MATCH EXISTING TRIM
  STAIN COLOR: TO MATCH EXISTING DOORS & TRIM

EXTERIOR FINISHES
- COLUMN COVERS
  MFR: PAC-CLAD
  STYLE: PAC-2000R
  COLOR A: CUSTOM COLOR TBD
  COLOR B: HUNTER GREEN
- EIFS (EXTERIOR INSULATION FINISH SYSTEM)
  MFR: REFER TO SPECIFICATIONS
  TEXTURE: REFER TO SPECIFICATIONS
  MAIN COLOR: TO BE SELECTED
  ACCENT COLOR: TO BE SELECTED
- COPING AND DOWNSPOUTS
  MFR: REFER TO SPECIFICATIONS
  COLOR: MATCH EXISTING ADJACENT
- BRICK
  MFR: GLEN-GERY
  PRODUCT: BRAZILWOOD WIRECUT

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

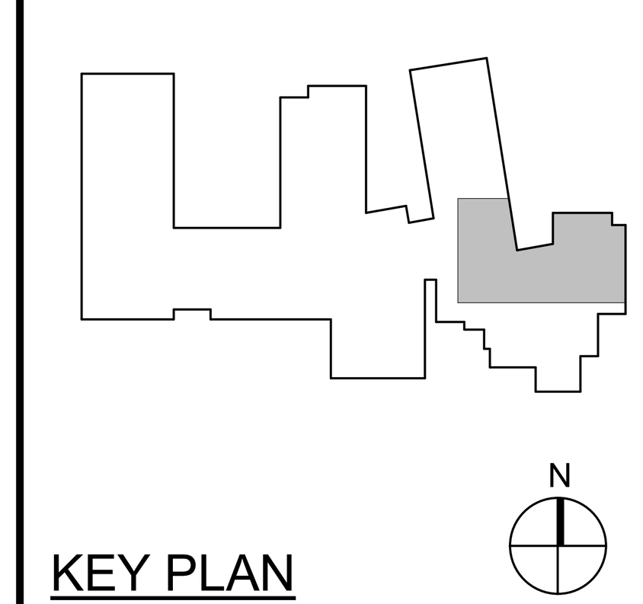
EAGLE ELEMENTARY SCHOOL
350 N. Sixth Street
Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

317.848.0966 WWW.FHAI.COM
350 East New York Street, Indianapolis, IN 46204>



KEY PLAN

ISSUED FOR BID

PAUL A. MILLER
REGISTERED
No. AR10800161
STATE OF INDIANA
ARCHITECT

PROJECT MANAGER: JM
DRAWN BY: BGS
PROJECT NUMBER: 224035.00
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	12.22.2025

DEMO PLAN AND FLOOR PLAN

EEA-11A

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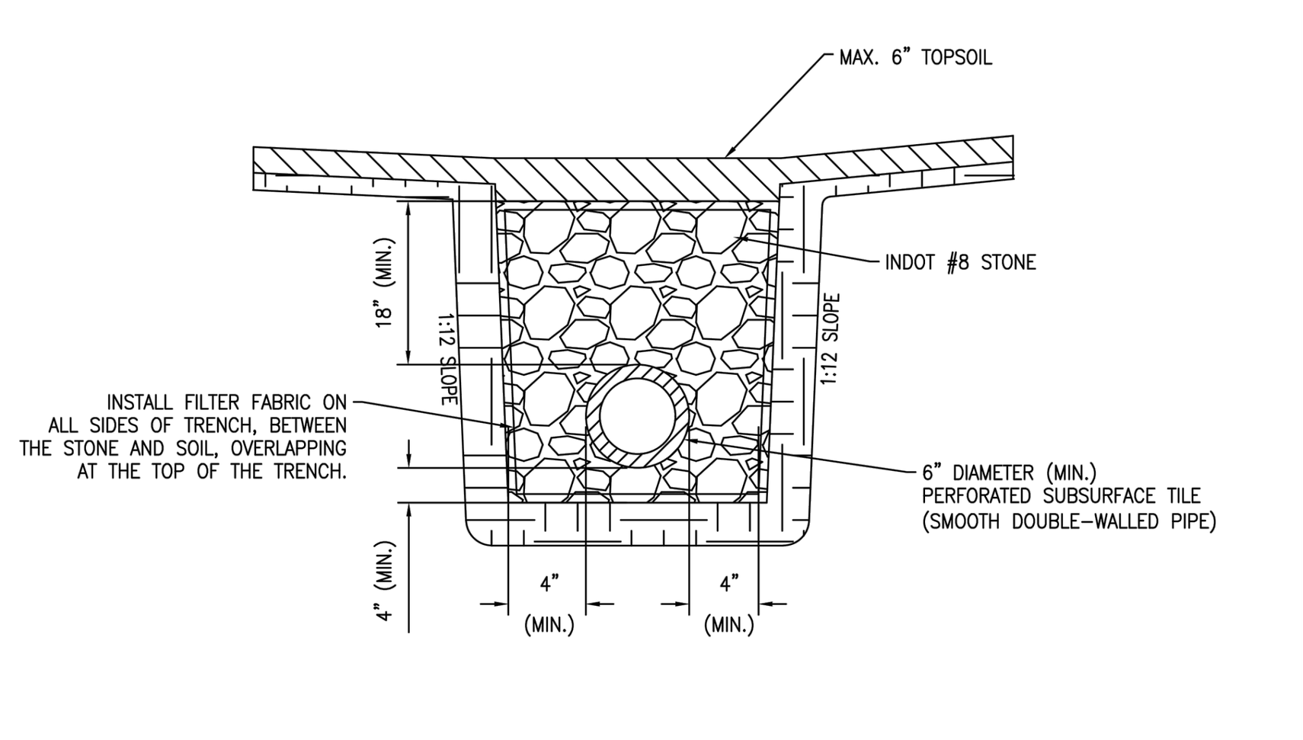


NOT TO SCALE

DETAIL I

BEDDING AND BACKFILL SUBSURFACE DRAINS

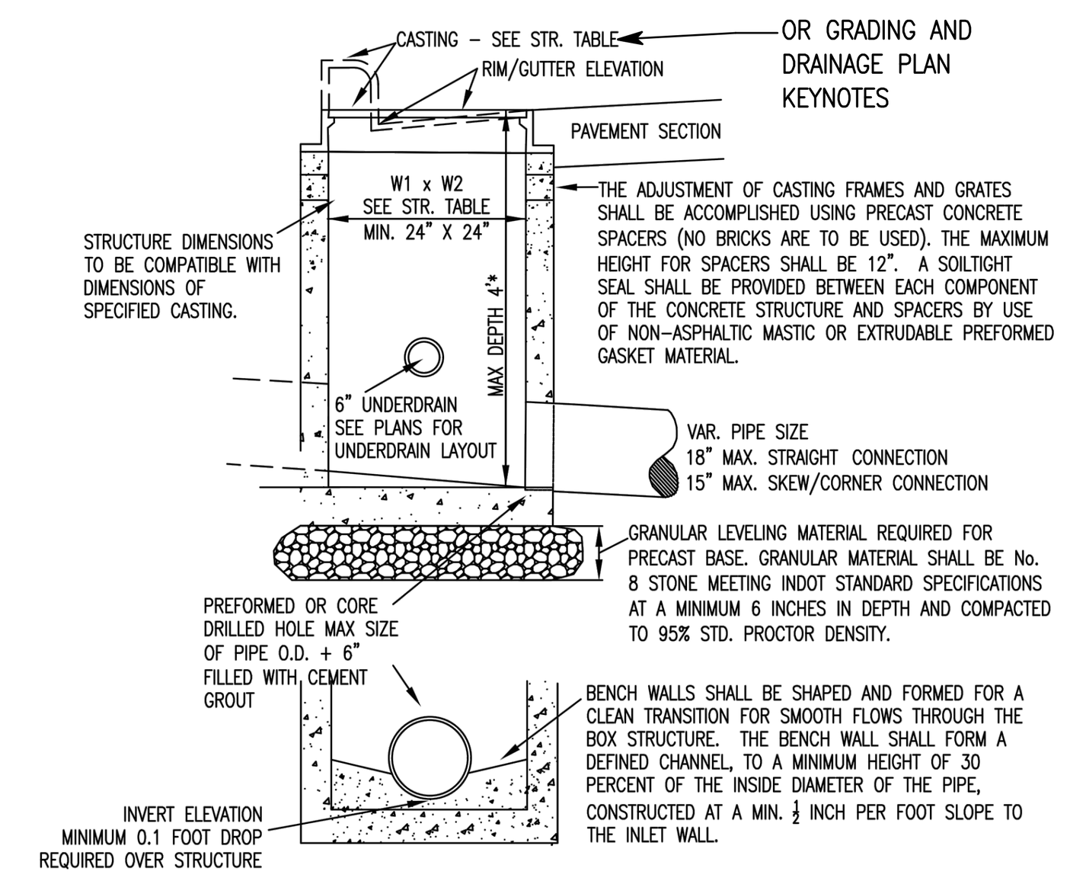
STANDARD CONSTRUCTION DETAILS TOWN OF ZIONSVILLE

DRAWN: AMF
DATE: JULY 2024
DETAIL NO. ST-10

STRUCTURE SIZING CHART

INSIDE DIMENSIONS	INLET TYPE	COMMENTS
24" X 24"	"A"	18" MAX. STRAIGHT CONNECT 15" MAX. SKEW/CORNER
24" X 36"	"M"	18" MAX. SHORT WALL STRAIGHT CONNECT 27" MAX. LONG WALL STRAIGHT CONNECT 15" MAX. SHORT WALL/SKEW, CORNER 18" MAX. LONG WALL/SKEW, CORNER
30" X 30"	"B"	24" MAX. STRAIGHT CONNECT 15" MAX. SKEW/CORNER

GENERAL NOTES:
STORM BOX STRUCTURES SHALL BE PRECAST CONCRETE CLASS A WITH A 4000 PSI. 28 DAY COMPRESSIVE STRENGTH. THE STRUCTURE DESIGN SHALL BE IN FULL ACCORDANCE WITH ASTM C890



NOT TO SCALE

NOTES:
1. ALL STRUCTURE JOINTS SHALL BE SLICKED WITH NON–SHRINK GROUT.
2. INLET STRUCTURES WITH MULTIPLE CASTINGS SHALL HAVE A CONCRETE TOP SLAB THAT SUPPORTS EACH CASTING ON ALL SIDES.

*INLET STRUCTURES DEEPER THAN 4' MAY BE ALLOWED ON A CASE–BY–CASE BASIS. ALL STRUCTURES DEEPER THAN 4' SHALL HAVE STEPS AND BE LARGE ENOUGH FOR FULL MAN ENTRY.

DETAIL F

STORM BOX STRUCTURE

STANDARD CONSTRUCTION DETAILS TOWN OF ZIONSVILLE

DRAWN: AMF
DATE: JULY 2024
DETAIL NO. ST-2

SEASONAL SOIL PROTECTION CHART

STABILIZATION PRACTICE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING		A			*			*	*/I/			
DORMANT SEEDING	B									B		
TEMPORARY SEEDING		C	E		*		* D					
SODDING		F **			*				*			
MULCHING	G											

A = SEE SPECIFICATIONS FOR PERMANENT SEEDING REQUIREMENTS.

B = KENTUCKY BLUEGRASS 120 LBS/ACRE; CREEPING RED FESCUE 120 LBS/ACRE; PLUS 2 TONS STRAW MULCH/ACRE, OR ADD ANNUAL RYE GRASS 30 LBS/ACRE FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400–600 LBS./ACRE OF 12–12–12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

C = SPRING OATS 3 BUSHELS/ACRE FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400–600 LBS./ACRE OF 12–12–12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

D = WHEAT OR RYE 2 BUSHELS/ACRE FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400–600 LBS./ACRE OF 12–12–12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

E = ANNUAL RYE GRASS 40 LBS/ACRE (1 LB/1000 SQ. FT.) FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400–600 LBS./ACRE OF 12–12–12 ANALYSIS, OR EQUIVALENT, FERTILIZER.

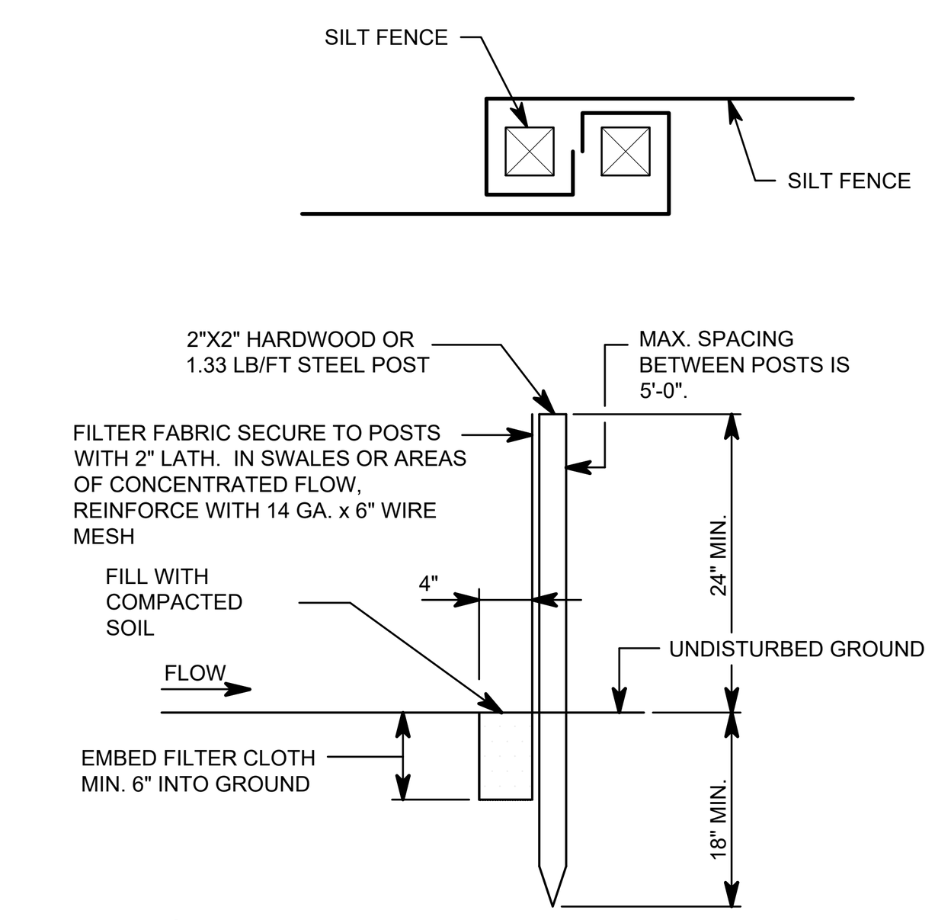
F = SOD

G = STRAW MULCH 2 TONS/ACRE

* /I/ * = IRRIGATION NEEDED DURING JUNE, JULY, AUGUST AND/OR SEPTEMBER

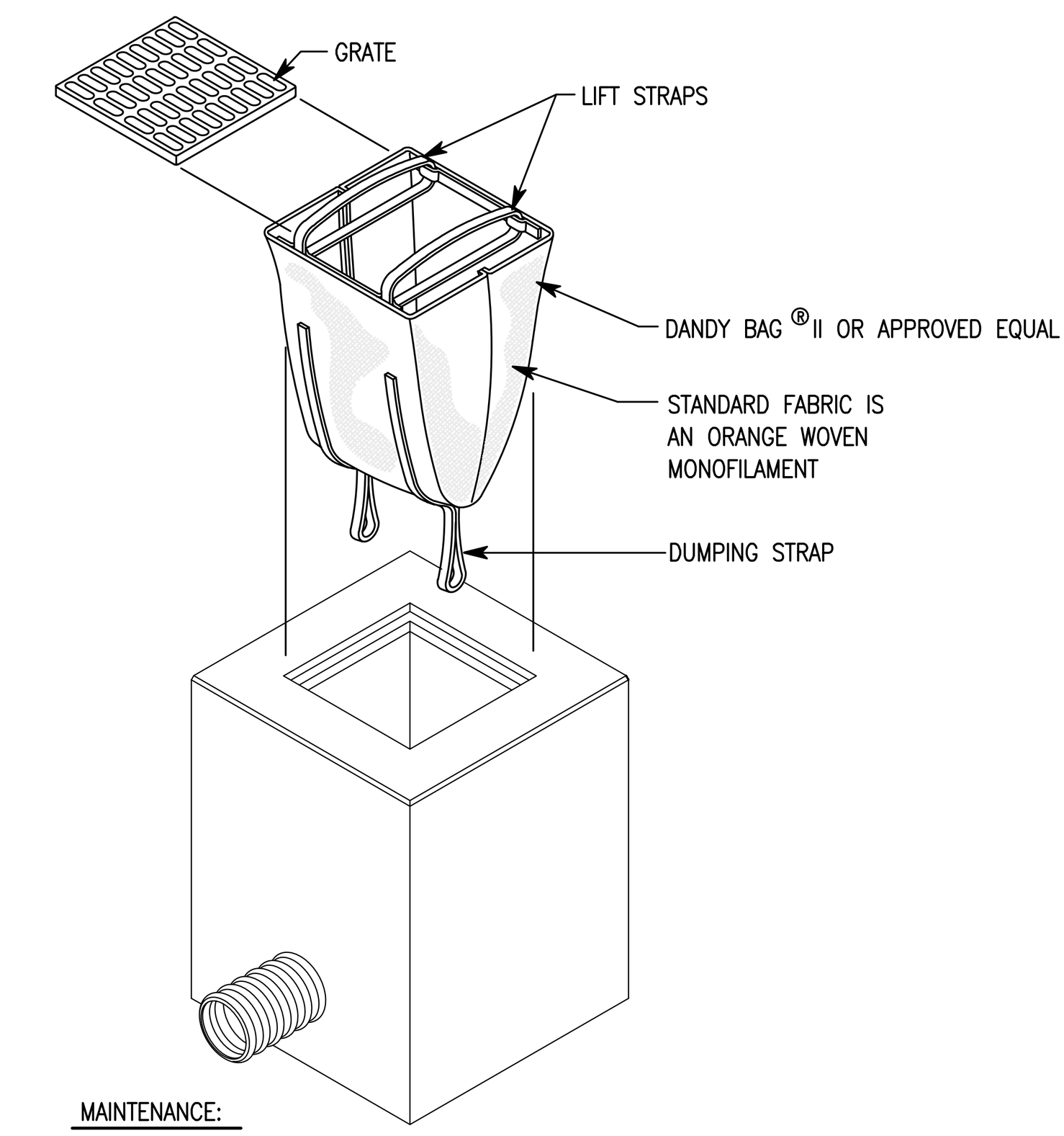
** = IRRIGATION NEEDED FOR 2 WEEKS AFTER SUPPLYING SOD

SEASONAL SOIL PROTECTION CHART - DETAIL E
NONE



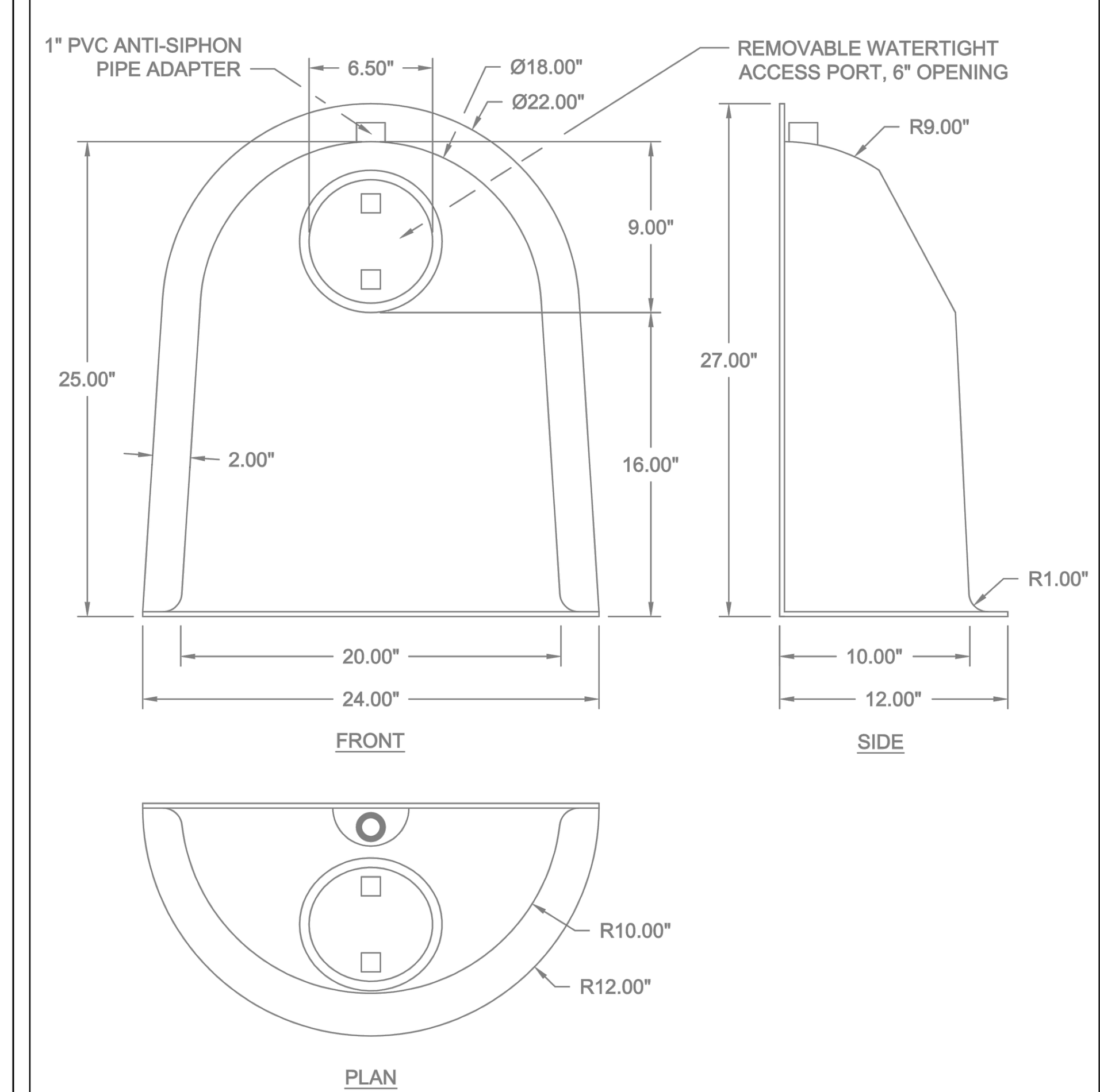
MAINTENANCE:
1. INSPECT WEEKLY AND AFTER EACH STORM EVENT.
2. IF FABRIC IS TORN OR DETERIORATED, REPLACE SECTION IMMEDIATELY.
3. REMOVE SEDIMENT WHEN HEIGHT REACHES 1/3 OF OF THE HEIGHT OF THE FENCE OR IS CAUSING FABRIC TO BULGE.
4. TAKE CARE NOT TO UNDERMINE THE ENTRENCHED FABRIC.
5. AFTER DRAINAGE AREA IS STABILIZED, REMOVE FENCE AND SEDIMENT, BRING DISTURBED AREA TO GRADE AND STABILIZE IT.

SILT FENCE - DETAIL A
NO SCALE



MAINTENANCE:
1. INSPECT WEEKLY AND AFTER EACH STORM EVENT.
2. IF FABRIC IS TORN OR DETERIORATED, REPLACE IMMEDIATELY.
3. REMOVE SEDIMENT ON A REGULAR SCHEDULE
4. AFTER DRAINAGE AREA IS STABILIZED, REMOVE SEDIMENT BAG

AREA INLET SEDIMENT BAG - DETAIL B
NONE



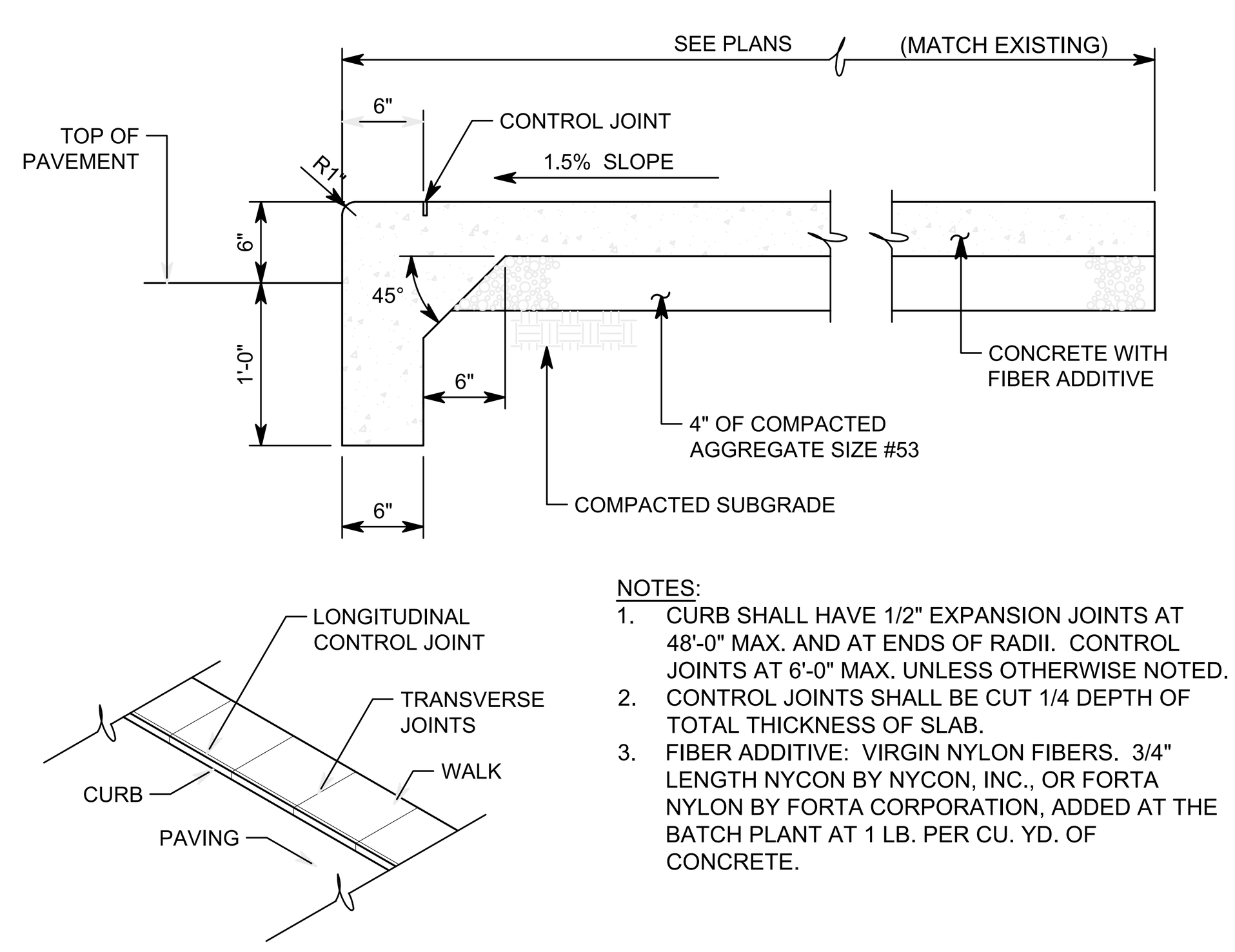
US PATENT #6126817 ADDITIONAL PATENTS PENDING

BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3195

DESCRIPTION	DATE	SCALE
18F SNOUT OIL & DEBRIS STOP	09/14/99	NONE
	DRAWING NUMBER 18F	

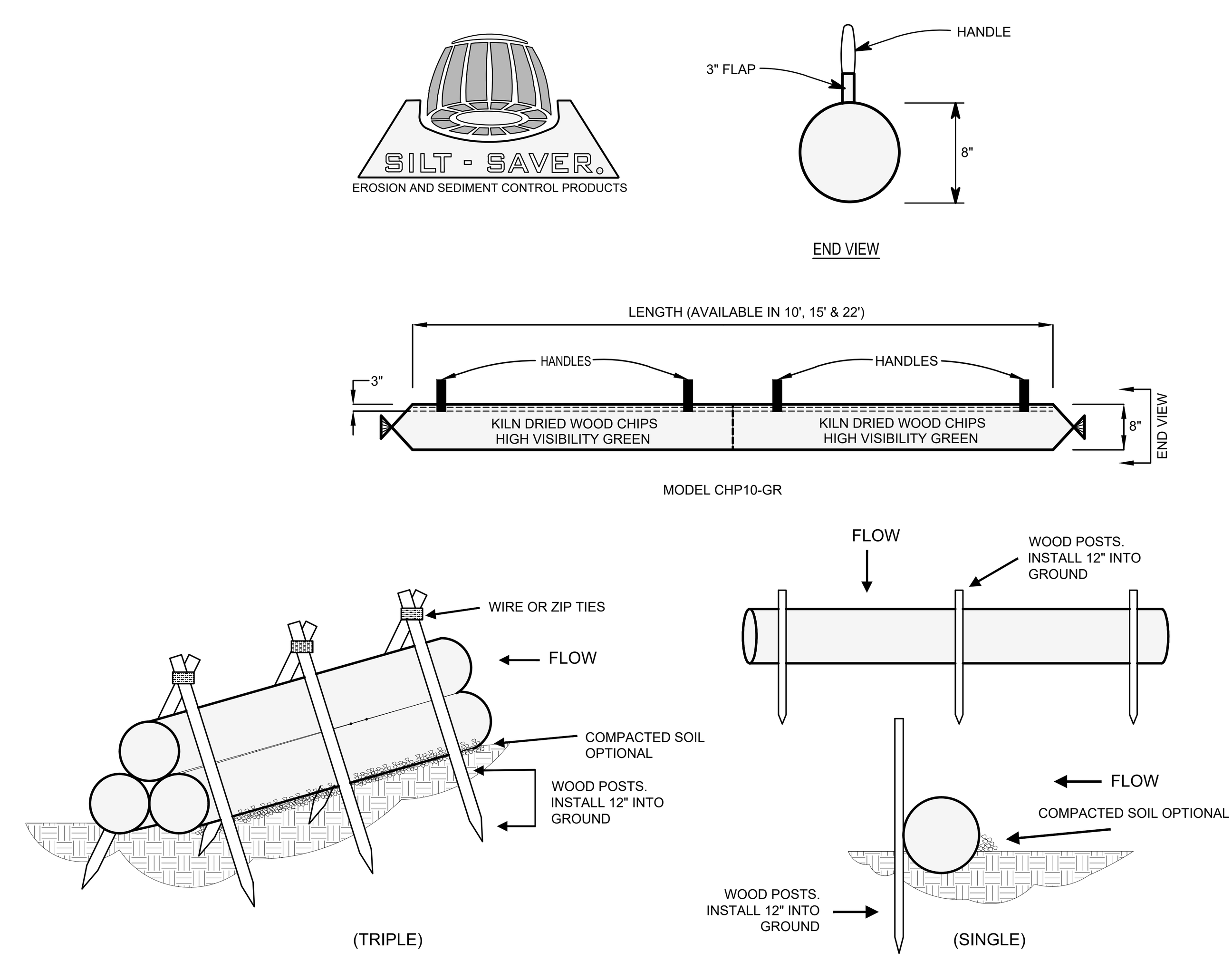
STORMWATER QUALITY BMP-1-SNOUT - DETAIL L
NONE

NOTES:
1. INSTALL BOTTOM OF HOOD 2" BELOW THE INVERT OF PIPE.

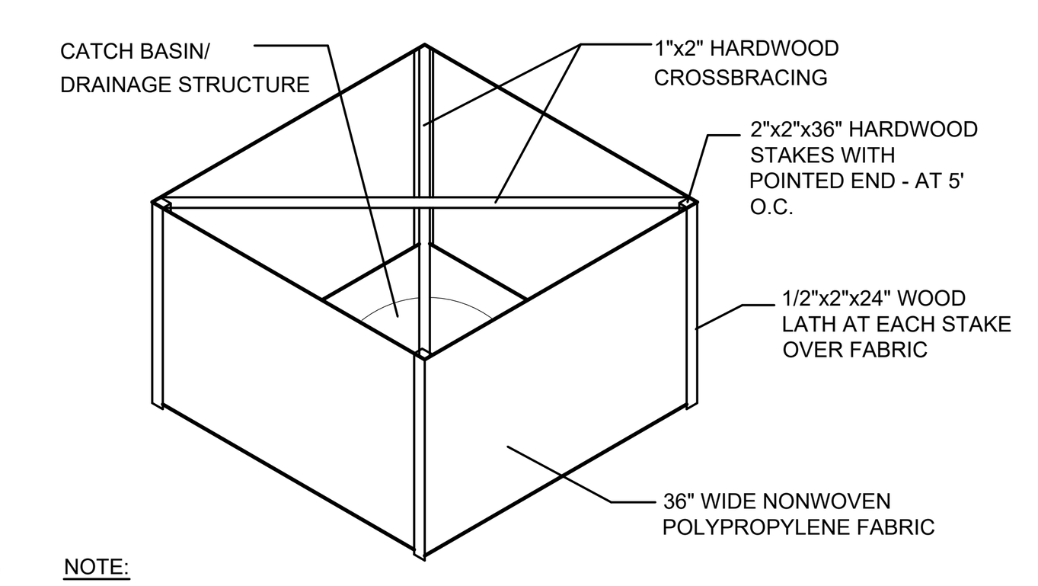


NOTES:
1. CURB SHALL HAVE 1/2" EXPANSION JOINTS AT 48'-0" MAX. AND AT ENDS OF RADII. CONTROL JOINTS AT 6'-0" MAX. UNLESS OTHERWISE NOTED.
2. CONTROL JOINTS SHALL BE CUT 1/4 DEPTH OF TOTAL THICKNESS OF SLAB.
3. FIBER ADDITIVE: VIRGIN NYLON FIBERS. 3/4" LENGTH NYCON BY NYCON, INC., OR FORTA NYLON BY FORTA CORPORATION, ADDED AT THE BATCH PLANT AT 1 LB. PER CU. YD. OF CONCRETE.

MONOLITHIC CURB AND WALK - DETAIL J
1" = 1'-0" (18" CURB)



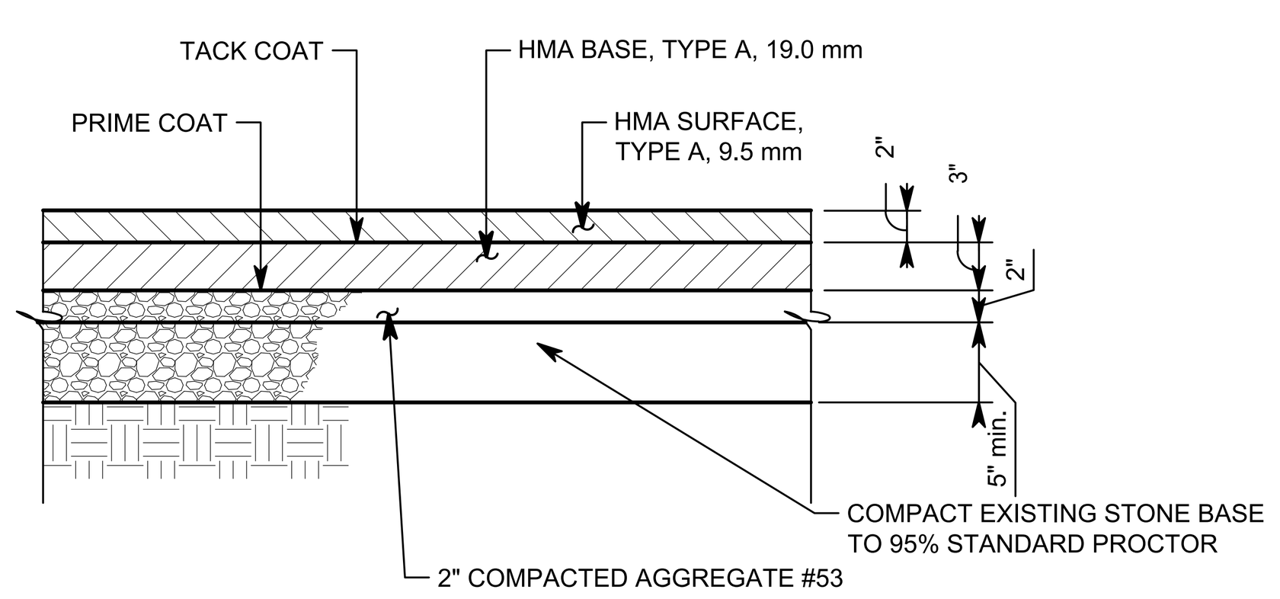
WEIGHTED WATTLE DETAIL - DETAIL H
NO SCALE



NOTE:
REFER TO SILT FENCE SECTION FOR EMBEDMENT DETAIL

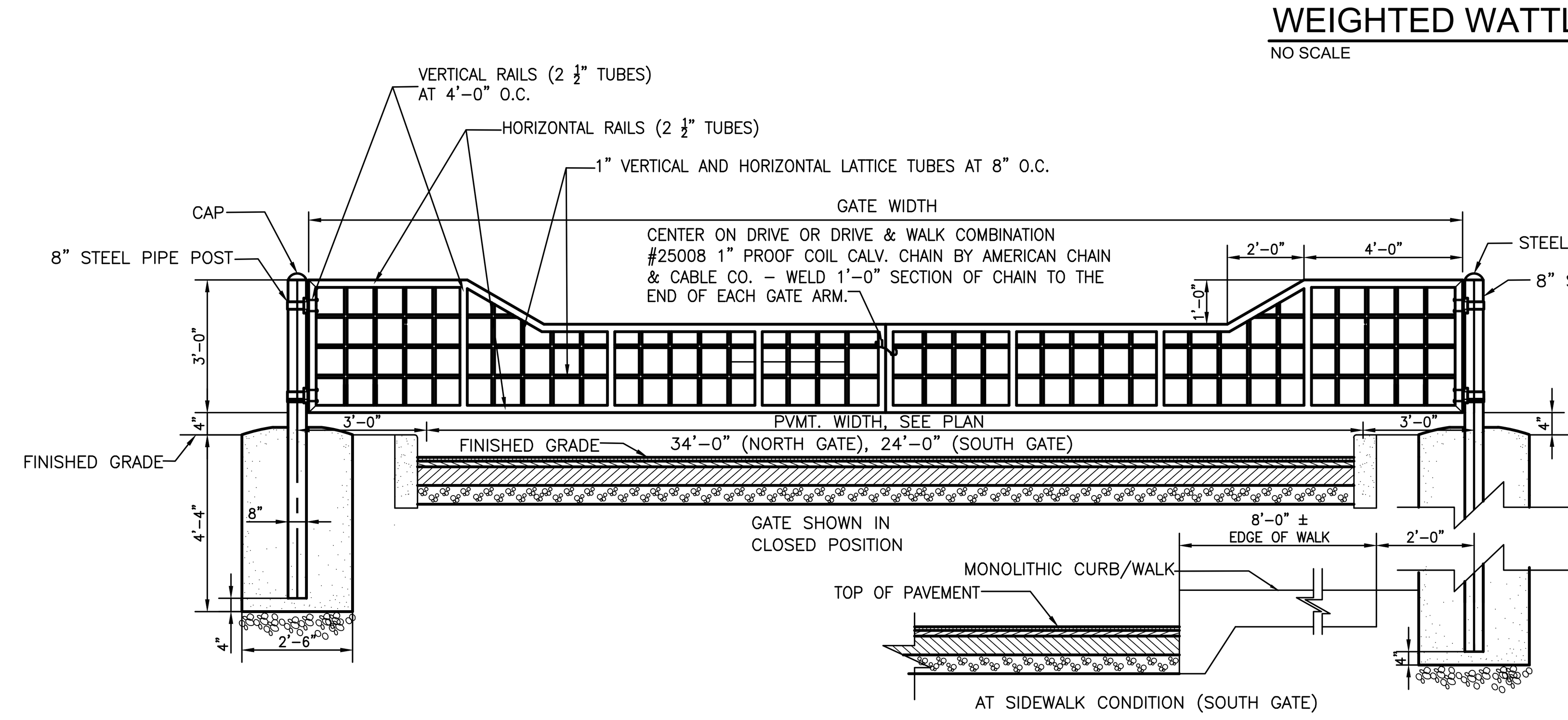
MAINTENANCE:
1. INSPECT WEEKLY AND AFTER EACH STORM EVENT.
2. IF FABRIC IS TORN OR DETERIORATED, REPLACE SECTION IMMEDIATELY.
3. REMOVE SEDIMENT WHEN HEIGHT REACHES 1/3 OF THE HEIGHT OF THE FENCE OR IS CAUSING FABRIC TO BULGE.
4. TAKE CARE NOT TO UNDERMINE THE ENTRENCHED FABRIC.
5. AFTER DRAINAGE AREA IS STABILIZED, REMOVE FENCE AND SEDIMENT, BRINGING DISTURBED AREA TO GRADE AND STABILIZE IT.

SILT FENCE INLET PROTECTION - DETAIL C
NO SCALE



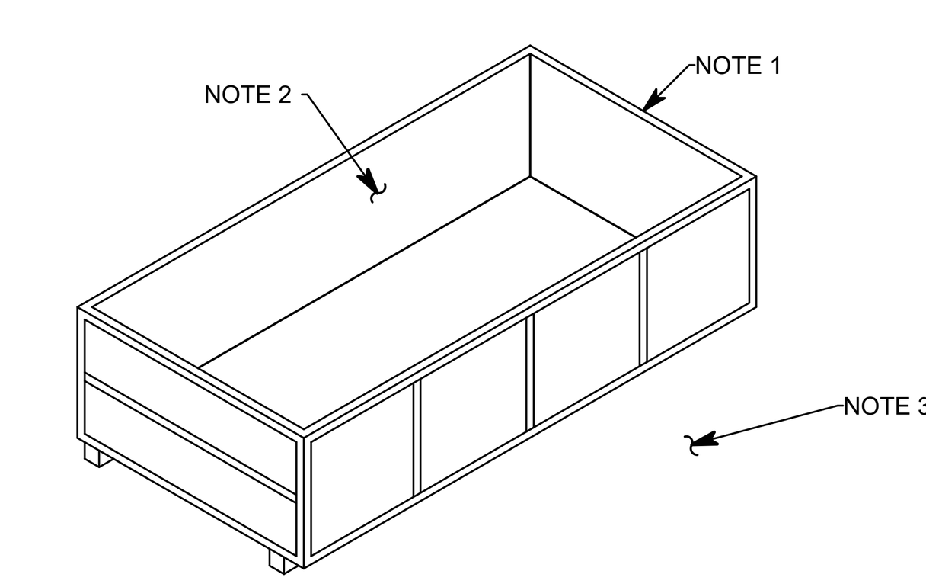
NOTES:
1. PAVEMENT DEMO APPLIES TO ASPHALT PAVEMENT REMOVAL ONLY.
2. AFTER EXISTING PAVEMENT HAS BEEN REMOVED, STONE BASE SHALL BE PROOFROLLED. AREAS THAT PASS PROOFROLL CAN BE RE-PAVED
3. AREAS THAT FAIL PROOFROLL WILL REQUIRE RECOMPACTION OF THE STONE BASE AND/OR STABILIZATION OF THE SUBGRADE PER INDOT SEC. 207. AND A SUCCESSFUL PROOFROLL PRIOR TO REPAVING.
4. GEOTECHNICAL ENGINEER SHALL BE PRESENT DURING PROOFROLL TEST.
5. MEDIUM DUTY PAVEMENT TO BE PROVIDED AT ALL FULL DEPTH PAVEMENT REPLACEMENT. 1

MEDIUM DUTY PAVEMENT - DETAIL M
1" = 1'-0"



TRAFFIC CONTROL GATE - DETAIL K
NO SCALE

NOTES:
1. GATE TO BE BARRIER GATE BY BASTEEL PERIMETER SYSTEMS OR ENGINEER APPROVED EQUAL. 1



NOTES:
1. PROVIDE 10 YD. OR 15 YD. ROLL OFF DUMPSTER FOR STORAGE OF CONCRETE WASHOUT MATERIAL. SERVICE DUMPSTER WHEN APPROACHING 2/3 FULL USING CARE SO THAT GREY WATER IS NOT SPILLED OUT WHEN DUMPSTER IS MOVED.
2. PROVIDE LEAKPROOF (10 MIL MIN.) PLASTIC LINER.
3. LOCATE DUMPSTER IN DESIGNATED AND APPROVED LOCATION

STANDARD WASHOUT - DETAIL D
NONE

ZIONSVILLE COMMUNITY SCHOOLS

2026 IMPROVEMENTS

STONEGATE ELEMENTARY SCHOOL
7312 W. Stonegate Drive
Zionsville, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT
FANNING HOWEY
317.848.0966 WWW.FHAI.COM
350 E NEW YORK ST #300, INDIANAPOLIS, IN 46204

CONSULTANT
TLF
TLF, INC.
3901 West 86th Street, Suite 200
Indianapolis, Indiana 46268
Phone: 317-334-1500
Fax: 317-334-1552
TLF Job No: 2025-363

ISSUED FOR BID

KRISTOPHER S. GRANT REGISTERED No. PE10606090 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN BY: PMR
PROJECT NUMBER: 224035.00 (TLF JOB #2025-363-01)
PROJECT ISSUE DATE: 12.11.2025

REV. NO.	DESCRIPTION	DATE
N/A	ISSUED FOR BID	12.11.25
1	ADDENDUM 1	12.22.25

SITE DETAILS

SG-G4-01

Drawing Path: P:\2025\300\2025-363\01 Stonegate Elementary\CAD\Civil\Active\6_2025-363_C403_SD2.dwg
Plotted By: dschnur Time of Plot: 12/18/25 – 11:05am Last Edited: 12/17/25 – 3:50pm