design west | architects

date:	5.28.24
project:	Hyde Park Middle School
by:	Michael Rigby
subject:	Addendum 05

CONTRACT ADDENDUM 04

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents. Prior to proceeding in accordance with these instructions, indicate your acceptance of these instructions for minor change to the work as consistent with the Contract Documents and return a copy to the Architect.

NOTICE: The last day to submit questions will be Thursday, May 23rd end of day. The last day for addendum release will be Tuesday, May 28th.

QUESTIONS:

DWA QUESTION - MAY 23, 2024

01 **DWA Question 01:** *The fire hydrants don't show any concrete pads or bollards around them. Will either be necessary?*

ANSWER: See Civil items

02 **DWA Question 02:** *On sheet A411 in restrooms F125 and F127 there aren't any soap dispensers called out for any of the sinks. Should they be called out?*

ANSWER: Soap dispensers added and tagged on sheet.

03 **DWA Question 03:** *Are the digital displays called out owner provided?*

ANSWER: Yes, all digital displays will be owner provided, contractor installed

04 **DWA Question 04:** *The enlarged plan for Choir D111 shows goggle cleaning cabinets where the elevation shows felt tack boards. Where should the goggle cleaning cabinets be?*

ANSWER: Tags for the tack boards, and digital display have been corrected.

05 **DWA Question 05:** *On sheet A-418 the enlarged plans show felt tack boards, but the elevations show digital displays. Please clarify.*

ANSWER: Keynotes have been corrected on sheet

06 **DWA Question 06:** *The specifications do not call out the level of drywall finish, such as level 4 or 5, smooth or textured. Please Advise.*

ANSWER: See updated Specification section 09 2116 – Gypsum board Assemblies

795 North 400 West Salt Lake City, Utah 84103
Tel 801 539 8221

255 South 300 West Logan, Utah 84321
Tel 435 752 7031

07 **DWA Question 07:** *On sheet E-242 it is calling for (2) 24strand fiber line to each I.T closet. Do they want a total of 48 strands per closet or do they want (2) 12strand fiber lines ran for a total of 24 strands?*

ANSWER: (1) 24-strand to each IDF, or (2) 12-strand would be acceptable. We do not need 48 fibers.

08 **DWA Question 08:** *On sheet A-114.3 in the kitchen, it looks as though there are corner guards shown in a lot of places, but not labeled. Please clarify corner guards in the kitchen.*

ANSWER: Corner guards in kitchen area are per Kitchen K-101.

09 **DWA Question 09:** *On sheet A-114.4 in rooms D111 and D108, the legend does not reflect the materials shown in the classroom and it's not listed on the finish schedule pages. Please provide the ceiling material callout for these 2 rooms.*

ANSWER: See legend in RCP A-114.4 and Sec 09 5100 Acoustical Ceilings, 2.02 Acoustical Ceilings, D FRP Lay-in Ceiling Panels.

10 **DWA Question 10:** *The base bid roofing specs ask for a vapor barrier of 6 mil polyethylene, is that correct? Or do they want an actual roof vapor barrier installed? If so, what product/spec?*

ANSWER: See updated specification section 07 5400.

11 **DWA Question 11:** *Is EPS-tapered insulation acceptable for the sloped insulation at roof crickets?*

ANSWER: This is acceptable, minimum 1.5 lb. EPS weight. See updated Roofing Specifications.

12 **DWA Question 12:** *ALT 2 calls for a wind speed warranty of up to 90 mph. Is this the intended wind speed for the Base Bid also?*

ANSWER: Wind uplift needs to be designed to forces calculated with ASCE 7. See both base bid and alternate bid roofing specification sections.

13 **DWA Question 13:** *It looks like the roofing material thickness for the roofing alternate was revised from 45 mil to 60 mil in addendum 3, but the base bid roofing material is still shown as 45 mil. Please advise if the base bid will be changed as well.*

ANSWER: No Base bid mill is per Specification.

14 **DWA Question 14:** *There are a couple of sections on these parapet walls that are very wide on top, too wide for our 4'x10' sheets of metal to make a proper cap, which is what it calls for. On these areas that are too large for our metal, could we install a membrane coated metal drip edge at the face of the parapet that we can weld our membrane too to make it water tite and then, using that membrane coated metal drip edge as a hold-down clip, snap a piece of metal over that to give it the finish look they're looking for?*

ANSWER: This is acceptable

15 **DWA Question 15:** *Spec section 21 1000, 3.4G, states that 2" pipe and larger shall be threaded. Would it be possible to use grooved pipe for 2" and smaller?*

ANSWER: Yes. This is noted in this addendum.

16 **DWA Question 16:** *Storefront Spec in the basis of design of swinging doors section B it has Thermally Broken doors for E104A and E104B. There are no doors on the door schedule with those door numbers.*

ANSWER: See updated Spec Section

17 **DWA Question 17:** *On Level 1 Area E it has a window type X called out but there is no window type X on the window schedule.*

ANSWER: That should be frame type W, see updated sheet A-115.2

18 **DWA Question 18:** *In the glazing spec basis of design it has grey tinted glass called out. But is also mentions Clear. Please clarify.*

ANSWER: See updated Specification section 08 8000

19 **DWA Question 19:** *The drawings indicate there is power and lighting in Sections 1B & 2B that is supplied from the panels in sections 1A & 2A, If the alternate 1 is chosen, what is the plan to supply these items.*

ANSWER: All power and lighting in areas 1A, 1B, 2A and 2B are power from the panels in Electrical A120. Whether the alternate is selected or not, should not affect these panels or the power to the other areas.

20 **DWA Question 20:** *The drawings indicate that the street lighting is supplied by the city and installed by RMP. RMP indicates that they only run power to the light poles. Who is responsible to install the pole base's and install the light poles?*

ANSWER: Jennifer with Rocky Mountain Power informed us that they have an agreement with the city that RMP will install the light poles. If that is not the case, please plan on the city installing the light poles. We should only be required to install the conduit.

ITEMS:

05.01 See attached Civil Items

05.02 See attached Structural Items

05.03 See attached Mechanical Items

05.04 See attached Electrical Items

05.05 00 0110 - Table of Contents
- Table of contents is updated to include new section 07 1713

05.06 07 1713 – Bentonite Panel Waterproofing
- Due to water table located during latest site testing, this section has been added for the purpose of protecting the elevator shaft which will likely be submerged.

05.07 07 5400 – Thermoplastic (KEE) Membrane Roofing
- Formerly 2.03 A - Removed vapor barrier from spec
- 2.03 D,1 - Added EPS foam crickets as acceptable alternate to poly-iso.

05.08 07 5419 – Single-ply PVC Thermoplastic Roofing
- 2.05 B – Added EPS foam crickets as acceptable alternate to poly-iso
- 2.05 - Added Quality Assurance paragraph to match section requirements found in 07 5400.

05.09 08 4313 – Aluminum-framed Storefronts
- Removed doors E104A & E104B from thermal doors.

05.10 08 8000 – Glazing
- 2.04-2.06 - Changed callouts from grey tint to clear glazing

05.11 09 2119 – Gypsum Board Assemblies
- 3.03 Finish and Texture paragraph now added and clarifies design intent.

05.12 A-114.4 – AREA D – REFLECTED CEILING PLAN
- Removed finish tag P1 in D108

05.13 A-115.2 – PLAN – LEVEL 01 AREA E - ANNOTATION
- Frame Type X removed and corrected to Frame Type W

05.14 A-411 – ENLARGED VIEWS
- D4 Soap Dispensers added and tagged.
- Accessories legend updated on item “E” to “wall mounted soap dispenser…”

05.15 A-416 – ENLARGED VIEWS
- A3 – Enlarged Plan keynotes for the tack boards and digital display have been corrected.

05.16 A-418 – ENLARGED VIEWS
- A1 – Enlarged Plan keynotes corrected.
- A4 – Enlarged plan keynotes corrected.
- Keynotes and Accessories legend corrected.

Sheets:
A-114.4 – AREA D – REFLECTED CEILING PLAN
A-115.2 – PLAN – LEVEL 01 AREA E - ANNOTATION
A-411 – ENLARGED VIEWS
A-416 – ENLARGED VIEWS
A-418 – ENLARGED VIEWS

Michael Rigby 5.28.24

ISSUED BY Date
Architect

ACCEPTED BY Date
Contractor

CACHE • LANDMARK
ENGINEERS • SURVEYORS • PLANNERS

HPMS ADDENDUM #5

DATE:	May 28, 2024	
TO:	**Michael Rigby** Design West Architects 255 South 300 West Logan UT, 84321	 435.754.9366 C 435.752.7031 T
FROM:	**Jeremy Jensen** Cache-Landmark Engineering 95 Golf Course Rd, Suite 101 Logan, UT 84321	 435.770.3441 C 435.713.0099 T jjensen@cachelandmark.com
PROJECT:	**Hyde Park Middle School**	
SUBJECT:	**Addendum #5 – Bid Package #2**	

The following additions are provided for Bid Package #2 based on questions provided to the Owner/Architect/Engineers:

1. **Civil - Site Plan – Northwest, Sheet C-202.**
   a. **ADDED –** Bollards and concrete pad for proposed fire hydrant as shown on plan.

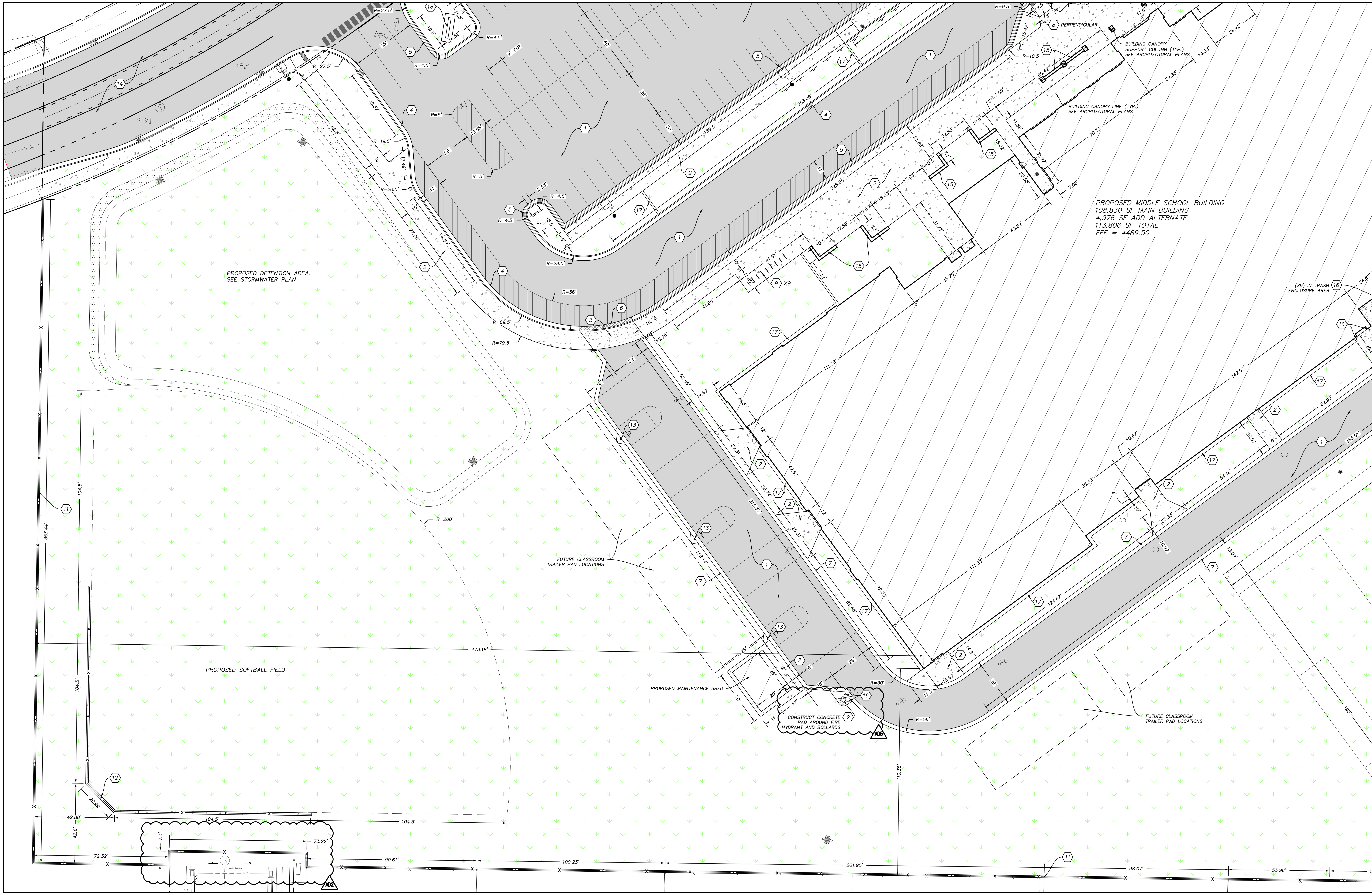
2. **Civil – Site Plan – Northeast, Sheet C-204.**
   a. **ADDED –** Bollards and concrete pad for proposed fire hydrant as shown on plan

3. **Civil – Civil Details, Sheet C-501.**
   a. **CLARIFICATION –** Detail #1: Structural fabric for bus parking area is to be included in Bid Package #1. Do not include in Bid Package #2.

Addendum #5 is hereby issued on May 28, 2024
Cache-Landmark Engineering

Jeremy Jensen E.I.T.
Project Manager

Attachment – Civil Sheets C-202 and C-204



SITE PLAN NOTES

1. ALL DIMENSIONS AND RADII ARE MEASURED AT TOP BACK OF CURB UNLESS STATED OTHERWISE OR WHERE NO CURB EXISTS.
2. ALL EXISTING HARDSCAPE FEATURES, LANDSCAPING AND IRRIGATION SYSTEMS THAT ARE DAMAGED OR DISTURBED DURING CONSTRUCTION ARE TO BE REPAIRED OR REPLACED AT CONTRACTORS EXPENSE.
3. ALL WORK TO COMPLY WITH HYDE PARK CITY STANDARDS AND SPECIFICATIONS.
4. ALL IMPROVEMENTS TO COMPLY WITH ADA STANDARDS.
5. ALL PAVEMENT MARKINGS TO CONFORM WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

LEGEND

- PROPOSED STANDARD DUTY CONCRETE
- PROPOSED HEAVY DUTY CONCRETE
- PROPOSED ASPHALT
- PROPOSED LANDSCAPE AREA
- PROPOSED MIDDLE SCHOOL BUILDING
- PROPOSED MIDDLE SCHOOL BUILDING ADD ALTERNATE (SEE ARCHITECTURAL PLANS)
- PROPOSED SPILL CURB AND GUTTER
- PROPOSED CATCH CURB AND GUTTER
- PROPOSED ROLL CURB (TRANSITION FROM ROLL CURB TO CATCH OR SPILL CURB WITHIN 5')

SITE CONSTRUCTION NOTES

1. CONSTRUCT STANDARD ASPHALT SECTION. SEE SHEET C–501/DETAIL 1.
2. CONSTRUCT STANDARD DUTY CONCRETE SECTION. SEE SHEET C–501/DETAIL 2.
3. CONSTRUCT HEAVY DUTY CONCRETE SECTION. SEE SHEET C–501/DETAIL 3.
4. CONSTRUCT CONCRETE CATCH CURB. SEE SHEET C–501/DETAIL 4.
5. CONSTRUCT CONCRETE SPILL CURB. SEE SHEET C–501/DETAIL 4.
6. CONSTRUCT CONCRETE ROLL CURB. SEE SHEET C–501/DETAIL 5.
7. CONSTRUCT 2' RIBBON CURB. SEE SEE SHEET C–501/DETAIL 6.
8. CONSTRUCT ADA RAMP. SEE SHEET C–501.
9. INSTALL BIKE RACK PER MANUFACTURER SPECIFICATIONS. SEE ARCHITECTURAL SITE PLAN.
10. INSTALL FLAGPOLE PER MANUFACTURER SPECIFICATIONS. SEE ARCHITECTURAL SITE PLAN.
11. INSTALL FENCE WITH CONCRETE CURBING. SEE ARCHITECTURAL SITE PLAN.
12. INSTALL BACKSTOP FENCE WITH CONCRETE CURBING. SEE ARCHITECTURAL SITE PLAN.
13. INSTALL BASKETBALL STANDARD PER MANUFACTURER SPECIFICATIONS.
14. CONSTRUCT ROADWAY SECTION. SEE ROAD PLAN AND PROFILE SHEETS.
15. CONSTRUCT SEAT WALL. SEE ARCHITECTURAL SITE PLAN.
16. INSTALL CONCRETE BOLLARD. SEE SHEET C–501/DETAIL 7.
17. CONSTRUCT CONCRETE MOWCURB. SEE ARCHITECTURAL SITE PLAN.
18. INSTALL MONUMENT SIGN. SEE ARCHITECTURAL SITE PLAN.

SITE PLAN–SOUTHWEST

SCALE: 1"=20'

0 10' 20' 40'
GRAPHIC SCALE 1"= 20'

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

Cache • Landmark
Engineers
Surveyors
Planners
95 Golf Course Rd.
Suite 101
Logan, UT 84321
435.713.0099

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UT

CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
AD2	5/9/2024	BID PACKAGE #1 ADDENDUM #2
AD3	5/14/2024	BID PACKAGE #2 ADDENDUM #3
PR1	5/22/2024	BID PACKAGE #1 PR#1
AD5	5/28/2024	BID PACKAGE #2 ADDENDUM #5

PROJECT #: 123005
DRAWN BY: J. JENSEN
CHECKED BY: L. ANDERSON
ISSUED: 05.28.2024

PROFESSIONAL ENGINEER LANCE ANDERSON 323733-2202 5/28/24 STATE OF UTAH

CIVIL- SITE PLAN SOUTHWEST

C-202

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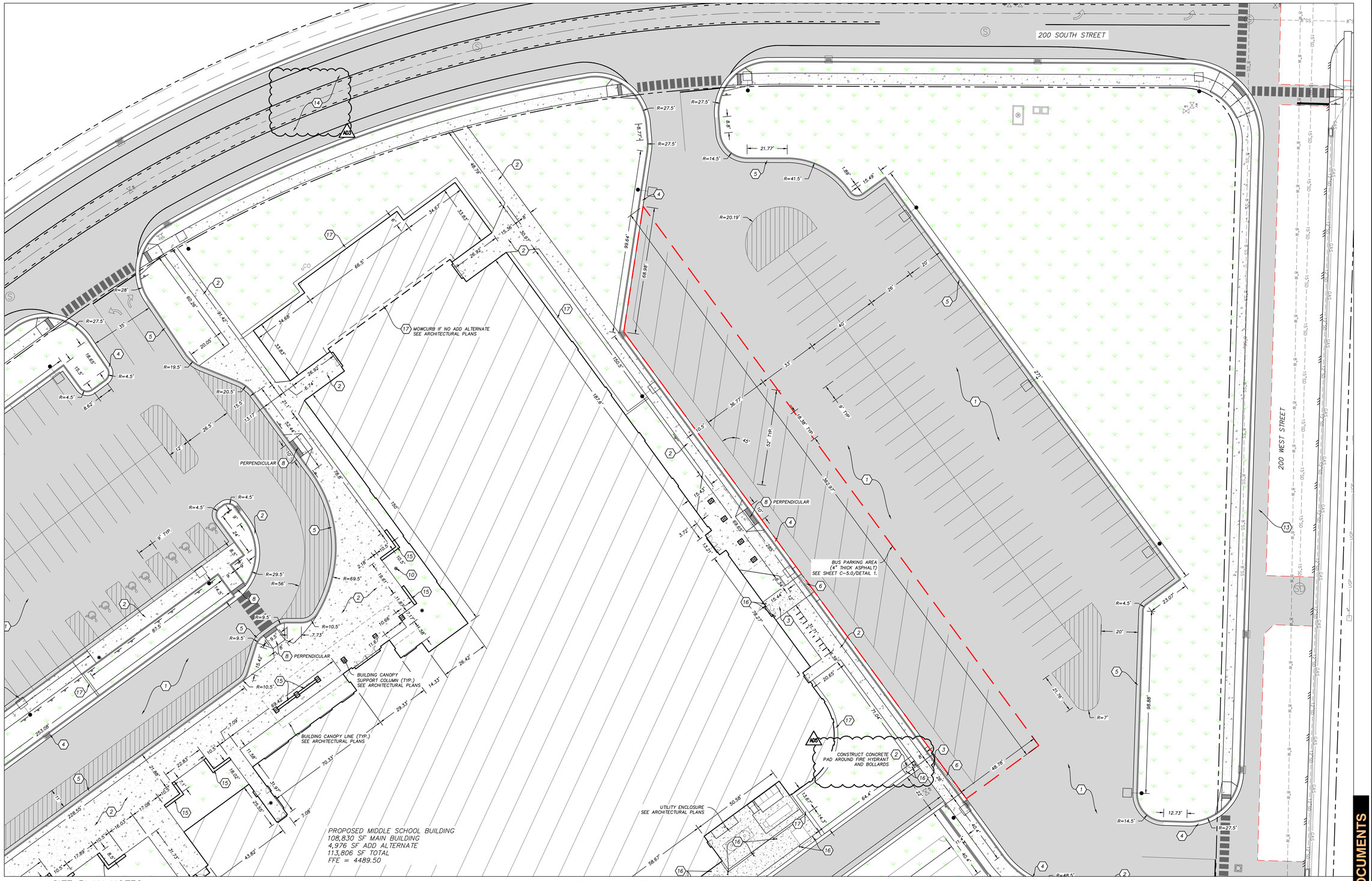

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18. INSTALL MONUMENT SIGN. SEE ARCHITECTURAL SITE PLAN.

SITE PLAN-NORTHEAST

SCALE: 1"=20'

GRAPHIC SCALE 1"= 20'

CONSTRUCTION DOCUMENTS

design west | architects
LOGAN, UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103

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250 W 200 S HYDE PARK, UT
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ADD5	5/28/2024	BID PACKAGE #2 ADDENDUM #5

PROJECT #: 123005
DRAWN BY: J. JENSEN
CHECKED BY: L. ANDERSON
ISSUED: 05.28.2024

PROFESSIONAL ENGINEER
LANCE ANDERSON
STATE OF UTAH

CIVIL- SITE PLAN NORTHEAST

C-204

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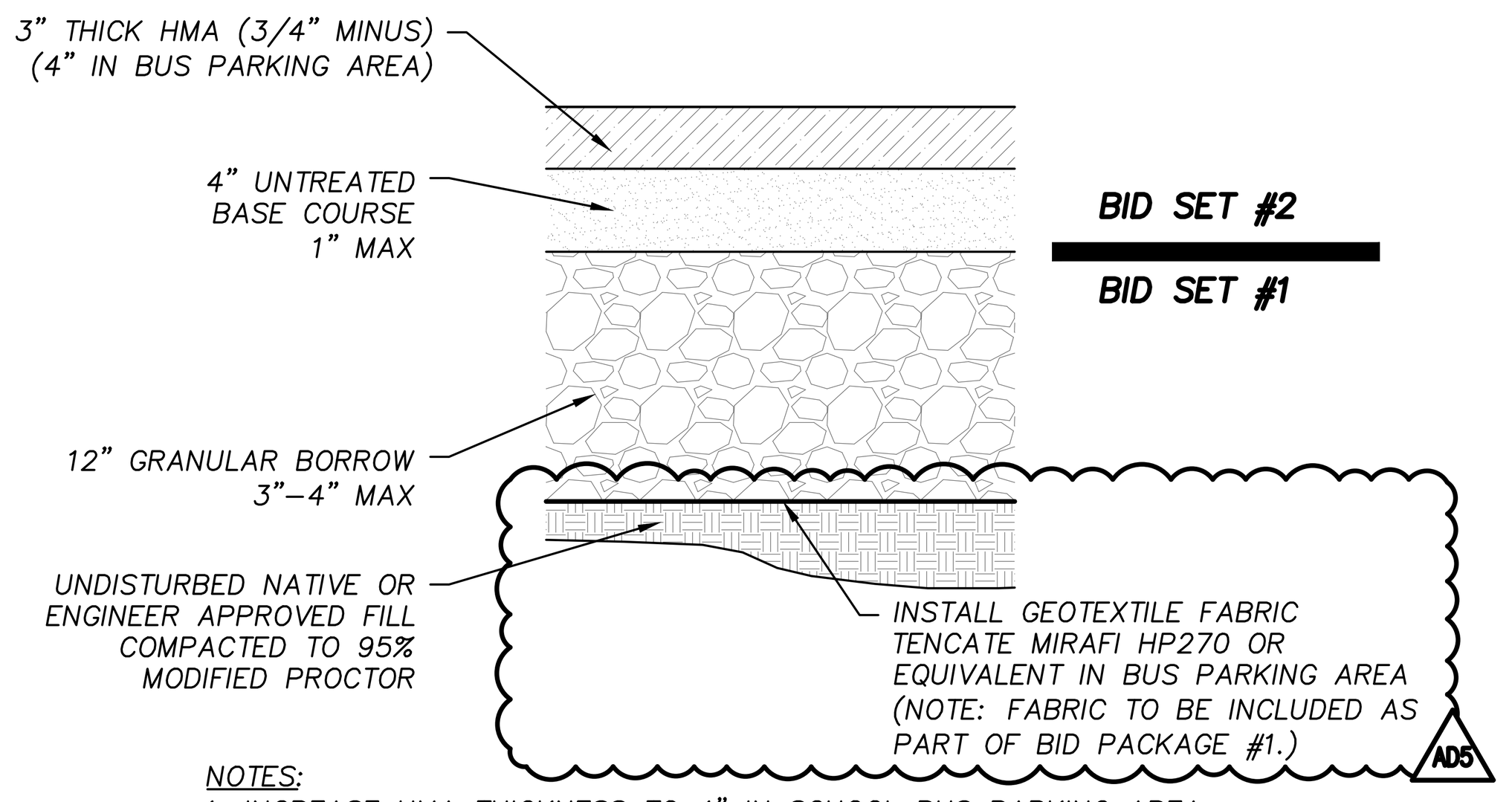
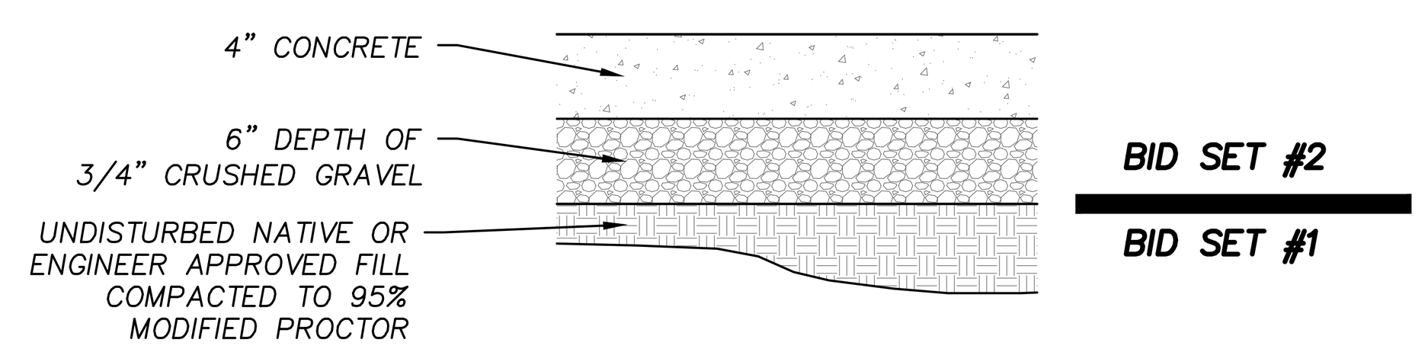


NOTES:
1. INCREASE HMA THICKNESS TO 4" IN SCHOOL BUS PARKING AREA.
2. TOP SOIL IS NOT TO BE USED AS FILL MATERIAL.

1 ON–SITE STANDARD ASPHALT SECTION
SCALE: NTS

NOTE: ALL ON–SITE CONCRETE FLATWORK TO BE USU STANDARD CONCRETE MIX. SEE CIVIL SPECIFICATIONS.



NOTES:
1. CONCRETE SHALL BE 4500 PSI, 28 DAY STRENGTH
2. INSTALL CONTRACTION JOINTS @ 10'–0" O.C. (TYP.) – COORDINATE WITH ARCHITECTURAL AND LANDSCAPE SITE DRAWINGS
3. INSTALL EXPANSION JOINTS @ 200'–0" O.C. (TYP.) – COORDINATE WITH ARCHITECTURAL AND LANDSCAPE SITE DRAWINGS
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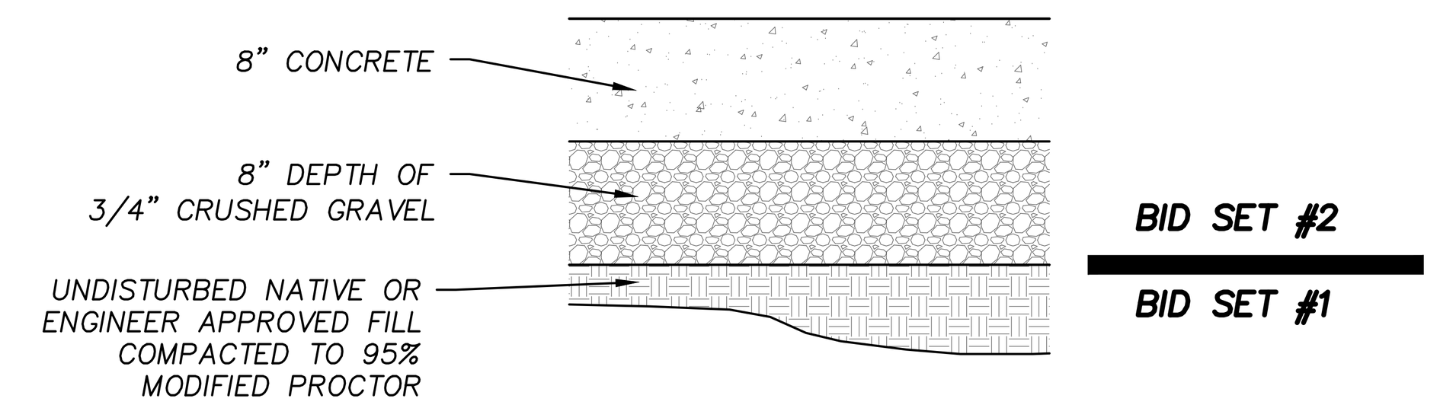
2 STANDARD DUTY CONCRETE SECTION
SCALE: NTS



NOTES:
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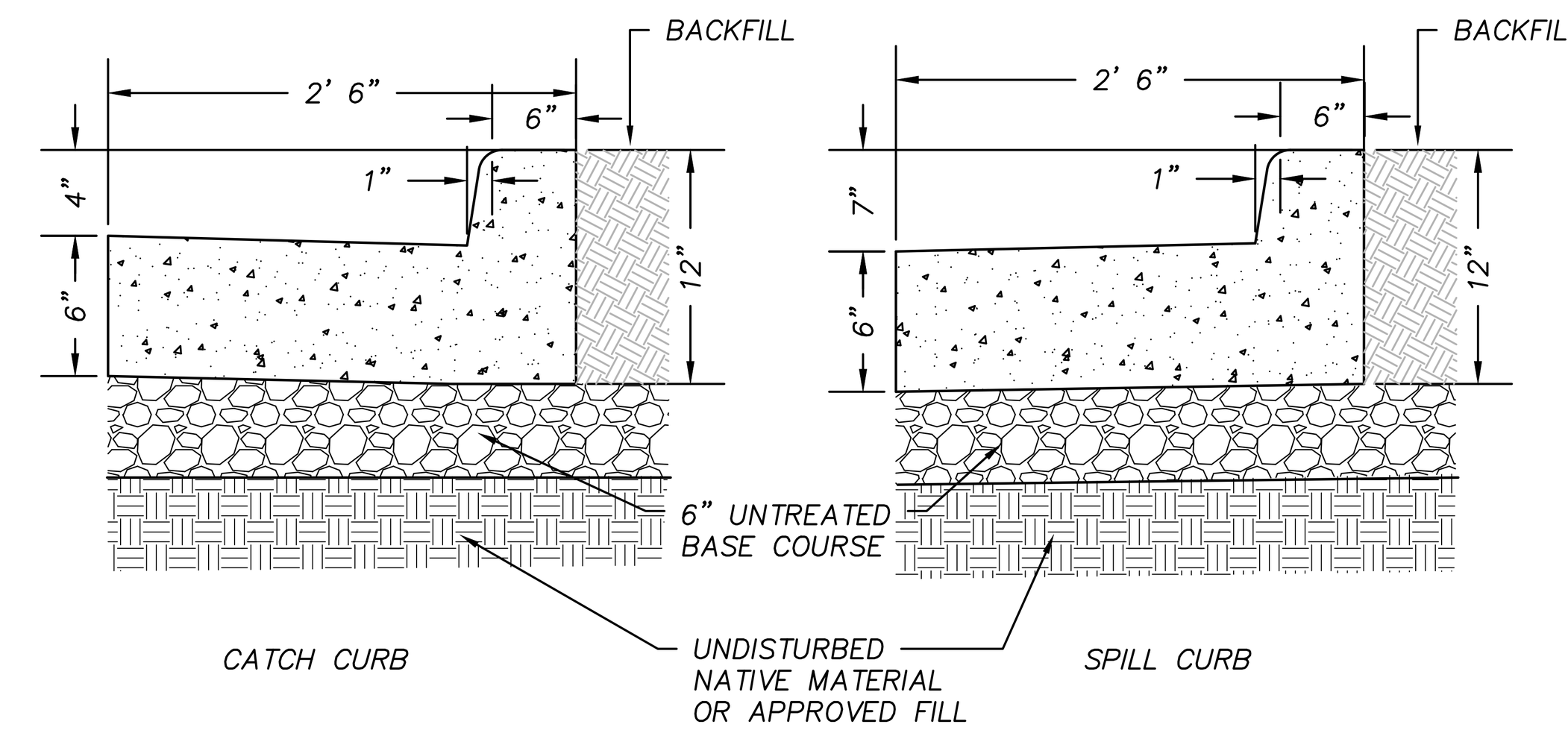
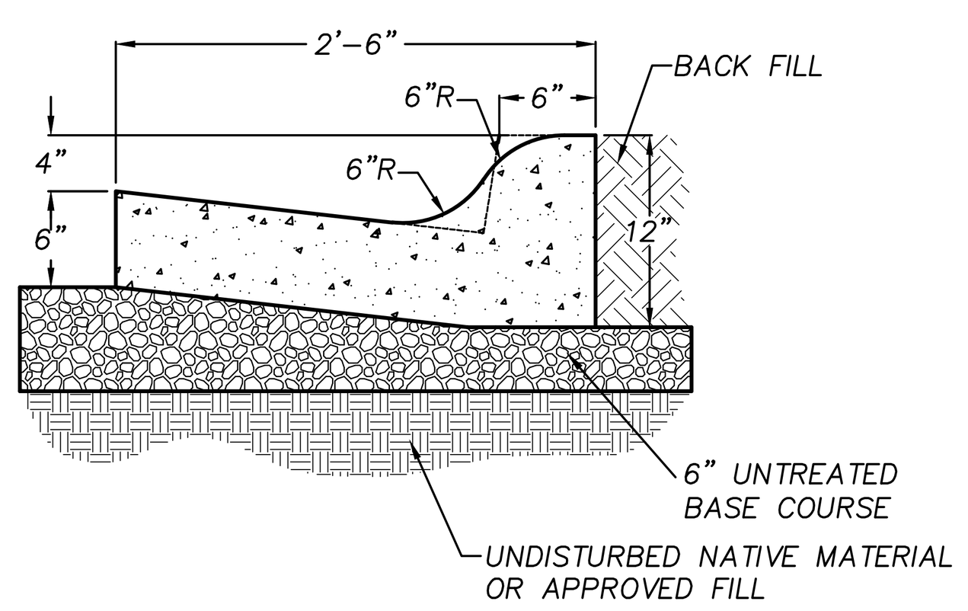
3 HEAVY DUTY CONRETE SECTION
SCALE: NTS



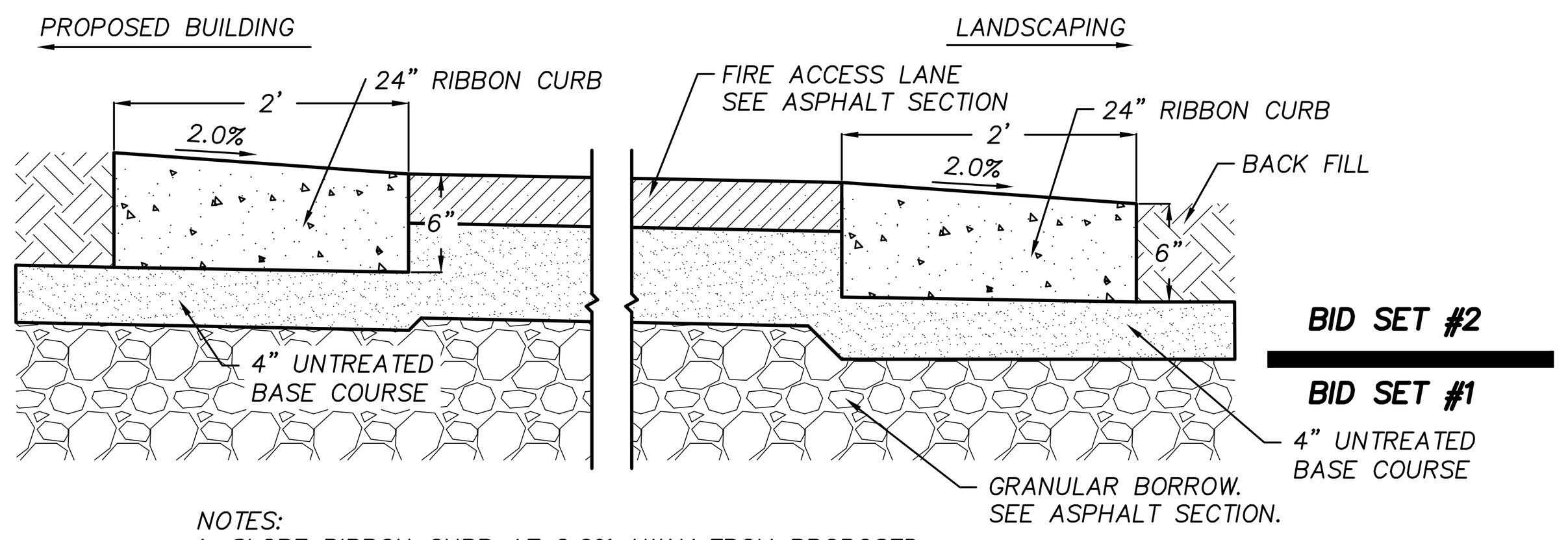
NOTES:
1. CONCRETE SHALL BE 4500 PSI – 28 DAY STRENGTH
2. PROVIDE CONTRACTION JOINTS @ 10'–0" O.C.
3. PROVIDE EXPANSION JOINTS @ 50'–0" O.C.

4 CONCRETE CURB AND GUTTER
SCALE: NTS



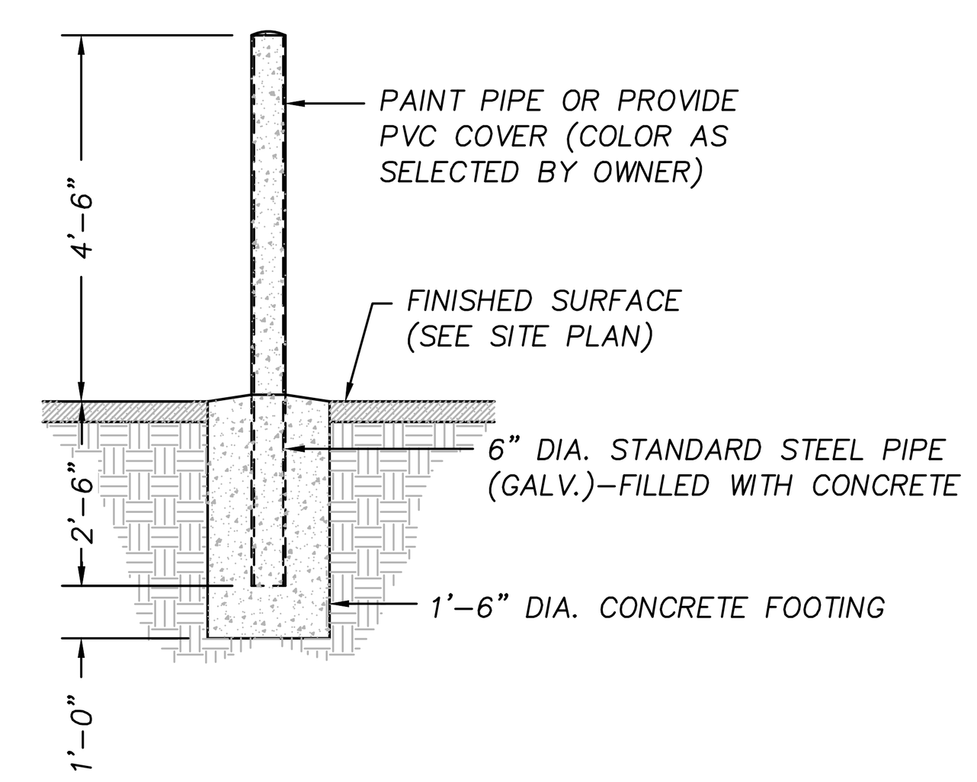
NOTES:
1. CONCRETE SHALL BE 4,500 PSI, 28 DAY STRENGTH.
2. PROVIDE CONTRACTION JOINTS @ 10'–0" O.C.
3. PROVIDE EXPANSION JOINTS @ 50'–0" O.C.

5 ROLL CURB AND GUTTER SECTION
SCALE: NTS

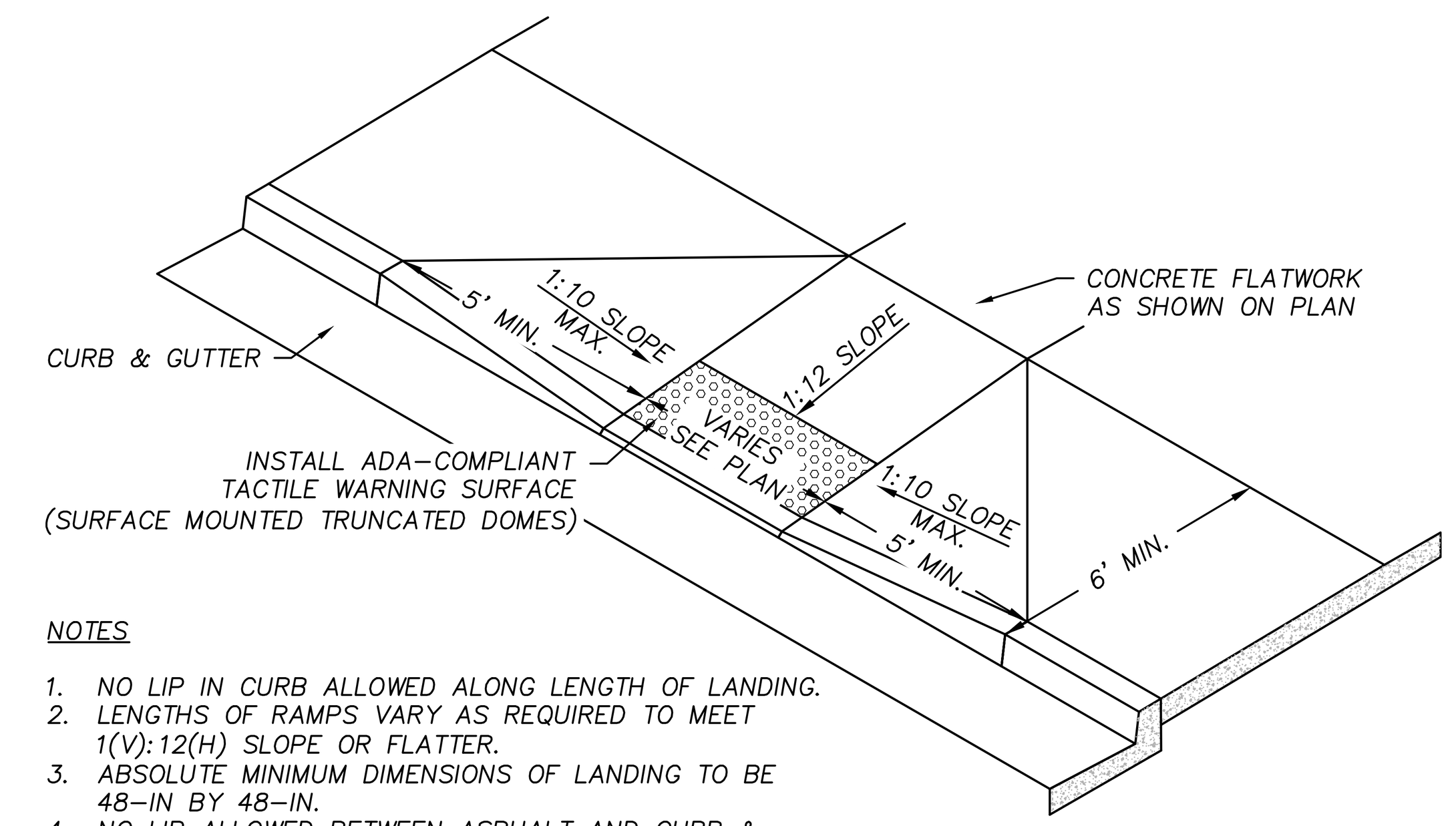


NOTES:
1. SLOPE RIBBON CURB AT 2.0% AWAY FROM PROPOSED BUILDING TO ALLOW STORMWATER TO FLOW UNOBSTRUCTED AWAY FROM BUILDING AND ACROSS FIRE ACCESS LANE..
2. CONCRETE SHALL BE 4,500 PSI, 28 DAY STRENGTH.
3. PROVIDE CONTRACTION JOINTS @ 10'–0" O.C.
4. PROVIDE EXPANSION JOINTS @ 50'–0" O.C.

6 24 IN RIBBON CURB SECTION
SCALE: NTS

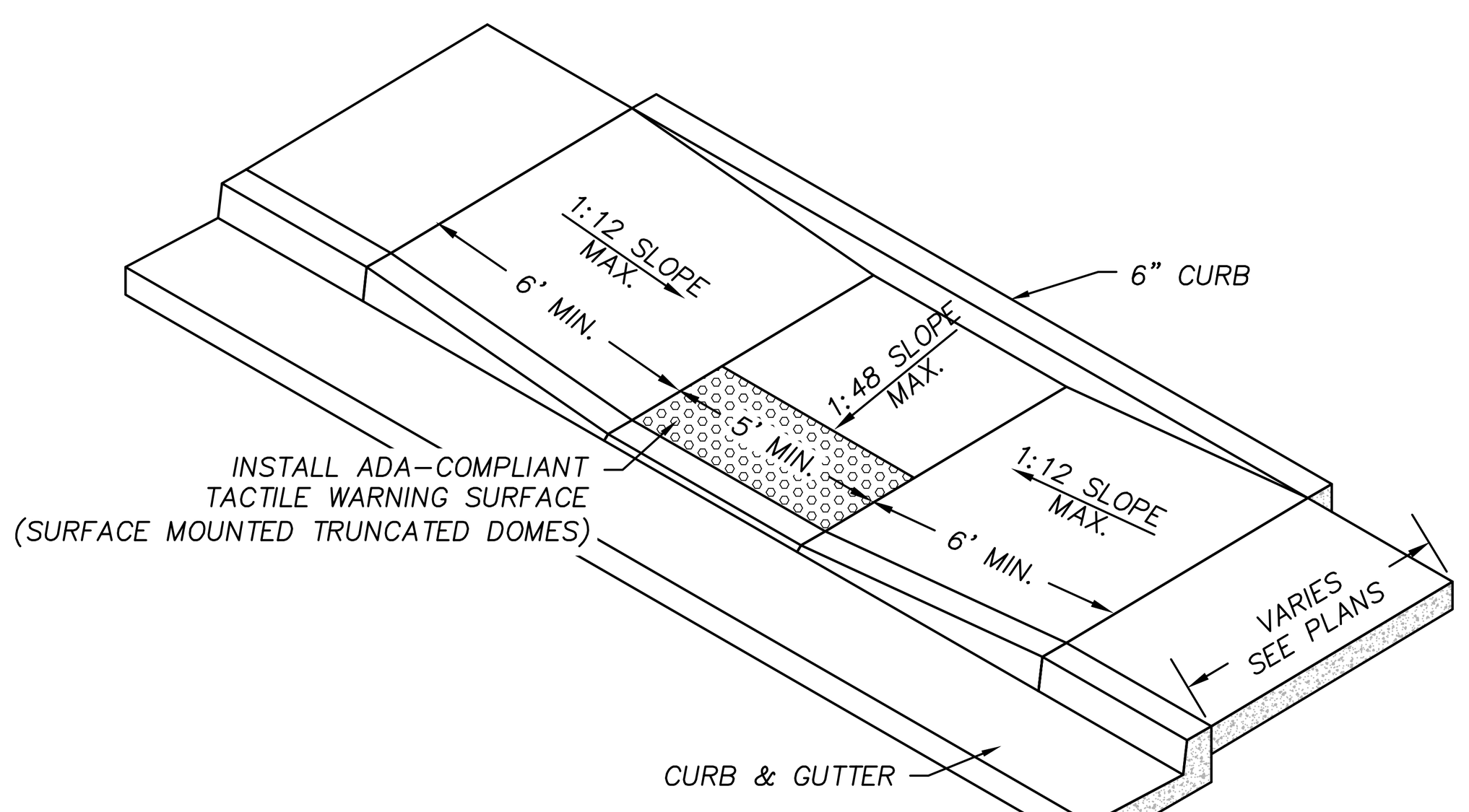


7 6" CONCRETE BOLLARD
SCALE: NTS



NOTES
1. NO LIP IN CURB ALLOWED ALONG LENGTH OF LANDING.
2. LENGTHS OF RAMPS VARY AS REQUIRED TO MEET 1(V):12(H) SLOPE OR FLATTER.
3. ABSOLUTE MINIMUM DIMENSIONS OF LANDING TO BE 48–IN BY 48–IN.
4. NO LIP ALLOWED BETWEEN ASPHALT AND CURB & GUTTER ALONG LENGTH OF LANDING.

8 PERPENDICULAR ADA RAMP (TYP.)
SCALE: NTS



NOTES
1. NO LIP IN CURB ALLOWED ALONG LENGTH OF LANDING.
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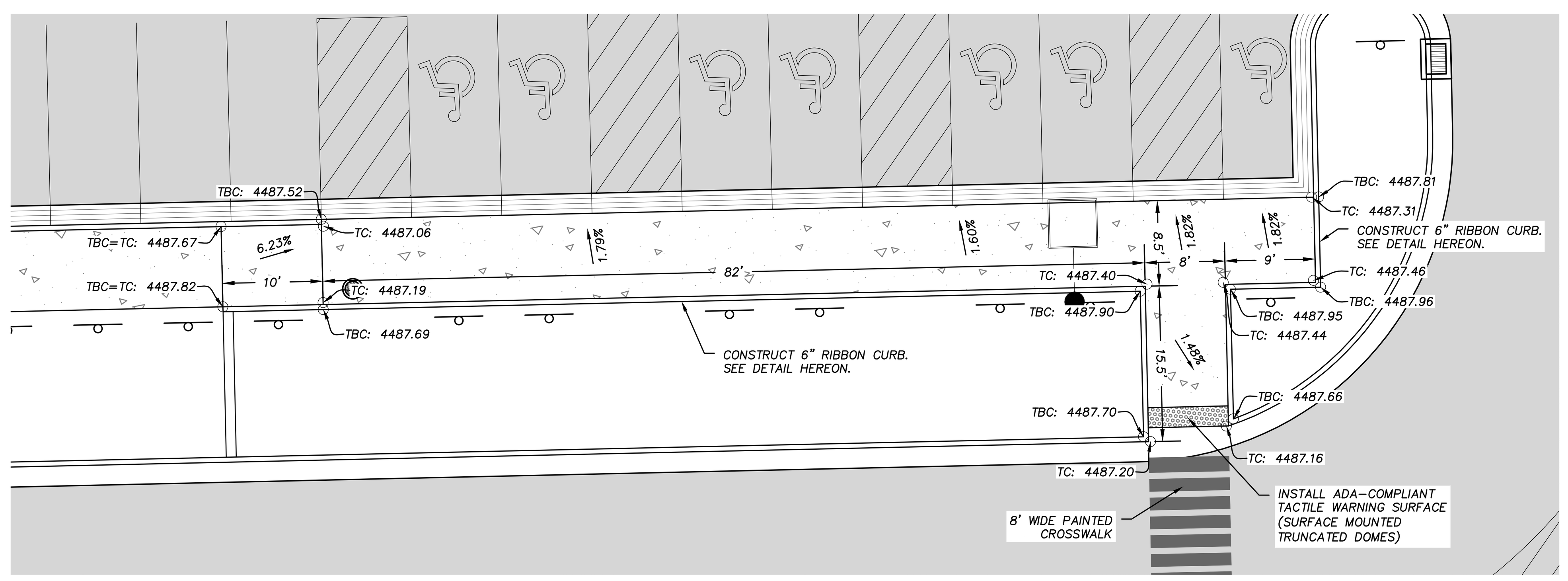
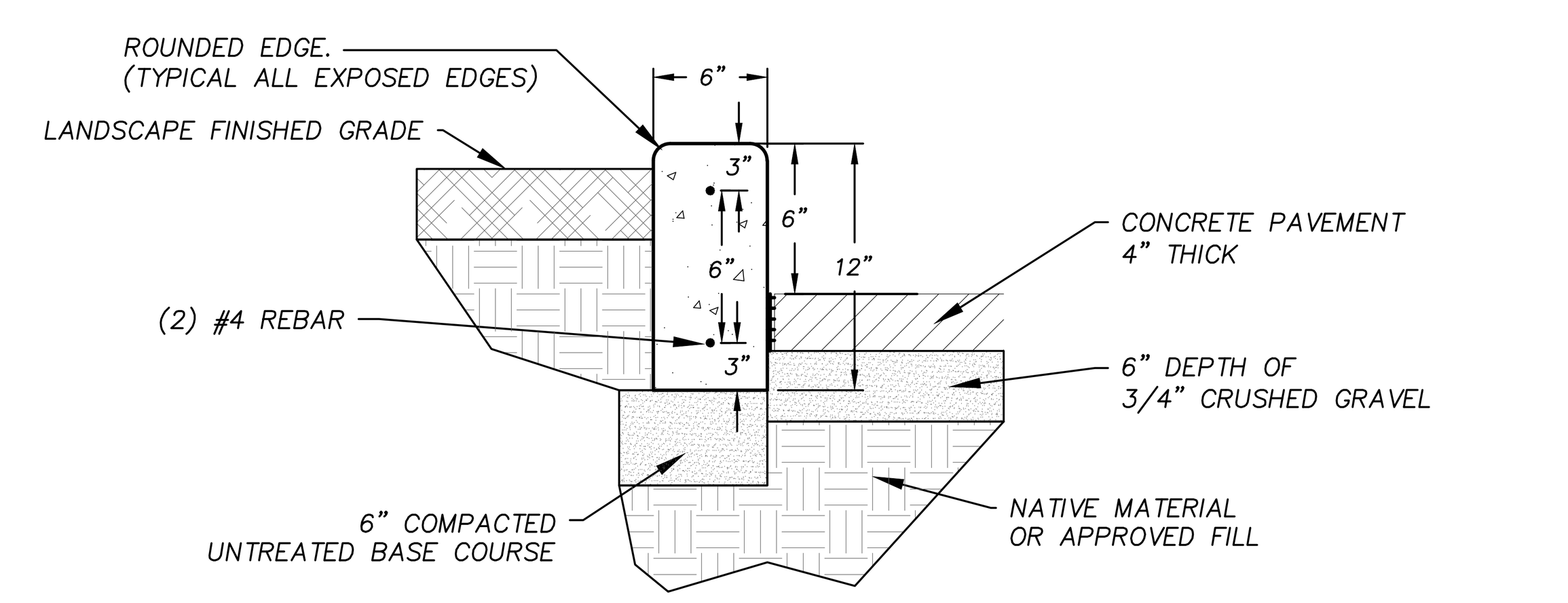
3. ABSOLUTE MINIMUM DIMENSIONS OF LANDING TO BE 48–IN BY 48–IN.
4. NO LIP ALLOWED BETWEEN ASPHALT AND CURB & GUTTER ALONG LENGTH OF LANDING.

9 PARALLEL ADA RAMP (TYP.)
SCALE: NTS

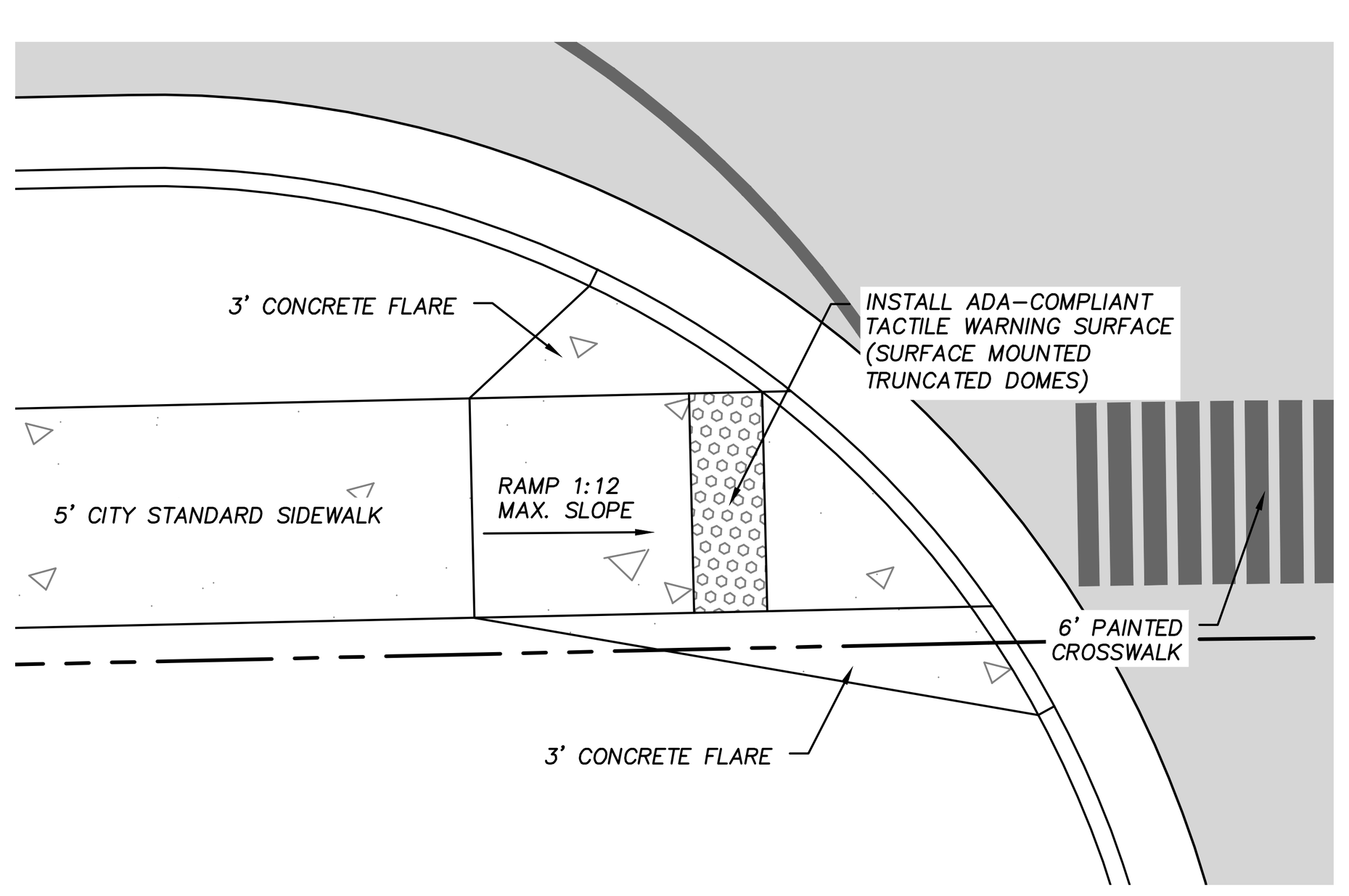


10 ADA PARKING AREA
SCALE: 1" = 10'

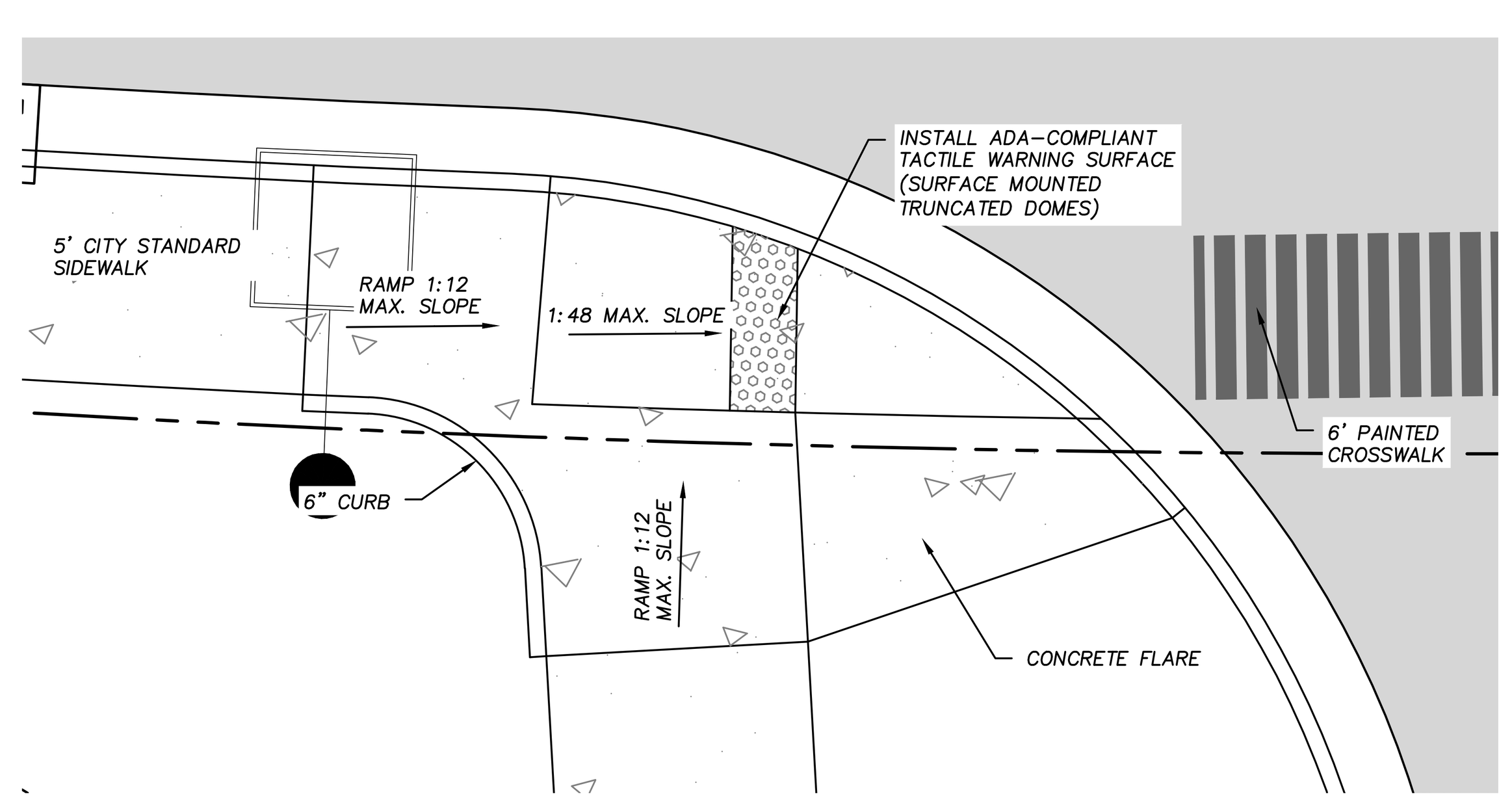


NOTES:
1. CONCRETE SHALL BE 4,500 PSI, 28 DAY STRENGTH.
2. PROVIDE CONTRACTION JOINTS @ 10'–0" O.C.
3. PROVIDE EXPANSION JOINTS @ 50'–0" O.C.

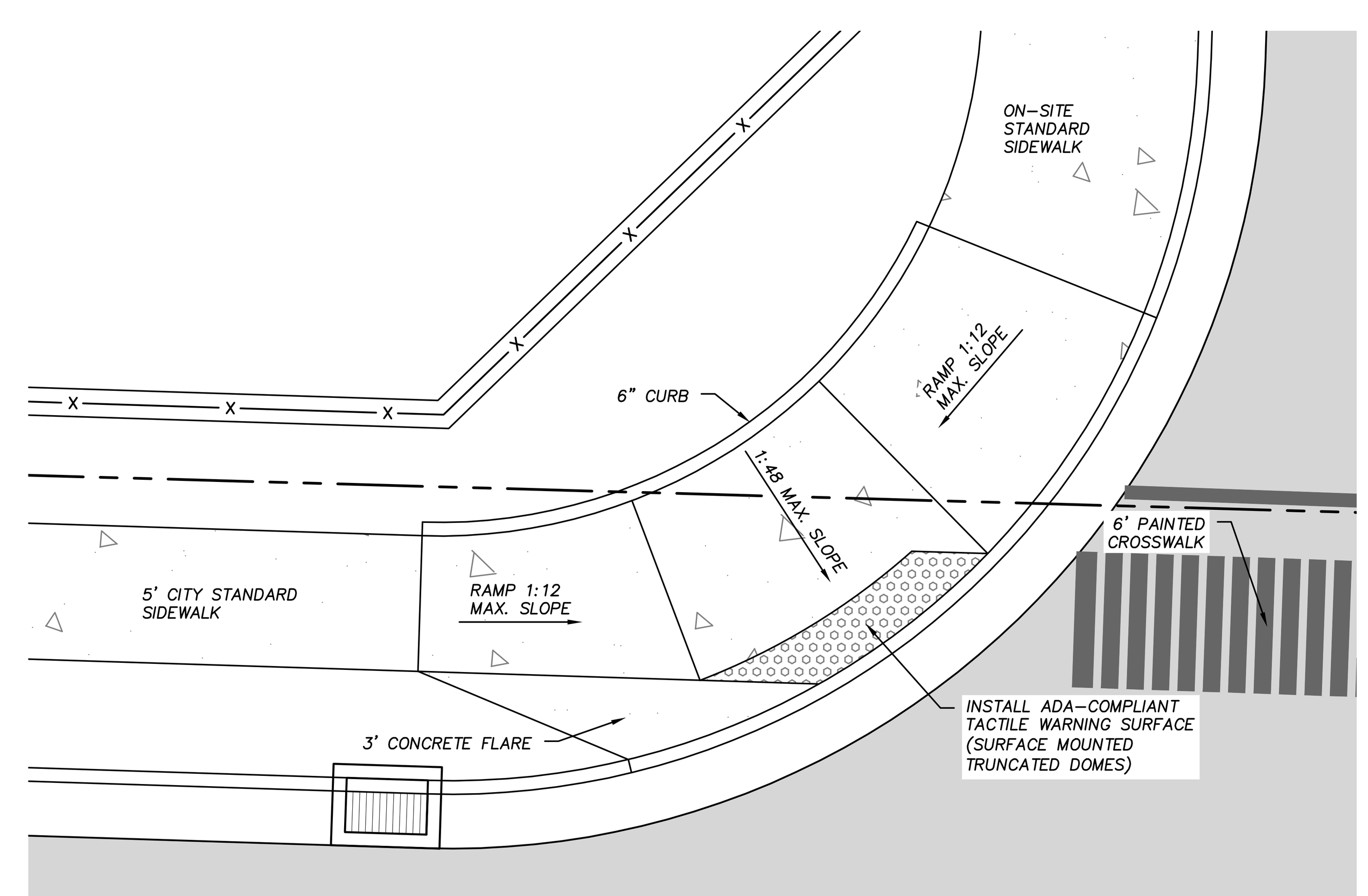
11 6" RIBBON CURB SECTION
SCALE: NTS



12 ADA RAMP AT ROADWAY ACCESS (TYP.)
SCALE: 1" = 5'



13 ADA RAMP 200 SOUTH STA. 2+30.00
SCALE: 1" = 5'



14 ADA RAMP 200 WEST STA. 19+65.50
SCALE: 1" = 5'

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

Cache • Landmark
Engineers
Surveyors
Planners
95 Golf Course Rd.
Suite 101
Logan, UT 84321
435.713.0099

HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UT
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
AD2	5/9/2024	BID PACKAGE #1 ADDENDUM #2
AD3	5/14/2024	BID PACKAGE #2 ADDENDUM #3
PR1	5/22/2024	BID PACKAGE #1 PR#1
AD5	5/28/2024	BID PACKAGE #2 ADDENDUM #5

PROJECT #: 123005
DRAWN BY: J. JENSEN
CHECKED BY: L. ANDERSON
ISSUED: 05.28.2024

PROFESSIONAL ENGINEER LANCE ANDERSON 323733-2202 5/28/24 STATE OF UTAH

CONSTRUCTION DOCUMENTS

CIVIL UTILITY DETAILS

C-501

7/15/2019 3:26:09 PM

MEMORANDUM

Project: CCSD Middle Schools
Location: Cache County, UT
Project No: 23914
Date: 5/28/2024
( ) Telephone ( ) Conference ( ) Field (X) Memo
Memo by: Josh Blazzard, SE

RE: Addendum 5

Comments/Items Discussed:

Below is a description of items contained in Addendum #5:

Sheet S-011:

1) The concrete wall schedule has been updated to include an option for 18” horizontal wall spacing.

Copy to: Design West Architects

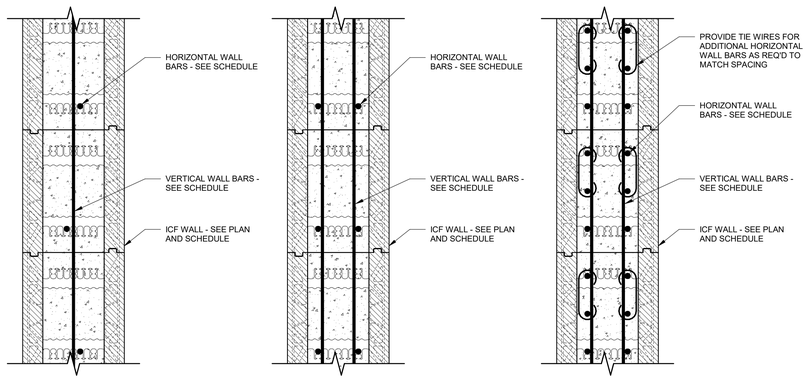
Filing: (X) Project File ( ) Other

23914_Addendum 5 Narrative_20240528.doc

STANDARD HOOK & BEND SCHEDULE

TYPE OF STANDARD HOOK	BAR SIZE	MIN. INSIDE BEND DIA. FOR STIRRUPS, TIES, AND HOOPS, in	STRAIGHT EXTENSION ℓ_{ext} FOR STIRRUPS, TIES, AND HOOPS in.	MIN. INSIDE BEND DIA. FOR OTHER BARS, in	STRAIGHT EXTENSION ℓ_{ext} FOR OTHER BARS in.	TYPE OF STANDARD HOOK
90° HOOK	#3 - #5	$4d_b$	GREATER OF $6d_b$ AND 3"	$6d_b$	$12d_b$	POINT AT WHICH BAR IS DEVELOPED; 90° BEND; DIA; d_b; ℓ_{ext}; ℓ_{dh}
	#6 - #8	$6d_b$	$12d_b$			
	#9 - #11	N/A	N/A	$8d_b$		
	#14 - #18	N/A	N/A	$10d_b$		
135° HOOK	#3 - #5	$4d_b$	GREATER OF $6d_b$ AND 3"	N/A	N/A	135° BEND; DIA; d_b; ℓ_{ext}
	#6 - #8	$6d_b$	GREATER OF $6d_b$ AND 3"	N/A	N/A	
180° HOOK	#3 - #5	$4d_b$	GREATER OF $4d_b$ AND 2.5"	$6d_b$	GREATER OF $4d_b$ AND 2.5"	180° BEND; DIA; d_b; ℓ_{ext}
	#6 - #8	$6d_b$				
	#9 - #11	N/A	N/A	$8d_b$		
	#14 - #18	N/A	N/A	$10d_b$		

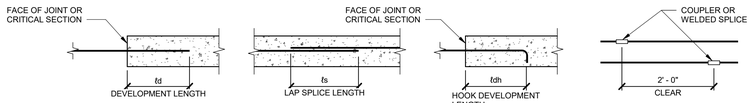
TYPICAL ICF CONFIGURATION SCHEDULE



SINGLE LAYER REINFORCING | DOUBLE LAYER REINFORCING | DOUBLE LAYER REINFORCING W/ ADDED HORIZ. REINFORCING

2021 IBC CONCRETE REBAR LAP SPLICE SCHEDULE (60KSI REBAR)

FOR CONCRETE APPLICATIONS (ACI 318 - 19)

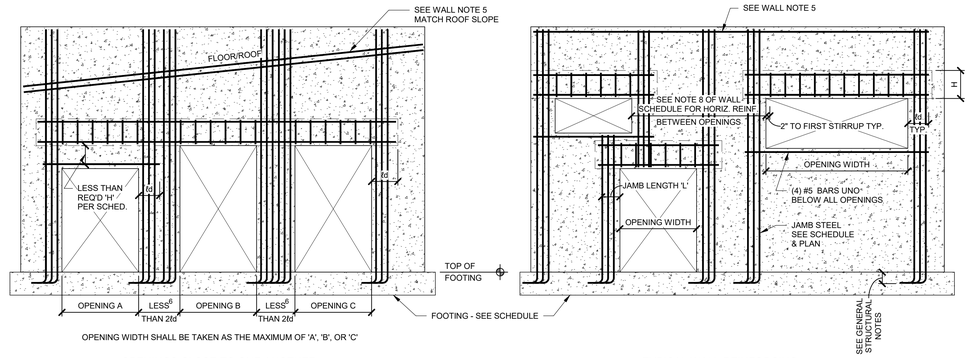


BAR LOCATION	CONCRETE REINFORCING & SPLICE LENGTHS (IN)																											
	CONCRETE		BAR SIZE																									
	TYPE	STRENGTH	#3			#4			#5			#6			#7			#8			#9			#10			#11			COMMENTS
			td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	
VERT. WALL BARS, FILL ON METAL DECK	NWC	3000 PSI	17	22	6	22	29	6	28	36	8	33	43	11	48	62	14	55	72	16	62	81	20	70	91	23	78	101	27	
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	3000 PSI	22	29	6	29	38	6	36	47	8	43	56	11	63	82	14	72	94	16	81	105	20	91	118	23	101	131	27	
BEAM BOTTOM BARS, COLUMN BARS	NWC	3000 PSI	17	22	6	22	29	10	28	36	13	33	43	17	48	62	21	55	72	26	62	81	31	70	91	37	78	101	43	
FOOTING BOTTOM BARS, SLAB ON GRADE	NWC	3000 PSI	12	16	6	14	18	6	17	22	8	20	26	11	29	38	14	33	43	16	38	49	20	42	55	23	46	61	27	
SLAB TOP BARS[5] BEAM TOP BARS	NWC	3000 PSI	22	29	6	29	38	10	36	47	13	43	56	17	63	82	21	72	94	26	81	105	31	91	118	37	101	131	43	

BAR LOCATION	CONCRETE REINFORCING & SPLICE LENGTHS (IN)																											
	CONCRETE		BAR SIZE																									
	TYPE	STRENGTH	#3			#4			#5			#6			#7			#8			#9			#10			#11			COMMENTS
			td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	td	ts	tdh	
VERT. WALL BARS, FILL ON METAL DECK	NWC	4500 PSI	14	18	6	18	23	6	23	30	8	27	35	10	40	52	12	45	59	15	51	66	18	57	74	21	64	83	25	
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	4500 PSI	18	23	6	24	31	6	30	39	8	35	46	10	51	66	12	59	77	15	66	86	18	74	96	21	82	107	25	
BEAM BOTTOM BARS, COLUMN BARS	NWC	4500 PSI	14	18	6	18	23	9	23	30	12	27	35	16	40	52	20	45	59	24	51	66	29	57	74	34	64	83	40	
FOOTING BOTTOM BARS, SLAB ON GRADE	NWC	4500 PSI	12	16	6	12	16	6	13	17	8	16	21	10	23	30	12	26	34	15	29	38	18	33	43	21	36	47	25	
SLAB TOP BARS[5] BEAM TOP BARS	NWC	4500 PSI	18	23	6	24	31	9	30	39	12	35	46	16	51	66	20	59	77	24	66	86	29	74	96	34	82	107	40	

NOTES :
1. MECHANICAL COUPLERS MAY BE USED IN LIEU OF LAP SPLICES SHOWN. SEE STRUCTURAL NOTES FOR MINIMUM COUPLER CAPACITY. WHERE MECHANICAL COUPLERS ARE USED, STAGGER ADJACENT SPLICES A MINIMUM OF 24" AS INDICATED ABOVE.
2. LENGTHS INDICATED IN THIS SCHEDULE SHALL BE INCREASED BY 50% FOR STRAIGHT BAR DEVELOPMENT AND 20% FOR HOOKED BARS WHERE EPOXY COATING IS USED.
3. WHEN SPLICING BARS OF DIFFERENT SIZES, USE LAP SPLICE LENGTH OF LARGER BARS UNO.
4. SPLICE BARS LARGER THAN #11 USING MECHANICAL COUPLERS.
5. SLAB TOP BARS ONLY FOR SLABS 12" OR GREATER IN THICKNESS.

TYPICAL CONCRETE/JAMB/BEAM/WALL REINFORCING SCHEDULE



OPENINGS CLOSE TO ONE ANOTHER

TYPICAL WALL REINFORCING

CONCRETE WALL HEADER SCHEDULE

MARK	H	W	BOTTOM BARS	TOP BARS	TRANSVERSE BAR SPACING	MAX. OPENING WIDTH	COMMENTS
CB-1	16"	8"	(2) #5	(2) #5	#4 @ 6"o.c.	5'-0"	
CB-2	16"	8"	(4) #5	(2) #5	#4 @ 6"o.c.	7'-0"	(2) LAYERS BOTTOM BARS
CB-3	24"	8"	(4) #6	(2) #5	#4 @ 8"o.c.	10'-0"	(2) LAYERS BOTTOM BARS
CB-4	24"	8"	(6) #6	(2) #5	#5 @ 8"o.c.	14'-0"	(3) LAYERS BOTTOM BARS
CB-5	32"	8"	(6) #6	(2) #6	#5 @ 8"o.c.	16'-0"	(3) LAYERS BOTTOM BARS
CB-6	48"	8"	(6) #6	(2) #6	#5 @ 12"o.c.	SEE PLAN	(3) LAYERS BOTTOM BARS
CB-7	16"	10"	(3) #6	(2) #5	#3 @ 6"o.c.	7'-0"	
CB-8	24"	10"	(6) #6	(2) #5	#3 @ 6"o.c.	12'-0"	(2) LAYERS BOTTOM BARS
CB-9	32"	10"	(6) #6	(2) #5	#3 @ 6"o.c.	16'-0"	(3) LAYERS BOTTOM BARS

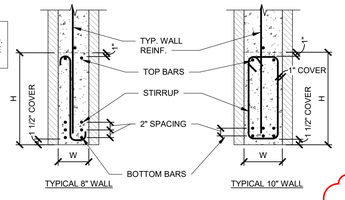
NOTES:
1. TOP AND BOTTOM BARS SHALL BE CONTINUOUS THROUGHOUT THE HEADER WITHOUT SPLICING IF POSSIBLE.
2. IF SPLICES ARE REQUIRED THEY SHALL NOT OCCUR IN THE MIDDLE HALF SPAN OF THE HEADER.
3. TYPICAL HORIZONTAL WALL REINFORCING NEED NOT OCCUR IN DEPTH OF HEADER.
4. TOP AND BOTTOM BARS SHALL EXTEND PAST THE EDGE OF AN OPENING A MINIMUM DISTANCE OF THE DEVELOPMENT LENGTH *td*; SEE REBAR LAP/SPLICE SCHEDULE.
5. NO CONSTRUCTION/EXPANSION JOINTS SHALL OCCUR THROUGH BEAM LENGTH.

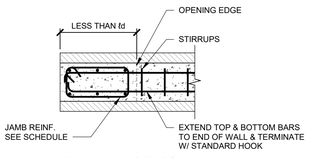
CONCRETE JAMB SCHEDULE

MARK	WALL 't'	LENGTH	VERTICAL BARS	TIES[7]	MAX. OPENING SIZE	COMMENTS
CJ-1	8"	16"	(6) #6	--	5'-0"	
CJ-2	8"	16"	(6) #6	#3 @ 12"o.c.	7'-0"	
CJ-3	8"	20"	(8) #6	#3 @ 12"o.c.	12'-0"	
CJ-4	8"	24"	(10) #6	#3 @ 12"o.c.	16'-0"	
CJ-5	8"	36"	(12) #6	#3 @ 12"o.c.	--	
CJ-6	8" OR 10"	16"	(6) #6	#3 @ 5"o.c.	SEE PLAN	
CJ-7	10"	12"	(4) #6	--	5'-0"	
CJ-8	10"	16"	(6) #6	#3 @ 12"o.c.	7'-0"	
CJ-9	10"	30"	(14) #6	--	12'-0"	
CJ-10	10"	48"	(24) #6	--	16'-0"	
CJ-11	8"	30"	(12) #6	#3 @ 12"o.c.	SEE PLAN	

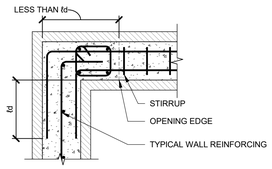
NOTES:
1. JAMBS PER OPENING SIZE SHALL BE USED U.N.O. ON PLANS.
2. TIE SPACING IS A MAXIMUM.
3. NO VERTICAL CONSTRUCTION/EXPANSION JOINTS SHALL OCCUR IN JAMB LENGTH 'L'.
4. LAP SPLICES SHALL BE PER REBAR LAP SCHEDULE.
5. JAMB REINFORCING SHALL BE TIED TO FOOTING DOWELS.
6. JAMBS SHALL BE AT EACH SIDE OF OPENING. WHERE OPENINGS ARE CLOSE TOGETHER AND NOT SPECIFICALLY CALLED OUT ON PLANS CONTACT ENGINEER.

NOTE: SINGLE STIRRUP LEG SHALL BE USED @ 8" WALLS UNO. SINGLE STIRRUP HOOP SHALL BE USED @ 10" WALL UNO.

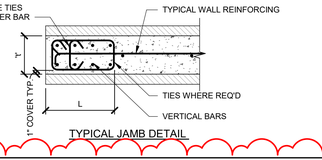




TYPICAL BEAM REINFORCING @ END WALL



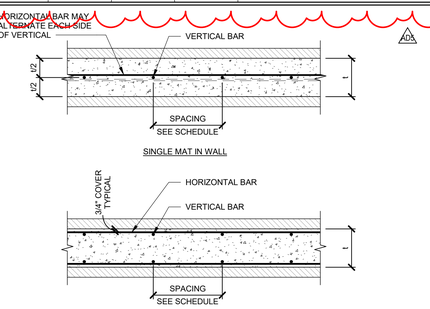
TYPICAL BEAM REINFORCING @ WALL CORNER



TYPICAL JAMB DETAIL

CONCRETE WALL SCHEDULE

MARK	t	VERTICAL REINFORCING SIZE	VERTICAL REINFORCING SPACING	HORIZONTAL REINFORCING SIZE	HORIZONTAL REINFORCING SPACING	COMMENTS
CW-1	8"	#6	16"o.c.	#5	16" OR 18"o.c.	TYPICAL WALL UNLESS NOTED OTHERWISE
CW-2	8"	#6	12"o.c.	#5	16" OR 18"o.c.	MAT EACH FACE
CW-3	10"	#6	8"o.c.	#6 @ 16"o.c. OR (2) #5	@ 18"o.c.	
CW-4	10"	#6	12"o.c.	#6 @ 16"o.c. OR (2) #5	@ 18"o.c.	
CW-5	8"	#6	16"o.c.	#6	16" OR 18"o.c.	
CW-6	8"	#6	16"o.c.	#6	16" OR 18"o.c.	HOOK BARS AROUND VERTICAL REINF. AT END OF WALLS



NOTES:
1. VERTICAL BARS IN SINGLE MAT WALLS SHALL BE CENTERED IN WALL.
2. VERTICAL BARS IN DOUBLE MAT WALLS SHALL BE PLACED TIGHT AGAINST HORIZONTAL BARS AS SHOWN AND HELD IN PLACE WHILE PLACING CONCRETE.
3. TYPICAL VERTICAL WALL REINFORCING NEED NOT EXTEND INTO JAMB.
4. TYPICAL HORIZONTAL WALL REINFORCING SHALL EXTEND INTO JAMB BARS AS SHOWN.
5. PROVIDE (4) #5 BARS x CONT. AT ALL FLOOR AND ROOF ELEVATIONS TYPICAL UNLESS NOTED OTHERWISE.
6. U.N.O. USE CW-1 FOR ALL WALLS.
7. PROVIDE (2) #5 BARS x CONT. @ TOP OF WALL WHERE WALL EXTENDS PAST ROOF.
8. SPACE HORIZONTAL REINFORCING @ 8"o.c. FOR WALL SEGMENTS THAT ARE LESS THAN 4'-0" IN LENGTH.

design west | architects
LOGAN, UT 84321
255 SOUTH 200 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

HYDE PARK MIDDLE SCHOOL

250 W 200 S, HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

DESCRIPTION:
DATE: 05.28.24 ADS
MARK:

PROJECT #: 123006
DRAWN BY: BLP
CHECKED BY: J. Blazzard
ISSUED: 05.02.2024

PROFESSIONAL STRUCTURAL ENGINEER
Joshua L. Blazzard
No. 5251609
5/15/24
STATE OF UTAH

SCHEDULES

S-011

5/28/2024 9:38:39 AM

VBFA

ADDENDUM 5

DATE: May 28, 2024

PROJECT NO: 23717

PROJECT: Hyde Park and Nibley Middle Schools

The following revision, additions, deletions, and/or items of clarification shall hereby be included as an integral part of the Contract Documents for the above-listed project and shall be fully binding. All other requirements of the original plans and specification shall remain in effect in their respective order.

DIVISION – 21, 22 & 23

QUESTIONS

Can we get pipe sizing on the MP pages that are not indicated please?

A. Additional pipe sizes have been added. See attached.

Can we get the piping in a bolder print, so it is more legible please?

A. The drawings are meant to be printed in color. Please print drawings in color.

Spec section 21 1000,3.4G, states that 2" pipe and larger shall be threaded. Would it be possible to use grooved pipe for 2" and smaller?

A. Yes. This is noted in this addendum.

-Spec section 233113-15 3.12 B states that duct in areas with no ceilings needs to be double wall. Our experience with VBFA is that it is typically noted on the drawings where double wall K-27 duct is required. There are currently several places on the drawings where double wall duct is called out.

Is it the intent for all exposed duct to be double wall (even where not noted)? This would apply to places line the gym, cafeteria, CCA shop, etc.

A. No. The exposed medium pressure ductwork shall be double wall from the air handler to 20 feet down stream of the air handler. All other exposed ductwork shall be lined as specified.

DRAWINGS

SHEET - M601

1. Add note 2 to Air Handler Schedule as follows: 2. UNIT COMPLETE WITH 20" SEISMIC CURB AND EBTRON AIR FLOW MEASURING STATION ON THE OUTSIDE AIR INLET.
2. Add curb height of 18" to note 2 on Make-Up Air Handler Unit Schedule. See attached.
3. Add DL-1 to the Grilles, Registers and Diffusers schedule as shown. See attached.

SHEET - MP111.A

1. Modify piping as shown. See attached.

SHEET - MP111.B

1. Modify piping as shown. See attached.

SHEET - MP111.C

1. Add pipe size tag. See attached.
2. Modify piping as shown. See attached.

SHEET - MP111.D
1. Add pipe size tag. See attached.
2. Modify piping as shown. See attached.

SHEET - MP111.E
1. Add pipe size tag. See attached.
2. Move pipe size tag for clarity. See attached.
3. Modify piping as shown. See attached.

SHEET - MP111.F
1. Modify piping as shown. See attached.
2. Add pipe size tag. See attached.

SHEET - MP112.A
1. Modify piping as shown. See attached.

SHEET - MP112.B
1. Modify piping as shown. See attached.

SHEET - MP112.C
1. Modify piping as shown. See attached.

SPECIFICATIONS

SECTION – 211000
2. Paragraph 3.4.G.1 changed from “2 and Smaller” to “1-1/4 and Smaller”

PRIOR APPROVALS

The following manufacturers, trade names and products are allowed to bid on a name brand only basis with the provision that they completely satisfy all and every requirement of the drawings, specifications and all addenda shall conform to the design, quality and standards specified, established, and required for the complete and satisfactory installation and performance of the building and all its respective parts.

Item	Manufacturer	Comments
Water Cooler	Oasis	Not Approved
Bottle Filler	Oasis	Not Approved
Emergency Shower	Chicago	Approved
Water Heater	PVI	Not Approved
Water Treatment	Clear Water	Not Approved
Cabinet Unit Heaters	Sterling Commercial Hydronics	Approved
Boilers	Lochinvar	Not Approved
Unit Heaters	Sterling Commercial Hydronics	Approved
Water Heaters	Lochinvar	Not Approved
VFD	Eaton	Not Approved
VFD	Danfoss	Approved
Storage Tanks	Lochinvar	Approved
Piping	Niron	Not Approved
Service Sink	Fiat	Approved
Grease Interceptor	Schier	Not Approved
Water Closets	Sloan Valve Co.	Not Approved
Urinals	Sloan Valve Co.	Approved
Lavatories	Sloan Valve Co.	Not Approved
Sensor Faucet	Sloan Valve Co.	Approved
Grease Interceptor	Schier	Not Approved
HVAC Power Ventilators	S&P	Not Approved
Fixed Extruded Aluminum Louvers	United Enertech	Approved
Custom AHU	Scott Springfield	Not Approved

Packaged indirect fired Outdoor MAU	Thermo Tek	Not Approved
Ductless Fan Coil Units	Mitsubishi	Approved
Electric Unit Heaters	Berko	Approved
Thermometers	Winters	Approved
Hydronic Piping Specialties	IFC	Approved
Expansion Tanks, Air Separators	Grundfos	Approved
Hydronic Heat Exchangers	Alfa Laval	Approved

AIR HANDLER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	AIR SUPPLY AIRFLOW (CFM)	COMPONENTS FANS	COMPONENTS COILS	ELECTRICAL LIGHTING AND OUTLET VOLT/PH/HZ	PHYSICAL CABINET LENGTH/ WIDTH/HEIGHT (IN)	PHYSICAL WEIGHT (LB)	NOTES
RTU-1	DAIKIN OAH071GBCM	AREA A,B	32403	SF-RTU-1, RF-RTU-1	CC-RTU-1, HC-RTU-1	120/1/60	420/136/100	1667	1,2
RTU-2	DAIKIN OAH082GBCM	AREA A,B	37205	SF-RTU-1, RF-RTU-2	CC-RTU-2, HC-RTU-2	120/1/60	426/136/112	1814	1,2
RTU-3	DAIKIN OAH082GBCM	AREA C	34705	SF-RTU-1, RF-RTU-3	CC-RTU-3, HC-RTU-3	120/1/60	424/136/112	1814	1,2
RTU-4	DAIKIN OAH045GBCM	AREA D	21240	SF-RTU-1, RF-RTU-4	CC-RTU-4, HC-RTU-4	120/1/60	398/106/84	1150	1,2
RTU-5	DAIKIN OAH008GBCM	AREA D	3290	SF-RTU-1, RF-RTU-5	CC-RTU-5, HC-RTU-5	120/1/60	326/58/40	417	1,2
RTU-6	DAIKIN OAH021GBCM	AREA D	8856	SF-RTU-1, RF-RTU-6	CC-RTU-6, HC-RTU-6	120/1/60	356/82/58	681	1,2
RTU-7	DAIKIN OAH025GBCM	AREA E	10555	SF-RTU-1, RF-RTU-7	CC-RTU-7, HC-RTU-7	120/1/60	354/76/72	700	1,2
RTU-8	DAIKIN OAH018GBCM	AREA F	8425	SF-RTU-1, RF-RTU-8	CC-RTU-8, HC-RTU-8	120/1/60	364/80/52	671	1,2
RTU-9	DAIKIN OAH071GBCM	AREA F	30000	SF-RTU-1, RF-RTU-9	CC-RTU-9, HC-RTU-9	120/1/60	418/136/100	1723	1,2
RTU-10	DAIKIN OAH020GBCM	AREA F	8695	SF-RTU-1, RF-RTU-10	CC-RTU-10, HC-RTU-10	120/1/60	348/76/60	653	1,2

1. UNIT COMPLETE WITH 2" FILTERS.
2. UNIT COMPLETE WITH 20" SEISMIC CURB AND EBTRON AIR FLOW MEASURING STATION ON THE OUTSIDE AIR INLET.

AIR SEPARATOR SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID FLOW (GPM)	FLUID WORKING FLUID	FLUID HEAD LOSS (FT)	FLUID SYSTEM PRESSURE (PSIG)	PHYSICAL DIA./ HEIGHT (IN)	NOTES
AS-CHW-01	TACO AC08F-125	CHILLER ROOM C112	TANK, INLINE, STRAINER	1037.8	30% P GLY	3	60	20/45.5	1
ASHW-1	TACO 4908AD-125	BOILER ROOM D135	TANK, HIGH EFF, AIR/DIRT	662.9	30% P GLY	3	60	18/41.5	1

1. ASME CERTIFIED

MAKE-UP AIR HANDLER UNIT SCHEDULE

ID	MANUFACTURER	MODEL NO	LOCATION	OUTSIDE AIR FLOW RATE (CFM)	EXTERNAL STATIC PRESSURE DROP (IN H20)	HEATING ENTER/ LEAVING AIR TEMP. DB (DEG. F)	HEATING INPUT HEATING LOAD (MBH)	HEATING OUTPUT HEATING LOAD (MBH)	HEATING FUEL TYPE	MAX DIMENSIONS L x W x H (IN)	MAX OPERATING WEIGHT (LBS)	EVAP COOLER	MOTOR HP	MOTOR VOLT/PH/HZ	NOTES
MAU-1	GREENHECK	IGX-P116-H22-MF	KITCHEN	2981	0.75	-20	287.7	233.1	NAT GAS	133 X 44 X 45	1700	YES	1.5	460/3/60	(1)(2)(3)(4)(5)(6)
MAU-2	GREENHECK	IGX-P116-H22-MF	KITCHEN	2981	0.75	-20	287.7	233.1	NAT GAS	133 X 44 X 45	1700	YES	1.5	460/3/60	(1)(2)(3)(4)(5)(6)

(1) ALL CAPACITIES BASED AT A 4000 FEET ELEVATION.
(2) UNIT COMPLETE WITH 18" SPRING VIBRATION ISOLATED ROOF CURB. MATCH ROOF CURB TO SUPPORT UNIT.
(3) SUPPLIED WITH VENT CAP AND COMBUSTION AIR OPENING.
(4) INTERLOCK UNIT WITH KITCHEN HOOD CONTROL PANEL, DIV. 26.
(5) EQUIPPED WITH FACTORY MOUNTED STARTER & DISCONNECT.
(6) TYPE UNIT: 100% OUTSIDE AIR ROOFTOP MAKE-UP AIR HANDLING UNIT, COMPLETE WITH THE FOLLOWING OPTIONS:
A) DOWN DISCHARGE PLENUM.
B) STAINLESS STEEL HEAT EXCHANGER.
C) MODULATING GAS VALVE DOWN TO 30% AND DUCT TEMPERATURE SENSOR. SET TEMPERATURE SENSOR AT 65 DEG.F LEAVING AIR TEMPERATURE.
D) EVAPORATIVE COOLER TO BLOWER FAN TRANSITION.
E) FACTORY MOUNTED DISCONNECT.

HYDRONIC BOILER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FUEL TYPE	FLUID MINIMUM INPUT LOAD (BTU/H)	FLUID MINIMUM INPUT FLOW (CFH)	FLUID OUTPUT LOAD (BTU/H)	FLUID FLOW RATE (GPM)	FLUID ENTERING/ LEAVING TEMP. (°F)	FLUID WORKING FLUID	FLUID HEAD LOSS (FT)	ELECTRICAL MOTOR QUAN.	ELECTRICAL MOTOR SIZE (HP)	ELECTRICAL MOTOR VOLT/PH/HZ	ELECTRICAL CONTROL CIRCUIT VOLT/PH/HZ	PHYSICAL STACK DIAMETER (IN)	PHYSICAL LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
B-1	CLEAVER-BROOKS CFC-E 5000	BOILER ROOM D135	COND, FORCED, DUAL RET	NAT GAS	5000000	5000	4400000	282.4	126.7/160	30% P GLY	5	1	10.73	460/3/60	120/1/60	1@14	80.6/58.7/93.6	1
B-2	CLEAVER-BROOKS CFC-E 5000	BOILER ROOM D135	COND, FORCED, DUAL RET	NAT GAS	5000000	5000	4400000	282.4	126.7/160	30% P GLY	5	1	10.73	460/3/60	120/1/60	1@14	80.6/58.7/93.6	1

1. ASME CERTIFIED

CHEMICAL FEED SYSTEM SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID WORKING FLUID	FLUID TOTAL VOLUME (GAL)	FLUID STATIC FILL PRESSURE (PSIG)	FLUID PRESSURE RATING (PSIG)	ELECTRICAL VOLT/PH/HZ	ELECTRICAL ALARM PANEL	PHYSICAL LENGTH/ WIDTH/ HEIGHT (IN)	PHYSICAL NPT FITTING (IN)	PHYSICAL TANK SIZE (GAL)	NOTES
CWT-01	WEST CONDENSER WATER TREATMENT	CHILLER ROOM C112	CHEMICAL FEEDER	WATER	1688.4	4	0	120/1/60	-----	108/36/66	1	50	1-3

1. PROVIDE THREE DOUBLE WALL CONTAINMENT POLY TANKS; (1) SCALE INHIBITOR, (2) BIOCIDE, ONE INJECTION PUMP PER TANK MOUNTED ON SS SHELF ABOVE TANKS
2. WALL MOUNTED CONTROLLER. SOLIDS SEPARATOR BLOW DOWN SHALL BE CONTROLLED BY TOWER TREATMENT CONTROLLER
3. ESTIMATED WEIGHT: 50 LBS.

WATER-COOLED CHILLER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	REFRIG.	LOAD (TONS)	FLUID DESCRIPTION	FLUID FLOW RATE (GPM)	FLUID ENTERING/ LEAVING TEMP. (°F)	FLUID WORKING FLUID	FLUID HEAD LOSS (FT)	ELECTRICAL MAX KW	ELECTRICAL TOTAL MCA	ELECTRICAL TOTAL MOCP	ELECTRICAL MAXIMUM UNIT EFFICIENCY (KW/TON)	ELECTRICAL EFFICIENCY RATING	CHILLER AND CONTROL CIRCUIT VOLT/PH/HZ	PHYSICAL LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
CH-1	CARRIER 19MV-21L21K259E35	CHILLER RM	MAG BEARING	R513A	270	EVAPORATOR	686.9	54/44	30% P GLY	18.2	150	252	450	0.542	0.5330 (NPLV)	460/3/60 - 120/1/60	158/52/100	1-7
						CONDENSER	749	80/90	WATER	14.6								

1. WITH FACTORY SOUND ATTENUATION, STARTER AND DISCONNECT
2. UNIT WITH MODULATION CAPACITY DOWN TO 15% OF MAXIMUM LOAD AND RUN AT 55 CHWS AND 59 CHWR
3. UNIT WITH FACTORY VSD/DISCONNECT, FILTER, BACNET NETWORK INTERFACE CARD
4. MINIMUM EVAPORATOR FLOW = 350 GPM, CONDENSER = 375.4 GPM.
5. UNIT COMPLETE WITH ECONOMIZER.
6. UNIT WITH INLET GUIDE VANES, VFD AND MAGNETIC BEARING COMPRESSORS
7. PROVIDE WITH MARINE BOX ON CONDENSER WATER INLET.

AIR HANDLER HYDRONIC COIL SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	USAGE	AIR AIRFLOW RATE (CFM)	AIR LOAD (BTU/H)	AIR SENSIBLE LOAD (BTU/H)	AIR ENTERING TEMP. DB/WB (°F)	AIR LEAVING TEMP. DB/WB (°F)	AIR STATIC PRESSURE (IN. H2O)	HYDRONIC FLOW RATE (GPM)	HYDRONIC ENTERING/ LEAVING TEMP. (°F)	HYDRONIC WORKING FLUID	HYDRONIC HEAD LOSS (FT)	PHYSICAL COILS NO.	PHYSICAL MINIMUM FACE AREA (FT²)	PHYSICAL MINIMUM NO. ROWS/ FINS PER INCH	NOTES
CC-RTU-1	DAIKIN	RTU-1	COOLING	32403	992870	889533	81.8/62.2	51.8/50.6	0.57	170.7	42/54.1	30% P GLY	16.3	2	66.62	6/10	
CC-RTU-2	DAIKIN	RTU-2	COOLING	37205	1131106	1005771	81.4/62.2	51.9/50.7	0.56	194.1	42/54.2	30% P GLY	15.8	2	76.88	6/10	
CC-RTU-3	DAIKIN	RTU-3	COOLING	34705	1063615	965902	82.5/62.2	52.1/50.6	0.47	187.6	42/53.8	30% P GLY	14.9	2	76.88	6/9	
CC-RTU-4	DAIKIN	RTU-4	COOLING	21240	720509	620259	83.8/63.7	51.9/51.2	0.67	127.5	42/53.8	30% P GLY	10.2	2	42.62	6/12	
CC-RTU-5	DAIKIN	RTU-5	COOLING	3290	93487	81263	79/61.8	52/51.1	0.46	15.9	42/54.2	30% P GLY	12.5	1	7.5	5/12	
CC-RTU-6	DAIKIN	RTU-6	COOLING	8856	278770	246816	82.3/62.6	51.9/50.8	0.46	47.5	42/54.2	30% P GLY	14.6	1	20.12	5/12	
CC-RTU-7	DAIKIN	RTU-7	COOLING	10555	262590	240695	76.6/60	51.7/50.3	0.46	46.8	42/53.7	30% P GLY	9.7	2	23.62	6/9	
CC-RTU-8	DAIKIN	RTU-8	COOLING	8425	257842	235773	82.4/62	51.8/50.4	0.62	44.8	42/54	30% P GLY	12.3	1	16.75	8/7	
CC-RTU-9	DAIKIN	RTU-9	COOLING	30000	933250	830187	82.4/62.5	52.2/50.8	0.46	165.3	42/53.8	30% P GLY	15.3	2	66.62	6/9	
CC-RTU-10	DAIKIN	RTU-10	COOLING	8695	245623	229421	80.6/61	51.8/50.1	0.5	43.8	42/53.7	30% P GLY	14	1	18.38	6/9	
HC-RTU-1	DAIKIN	RTU-1	HEATING	23885	451084	451084	39.5	60.1	0.09	23.6	160/119.8	30% P GLY	3.3	2	65	1/8	
HC-RTU-2	DAIKIN	RTU-2	HEATING	32960	691642	691642	37.4	60.3	0.12	35.9	160/119.4	30% P GLY	6.3	2	70	1/11	
HC-RTU-3	DAIKIN	RTU-3	HEATING	27108	703424	703424	31.5	59.8	0.19	37.2	160/120.2	30% P GLY	4.5	2	70	1/12	
HC-RTU-4	DAIKIN	RTU-4	HEATING	21240	578538	578538	30.6	60.3	0.14	30.1	160/119.5	30% P GLY	1.5	2	41.25	2/7	
HC-RTU-5	DAIKIN	RTU-5	HEATING	3290	28421	28421	50.6	60	0.14	2	160/129.9	30% P GLY	0.2	1	4.38	1/7	
HC-RTU-6	DAIKIN	RTU-6	HEATING	8230	190387	190387	34.6	59.9	0.07	10	160/119.9	30% P GLY	3.6	1	19.25	1/7	
HC-RTU-7	DAIKIN	RTU-7	HEATING	6950	76391	76391	50	62	0.11	4.3	160/122.5	30% P GLY	0.3	1	16.25	1/6	
HC-RTU-8	DAIKIN	RTU-8	HEATING	4645	144102	144102	26.7	60.6	0.13	7.1	160/117.4	30% P GLY	2.7	1	16	1/6	
HC-RTU-9	DAIKIN	RTU-9	HEATING	30000	1450254	1450254	36.8	89.6	0.15	76.8	160/120.3	30% P GLY	3	2	65	2/10	
HC-RTU-10	DAIKIN	RTU-10	HEATING	8540	353636	353636	44.5	89.7	0.17	19.3	160/121.5	30% P GLY	3.3	1	17.5	2/9	

CONDENSATE NEUTRALIZER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	QTY	TYPE	CONDENSATE DEVICE INPUT LOAD (BTUI/H)	CONDENSATE DEVICE EFFICIENCY (%)	PHYSICAL LENGTH/ WIDTH/ HEIGHT (IN)	PHYSICAL NPT FITTING (IN)	NOTES
CN-1	AXIOM NT25	BOILER ROOM D135	1	STANDARD	5000000	96	17.5/13.5/8	1	
CN-2	AXIOM NT25	BOILER ROOM D135	1	STANDARD	5000000	96	17.5/13.5/8	1	

COOLING TOWER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FAN AIRFLOW (CFM)	AMBIENT TEMP. DB/WB (°F)	FLUID FLOW RATE (GPM)	FLUID ENTERING/ LEAVING TEMP. (°F)	FLUID WORKING FLUID	FLUID INLET/ OUTLET HEAD LOSS (FT)	ELECTRICAL, FAN MOTOR QUAN.	ELECTRICAL, FAN MOTOR SIZE (HP)	ELECTRICAL, FAN MOTOR SPEED (RPM)	ELECTRICAL, FAN TOWER AND CONTROL CIRCUIT VOLT/PH/HZ	PHYSICAL OPERATING WEIGHT (LB)	PHYSICAL LENGTH/ WIDTH/ HEIGHT (IN)	NOTES
CT-01 CELL A	EVAPCO AT 19-2J9	MECH. YARD	OPEN, COUNTERFLOW, AXIAL	50800	95/96	810	90/80	WATER	5	1	15	1750	460/3/60 - 120/1/60	7090	107.5/101.5/140.4	1-7

1. UNIT PROVIDED WITH LOW SOUND FAN.
2. BASIN SHALL BE ALL 304 STAINLESS STEEL CONSTRUCTION.
3. PROVIDE BASIN PLATFORM, LADDERS, LADDER EXTENSIONS AS REQUIRED.
4. PROVIDE WITH VIBRATION SWITCHES.
5. UNIT COMLPETE WITH A 10 KW, 480V/3PH SUMP HEATER. PROVIDE TRANSFORMER FOR A CONTROL CIRCUIT AT 120V/1PH.
6. TOWER SITS ON SUPPORT. SEE STRUCTURAL DRAWINGS.
7. UNIT COMPLETE WITH SUMP SWEEPER PIPING, MINIMUM SWEEPER FLOW RATE 89 GPM AT 20 PSI.

GRILLES, REGISTERS AND DIFFUSERS

ID	MANUFACTURER	MODEL	MAX NC	DESCRIPTION
CD-1	PRICE	SPD	30	SQUARE PLAQUE FACE CEILING DIFFUSERS. REMOVABLE FACE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. COLOR AND FINISH AS SELECTED BY ARCHITECT FROM STANDARD COLORS
CD-2	PRICE	SDS 100	30	2 SLOT LINEAR CEILING DIFFUSER WITH FULLY ADJUSTABLE AIR PATTERN AND FLOW CONTROL VANES FOR ONE OR TWO WAY THROW PATTERN. UNITS SHALL HAVE 1" SLOTS AND INSULATED PLENUM WITH ROUND DUCT CONNECTION. FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED. UNIT SHALL BE CURVED FACE FOR EXPOSED DUCT MOUNTING AS REQUIRED.
CD-3	PRICE	SDS 100	30	3 SLOT LINEAR CEILING DIFFUSER WITH FULLY ADJUSTABLE AIR PATTERN AND FLOW CONTROL VANES FOR ONE OR TWO WAY THROW PATTERN. UNITS SHALL HAVE 1" SLOTS AND INSULATED PLENUM WITH ROUND DUCT CONNECTION. FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED. UNIT SHALL BE CURVED FACE FOR EXPOSED DUCT MOUNTING AS REQUIRED.
CD-4	PRICE	SDS 100	30	4 SLOT LINEAR CEILING DIFFUSER WITH FULLY ADJUSTABLE AIR PATTERN AND FLOW CONTROL VANES FOR ONE OR TWO WAY THROW PATTERN. UNITS SHALL HAVE 1" SLOTS AND INSULATED PLENUM WITH ROUND DUCT CONNECTION. FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED. UNIT SHALL BE CURVED FACE FOR EXPOSED DUCT MOUNTING AS REQUIRED.
DL-1	PRICE	HCD1	25	DRUM LOUVER SUPPLY GRILLE WITH ROTATABLE DRUM HAVING MECHANISM TO FIX DRUM ANGLE, VARIABLE VOLUME, STEEL FRAME, ALUMINUM VANES AND DRUM. MOUNTING FRAME C/W COUNTER SUNK HOLES FOR DUCT MOUNTING. ADJUSTABLE THROUGH 60 DEGREES.
DL-2	PRICE	HCD1	25	EXTERNAL INSULATED WEATHERPROOF ALUMINUM CONSTRUCTION, OTHER ARCHITECTURAL
RG-1	PRICE	PDDR	30	PERFORATED FACE RETURN AIR UNIT, REMOVABLE FACE & CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. AIR QUANTITY SHALL MATCH ROOM SUPPLY OR EXHAUST AIR QUANTITY. COLOR AND FINISH AS SELECTED BY ARCHITECT.
RG-2	PRICE	90	30	HEAVY DUTY RETURN GYM GRILLE. PERFORATED FACE RETURN AIR UNIT, REMOVABLE FACE & CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. STEEL OPPOSED BLADE DAMPER. INCLUDING 30° BLADE DEFLECTION.
EG-1	PRICE	80	30	CRATE TYPE CEILING EXHAUST AIR UNIT, WITH OBD. REMOVABLE FACE AND CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. UNITS SHALL HAVE 1/2" x 1/2" x 1/2" SQUARES.
SWE-1	PRICE	535	30	SIDEWALL RETURN AIR GRILLE. HORIZONTAL STATIONARY 45° DEFLECTION VANES SET ON 1/2 INCH CENTER. C/R. COLOR AND FINISH AS SELECTED BY ARCHITECT
SWR-1	PRICE	535	30	SIDEWALL RETURN AIR GRILLE. HORIZONTAL STATIONARY 45° DEFLECTION VANES SET ON 1/2 INCH CENTER. COLOR AND FINISH AS SELECTED BY ARCHITECT
SWS-1	PRICE	520	30	DOUBLE DEFLECTION HIGH SIDEWALL SUPPLY REGISTER. VERTICAL FRONT WITH HORIZONTAL REAR DEFLECTION ADJUSTABLE VANES SPACED AT 3/4 INCH O.C. COMPLETE WITH OBD AND REMOVABLE CORE. COLOR AND FINISH AS SELECTED BY ARCHITECT.
SWS-2	PRICE	HCD1	30	DRUM LOUVER SUPPLY GRILLE WITH ROTATABLE DRUM HAVING MECHANISM TO FIX DRUM ANGLE, VARIABLE VOLUME, STEEL FRAME, ALUMINUM VANES AND DRUM. MOUNTING FRAME C/W COUNTER SUNK HOLES FOR DUCT MOUNTING. ADJUSTABLE THROUGH 60 DEGREES.

1. PROVIDE CD-1 FOR ALL CEILING SUPPLY DIFFUSERS UNLESS NOTED OTHERWISE.
2. PROVIDE RG-1 FOR ALL CEILING RETURN GRILLES UNLESS NOTED OTHERWISE.
3. PROVIDE EG-1 FOR ALL CEILING EXHAUST GRILLES UNLESS NOTED OTHERWISE.

EXPANSION TANK SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID WORKING FLUID	FLUID MIN. TANK/ ACCEPTANCE VOLUME (GAL)	FLUID MINIMUM FILL PRESSURE (PSIG)	FLUID MAXIMUM WORKING PRESSURE (PSIG)	FLUID RELIEF VALVE PRESSURE (PSIG)	PHYSICAL TANK SIZE (GAL)	PHYSICAL DIA./ HEIGHT (IN)	PHYSICAL NPT FITTING (IN)	NOTES
ET-CHW-01	TACO CA300-125	CHILLER ROOM C112	VERT, BLADDER, FULL	30% P GLY	64.3/33.8	19.2	54	60	79	24/59	1.5	1
ET-HW-1	TACO CA800-125	BOILER RROM D135	VERT, BLADDER, FULL	30% P GLY	192.9/101.3	19.2	54	60	211	30/89	1.5	1

1. ASME CERTIFIED

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79S NORTH 400 WEST
LOGAN, UT 84321
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VBFA Project #: 23717

HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

DESCRIPTION: Addendum 3 / Addendum 5
DATE: 5-1-2024 / 5-29-2024
MARK: 1 / 2

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

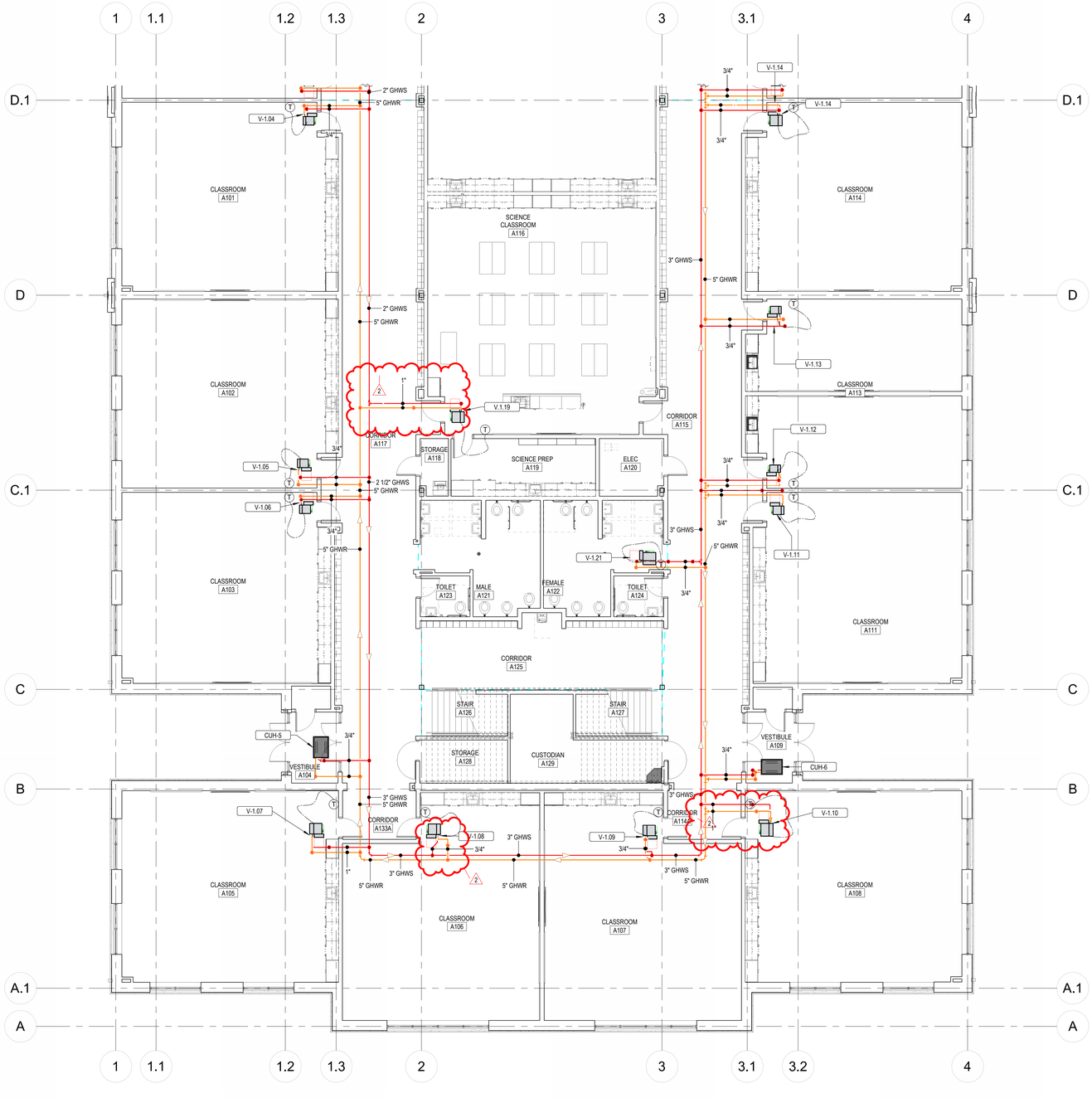
LICENSED PROFESSIONAL ENGINEER
No. 6380445-2202
MECHANICAL ONLY
STATE OF UTAH

CONSTRUCTION DOCUMENTS

MECHANICAL SCHEDULES
M-601

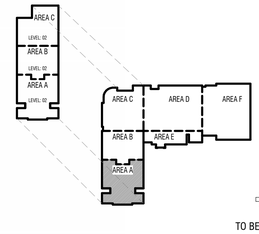
D:\2023\11\19 AM

KEYNOTES



1 MP-111.A MECHANICAL PIPING PLAN - LEVEL 01 - AREA A
1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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255 SOUTH 300 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

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VBFA Project #: 23717

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
1	5-15-2024	Addendum 3
2	5-28-2024	Addendum 5

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

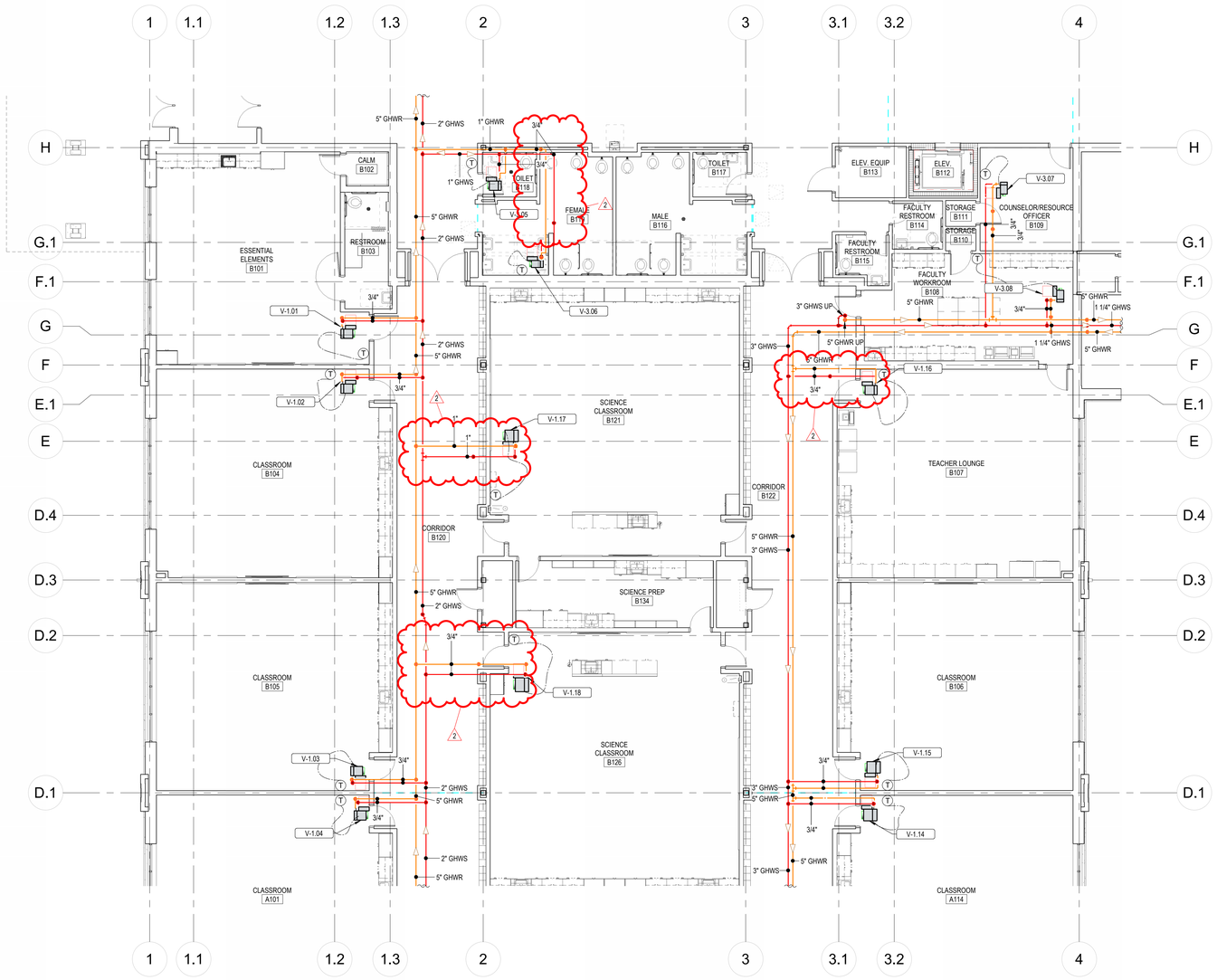
LICENSED PROFESSIONAL ENGINEER
No. 8389445-2202
JEDEDIAH L. WINKLER
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 01 - AREA A

MP-111.A

5/28/2024 10:56:28 AM

KEYNOTES



1 MP-111.B MECHANICAL PIPING PLAN - LEVEL 01 - AREA B
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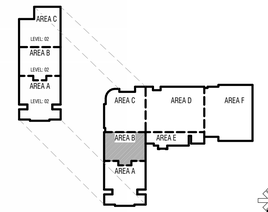
KEY PLAN



TO BE determined

CONSTRUCTION DOCUMENTS

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255 SOUTH 200 WEST LOGAN, UT 84321
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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
2	5-28-2024	Addendum 5

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

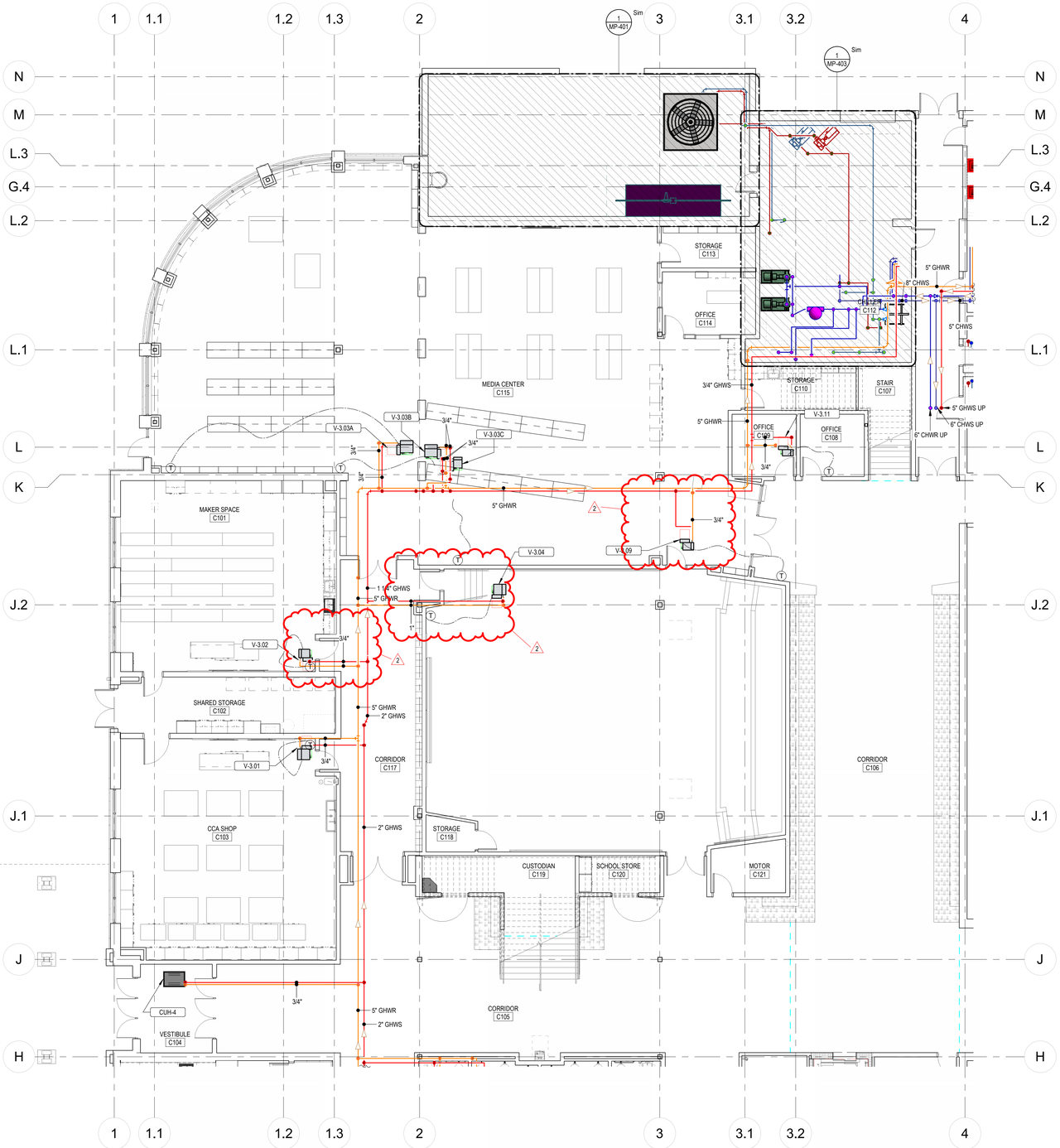
LICENSED PROFESSIONAL ENGINEER
No. 8386645-2202
MICHEDIAN L. JOHNSON
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 01 - AREA B

MP-111.B

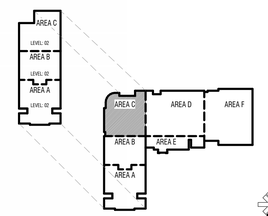
5/28/2024 10:58:32 AM

KEYNOTES



1 MP-111.C MECHANICAL PIPING PLAN - LEVEL 01 - AREA C
1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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VBFA Project #: 23717

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
1	5-15-2024	Addendum 3
2	5-28-2024	Addendum 5

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

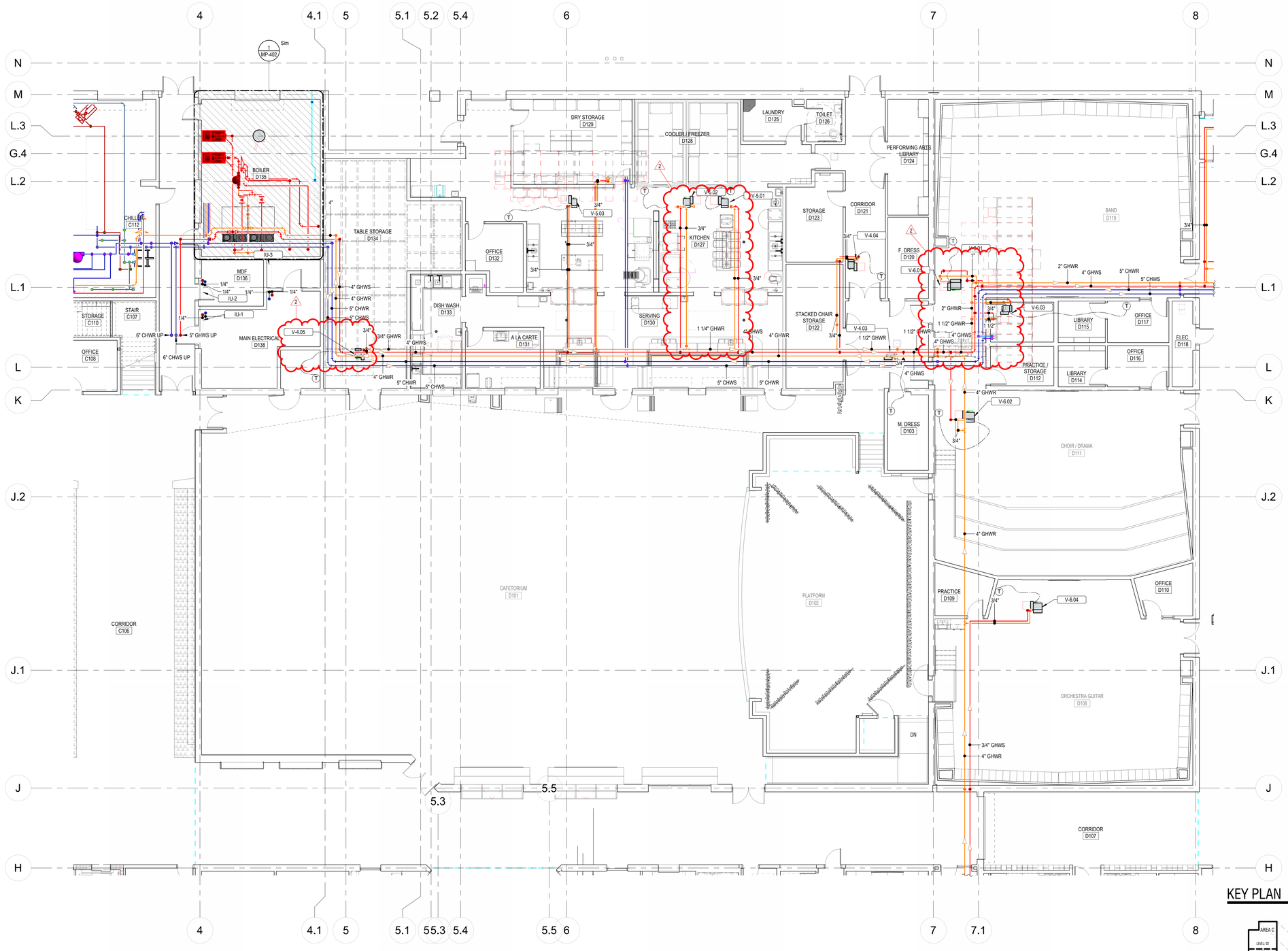
LICENSED PROFESSIONAL ENGINEER
No. 8386445-2202
MEDIAN L. WHITE
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 01 - AREA C

MP-111.C

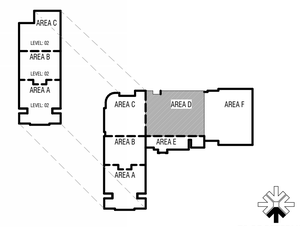
5/28/2024 10:55:04 AM

KEYNOTES



1 MP-111.D MECHANICAL PIPING PLAN - LEVEL 01 - AREA D
1/8" = 1'-0"

KEY PLAN



TO BE determined

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
2	5-28-2024	Addendum 5

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

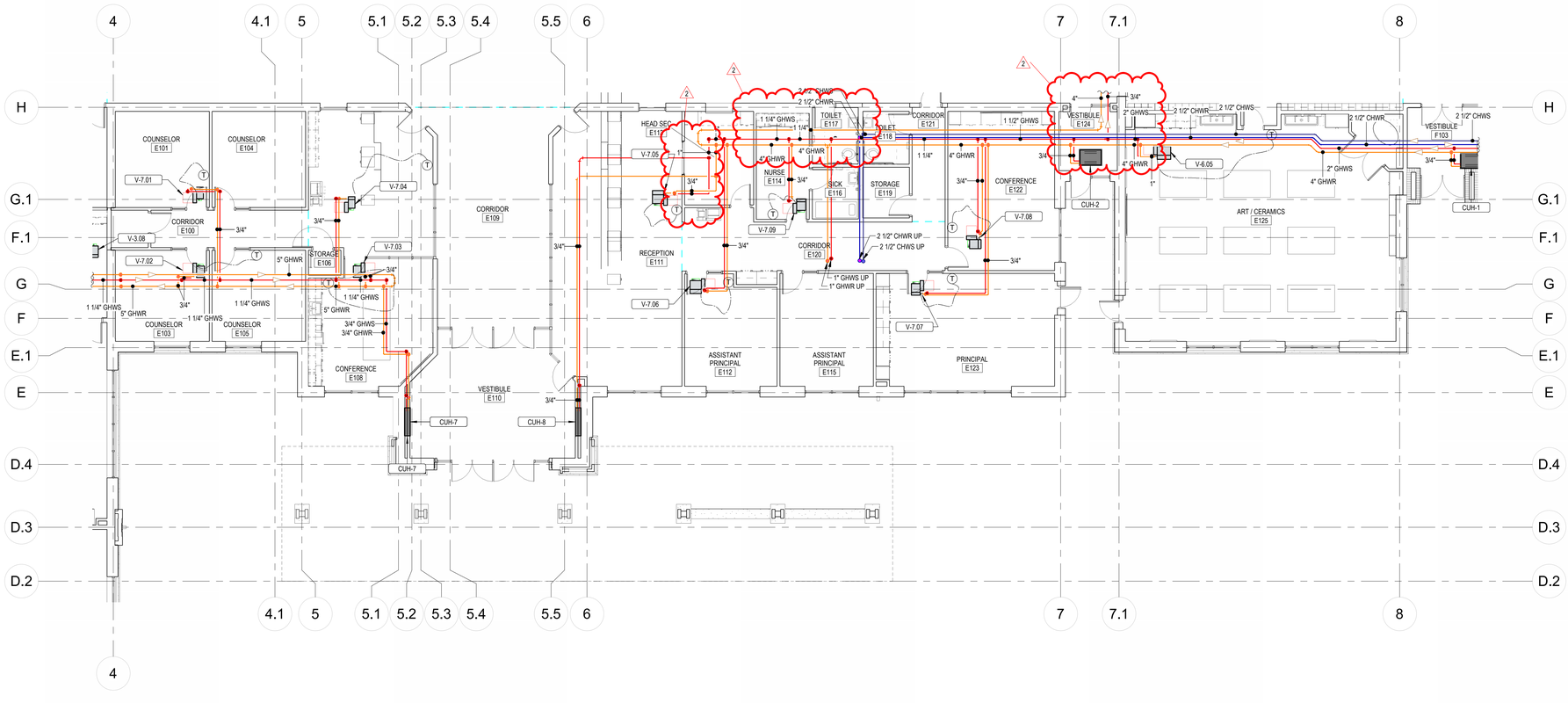
LICENSED PROFESSIONAL ENGINEER
No. 8386445-2202
MEREDIAN L. ZENFORD
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 01 - AREA D

MP-111.D

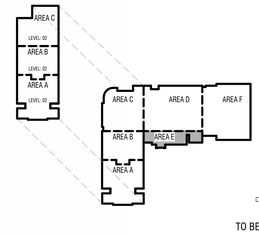
5/28/2024 10:58:03 AM

KEYNOTES



1 MP-111.E MECHANICAL PIPING PLAN - LEVEL 01 - AREA E
1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST
795 NORTH 400 WEST
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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
2	5-28-2024	Addendum 5

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8389445-2202
JACOBIAN L. WINKLER
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 01 - AREA E

MP-111.E

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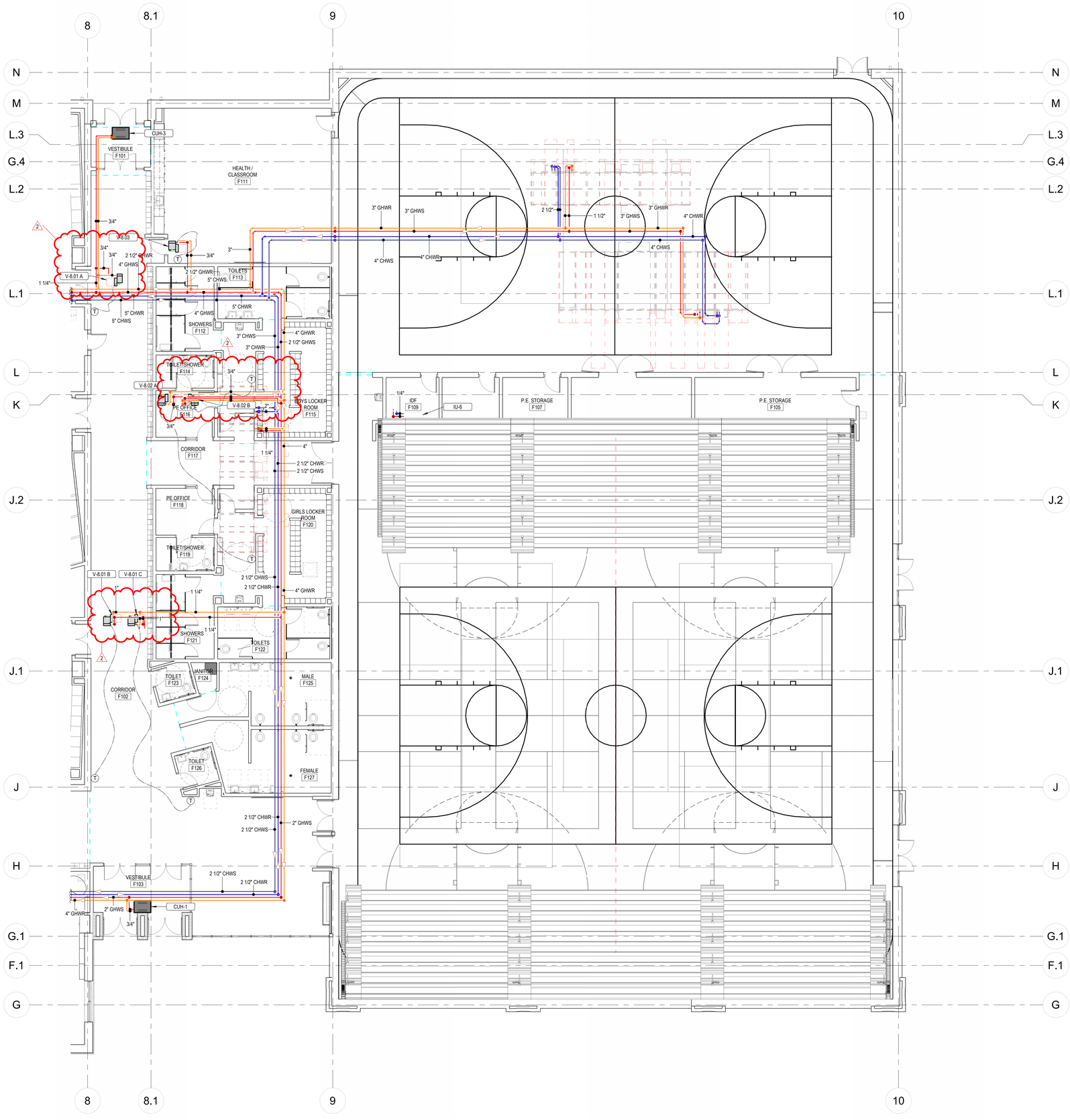
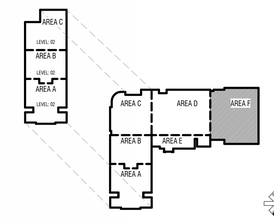


KEYNOTES

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

1 MP-111.F MECHANICAL PIPING PLAN - LEVEL 01 - AREA F
1/8" = 1'-0"

5/28/2024 10:06:12 AM

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
2	5-28-2024	Addendum 5

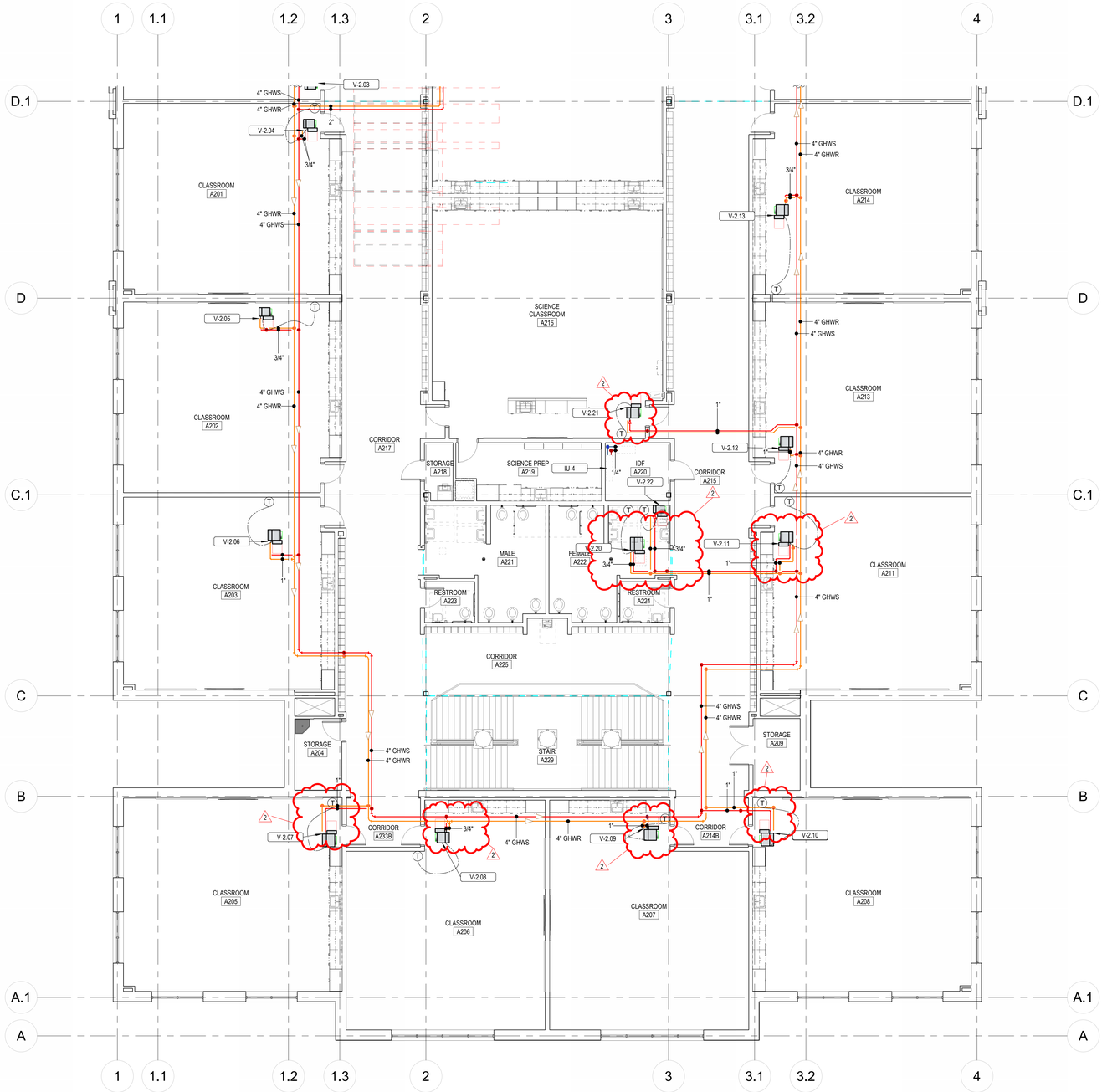
PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8389445-2202
LOREDIAN L. WARNER
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 01 - AREA F

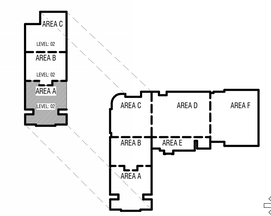
MP-111.F

KEYNOTES



1 MP-112.A MECHANICAL PIPING PLAN - LEVEL 02 - AREA A
1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
2	5-28-2024	Addendum 5

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

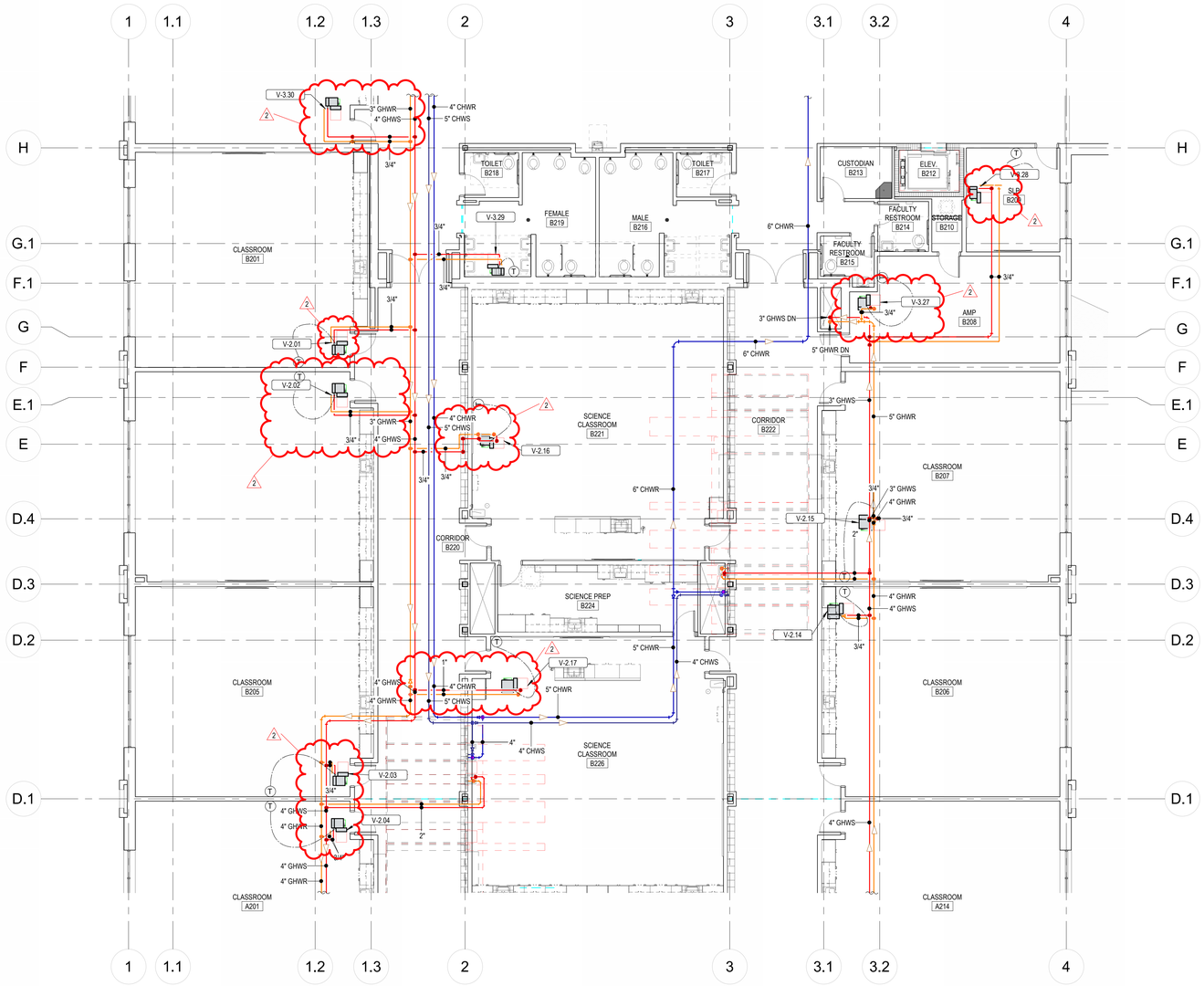
LICENSED PROFESSIONAL ENGINEER
No. 8386445-2202
CHEDIAH L. LOWDER
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 02 - AREA A

MP-112.A

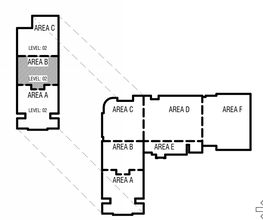
5/28/2024 10:06:19 AM

KEYNOTES



1 MP-112.B MECHANICAL PIPING PLAN - LEVEL 02 - AREA B
1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
2	5-28-2024	Addendum 5

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

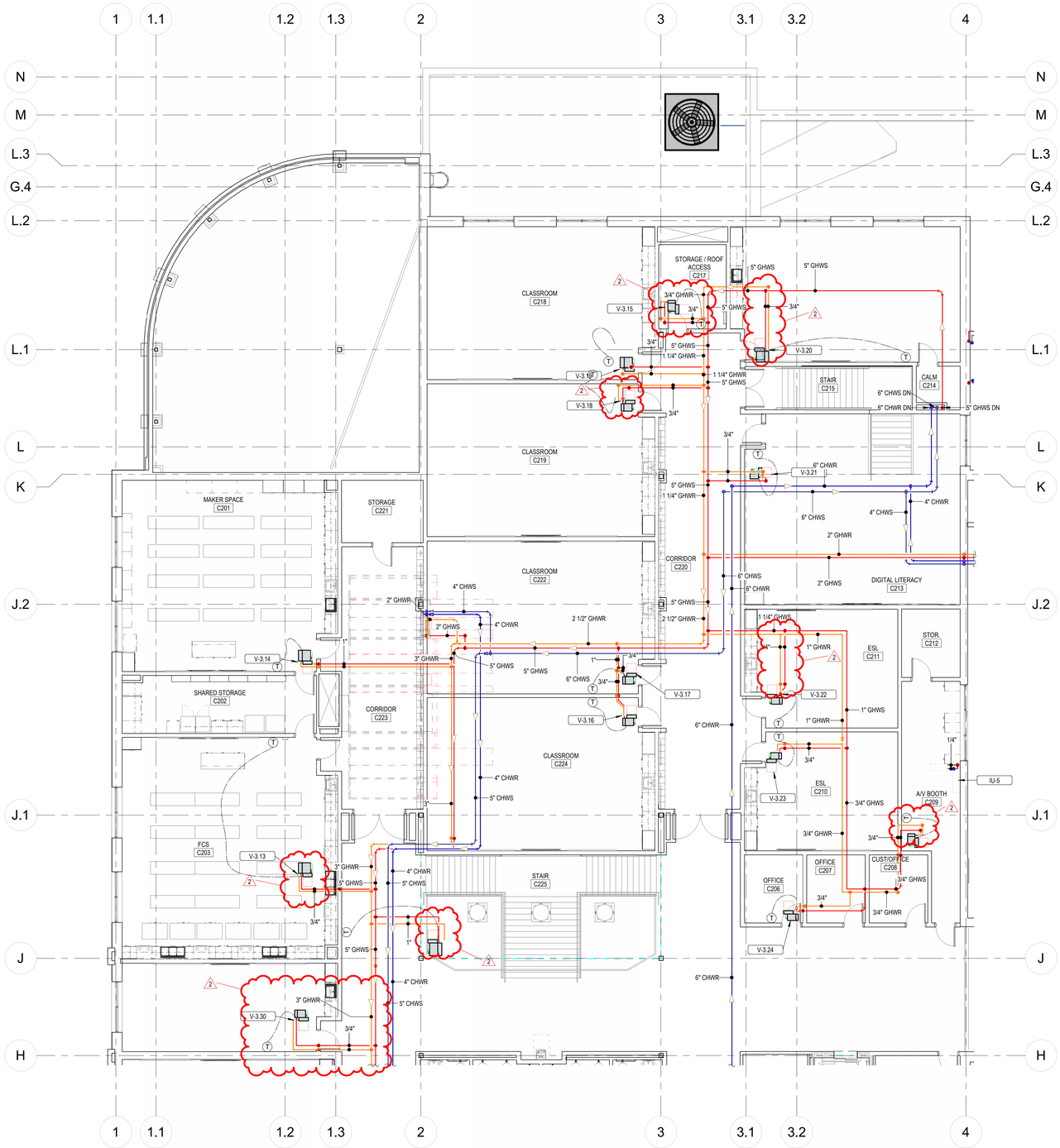
LICENSED PROFESSIONAL ENGINEER
No. 8386445-2202
JACOB DIAN L. WARNER
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 02 - AREA B

MP-112.B

5/28/2024 10:58:22 AM

KEYNOTES



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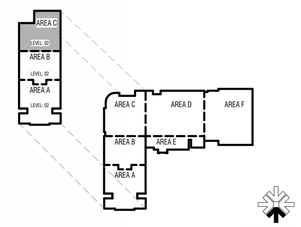

TO BE DETERMINED

1 MP-112.C MECHANICAL PIPING PLAN - LEVEL 02 - AREA C
1/8" = 1'-0"

CONSTRUCTION DOCUMENTS

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VBFA Project #: 23717

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
1	5-15-2024	Addendum 3
2	5-28-2024	Addendum 5

PROJECT #: 23717
DRAWN BY: Author
CHECKED BY: LW
ISSUED: 05/02/2024

LICENSED PROFESSIONAL ENGINEER
No. 8366445-2202
JEDEDIAH L. LOWDER
STATE OF UTAH

MECHANICAL PIPING PLAN - LEVEL 02 - AREA C

MP-112.C

5/28/2024 10:04:24 AM

ENVISION ENGINEERING

ELECTRICAL ADDENDUM

ADDENDUM #05

To:	Stephen Williams, AIA, NCARB	**From:**	Philip Borup
Company:	Design West Architects	**Phone:**	801-534-1130
Date:	05/28/2024		
Project	Hyde Park Middle School	**Project #:**	2023-268

Specifications:

26 0110 Conduit Raceways: Section 2.4 has been added as follows:

2.4 COLORS:

A. Provide colored conduit for each system as follows:

1. 120/208V Power – Yellow
2. 277/480V Power – Orange
3. Data – Blue
4. CCTV – Blue
5. Intercom – Blue
6. Wireless Access Points – Blue
7. Fire Alarm – Red

B. Standard silver conduits can be used in open ceilings where they will be painted to match the color of the ceiling.

27 1500 Communications Horizontal Cabling

1. Leviton has been added as an approved manufacturer for UTP cabling.
2. Tyco has been removed from the UTP cable hardware. Leviton is the only approved manufacturer for UTP cable hardware.

Approved Bidders:

1. Approved lighting controls have changed back to how they were in the bid set. Lutron is the only approved manufacturer. Wattstopper and others will be allowed to bid as an unapproved system. Those manufacturers will be reviewed by the district at bid time. The cost for each lighting control manufacturer is to be broken out separately on the bid form.

Drawings:

E-101 – Site Plan – Electrical:

1. AF2 fixtures at monument sign have been deleted. An additional pull box was added at the monument sign with conduit back to the electrical room for future power.

E-111 – Level 1 – Area A – Lighting:

1. Exterior wall packs have been adjusted. See plans for more information.

E-112 – Level 1 – Area B – Lighting:

1. Exterior wall packs have been adjusted. See plans for more information.

E-113 – Level 1 – Area C – Lighting:

1. Exterior wall packs have been adjusted. See plans for more information.

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info@envisioneng.com

E-115 – Level 1 – Area E – Lighting:
1. Exterior wall packs have been adjusted. See plans for more information.

E-121 – Level 2 – Area A – Lighting:
1. Circuit and relay added to flag flood light.

E-132 – Cafetorium Theatrical Lighting Plan:
1. Changed two switch stations to touchscreens and added switch stations next to each of the four (4) entrances into the Cafetorium.

E-141 – Theatrical Lighting Riser:
1. Riser and schedules have been updated.

E-161 – Light Fixture Schedule:
1. LS5 and AF2 have been removed from the schedule, LP3 and LR2 have been updated and WP3 has been added.
2. Relay schedules have been updated.

E-211 – Level 1 – Area A - Power
1. Power to EF-14 has been added.

E-212 – Level 1 – Area B - Power
1. Power to split system has been removed from Elevator Equipment Room

E-213 – Level 1 – Area C - Power
1. Special outlet for AC-1 has been changed to a fused disconnect.

E-214 – Level 1 – Area D - Power
1. Power added for VAV box transformer in Storage D112.

E-215 – Level 1 – Area E - Power
1. Power to exhaust fan has added in Kiln room.

E-221 – Level 2 – Area A - Power
1. Power added for VAV box transformer in Classroom A206.

E-222 – Level 2 – Area B - Power
1. Power added for VAV box transformer in Corridor.

E-223 – Level 2 – Area C - Power
1. Power added for split system in AV Booth C209.

E-224 – Roof Plan – Overall - Power
1. Conduit through the roof added for emergency radio antenna.

E-231 – Enlarged Power Plans
1. Power added to a few pieces of Mechanical Equipment.

E-232 – Enlarged Kitchen Plan
1. Power added to electric unit heater in kitchen restroom.

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E-242 – Data Risers
1. Half rack in Storage E119 has been changed to a full floor mounted rack.
2. Equipment was removed from the 3rd rack in the MDF to make space for intercom equipment.
3. Drawings were changed to show only (1) 24-strand fiber is needed to each IDF.

E-314 – Level 1 – Area D – Fire Alarm
1. Wires for SLC circuiting have been shown.
2. See drawings for additional changes.

E-315 – Level 1 – Area E – Fire Alarm
1. Wires for SLC circuiting have been shown.
2. See drawings for additional changes.

E-316 – Level 1 – Area F – Fire Alarm
1. Wires for SLC circuiting have been shown.
2. See drawings for additional changes.

E-321 – Level 2 – Area A – Fire Alarm
1. Wires for SLC circuiting have been shown.
2. See drawings for additional changes.

E-322 – Level 2 – Area B – Fire Alarm
1. Wires for SLC circuiting have been shown.
2. See drawings for additional changes.

E-323 – Level 2 – Area C – Fire Alarm
1. Wires for SLC circuiting have been shown.
2. See drawings for additional changes.

E-332 – Fire Alarm Symbols and Notes
1. Fire Alarm Matrix has been updated.

E-411 – Level 1 – Area A – Systems:
1. Keyed notes have been added to cameras.

E-412 – Level 1 – Area B – Systems:
1. Keyed notes have been added to cameras.

E-413 – Level 1 – Area C – Systems:
1. Keyed notes have been added to cameras.

E-414 – Level 1 – Area D – Systems:
1. Keyed notes have been added to cameras.
2. Additional information has been provided for kitchen doorbell.

E-415 – Level 1 – Area E – Systems:
1. Keyed notes have been added to cameras.

E-421 – Level 2 – Area A – Systems:
1. Keyed notes have been added to cameras.

E-422 – Level 2 – Area B – Systems:
1. Keyed notes have been added to cameras.

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E-423 – Level 2 – Area C – Systems:

1. Keyed notes have been added to cameras.

E-442 – Security Detail & Risers

1. Details and CCTV scope have been updated.

E-531 – Audio Visual Sections & Elevations

1. Classroom connection plate elevations have been updated.

E-532 – AV Music Rooms - Sections & Elevations

1. Classroom connection plate elevations have been updated.

E-541 – Audio Visual Enlarged Plans – Typical Classrooms

1. Classroom connection plate elevations have been updated.

E-571 – AV Riser & Equipment List

1. Lightspeed DRQ has been added to list of approved classroom ceiling speakers.

E-573 – AV Riser & Equipment List

1. Audio system – Cafetorium – equipment list has been updated.

E-575 – AV Riser & Equipment List

1. Audio system – Cafetorium – equipment list has been updated.

E-615 – Level 1 – Area E - Intercom

1. New symbols have been added to the reception area..

E-671 – Intercom Riser & Equip List

1. Intercom system – school – equipment list has been updated.

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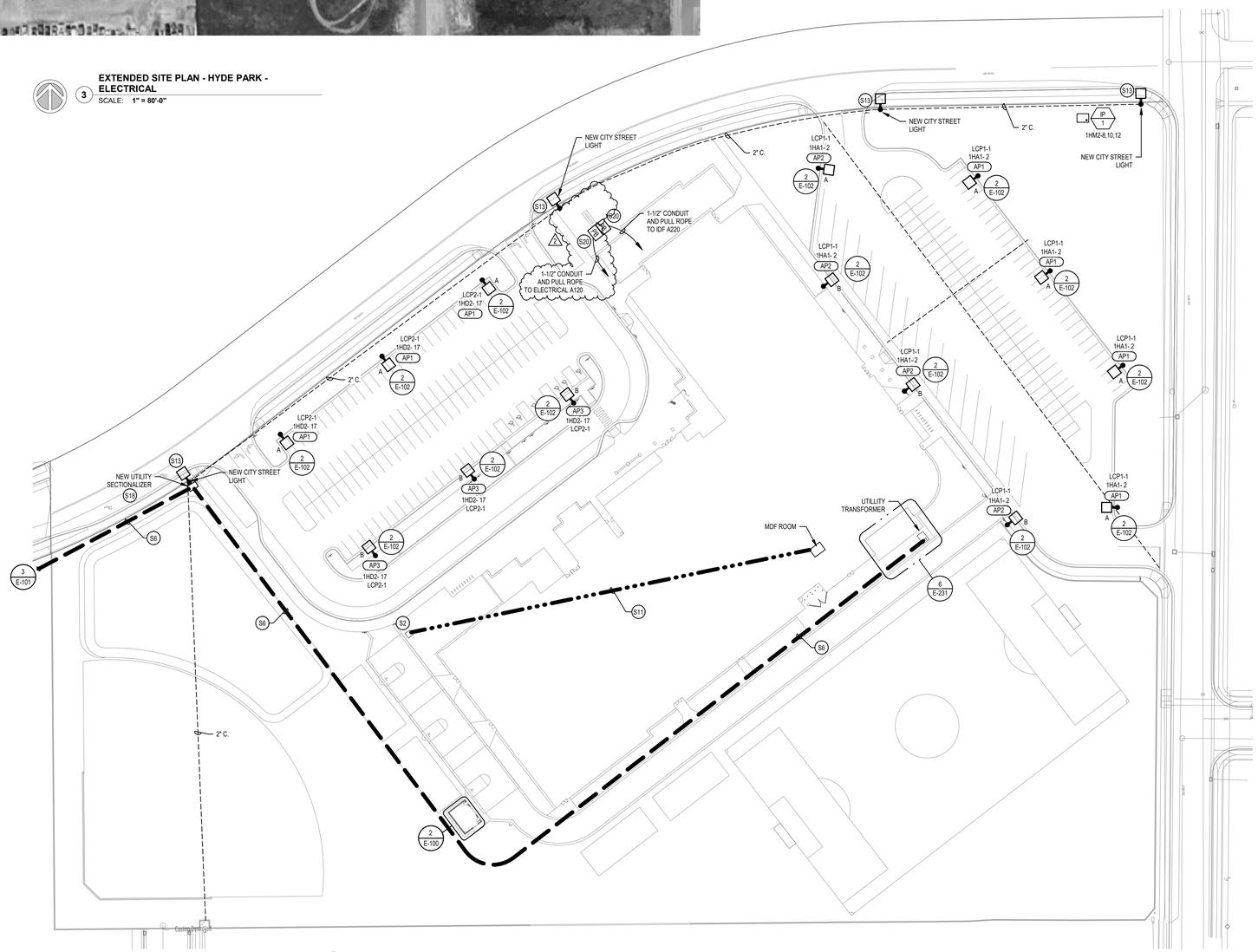
EXTENDED SITE PLAN - HYDE PARK - ELECTRICAL
3 SCALE: **1" = 80'-0"**



HYDE PARK SITE PLAN - ELECTRICAL
1 SCALE: **1" = 50'-0"**

SITE GENERAL NOTES:

1. PROVIDE ALL REQUIRED BACKFILLING, ETC. FOR ALL CONDUITS, PROVIDE REQUIRED BACKFILL MATERIAL AS DIRECTED BY EACH UTILITY.
2. COORDINATE ALL LOCATIONS AND ROUTING WORK IN THE FIELD.
3. ROUTE CONDUITS A MINIMUM OF 2' BELOW THE BUILDING FLOOR SLAB.
4. MINIMUM CONDUIT FOR SITE WORK SHALL BE 1".
5. CONDUIT ROUTING SHOWN IS SCHEMATIC AND FOR CLARIFICATION COORDINATE LOCATION WITH ALL AFFECTED TRADES.
6. PROVIDE A MINIMUM OF 12" SEPARATION BETWEEN POWER AND COMMUNICATION CONDUITS.
7. ALL CONDUITS THAT EXTEND THROUGH CONCRETE SHALL BE GALVANIZED RIGID CONDUIT AND WRAPPED WITH TWO (2) LAYERS OF PVC TAPE.
8. ALL ELBOWS THAT ARE UNDER THE FINISHED GRADE SHALL BE GALVANIZED RIGID CONDUIT AND WRAPPED WITH TWO (2) LAYERS OF PVC TAPE.

UTILITY COORDINATION REQUIREMENTS:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND VERIFY ALL REQUIREMENTS AND LOCATIONS TO EXTEND CONDUITS FOR UTILITY USE WITHIN 2 WEEKS OF THE CONTRACT AWARD. THE CONTRACTOR SHALL NOT ROUGH-IN ANY CONDUITS UNTIL THE UTILITY COORDINATION IS COMPLETE AND ALL LOCATIONS ARE KNOWN. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT AND THE ENGINEER A WRITTEN SIGNED STATEMENT, INCLUDING A SKETCH OF LOCATIONS, FROM THE UTILITY COMPANY NOTIFYING THEM THAT THEY HAVE COORDINATED AND VERIFIED ALL REQUIREMENTS. IF THE CONTRACTOR DOES NOT COORDINATE AND VERIFY THE REQUIREMENTS WITH THE UTILITIES OR PROVIDE A WRITTEN STATEMENT FROM THE UTILITY COMPANY TO THE ARCHITECT AND ENGINEER ALL CHANGES DO TO LACK OF COORDINATION WILL BE DONE AT NO ADDITIONAL EXPENSE TO THE OWNER.

THE ELECTRICAL CONTRACTOR SHALL ORGANIZE A PRE-CONSTRUCTION MEETING INCLUDING THE UTILITY AND GENERAL CONTRACTOR TO COORDINATE AND VERIFY ALL REQUIREMENTS, WITHIN 2 WEEKS OF THE CONTRACT AWARD. COORDINATION ITEMS INCLUDE BUT ARE NOT LIMITED TO:

- GENERAL UTILITY REQUIREMENTS AND DIVISION OF SCOPE OF WORK
- CONDUIT AND TRENCHING REQUIREMENTS
- CONDUIT ROUTING
- UTILITY EQUIPMENT PADS AND SUB-BASE REQUIREMENTS
- UTILITY CLEARANCE REQUIREMENTS
- EQUIPMENT SCREEN WALLS, EQUIPMENT ENCLOSURES, AND EQUIPMENT YARDS
- COORDINATION WITH OTHER UTILITIES OR EXISTING CONDITIONS
- AVAILABLE FAULT CURRENT CALCULATIONS (POWER UTILITY ONLY)
- UTILITY REQUIRED SITE OBSERVATIONS
- SCHEDULING OF UTILITY INSTALLATIONS

THE CONTRACTOR SHALL NOT ROUGH-IN ANY CONDUITS, EQUIPMENT PADS, OR SIMILAR ITEMS UNTIL THE UTILITY COORDINATION IS COMPLETE AND ALL THE LOCATIONS ARE KNOWN. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT AND ENGINEER A WRITTEN, SIGNED STATEMENT, INCLUDING A SKETCH OF EQUIPMENT AND CONDUIT LOCATIONS, FROM THE UTILITY COMPANY NOTIFYING THEM THAT THEY HAVE COORDINATED AND VERIFIED ALL REQUIREMENTS WITH THE UTILITIES AND PROVIDE A WRITTEN STATEMENT FROM THE UTILITY COMPANY TO THE ARCHITECT AND ENGINEER, ALL CHANGES DUE TO LACK OF COORDINATION WILL BE PROVIDED AT NO ADDITIONAL EXPENSE TO THE OWNER.

UTILITY REQUIREMENTS:

1. BURY CONDUITS PER UTILITY REQUIREMENTS. REFER TO SITE DETAIL SHEETS FOR TRENCHING REQUIREMENTS.
2. VERIFY AND COMPLY WITH ALL POWER UTILITY AND TELECOMMUNICATIONS PROVIDER REQUIREMENTS.
3. INCLUDE IN BID ALL LINE EXTENSION FEES, UNDERGROUND FEES, AND ALL MISC. FEES CHARGED BY ROCKY MOUNTAIN POWER, CENTURYLINK, AND GOOGLE FIBER.

KEYED NOTES (#)

S2 PROVIDE HUBBELL QUAZITE 24" X 36" PG STYLE IN-GRADE JUNCTION BOX WITH HEAVY DUTY COVER. CONFIRM PLACEMENT WITH OWNER PRIOR TO ROUGH-IN. REFER TO THE SITE DETAILS FOR MORE INFORMATION.

S3 RUN (4) 3" CONDUITS TO SWITCHBOARD 'DPLD' FOR POWER TO FUTURE PORTABLES. PROVIDE PULL ROPE AND LABEL BOTH ENDS OF CONDUIT.

S4 RUN (3) 2" CONDUITS TO IDF F109 FOR DATA, INTERCOM, AND FIRE ALARM TO FUTURE PORTABLES. PROVIDE PULL ROPE AND LABEL BOTH ENDS OF CONDUIT.

S6 SEE ONE LINE DIAGRAM FOR MORE INFORMATION.

S11 SEE TELECOM RISER DIAGRAM FOR MORE INFORMATION.

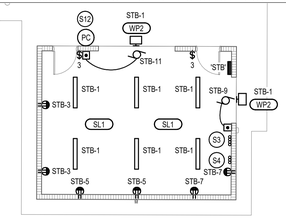
S12 LINE VOLTAGE PHOTOCELL TO CONTROL EXTERIOR WP2 LIGHT FIXTURES.

S13 CITY STREET LIGHT WILL BE FURNISHED BY THE CITY AND INSTALLED BY ROCKY MOUNTAIN POWER. ELECTRICAL CONTRACTOR IS TO RUN 2" CONDUIT BETWEEN THE STREET LIGHTS AS SHOWN. INSERT PULL STRING AND LABEL. COORDINATE EXACT LOCATIONS WITH NIBLEY CITY.

S18 FURNISH AND INSTALL A CONCRETE VAULT FOR NEW UTILITY SECTIONALIZER PER ALL ROCKY MOUNTAIN POWER STANDARDS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ROCKY MOUNTAIN POWER.

S19 FURNISH AND INSTALL A CONCRETE VAULT FOR NEW M.V. UTILITY SWITCH PER ALL ROCKY MOUNTAIN POWER STANDARDS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ROCKY MOUNTAIN POWER.

S20 PROVIDE HUBBELL QUAZITE 18" X 18" PG STYLE IN-GRADE JUNCTION BOX WITH HEAVY DUTY COVER. CONFIRM PLACEMENT WITH OWNER PRIOR TO ROUGH-IN. REFER TO THE SITE DETAILS FOR MORE INFORMATION.



ENLARGED STORAGE BUILDING - HYDE PARK
2 SCALE: **1/8" = 1'-0"**

UTILITY PROVIDER:
KREG ROBERTS
Tele: 435-230-5493
Email: KREG.ROBERTS@PACIFICORP.COM
WO# 7194955

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

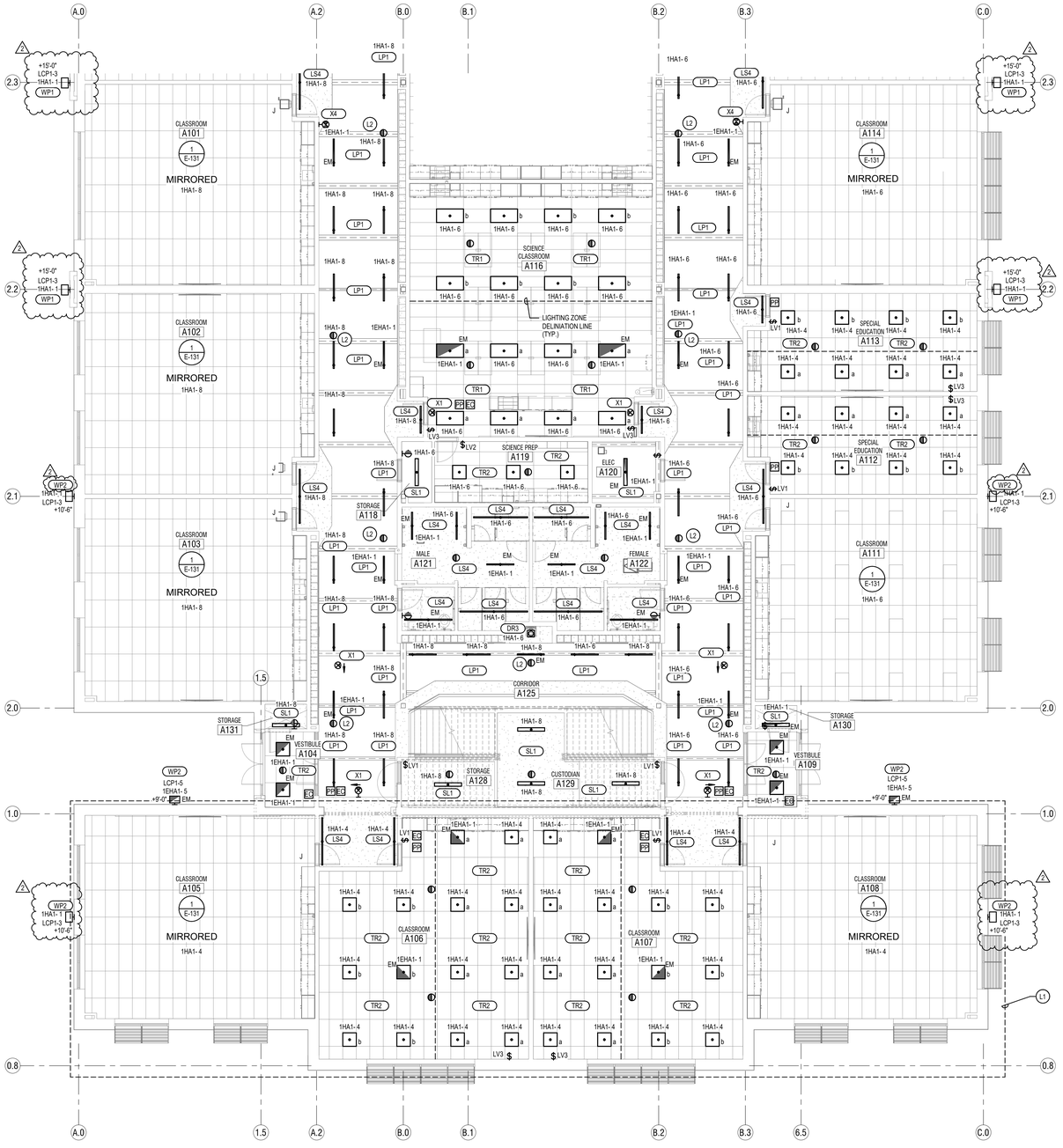
PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377411 04-26-2024 STATE OF UTAH

SITE PLAN - HYDE PARK - ELECTRICAL

E-101

5/28/2024 1:55:38 PM



1 **LEVEL 1 FLOOR PLAN - AREA A - LIGHTING**
SCALE: 1/8" = 1'-0"

LIGHTING GENERAL NOTES:

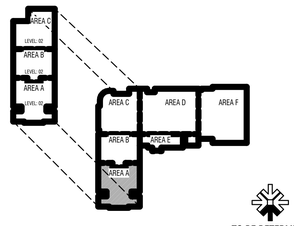
1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
2. LOCATE POWER PACKS AND ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING NEAR ROOM ENTRANCES.
3. CONFIRM ALL LOCATIONS OF LIGHT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
4. PROVIDE UNSWITCHED HOT FOR ALL EMERGENCY LIGHTS AND BATTERY PACKS.
5. REFER TO ARCHITECTURAL CEILING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES. PROVIDE AN RFI FOR ANY CONFLICTS BETWEEN LIGHTING PLANS AND ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ORDERING LIGHT FIXTURES.

KEYED NOTES (#)

L1 UNDER THE BASE BID, INCLUDE ALL WORK IN THIS AREA AS SHOWN ON THE PLANS. UNDER ALTERNATE #1, THIS AREA WILL BE REMOVED FROM THE PROJECT. PROVIDE A SEPARATE COST TO BE ISSUED AS A CREDIT FOR ALL WORK IN THIS AREA AS SHOWN ON THE PLANS.

L2 PENDANT MOUNT MOTION SENSOR ON THREADED ROD AT THE SAME HEIGHT AS LIGHT FIXTURES.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST
795 NORTH 400 WEST
LOGAN UT 84321
SALT LAKE CITY UT 84103

ENVISION
ELECTRICAL DESIGN
240 E. MORRIS AVE. SUITE 200
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HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	02.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER STATE OF UTAH 772411 04-26-2024

LEVEL 1 - AREA A - LIGHTING

E-111

5/28/2024 7:38:41 PM

LIGHTING GENERAL NOTES:

1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
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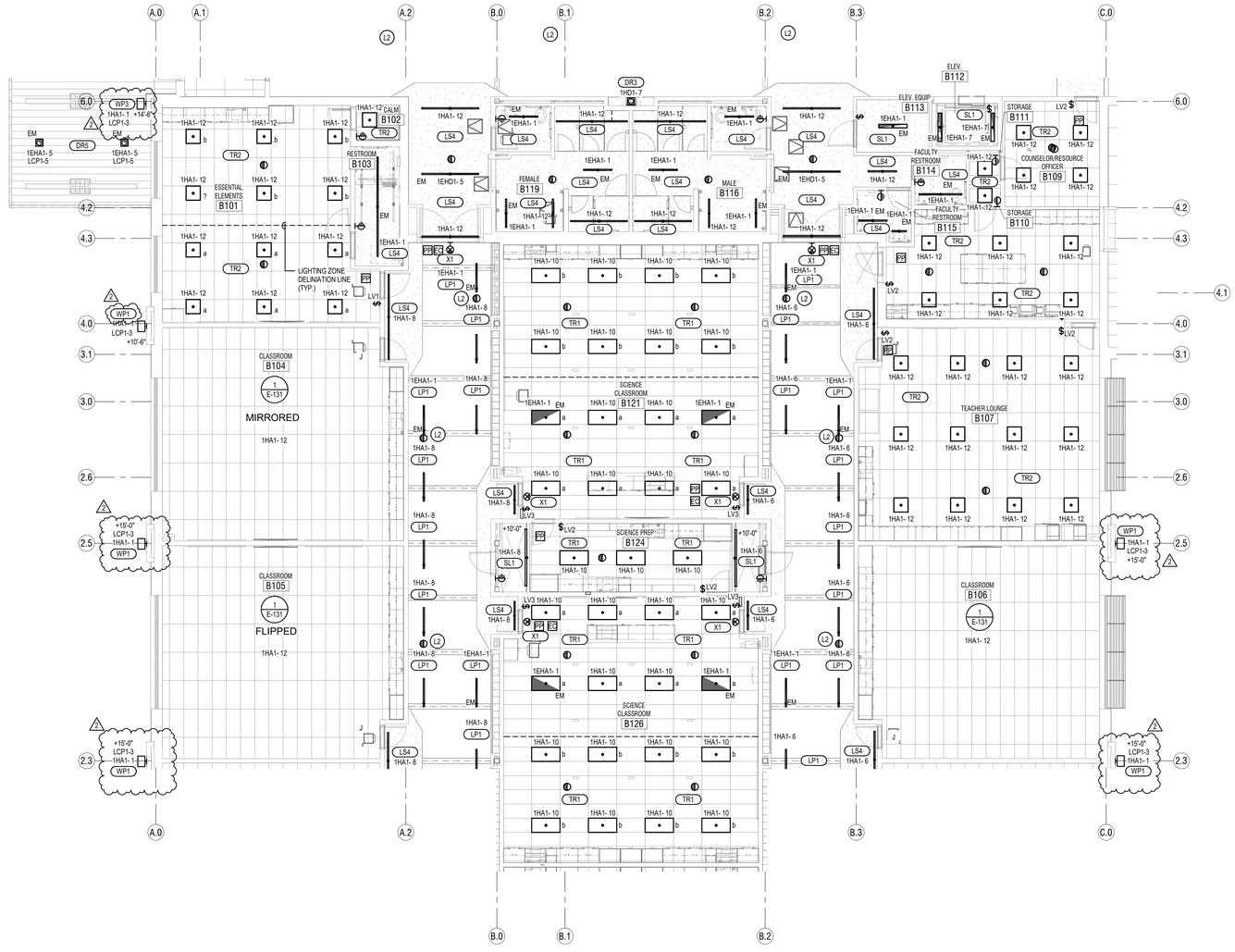
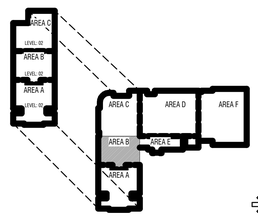
KEYED NOTES (#)

L2 PENDANT MOUNT MOTION SENSOR ON THREADED ROD AT THE SAME HEIGHT AS LIGHT FIXTURES.



LEVEL 1 FLOOR PLAN - AREA B - LIGHTING
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

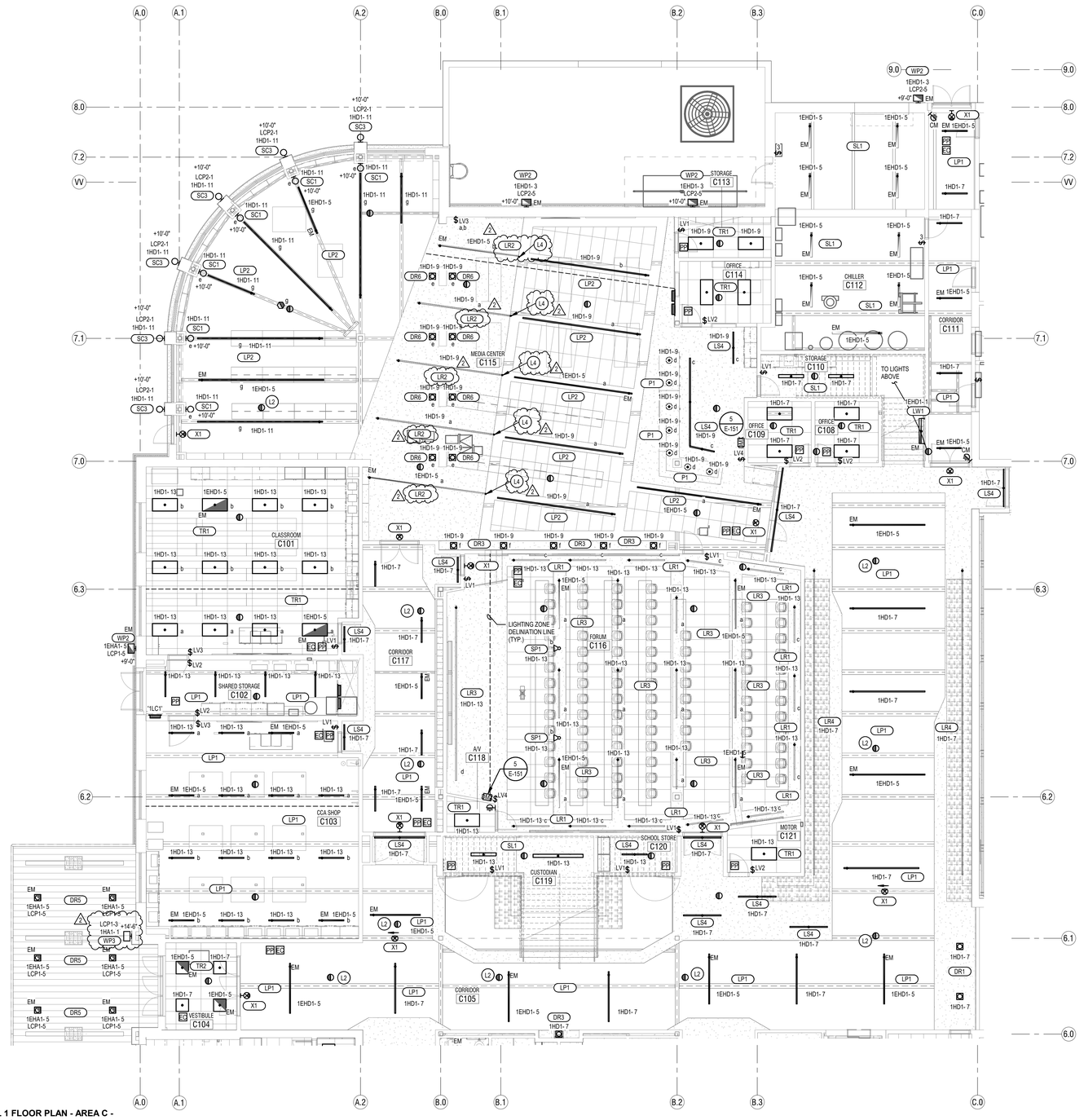
MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 1 - AREA B - LIGHTING

E-112

5/28/2024 1:39:44 PM



1 **LEVEL 1 FLOOR PLAN - AREA C - LIGHTING**
SCALE: **1/8" = 1'-0"**

LIGHTING GENERAL NOTES:

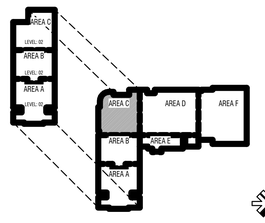
1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
2. LOCATE POWER PACKS AND ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING NEAR ROOM ENTRANCES.
3. CONFIRM ALL LOCATIONS OF LIGHT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
4. PROVIDE UNSWITCHED HOT FOR ALL EMERGENCY LIGHTS AND BATTERY PACKS.
5. REFER TO ARCHITECTURAL CEILING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES. PROVIDE AN RFI FOR ANY CONFLICTS BETWEEN LIGHTING PLANS AND ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ORDERING LIGHT FIXTURES.

KEYED NOTES (#)

L2 PENDANT MOUNT MOTION SENSOR ON THREADED ROD AT THE SAME HEIGHT AS LIGHT FIXTURES.

L4 LR2 LIGHT FIXTURE SHOULD BE RECESSED IN HARD LID CEILING WITH FACTORY MITERED OUTSIDE CORNER THAT TURNS UP THE WALL 2'-0".

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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795 NORTH 400 WEST SALT LAKE CITY, UT 84103

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 1 - AREA C - LIGHTING

E-113

5/28/2024 1:30:48 PM

LIGHTING GENERAL NOTES:

1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
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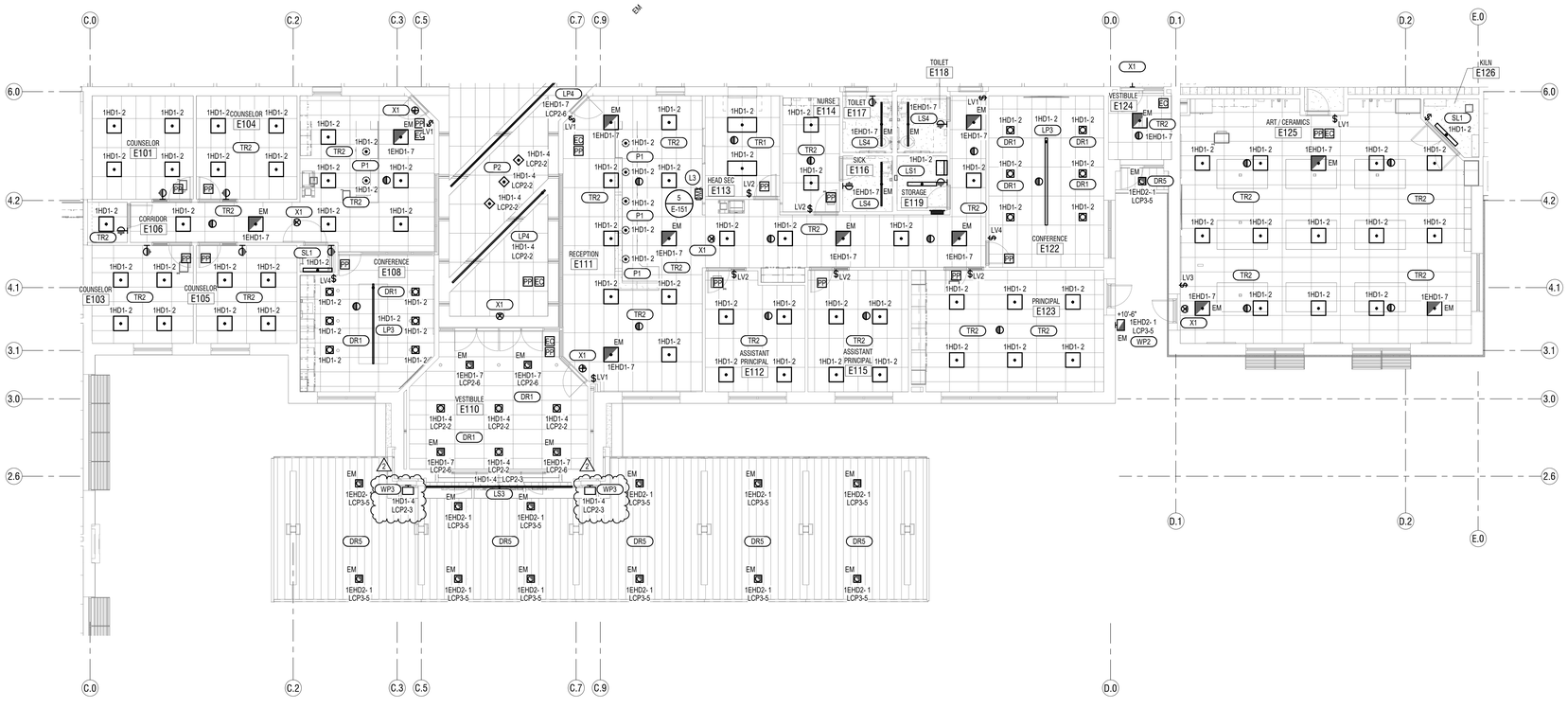
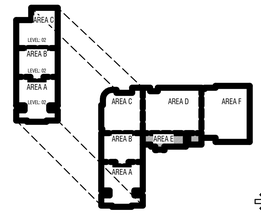
KEYED NOTES (#)

L3 DMX CONTROLLER TO CONTROL RGB LIGHTS IN BOTH STAIRS AND RGB LIGHTS IN CORRIDOR C106.



1 **LEVEL 1 FLOOR PLAN - AREA E - LIGHTING**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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795 NORTH 400 WEST
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SALT LAKE CITY, UT 84103

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
1	05/15/24	ADDENDUM 3
2	05/22/24	ADDENDUM 5

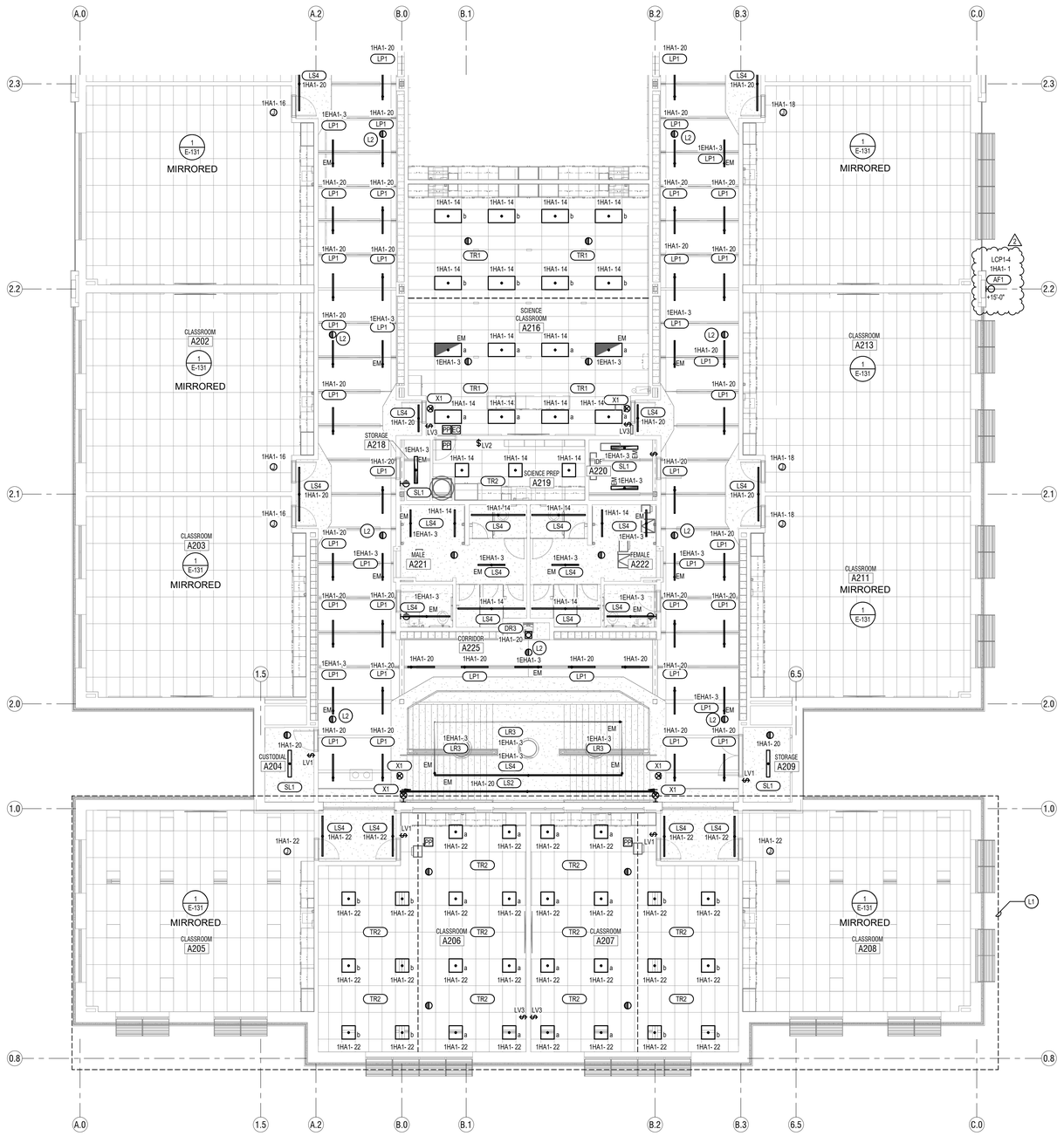
PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
05-22-2024

LEVEL 1 - AREA E - LIGHTING

E-115

5/30/2024 10:36 PM



1 **LEVEL 2 FLOOR PLAN - AREA A - LIGHTING**
SCALE: **1/8" = 1'-0"**

LIGHTING GENERAL NOTES:

1. REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
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KEYED NOTES (#)

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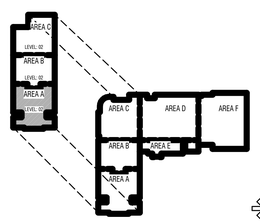
L.2 PENDANT MOUNT MOTION SENSOR ON THREADED ROD AT THE SAME HEIGHT AS LIGHT FIXTURES.

KEY PLAN



TO BE DETERMINED

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

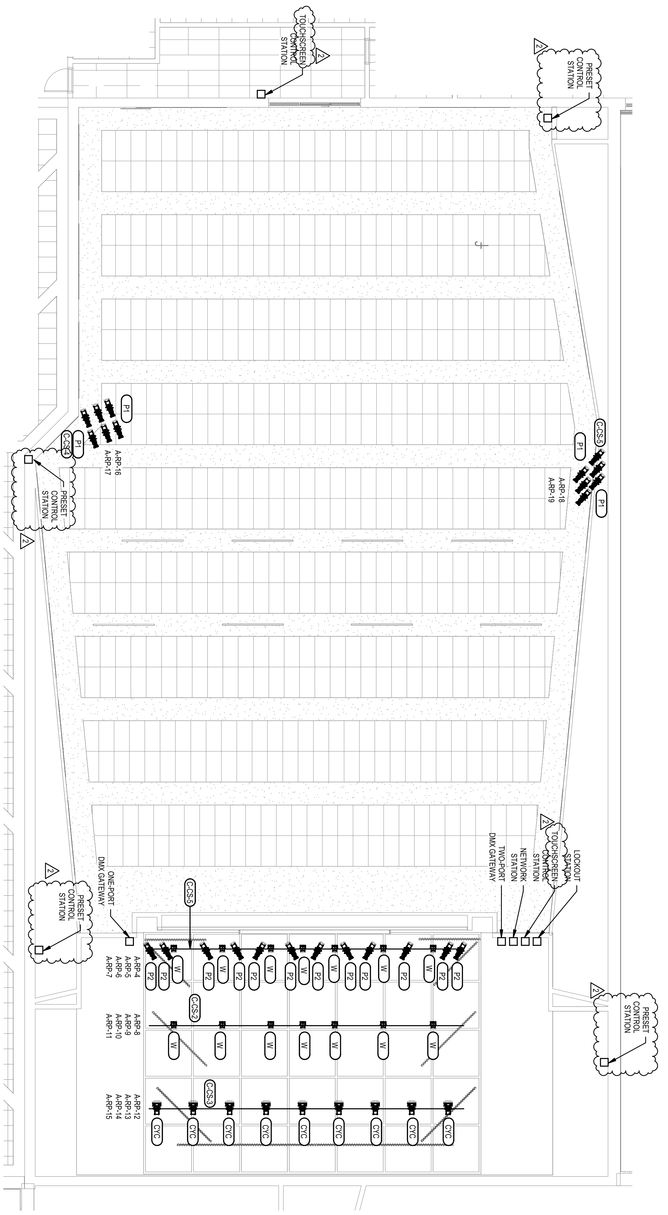
PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 2 - AREA A - LIGHTING

E-121

5/28/2024 1:31:08 PM

5/28/2024 1:31:14 PM



CAFETORIUM THEATRICAL LIGHTING PLAN

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

CONSTRUCTION DOCUMENTS

CAFETORIUM THEATRICAL LIGHTING PLAN

E-132

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH

CACHE COUNTY SCHOOL DISTRICT

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SALT LAKE CITY UT 84103

THEATRICAL LIGHT FIXTURE SCHEDULE				
DESCRIPTION	TYPE	MFG	PART NUMBER	NOTES
LED WASH FIXTURE	W	ETC STRAND		NOTE 1
LED PROFILE FIXTURE WITH 15-30 DEGREE ZOOM LENS	P1	ETC STRAND		NOTE 2
LED PROFILE FIXTURE WITH 25-50 DEGREE ZOOM LENS	P2	ETC STRAND		NOTE 3
LED CYC FIXTURE	CYC	ETC STRAND		NOTE 4

NOTES:

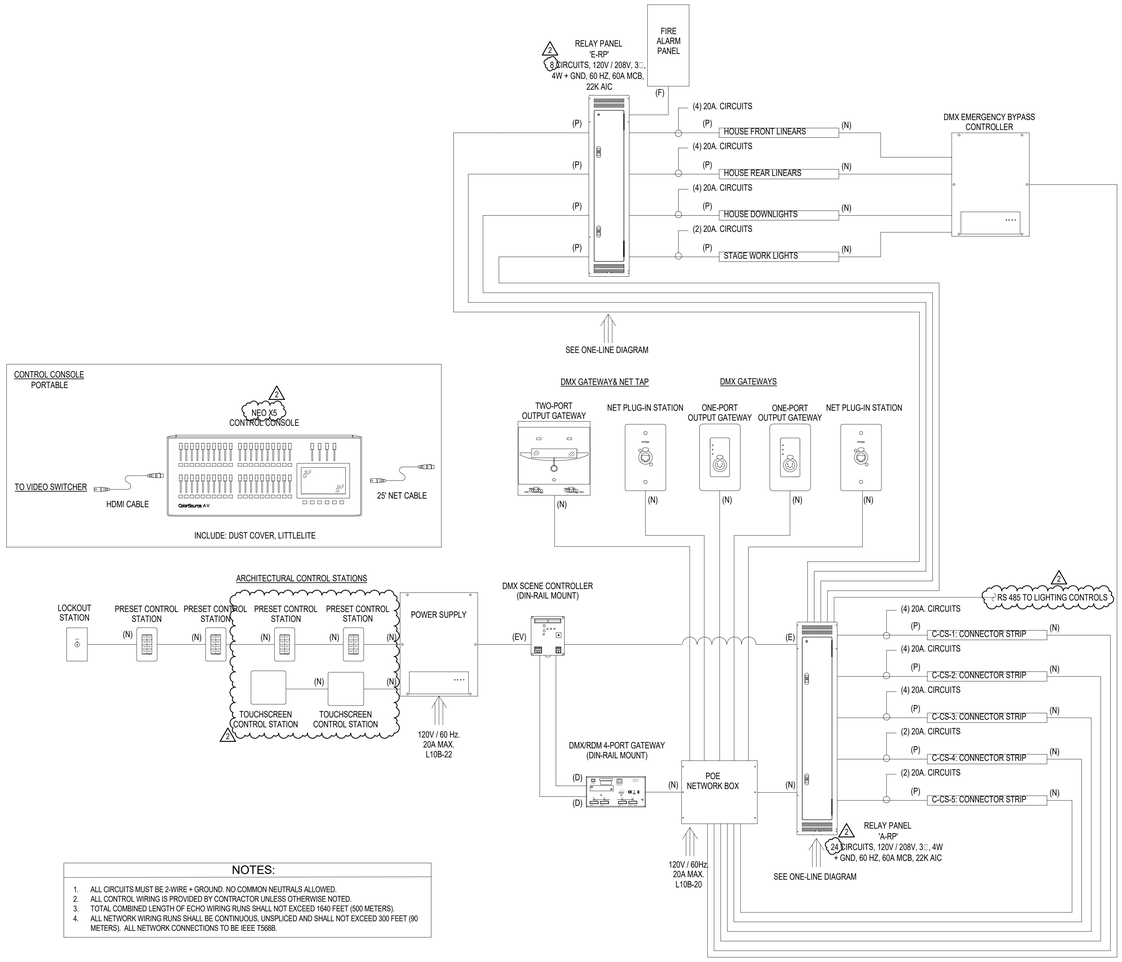
1. LED WASH FIXTURE INCLUDES POWER CABLE, DMX CABLE, PBG CONNECTOR, C-CLAMP, SAFETY CABLE. CONTRACTOR TO VERIFY LENGTH OF POWER CABLE AND DMX CABLE PRIOR TO ORDERING. COORDINATE EXACT FIXTURE LOCATIONS WITH THE SCHOOLS THEATER TEACHER.
2. LED PROFILE FIXTURES INCLUDES POWER CABLE, DMX CABLE, PBG CONNECTOR, C-CLAMP, SAFETY CABLE, SIZE A PATTERN HOLDER, AND 15-30 DEGREE ZOOM LENS. CONTRACTOR TO VERIFY LENGTH OF POWER CABLE AND DMX CABLE PRIOR TO ORDERING. COORDINATE EXACT LOCATIONS WITH THE SCHOOLS THEATER TEACHER.
3. LED PROFILE FIXTURES INCLUDES POWER CABLE, DMX CABLE, PBG CONNECTOR, C-CLAMP, SAFETY CABLE, AND 25-50 DEGREE ZOOM LENS. CONTRACTOR TO VERIFY LENGTH OF POWER CABLE AND DMX CABLE PRIOR TO ORDERING. COORDINATE EXACT LOCATIONS WITH THE SCHOOLS THEATER TEACHER.
4. LED CYC FIXTURE INCLUDES POWER CABLE, DMX CABLE, PBG CONNECTOR, C-CLAMP, SAFETY CABLE. CONTRACTOR TO VERIFY LENGTH OF POWER CABLE AND DMX CABLE PRIOR TO ORDERING. COORDINATE EXACT FIXTURE LOCATIONS WITH THE SCHOOLS THEATER TEACHER.

THEATRICAL CONTROLS	
TYPE	DESCRIPTION
C-CS-1, 2, 3	CONNECTOR STRIP, (1) 50' CONNECTOR STRIP, (24) PBG OUTLETS, SURFACE MOUNTED TO STRUCTURE, HANGING BRACKETS, (4) SWITCHED CIRCUITS, (1) DMX OUTPUT GATEWAY
C-CS-4, 5	CONNECTOR STRIP, (1) 16' CONNECTOR STRIP, (8) PBG OUTLETS, MOUNTED TO ETC MOTORIZED HOIST, HANGING BRACKETS, (2) SWITCHED CIRCUITS, (1) DMX OUTPUT GATEWAY

RELAY PANEL: E-RP			
CKT	CONTROL ZONE	LOAD TYPE	CONTROL METHOD
1	STAGE LIGHTS	LED	DMX
2	CAFETORIUM LRS	LED	DMX
3	CAFETORIUM LRS	LED	DMX
4	CAFETORIUM LRS	LED	DMX
5	STAGE RAMP LIGHTS	LED	DMX
6	CAFETORIUM DRY	LED	DMX
7	SPARE	LED	DMX
8	SPARE	LED	DMX

RELAY PANEL: A-RP			
CKT	CONTROL ZONE	LOAD TYPE	CONTROL METHOD
1	PROSCENIUM DR4	LED	DMX
2	CAFETORIUM LR1	LED	DMX
3	CAFETORIUM LR1	LED	DMX
4	C-CS-1	LED	DMX
5	C-CS-1	LED	DMX
6	C-CS-1	LED	DMX
7	C-CS-1	LED	DMX
8	C-CS-2	LED	DMX
9	C-CS-2	LED	DMX
10	C-CS-2	LED	DMX
11	C-CS-2	LED	DMX
12	C-CS-3	LED	DMX
13	C-CS-3	LED	DMX
14	C-CS-3	LED	DMX
15	C-CS-3	LED	DMX
16	C-CS-4	LED	DMX
17	C-CS-4	LED	DMX
18	C-CS-5	LED	DMX
19	C-CS-5	LED	DMX
20	SPARE	LED	DMX
21	SPARE	LED	DMX
22	SPARE	LED	DMX
23	SPARE	LED	DMX
24	SPARE	LED	DMX

WIRING LEGEND		
SYMBOL	WIRE TYPE	SIGNAL
(D)	(1) BELDEN 9729	DMX
(N)	(1) BELDEN 1583A	NETWORK
(E)	(1) BELDEN 8471 (1) #14 AWG. STRANDED	
(P)	2#12 AWG 1#12 AWG GND. (UPSIZE FOR VOLTAGE DROP)	120V POWER
(EV)	(1) BELDEN 8471 (1) #14 AWG STRANDED (2) #18 AWG STRANDED	



2 COMMONS THEATRICAL LIGHTING RISER DIAGRAM
SCALE: NTS

NOTES:

1. ALL CIRCUITS MUST BE 2-WIRE + GROUND. NO COMMON NEUTRALS ALLOWED.
2. ALL CONTROL WIRING IS PROVIDED BY CONTRACTOR UNLESS OTHERWISE NOTED.
3. TOTAL COMBINED LENGTH OF ECHO WIRING RUNS SHALL NOT EXCEED 1640 FEET (500 METERS).
4. ALL NETWORK WIRING RUNS SHALL BE CONTINUOUS, UNSPLICED AND SHALL NOT EXCEED 300 FEET (90 METERS). ALL NETWORK CONNECTIONS TO BE IEEE 1588B.

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255 SOUTH 200 WEST
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HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
3	05/15/24	ADDENDUM 3
5	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

THEATRICAL LIGHTING RISER
E-141

5/28/2024 1:31:15 PM

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	SOURCE	LOAD	APPROVED MANUFACTURERS	CATALOG NUMBER / SERIES
AB1	42" LED EXTERIOR BOLLARD WITH 180-DEGREE DISTRIBUTION. IK10 RATING.	LED 3000 LM 0-10 V DIMMING 4000 K	277 V 30 W	MCGRAW EDISON	BRT6
				SELUX	IBL 3.5 4QD 40 SCBA UNV DM
				RAGNI LIGHTING	CIK-16-C-42"-35-50-TX-1-S-STANDARD FINISH
AF1	WALL MOUNTED EXTERIOR LED FLOOD LIGHT FIXTURE WITH 15 X 60 BEAM ANGLE AND FULL SNOOT. MOUNTED ON	LED 1200 LM 0-10 V DIMMING 4000 K	277 V 13 W	ECOSENSE	F170-1S-LO-40-8-E1-X-F-C
				LUMASCAPE	LS5330 - 15D 840 WH S 13 PS 016
AF2	NOT USED				
AP1	LED POLE MOUNTED LIGHT FIXTURE WITH TYPE 4 DISTRIBUTION, HOUSE SIDE SHIELD AND 20', NON-TAPERED STEEL POLE.	LED 20,000 LM 0-10 V DIMMING 4000 K	277 V 185 W	MCGRAW-EDISON	GLAN-SA2C-740-U-T4-SCBA-SPB2-SSP20 (MCGR, KW)-HSS
				GARDCO	OPF-M-A14-740-T4M-AR1-UNV-STANDARD FINISH-HSS
				LITHONIA	RSX2 LED P3 40K R4 MVOLT SPA HS NLTAIR2 PIRHN DDBXD / SSS 20 4C DM19AS DDBXD
				BEACON PRODUCTS, INC.	VP-2-320L-210-4K7-4-UNV-ASQU-SCBA SHD 2-HSS-XXX-SCBA SSSB20-40A-1-B3-SCB
AP2	LED POLE MOUNTED LIGHT FIXTURE WITH TYPE 4 DISTRIBUTION AND 20', NON-TAPERED STEEL POLE.	LED 20,000 LM 0-10 V DIMMING 4000 K	277 V 185 W	MCGRAW-EDISON	GLAN-SA2C-740-U-T4-SCBA-SPB2-SSP20 (MCGR, KW)
				GARDCO	OPF-M-A14-740-T4M-AR1-UNV-STANDARD FINISH
				LITHONIA	RSX2 LED P3 40K R4 MVOLT SPA NLTAIR2 PIRHN DDBXD / SSS 20 4C DM19AS DDBXD
				BEACON PRODUCTS, INC.	VP-2-320L-210-4K7-4-UNV-ASQU-SCBA SSSB20-40A-1-B3-SCB
AP3	LED POLE MOUNTED LIGHT FIXTURE WITH TYPE 5 DISTRIBUTION AND 20', NON-TAPERED STEEL POLE.	LED 20,000 LM 0-10 V DIMMING 4000 K	277 V 185 W	MCGRAW-EDISON	GLAN-SA2C-740-U-T5-SCBA-SPB2-SSP20 (MCGR, KW)-HSS
				GARDCO	OPF-M-A14-740-T5M-AR1-UNV-STANDARD FINISH-HSS
				LITHONIA	RSX2 LED P3 40K R5 MVOLT SPA HS NLTAIR2 PIRHN DDBXD / SSS 20 4C DM19AS DDBXD
				BEACON PRODUCTS, INC.	VP-2-320L-210-4K7-5QW-UNV-ASQU SCBA SSSB20 40A-1-B3-SCBA
AP4	LED POLE MOUNTED LIGHT FIXTURE WITH TYPE 2 DISTRIBUTION, HOUSE SIDE SHIELD AND 20', NON-TAPERED STEEL POLE.	LED 20,000 LM 0-10 V DIMMING 4000 K	277 V 185 W	MCGRAW-EDISON	GLAN-SA2C-740-U-T2-SCBA-SPB2-SSP20 (MCGR, KW)-HSS
				GARDCO	OPF-M-A14-740-T2M-AR1-UNV-STANDARD FINISH-HSS
				LITHONIA	RSX2 LED P3 40K R2 MVOLT SPA HS NLTAIR2 PIRHN DDBXD / SSS 20 4C DM19AS DDBXD
				BEACON PRODUCTS, INC.	VP-2-320L-210-4K7-2-UNV-ASQU-SCBA SHD 2-HSS-XXX-SCBA SSSB20-40A-1-B3-SCB
AP5	LED POLE MOUNTED LIGHT FIXTURE WITH TYPE 2 DISTRIBUTION, HOUSE SIDE SHIELD AND 12', NON-TAPERED STEEL POLE.	LED 10,000 LM 0-10 V DIMMING 4000 K	277 V 80 W	MCGRAW-EDISON	GLAN-SA2C-740-U-T2-SCBA-SPB2-SSP12 (MCGR, KW)-HSS
				GARDCO	OPF-M-A14-740-T2M-AR1-UNV-STANDARD FINISH-HSS
				LITHONIA	RSX2 LED P3 40K R2 MVOLT SPA HS NLTAIR2 PIRHN DDBXD / SSS 12 4C DM19AS DDBXD
				BEACON PRODUCTS, INC.	VP-2-320L-210-4K7-2-UNV-ASQU-SCBA SHD 2-HSS-XXX-SCBA SSSB20-40A-1-B3-SCB
DR1	4" ROUND DOWNLIGHT FIXTURE WITH 60-DEGREE BEAM, WHITE TRIM AND REFLECTOR	LED 1500 LM 0-10 V DIMMING 4000 K	277 V 15 W	HALO COMM	HC4
				GOTHAM	LDN4 40/15 LO4AR LSS MVOLT GZ10 TRW
				LIGHTOLIER	4RN Z4RDL15940WOCDZ10U
				PRESCOLITE	LFR-4RD-M-15L40K8-MD-DM1/LFR-4RD-T-SSWT/ LFR-4RD-H
DR2	4" ROUND DOWNLIGHT FIXTURE. WITH WHITE DEADFRONT LENS FOR SHOWER.	LED 1500 LM 0-10V-DIMMING 4000 K	277 V 15 W	HALO COMM	HC4
				GOTHAM	EVO4SH 40/15 DFR SOL MVOLT EZ1
				LIGHTOLIER	4RN P4RSL15940MCDZ10U
				PRESCOLITE	LFR-4RD-M-15L40K8-MD-DM1/LFR-4RD-T-SH-WTACL/LFR-4RD-H
DR3	2" ROUND DOWNLIGHT FIXTURE. WITH 40-DEGREE BEAM, WHITE TRIM AND REFLECTOR.	LED 700 LM 0-10V-DIMMING 4000 K	277 V 8 W	ALPHABET	NU3
				LITHONIA	LDN3 40/10 LO3AR LSS MVOLT UGZ10 TRW
				LIGHTOLIER	3RN P3RDL07940CDZ10U
				CREATIVE SYSTEMS	A3-NC-R-ST-10-S-SHB/A3-40-90-R-ST-WT-ST-SA-NL-80
DR4	4" SQUARE LED WALL WASH DOWNLIGHT FIXTURE. WITH WHITE TRIM AND REFLECTOR.	LED 2000 LM 0-10V-DIMMING 4000 K	277 V 20 W	ALPHABET	NU4-QW-SW-25LM-40K-80-WW-WH-WH-NC-UNV-DIM10
				LITHONIA	
				LIGHTOLIER	4SN P4SLW20940WCDZ10U
				PRESCOLITE	
DR5	4" ROUND EXTERIOR RATED LED DOWNLIGHT FIXTURE WITH 60-DEGREE BEAM, SEMI-SPECULAR REFLECTOR AND CUSTOM COLOR TRIM TO MATCH EXTERIOR SOFFIT.	LED 1500 LM NON-DIMMING 4000 K	277 V 15 W	ALPHABET	NU4
				GOTHAM	LDN4 40/15 LO4AR LSS MVOLT GZ10 TRW
				LIGHTOLIER	4RN Z4RDL15940WOCDZ10U
				PRESCOLITE	LFR-4RD-M-15L40K8-MD-DM1/LFR-4RD-T-SSWT/ LFR-4RD-H
DR6	4" ROUND RGBW LED DOWNLIGHT FIXTURE WITH 20-DEGREE BEAM, WHITE TRIM AND REFLECTOR.	LED 200 LM OF WHITE DMX RGBW	277 V 20 W	ALPHABET	NU4-RD-RGBW-10LM-35K-90-25D-CL-WH-WH-NC-UNV-DMX-RJ45
				GOTHAM	
				LIGHTOLIER	
				PRESCOLITE	
DR7	4" ROUND DOWNLIGHT FIXTURE WITH 60-DEGREE BEAM, WHITE TRIM AND REFLECTOR	LED 1500 LM DMX 4000 K	277 V 15 W	ALPHABET	NU4
				GOTHAM	LDN4 40/15 LO4AR LSS MVOLT GZ10 TRW
				LIGHTOLIER	4RN Z4RDL15940WOCDZ10U
				PRESCOLITE	LFR-4RD-M-15L40K8-MD-DM1/LFR-4RD-T-SSWT/ LFR-4RD-H
HB1	1'X4' LED PENDANT HIGH BAY FIXTURE WITH WHITE LENS AND IK10 RATING.	LED 30,000 LM NON-DIMMING 4000 K	277 V 285 W	METALUX	OHB-30SE-MFL-UNV-L840-CD-U
				LITHONIA	CPHB 48000LM SEF GCL WD MVOLT GZ10 40K 80CRI DWH
				HE WILLIAMS	GH-4-L300/840-FA-DIM-UNV
				COLUMBIA	PELA-840-L30-B-ED-U-PM
LP1	PENDANT MOUNTED LED LINEAR LIGHT FIXTURE. WITH 2"X2" PROFILE. LENGTH AS SHOWN ON DRAWINGS.	LED 1000 LM / FT 0-10V DIMMING 4000 K	277 V 10 W / FT	CORELITE	S122DP
				FINELITE	HP X P D *' V 840 F 277 SC FC-1% FA50 ** FE SCBA
				AXIS LIGHTING	TB2DLED-1000-80-40-SO-XX-STANDARD FINISH-UNV-DP-1-CA36
				LUMENWERX	FOR4PD-22-HLO-LED-80-1000-40-UNV-D1-1-5SWAC36-W
LP2	PENDANT MOUNTED LED LINEAR LIGHT FIXTURE WITH 3.5"X3.5" PROFILE AND 2.5" W x 2.5" H REGRESSED NOTCH. LENGTH AS SHOWN ON DRAWINGS.	LED 500 LM / FT 0-10V DIMMING 4000 K	277 V 7 W / FT	FLUXWERX	PF1-B-B-A-40-SCBA-X-S-F2-M-06
				PMC	S9062-D-P-40K-070-XX'-SCBA-UNV-OE
				PINNACLE	CDI-N-840-X-AC_ST-2-EL1-1-SCBA-FE
LP3	DECORATIVE PENDANT MOUNTED LED LINEAR LIGHT FIXTURE WITH DIRECT / INDIRECT DISTRIBUTION. DIRECT AND INDIRECT LIGHTING ARE TO BE ON SEPARATE SWITCHES. LENGTH AS SHOWN ON DRAWINGS.	LED 1200 LM / FT DN 400 LM / FT/ UP 0-10V DIMMING 4000 K	277 V 20 W / FT	ECOSENSE	RP2-4-B-09DN/03UP-L40-UNV-D-2C-FRF-SCAB-XX-48-XX'
				AYO	GAZ-CS-B-44-M-PSB-4-X-940-L-L-VL-SB-1D-B-MF-SC-MW
LP4	PENDANT MOUNTED LED LINEAR LIGHT FIXTURE. WITH 2"X2" PROFILE. LENGTH AS SHOWN ON DRAWINGS.	LED 1000 LM / FT 0-10V DIMMING 4000 K	277 V 10 W / FT	CORELITE	S122DP
				FINELITE	HP X P ID *' S TL 840 F 277 DC FC-1% FA50 ** FE SCBA
				EXTANT ARCH. LIGHTING	HTG-1P-TD-DT-XX-SLO-1250-840-MEODF-VU-D-STANDARD FINISH-AC-XX
				LUMENWERX	VIA2P-D-HLO-FH-NA-SW-80-1250-NA-40-**-UNV-D1-1C
LR1	1" WIDE LINEAR RECESSED LED RGBW LIGHT FIXTURE WITH WHITE LENS AND MUD-IN TRIM. LENGTH AS SHOWN ON DRAWINGS.	LED 400 LM / FT OF WHITE DMX RGBW	277 V 12 W	QTRAN	
				OMNI LIGHT	HUE-RGB412-H02-XX OCH-068R-XX-OM APO-XX-E-24 HUE-DMX-CONTROLLER-STANDARD FINISH HUE-DMX-DECODER
				KELVIX	
				XICO	
LR2	LINEAR RECESSED LED LIGHT FIXTURE WITH 2.5" W x 2.5" H REGRESSED NOTCH. LENGTH AS SHOWN ON DRAWINGS. OUTSIDE 90-DEGREE MITERED CORNER UP WALL AS SHOWN ON PLANS.	LED 500 LM / FT 0-10V DIMMING 4000 K	277 V 5 W / FT	FLUXWERX	NT1-L-02-B-A-40-F2-M-X
				PMC LIGHTING	S9062-D-FL/TRM-40K-070-XX'-SCBA-UNV-OE
				PINNACLE	CRD-840-X-SF-2-EL1-1-SCBA
LR3	2" WIDE MUD-IN RECESSED LED LINEAR LIGHT FIXTURE. LENGTH AS SHOWN ON DRAWINGS. FACTORY MITERED CORNERS.	LED 800 LM / FT 0-10V DIMMING 4000 K	277 V 8 W / FT	NULITE	RM2-06-L35-UNV-D-1C-FRF-WH-XX'
				AXIS LIGHTING INC.	B2SQRLED-750-80-35-SO-X-W-UNV-DP-1-DF
				MARK LIGHTING	SL2L LOP *FT FLP GB 80CRI 35K 800LMF MIN1 277 ZT
				LUMENWERX	VIA2R-D-HLO-FH-SW-80CRI-750LMF 35K-*FT-UNV-D1-1C-DMF-W
LR4	2" WIDE MUD-IN RECESSED RGBW LED LINEAR LIGHT FIXTURE WITH ASYMMETRIC OPTIC. LENGTH AS SHOWN ON DRAWINGS. TIE TO DMX CONTROLLER IN RECEPTION E111.	LED 400 LM / FT OF WHITE DMX RGBW	277 V 12 W / FT	PRUDENTIAL	BPRO2-REC-FLSH-CHR-HO-XX'-SCBA-WWF-LP-SC-UNV-X7-EDMX
				AXIS LIGHTING INC.	
				MARK LIGHTING	
				DAY-O-LITE	PRFL-24-D-FL-RGBW-LO-X-TRL-W-DIM10
LR5	2" WIDE MUD-IN RECESSED LED LINEAR LIGHT FIXTURE. LENGTH AS SHOWN ON DRAWINGS. FACTORY MITERED CORNERS.	LED 800 LM / FT DMX 4000 K	277 V 8 W / FT	PRUDENTIAL	BPRO2-REC-FLSH-LED4-SO-XX'-SCBA-WWF-LP-SC-UNV-X7-DMX
				AXIS LIGHTING INC.	
				MARK LIGHTING	
				DAY-O-LITE	PRFL-24-D-FL-40-HO-X-TRL-W-DIM10
LS1	1" WIDE SURFACE MOUNTED LED LINEAR LIGHT FIXTURE WITH WHITE LENS AND CORNER MOUNT CHANNEL. LENGTH AS SHOWN ON DRAWINGS.	LED 500 LM / FT 0-10V DIMMING 4000 K	277 V 5 W	QTRAN	ARKA-LL1SW-5.0-35-DRY-STD-DF-1S-BW-CLS-WH-CL2-SST-ST-XX' DRIVER
				OMNI LIGHT	GEN2-35-HO-XX OCH-006-XX-OM-APO-XX-E-24
				KELVIX	006 I **' DK 35K WHR CP SV ULV
				XICO	CHAC2-F-WH/RB-90-SWS220-5.0-35-1-FI-*FT 0-10V DIMMING
LS2	5" W x 4' L SURFACE MOUNTED LED LINEAR LIGHT FIXTURE WITH WRAP AROUND LENS.	LED 4000 LM 0-10V DIMMING 4000 K	277 V 40 W	KENALL	MLHA5
				LUMINAIRE	VPF4L LSL *FT MSL4 MIN10 50W 40K MVOLT OP WHT
				HE WILLIAMS	AVX-4-L62/840-CPC-(L50)-DIM-UNV
				BEGHELLI	BS100LED-4HT-VLO-WT40-120-277V
LS3	1" WIDE CORNER MOUNTED EXTERIOR LED LINEAR LIGHT FIXTURE WITH WHITE LENS.	LED 400 LM / FT 0-10V DIMMING 4000 K	277 V 4 W	Q-TRAN	SW24/3.0-WET-40-BW-CLS-WH-CL2-XX' ARKA-SCBA-SST-DF-NI-XX'
				OMNILIGHT	GEN2WL-41-SO-? OCH-005-?-FR-AL-APO-?-E-24
				ACOLYTE LED	CHAC2-W-SCBA-RB-0-SWS265-3.0-40 / DRIVER
LS4	1" WIDE LED LINEAR SURFACE MOUNTED LIGHT FIXTURE WITH WHITE LENS. LENGTH AS SHOWN ON THE DRAWINGS.	LED 750 LM / FT 0-10V DIMMING 4000 K	277 V 6 W / FT	QTRAN	SW-HE24/6.0-DRY-40-BW-BW-WH-BL2-XX' WIDE-ST-SST-DF-NI-XX' QZ DRIVER
				OMNI LIGHT	GEN2-35-SHO-XX OCH-SCS-XX-OM-AL-APO-XX-E-24
				SCOUT	SS-SLR SQM M 35 W ** 1 E N 48 * *'
				XICO	NSQ95-S-*FT-MWH-E1-OFL-S80-35-DLAM-75-UNV FD01-NN-RLDB-NN-SC1-FACTORY MITERED CORNER
LS5	NOT USED				
LW1	4' WALL MOUNTED LED LINEAR LIGHT FIXTURE WITH 2" x 2" PROFILE & WHITE LENS. DIRECT DISTRIBUTION ONLY	LED 1250 LM / FT NON-DIMMING 4000 K	277 V 13 W / FT	NULITE	RW24-D-STF-12-L40-UNV-D-1-SCBA-XX'
				BARTCO	BSS214 **' 40 D H WD SN SCBA
				AXIS LIGHTING	B2SQWDLED-1000-80-40-SO-4-STANDARD FINISH-UNV-DP-1
				STARTEK	SLIMD-4-1000-SD-40K-80-PW-AWM-U-1C
P1	DECORATIVE LED PENDANT MOUNTED LIGHT FIXTURE. 3" W x 12" H	LED 1500 LM NON-DIMMING 4000 K	277 V 15 W	OXYGEN	3-653-XXX-4000K
				EUREKA	4233-XB LED 40 277V DV C 36 RC SCBA SCBA WH
				LINDSLEY	LRD.PN.06.40.10.XX.H12.XX.XX.0-10V
				CONTECH	OFG101
P2	VERTICALLY MOUNTED 4' LONG PENDANT MOUNTED LIGHT FIXTURE WITH 3 LIGHT BARS AND WHITE LENSES.	LED 400 LM / FT 0-10V DIMMING 4000 K	277 V 8 W / FT	ECOSENSE	Y3-CVS-4'-40K-VLO-UNV-10D-SCBA-MF-44-PSS-8
				AYO LIGHTING	OPT-CS-3-44-B-PS-X-NL4'-840-VL-VL-1D-STANDARD FINISH-W
SC1	LED RGBW WALL MOUNTED CYLINDER WITH 20-DEGREE BEAM. DIRECT DISTRIBUTION ONLY.	LED 200 LM OF WHITE DMX RGBW	277 V 20 W	ALPHABET	BETA-4R-RGBW-10LM-43K-90-25D-SCBA-SCBA-W
				AQUARII	VN-75-RGBW-18-D-STANDARD FINISH-M-2-N-X
SC3	4' HIGH BY 4" WIDE BACKLIT LED EXTERIOR WALL SCONCE.	LED 1000 LM NON-DIMMING 4000 K	277 V 8 W	DALS	SWS48-CC
				LIGHTWAY	NECW-450-LED-01C-4-STANDARD FINISH
SL1	LED STRIP LIGHT FIXTURE WITH WHITE LENS. LENGTH AS SHOWN ON THE DRAWINGS.	LED 1250 LM / FT NON-DIMMING 4000 K	277 V 12 W / FT	METALUX	4SNX-48SL-LW-UNV-L840-CD1-U AYC-CHAIN/SET-U
				LITHONIA	CLX L48 4000LM SEF RDL MVOLT GZ10 40K 80CRI WH
				HE WILLIAMS	6CR-TL-L40/840-STANDARD FINISH-DIM-UNV-OW-CS-CM24-S2458/W
				COLUMBIA	CSL4-LSCS
TR1	2'X4' DECORATIVE LED TROFFER. 1" WIDE LENS AROUND THE PERIMETER OF THE GRID TILE.	LED 4800 LM 0-10V DIMMING 4000 K	277V 48 W	LUXRITE	LR24187-4000K
				LOUVERS LED	LI-GRD-24-CCT
				LITHONIA	LFRM 2X4 ALO8 SWW7 MVOLT M6
				GREEN IMAGE	GN-SFL-24-45-A-35
TR2	2'X2' DECORATIVE LED TROFFER. 1" WIDE LENS AROUND THE PERIMETER OF THE GRID TILE.	LED 3300 LM 0-10V DIMMING 4000 K	277V 33 W	LUXRITE	LR22187-4000K
				LOUVERS LED	LI-GRD-22-CCT
				LITHONIA	LFRM 2X2 ALO8 SWW7 MVOLT M6
				GREEN IMAGE	GN-SFL-22-45-A-35
TR3	2'X2' LED FLAT PANEL WITH SMOOTH WHITE LENS.	LED 3300 LM 0-10V DIMMING 4000 K	277V 33 W	METALUX	22CGTX-35-L840
				DAYBRITE	2FPZ33L835-4-DS-UNV-DIM
				LITHONIA	CPX 2X3 3300LM 80CRI 35K SWL MIN1 ZT MVOLT
				COLUMBIA	CBT22-A-LSCS-EDD-2PK
WP1	EXTERIOR WALL MOUNTED LED ROUND CYLINDER. 13-DEGREE BEAM UP, 60-DEGREE BEAM DOWN.	LED 1000 LM UP 4000 LM DN 0-10V DIMMING 4000 K	277 V 50 W	PORTFOLIO	(1) LERUD6C40D010 (2) EC6C40609040 (1) 6LBN3H (1) 6LBM3H (1) LNE6RUD
				KIRLIN	LWC-06RDI-3500L-1000U-WFL-SPU-50K-UNV
WP2	18"W x 18"H x 4"D EXTERIOR LED WALL PACK WITH TYPE 4 DISTRIBUTION. CUSTOM COLOR TO MATCH BUILDING FINISHES.	LED 9,000 LM 0-10V DIMMING 4000 K	277V 56 W	PERFORMANCE IN LTG	M50-M-53-T3-CCBA-40K-UNV-0-10V
				GARDCO	GBM-A12-840-T4M-UNV-CC
				LITHONIA	WDGE3 LED P3 40K 70CRI R4 MVOLT SRM CCBA
				SOLERA	ACER-C-18-57W-LED-UNV-4000K-DM-D-WM-TYPE IV-COLOR MINITEX BLK
WP3	EXTERIOR WALL MOUNTED LED ROUND CYLINDER. 13-DEGREE BEAM UP. INDIRECT DISTRIBUTION ONLY.	LED 1000 LM UP 0-10V DIMMING 4000 K	277 V 15 W	PORTFOLIO	LERUD6C40D010
				KIRLIN	LWC
X1	SINGLE SIDED LED DIE-CAST EXIT SIGN WITH GREEN LETTERS. AC ONLY.	LED	277 V 5W	ABB INSTALLATION PRODUCTS	PAG6
				ISOLITE	EDC AC G U SCBA SCBA MTEBP
				MULE	MD-A-1-G-BA
				COMPASS	CCESG
X2	LED DIE CAST DOUBLE SIDED EXIT SIGN. WHITE WITH GREEN LETTERS. AC ONLY.	LED	277 V 5W	EVENLITE	CCDS-AC-G-2-SCBA-XX
				LITHONIA	LQCW2G
				MULE	MD-A-U-G-WW
X3	LED DIE CAST EXIT SIGN WITH WIRE GUARD. WHITE WITH GREEN LETTERS. AC ONLY.	LED	277 V 5W	EVENLITE	CCDS-AC-G-1-SCBA-XX-M990010
				LITHONIA	LQC W 1 G / ELAWG1
				MULE	MD-A-U-G-WW WG1
X4	LED DIE CAST DOUBLE SIDED EXIT SIGN WITH GREEN LETTERS. END MOUNTED. AC ONLY.	LED	277 V 5W	EVENLITE	SOV-AC-G-2M-SCBA-UC
				LITHONIA	EDG 2 GMR
				MULE	MD-A-U-G-WW

LIGHT FIXTURE GENERAL NOTES

1. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPANCIES OF LOCATIONS AND QUANTITIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
2. CONFIRM MOUNTING HEIGHTS AND LOCATIONS OF ALL LIGHT FIXTURES WITH ARCHITECTURAL ELEVATIONS AND / OR ARCHITECT.
3. REFER TO THE SPECIFICATIONS FOR OTHER LIGHT FIXTURE REQUIREMENTS.
4. CONFIRM AVAILABLE MOUNTING DEPTHS OF ALL LIGHT FIXTURES AND COMPARE WITH DEPTHS SHOWN ON SHOP DRAWINGS. BRING ALL POTENTIAL CONFLICT AREAS TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO RELEASE.
5. ALL INTERIOR LIGHT FIXTURES ARE TO BE 3500 K AND ALL EXTERIOR LIGHT FIXTURES ARE TO BE 4000 K , UNLESS OTHERWISE NOTED IN THE FIXTURE DESCRIPTION.
6. ALL LIGHT FIXTURES ARE TO BE A MINIMUM OF 80 CRI UNLESS OTHERWISE NOTED IN THE FIXTURE DESCRIPTION.
7. ALL LED SOURCES MUST MEET L80 AT 50,000 HRS MINIMUM UNLESS OTHERWISE NOTED.
8. CONFIRM ALL MOUNTING REQUIREMENTS WITH ARCHITECT PRIOR TO RELEASE.
9. ALL LIGHT FIXTURES ARE TO HAVE AN EFFICACY OF 80 LUMENS PER WATT MINIMUM.

BIDDING REQUIREMENTS

1. BID ONLY PRODUCTS THAT ARE SPECIFIED OR APPROVED BY ADDENDUM.
2. PACKAGING OF LIGHT FIXTURES WITH OTHER SYSTEMS IS NOT ALLOWED AND MUST BE BID SEPARATELY. I.E. LIGHT FIXTURES, THEATRICAL LIGHTING, SPORTS LIGHTING AND ALL LIGHTING CONTROLS.
3. WHEN ONLY ONE PRODUCT IS APPROVED FOR BIDDING, THE PRICE FOR THAT ITEM SHALL BE BROKEN OUT SEPARATELY WHEN SUBMITTING PRICING TO VARIOUS DISTRIBUTORS AND / OR CONTRACTOR.
4. WHEN A CONTRADICTION EXISTS BETWEEN A SPECIFIC MODEL NUMBER AND THE DESCRIPTION, THE DESCRIPTION SHALL GOVERN.

LIGHT FIXTURE PRIOR APPROVAL REQUIREMENTS

1. PRIOR APPROVAL IS REQUIRED BEFORE BIDDING THIS PROJECT.
2. PRIOR APPROVALS SHALL BE SUBMITTED TO THE ELECTRICAL ENGINEER'S OFFICE AT LEAST (8) WORKING DAYS BEFORE BID TIME. PRIOR APPROVALS RECEIVED AFTER THIS TIME PERIOD SHALL BE REJECTED.
3. ITEMS THAT ARE SUBMITTED AND HAVE BEEN APPROVED WILL BE LISTED IN THE ADDENDUM(S). VERBAL APPROVALS WILL NOT BE GIVEN ON ANY ITEM.
4. IT IS NOT THE RESPONSIBILITY OF THE ELECTRICAL ENGINEER TO NOTIFY THE SUBMITTING PARTY OF ERRORS IN THE SUBMITTAL. NOTIFICATION OF ERRORS BY THE ELECTRICAL ENGINEER PRIOR TO ISSUANCE OF THE ADDENDUM(S) MAY NOT BE GIVEN.
5. PRIOR APPROVALS SHALL CONSIST OF CUT SHEETS DESCRIBING THE PRODUCTS BEING SUBMITTED AS EQUIVALENTS. ALL SPECIFICATION INFORMATION SHALL BE CLEARLY MARKED. PRODUCTS WITHOUT PHOTOMETRIC DATA WILL NOT BE APPROVED.
6. LIGHTING PACKAGES WILL BE REVIEWED FOR GENERAL PROJECT COMPLIANCE ONLY. AN IN-DEPTH REVIEW OF ANY ALTERNATE FIXTURES WILL BE DONE DURING THE SUBMITTAL REVIEW PROCESS. ANY FIXTURES THAT ARE NOT TRULY EQUAL, AND / OR DO NOT COMPLY WITH ALL OF THE REQUIREMENTS CONTAINED IN THE CONTRACT DOCUMENTS, WILL NOT BE APPROVED.

LIGHTING CONTROL PANEL SCHEDULE

PANEL NAME: LCP1
LOCATION: ELEC A120
TRANSFORMER VOLTAGE: 277
MOUNTING: SURFACE
NEMA TYPE: NEMA 1

RELAY NO.	CIRCUIT BREAKER	LOAD CONTROLLED	POLES	METHOD OF CONTROL	PROGRAMMING REQUIREMENTS
1	1HA1-2	SITE POLE LIGHTING	1	SWITCHED	
2	1HA1-24	MONUMENT SIGN LTG	1	SWITCHED	
3	1HA1-1	VESTIBULE COLUMN LTG	1	SWITCHED	
4	1HA1-1	FLAG POLE LIGHT	1	SWITCHED	
5	1EHA1-2	EM LTG BUILDING EXTERIOR	1	SWITCHED	
6		SPARE	1	SWITCHED	
7		SPARE	1	SWITCHED	
8		SPARE	1		

PROGRAMMING REQUIREMENTS

A	TIME ON (6:00 AM) - TIME OFF (7:00 PM), 2 HOUR OVERRIDE AT LOW VOLTAGE SWITCH
B	TIME ON (5:00 AM) - TIME OFF (10:00 PM)
C	MANUAL ON - TIME OFF (5:30 PM)
D	MANUAL ON - MANUAL OFF - SWEEP OFF AT END OF DAY (5:30 PM)
E	TIME ON (7:30 AM) - MANUAL OFF - SWEEP OFF AT END OF DAY (5:30 PM)
F	PHOTO CELL ON - PHOTO CELL OFF
G	PHOTO CELL ON - TIMED OFF (9:00 PM), 2 HOUR OVERRIDE AT LOW VOLTAGE SWITCH

NOTES: COORDINATE WITH THE ARCHITECT/OWNER FOR THE EXACT START AND END TIMES PRIOR TO THE FINAL PROGRAMMING OF THE LIGHTING CONTROL SYSTEM.

LIGHTING CONTROL PANEL SCHEDULE

PANEL NAME: LCP2
LOCATION: MAIN ELECTRICAL D138
TRANSFORMER VOLTAGE: 277
MOUNTING: SURFACE
NEMA TYPE: NEMA 1

RELAY NO.	CIRCUIT BREAKER	LOAD CONTROLLED	POLES	METHOD OF CONTROL	PROGRAMMING REQUIREMENTS
1	1HD1-11	BUILDING EXTERIOR LIGHTING	1	SWITCHED	
2	1HD1-4	MAIN ENTRY LIGHTING	1	SWITCHED	
3	1HD1-4	MAIN ENTRY SIGN LIGHTING	1	SWITCHED	
4			1	SWITCHED	
5	1EHD1-3	EM LTG BUILDING EXTERIOR	1	SWITCHED	
6	1EHD1-7	EM LTG CORRIDOR D106	1	SWITCHED	
7		SPARE	1	SWITCHED	
8		SPARE	1		

PROGRAMMING REQUIREMENTS

A	TIME ON (6:00 AM) - TIME OFF (7:00 PM), 2 HOUR OVERRIDE AT LOW VOLTAGE SWITCH
B	TIME ON (5:00 AM) - TIME OFF (10:00 PM)
C	MANUAL ON - TIME OFF (5:30 PM)
D	MANUAL ON - MANUAL OFF - SWEEP OFF AT END OF DAY (5:30 PM)
E	TIME ON (7:30 AM) - MANUAL OFF - SWEEP OFF AT END OF DAY (5:30 PM)
F	PHOTO CELL ON - PHOTO CELL OFF
G	PHOTO CELL ON - TIMED OFF (9:00 PM), 2 HOUR OVERRIDE AT LOW VOLTAGE SWITCH

NOTES: COORDINATE WITH THE ARCHITECT/OWNER FOR THE EXACT START AND END TIMES PRIOR TO THE FINAL PROGRAMMING OF THE LIGHTING CONTROL SYSTEM.

LIGHTING CONTROL PANEL SCHEDULE

PANEL NAME: LCP3
LOCATION: ELEC D118
TRANSFORMER VOLTAGE: 277
MOUNTING: SURFACE
NEMA TYPE: NEMA 1

RELAY NO.	CIRCUIT BREAKER	LOAD CONTROLLED	POLES	METHOD OF CONTROL	PROGRAMMING REQUIREMENTS
1	1HD2-13	AUXILLARY GYM LTG ZONE 'a'	1	SWITCHED	
2	1HD2-13	AUXILLARY GYM LTG ZONE 'c'	1	SWITCHED	
3	1HD2-13	AUXILLARY GYM LTG ZONE 'd'	1	SWITCHED	
4	1HD2-13	AUXILLARY GYM LTG ZONE 'f'	1	SWITCHED	
5	1HD2-13	AUXILLARY GYM LTG ZONE 'g'	1	SWITCHED	
6	1HD2-15	GYM LTG ZONE 'a'	1	SWITCHED	
7	1HD2-15	GYM LTG ZONE 'c'	1	SWITCHED	
8	1HD2-7	GYM LTG ZONE 'e'	1	SWITCHED	
9	1HD2-7	GYM LTG ZONE 'f'	1	SWITCHED	
10	1HD2-17	SITE POLE LIGHTS	1	SWITCHED	
11	1HD2-19	BOLLARD LIGHTS (NIBLEY ONLY)	1	SWITCHED	
12		SPARE	1		
13	1EHD2-1	EM LTG BUILDING EXTERIOR	1	SWITCHED	
14	1EHD2-3	EM LTG AUX. GYM ZONE 'b'	1	SWITCHED	
15	1EHD2-3	EM LTG AUX. GYM ZONE 'e'	1	SWITCHED	
16	1EHD2-3	EM LTG AUX. GYM ZONE 'h'	1	SWITCHED	
17	1EHD2-3	EM LTG GYM ZONE 'b'	1	SWITCHED	
18	1EHD2-3	EM LTG GYM ZONE 'd'	1	SWITCHED	
19	1EHD2-3	EM LTG GYM ZONE 'g'	1	SWITCHED	
20		SPARE	1		

PROGRAMMING REQUIREMENTS

A	TIME ON (6:00 AM) - TIME OFF (7:00 PM), 2 HOUR OVERRIDE AT LOW VOLTAGE SWITCH
B	TIME ON (5:00 AM) - TIME OFF (10:00 PM)
C	MANUAL ON - TIME OFF (5:30 PM)
D	MANUAL ON - MANUAL OFF - SWEEP OFF AT END OF DAY (5:30 PM)
E	TIME ON (7:30 AM) - MANUAL OFF - SWEEP OFF AT END OF DAY (5:30 PM)
F	PHOTO CELL ON - PHOTO CELL OFF
G	PHOTO CELL ON - TIMED OFF (9:00 PM), 2 HOUR OVERRIDE AT LOW VOLTAGE SWITCH

NOTES: COORDINATE WITH THE ARCHITECT/OWNER FOR THE EXACT START AND END TIMES PRIOR TO THE FINAL PROGRAMMING OF THE LIGHTING CONTROL SYSTEM.

LIGHTING CONTROL PANEL SCHEDULE

PANEL NAME: LCP4
LOCATION: ELEC D118
TRANSFORMER VOLTAGE: 277
MOUNTING: SURFACE
NEMA TYPE: NEMA 1

RELAY NO.	CIRCUIT BREAKER	LOAD CONTROLLED	POLES	METHOD OF CONTROL	PROGRAMMING REQUIREMENTS
1		SPARE	1	SWITCHED	
2		SPARE	1	SWITCHED	
3		SPARE	1	SWITCHED	
4		SPARE	1	SWITCHED	
5		SPARE	1	SWITCHED	
6		SPARE	1	SWITCHED	
7		SPARE	1	SWITCHED	
8		SPARE	1		
9		SPARE	1	SWITCHED	
10		SPARE	1	SWITCHED	
11		SPARE	1	SWITCHED	
12		SPARE	1		
13		SPARE	1		
14		SPARE	1		
15		SPARE	1		

PROGRAMMING REQUIREMENTS

A	TIME ON (6:00 AM) - TIME OFF (7:00 PM), 2 HOUR OVERRIDE AT LOW VOLTAGE SWITCH
B	TIME ON (5:00 AM) - TIME OFF (10:00 PM)
C	MANUAL ON - TIME OFF (5:30 PM)
D	MANUAL ON - MANUAL OFF - SWEEP OFF AT END OF DAY (5:30 PM)
E	TIME ON (7:30 AM) - MANUAL OFF - SWEEP OFF AT END OF DAY (5:30 PM)
F	PHOTO CELL ON - PHOTO CELL OFF
G	PHOTO CELL ON - TIMED OFF (9:00 PM), 2 HOUR OVERRIDE AT LOW VOLTAGE SWITCH

NOTES: COORDINATE WITH THE ARCHITECT/OWNER FOR THE EXACT START AND END TIMES PRIOR TO THE FINAL PROGRAMMING OF THE LIGHTING CONTROL SYSTEM.

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P (801) 534-1130
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www.envisioneng.com

HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER No. 77411 05-01-2024 STATE OF UTAH

CONSTRUCTION DOCUMENTS

LIGHT FIXTURE SCHEDULE

E-161

5/28/2024 1:52:06 PM

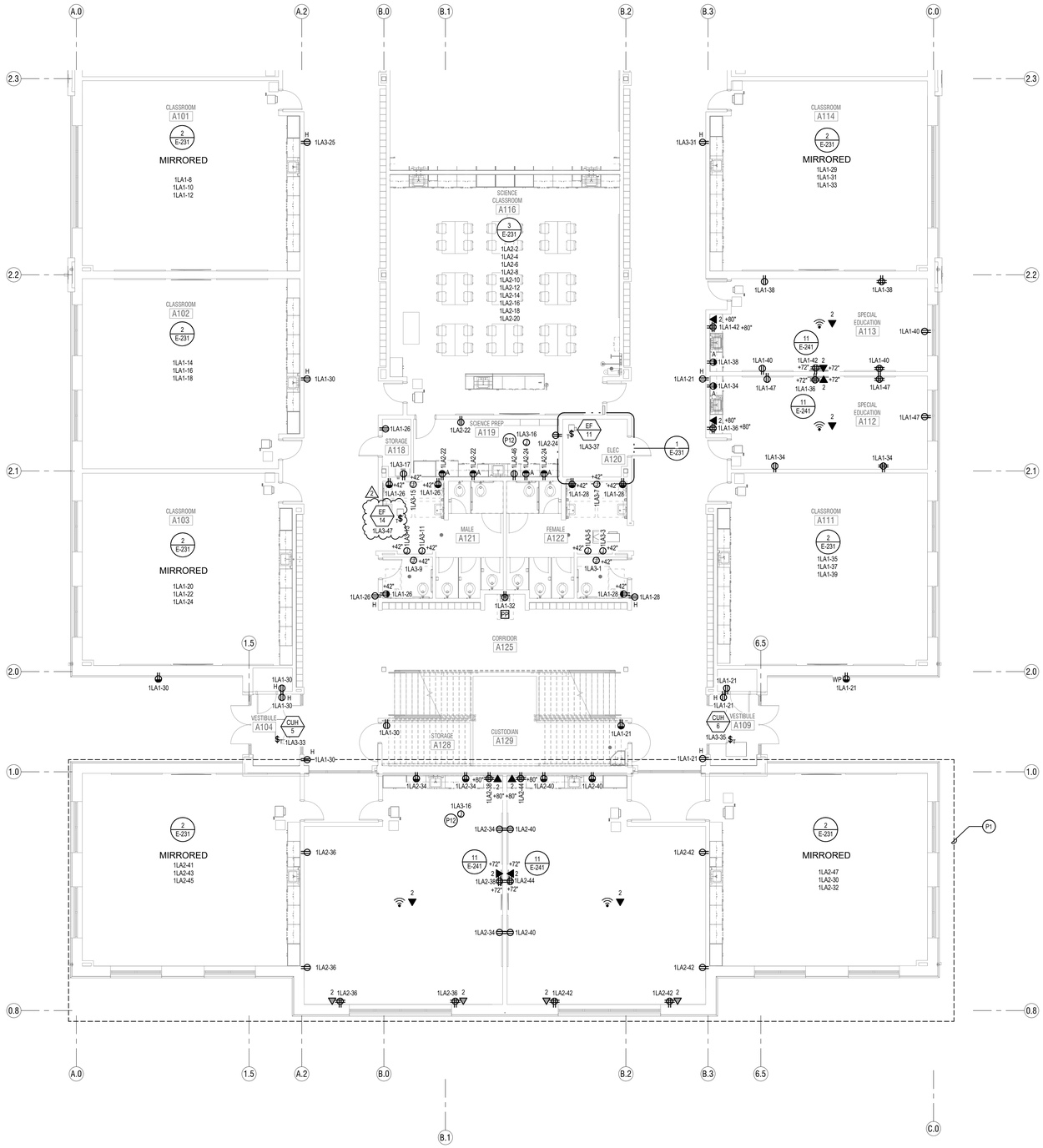
POWER GENERAL NOTES:

1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

KEYED NOTES (#)

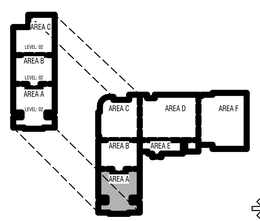
P1 UNDER THE BASE BID, INCLUDE ALL WORK IN THIS AREA AS SHOWN ON THE PLANS. UNDER ALTERNATE #1, THIS AREA WILL BE REMOVED FROM THE PROJECT. PROVIDE A SEPARATE COST TO BE ISSUED AS A CREDIT FOR ALL WORK IN THIS AREA AS SHOWN ON THE PLANS.

P12 POWER FOR VAV BOX TRANSFORMER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.



1 LEVEL 1 FLOOR PLAN - AREA A - POWER
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377411 04-26-2024 STATE OF UTAH

LEVEL 1 - AREA A - POWER

E-211

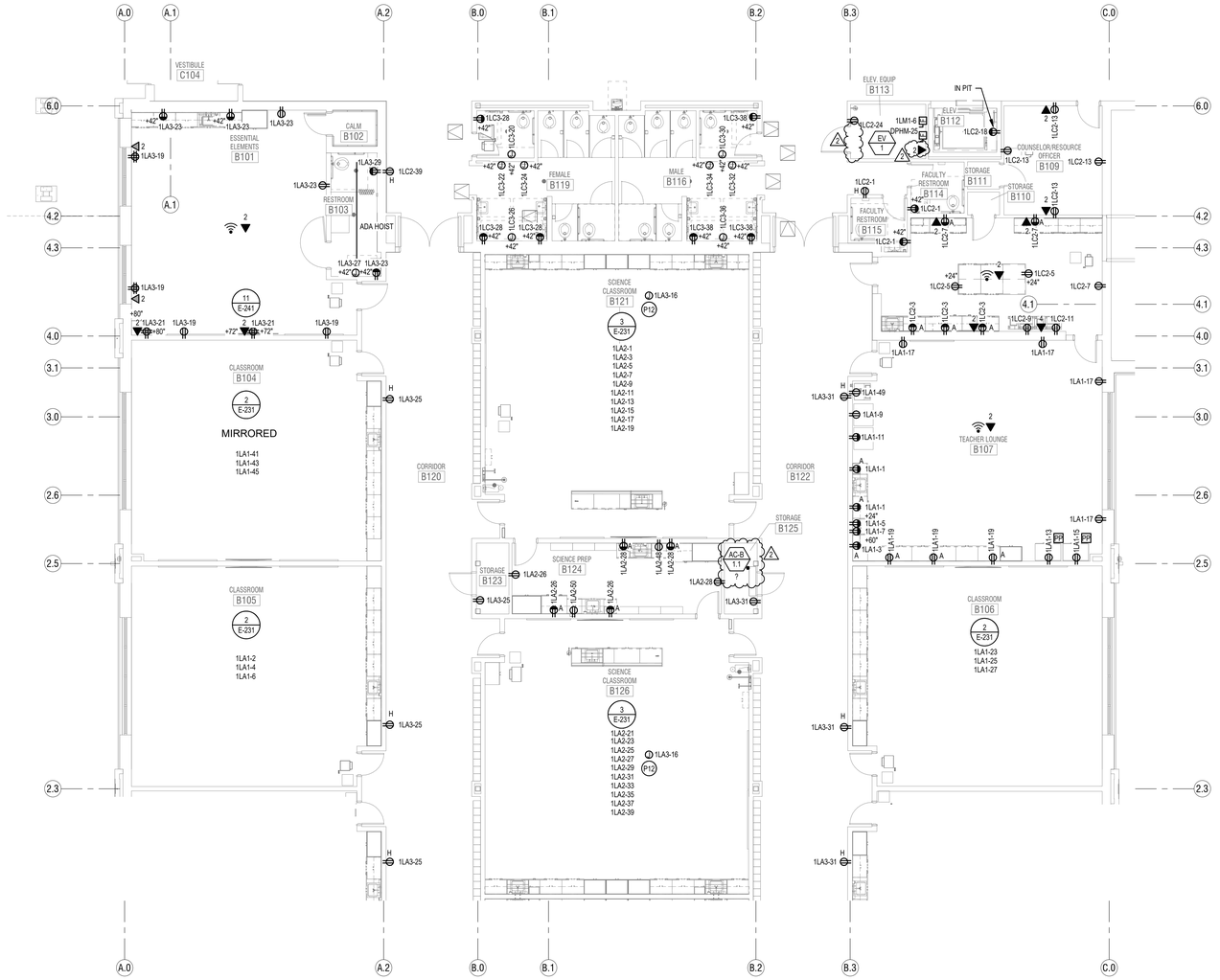
5/28/2024 1:31:19 PM

POWER GENERAL NOTES:

1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

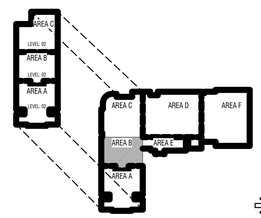
KEYED NOTES (#)

P12 POWER FOR VAV BOX TRANSFORMER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.



1 **LEVEL 1 FLOOR PLAN - AREA B - POWER**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 1 - AREA B - POWER

E-212

5/28/2024 1:31:21 PM

POWER GENERAL NOTES:

1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

KEYED NOTES (#)

P12 POWER FOR VAV BOX TRANSFORMER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.

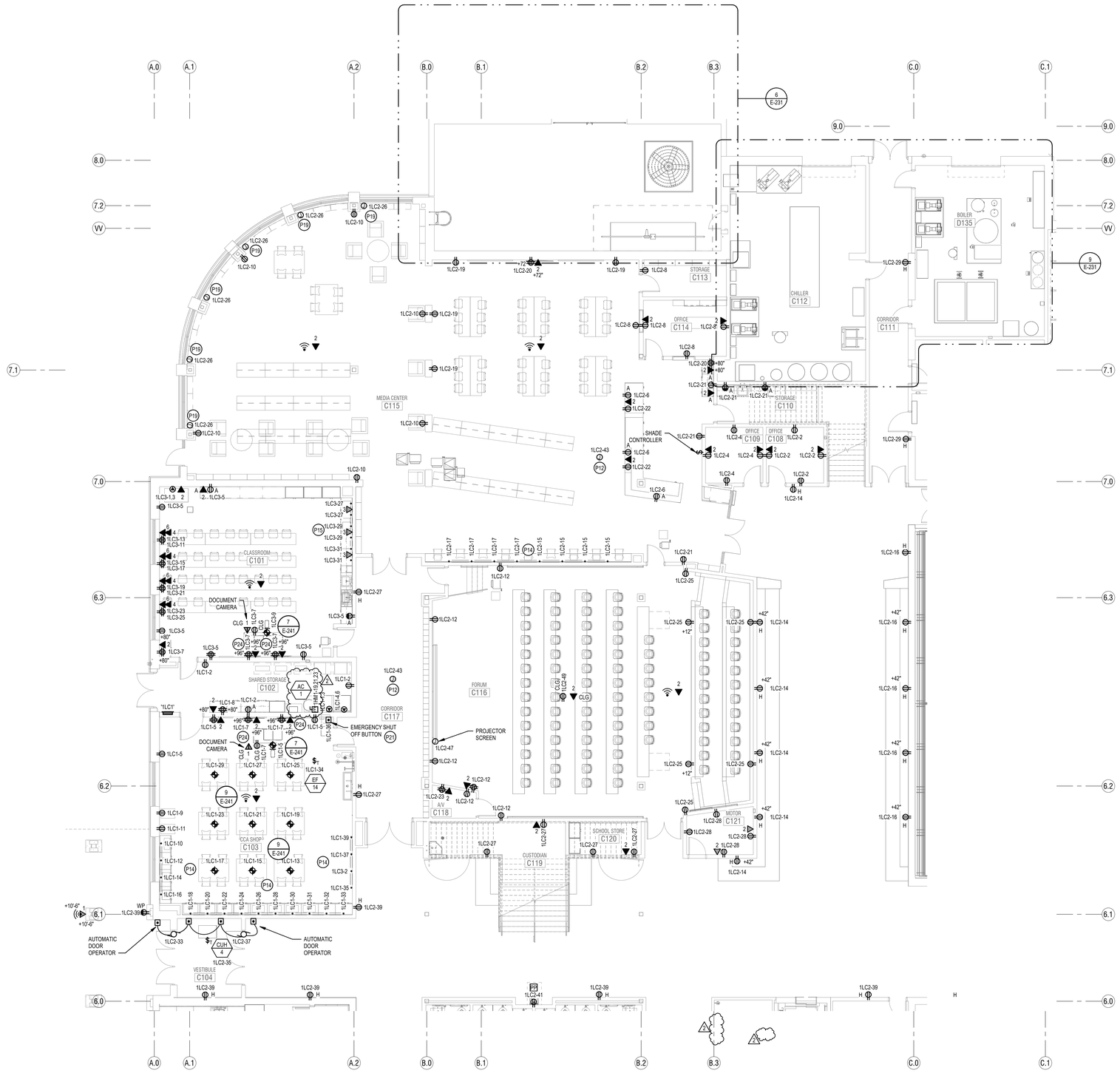
P14 WIREMOLD.

P15 2-CHANNEL WIREMOLD WITH DATA.

P19 TIE THE SHADE MOTOR TO THE CIRCUIT INDICATED THROUGH THE SHADE MOTOR SWITCH IN THE MAIN OFFICE AREA. REFER TO THE MANUFACTURER'S WIRING DIAGRAMS FOR ADDITIONAL INFORMATION. VERIFY THE LOCATION AND NUMBER OF CONTROLLERS AND SHADE MOTORS WITH THE SUPPLIER.

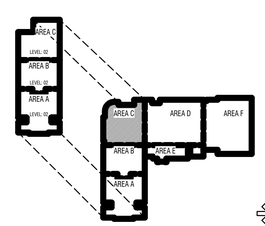
P21 MUSHROOM TYPE EMERGENCY SHUT OFF BUTTON WITH CLEAR PROTECTIVE COVER AND NORMALLY OPEN CONTACT. TIE TO SHUNT TRIP MAIN BREAKER IN PANEL 1LC1.

P24 PROVIDE A 25 KW INVERTER WITH 480V, 3Ø INPUT AND 480V, 3Ø OUTPUT TO POWER EMERGENCY LIGHTING PANELS.



1 LEVEL 1 FLOOR PLAN - AREA C - POWER
SCALE: **1/8" = 1'-0"**

KEY PLAN



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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
	03.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 1 - AREA C - POWER

E-213

5/28/2024 1:07:25 PM

POWER GENERAL NOTES:

1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

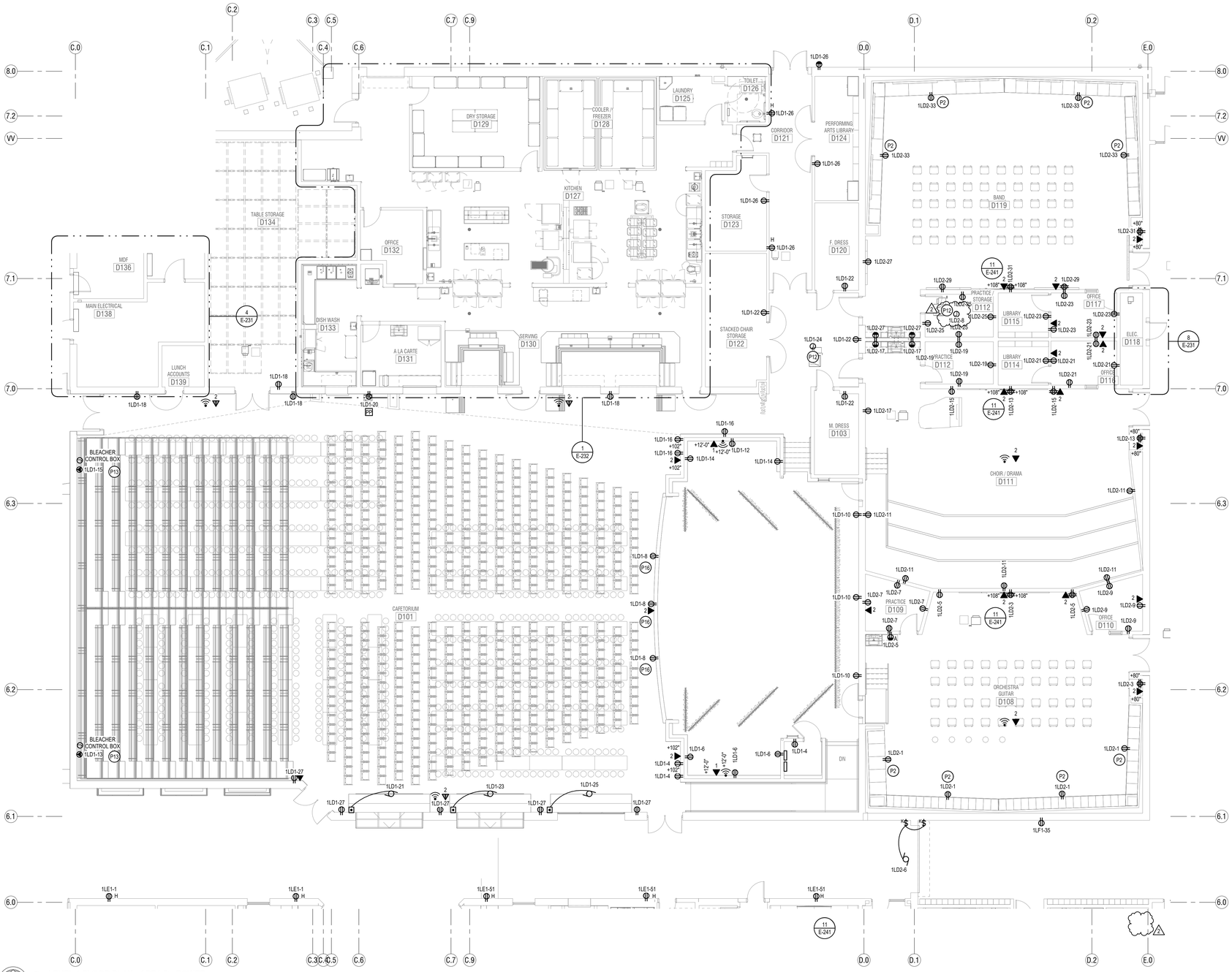
KEYED NOTES (#)

P2 RECEPTACLE TO BE MOUNTED HORIZONTALLY IN KICK PLATE UNDER MILLWORK.

P12 POWER FOR VAV BOX TRANSFORMER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.

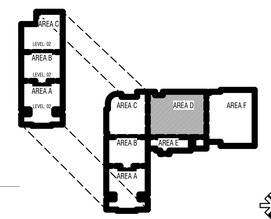
P13 BLEACHER CONROL BOX.

P16 MOUNT DEVICE IN FACE OF STEP.



1 LEVEL 1 FLOOR PLAN - AREA D - POWER
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LICENSED PROFESSIONAL ENGINEER
STATE OF UTAH
04-26-2024

LEVEL 1 - AREA D - POWER

E-214

5/28/2024 1:37:25 PM

POWER GENERAL NOTES:

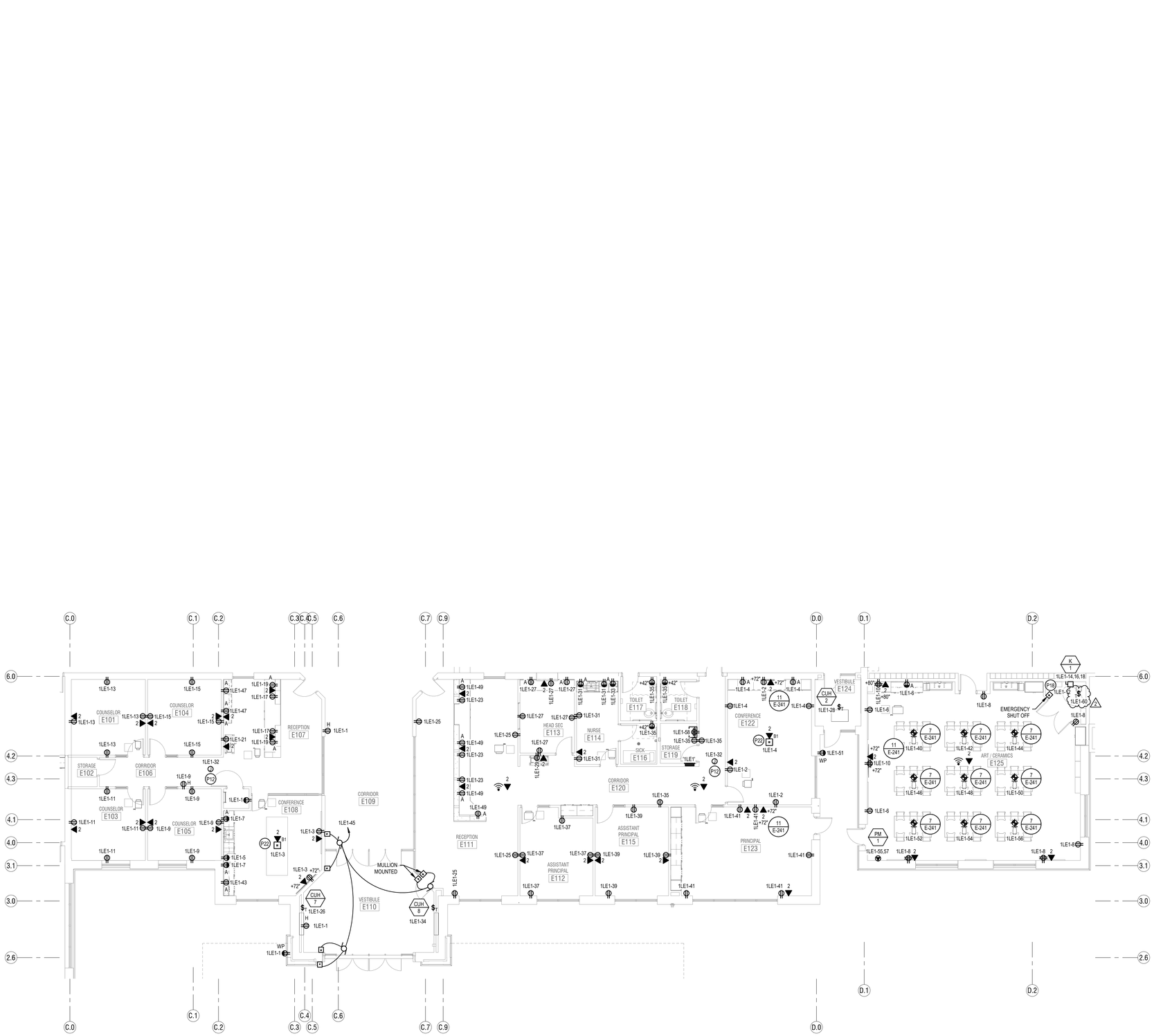
1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

KEYED NOTES (#)

P12 POWER FOR VAV BOX TRANSFORMER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.

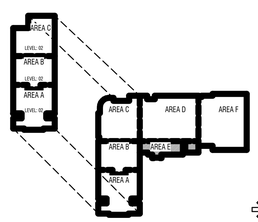
P18 MUSHROOM TYPE EMERGENCY SHUT OFF BUTTON WITH CLEAR PROTECTIVE COVER AND NORMALLY OPEN CONTACT. TIE TO KILN SHUNT TRIP BREAKER.

P22 4 GANG CONCRETE FLOOR BOX. PROVIDE WITH A 4-PLEX OUTLET, 2 DATA PORTS AND A BLANK SPACE FOR A/V. HUBBELL CAT. #24GTCVR***/ CFB4G25*** OR APPROVED EQUAL. RUN 1-1/2" CONDUIT FROM BLANK SPACE UP NEAREST WALL AND INTO ACCESSIBLE CEILING SPACE.



1 **LEVEL 1 FLOOR PLAN - AREA E - POWER**
SCALE: **1/8" = 1'-0"**

KEY PLAN



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CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	02/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — STATE OF UTAH — 772411 — 04-26-2024

LEVEL 1 - AREA E - POWER

E-215

5/28/2024 1:31:31 PM

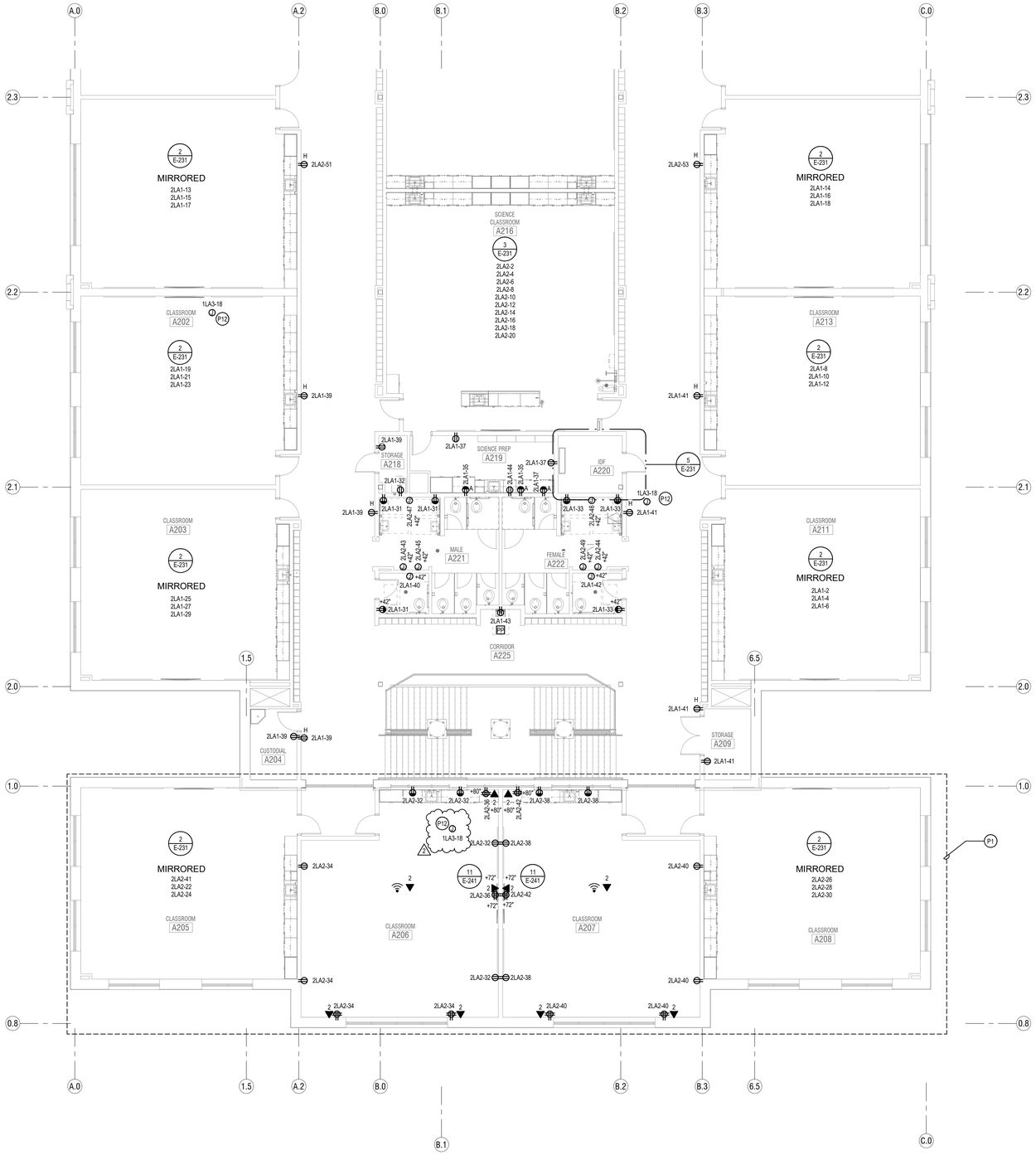
POWER GENERAL NOTES:

1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

KEYED NOTES (#)

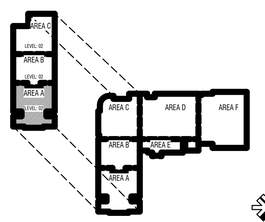
P1 UNDER THE BASE BID, INCLUDE ALL WORK IN THIS AREA AS SHOWN ON THE PLANS. UNDER ALTERNATE #1, THIS AREA WILL BE REMOVED FROM THE PROJECT. PROVIDE A SEPARATE COST TO BE ISSUED AS A CREDIT FOR ALL WORK IN THIS AREA AS SHOWN ON THE PLANS.

P12 POWER FOR VAV BOX TRANSFORMER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.



1 LEVEL 2 FLOOR PLAN - AREA A - POWER
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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255 SOUTH 200 WEST LOGAN, UT 84321
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HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377411 04-01-2024 STATE OF UTAH

LEVEL 2 - AREA A - POWER

E-221

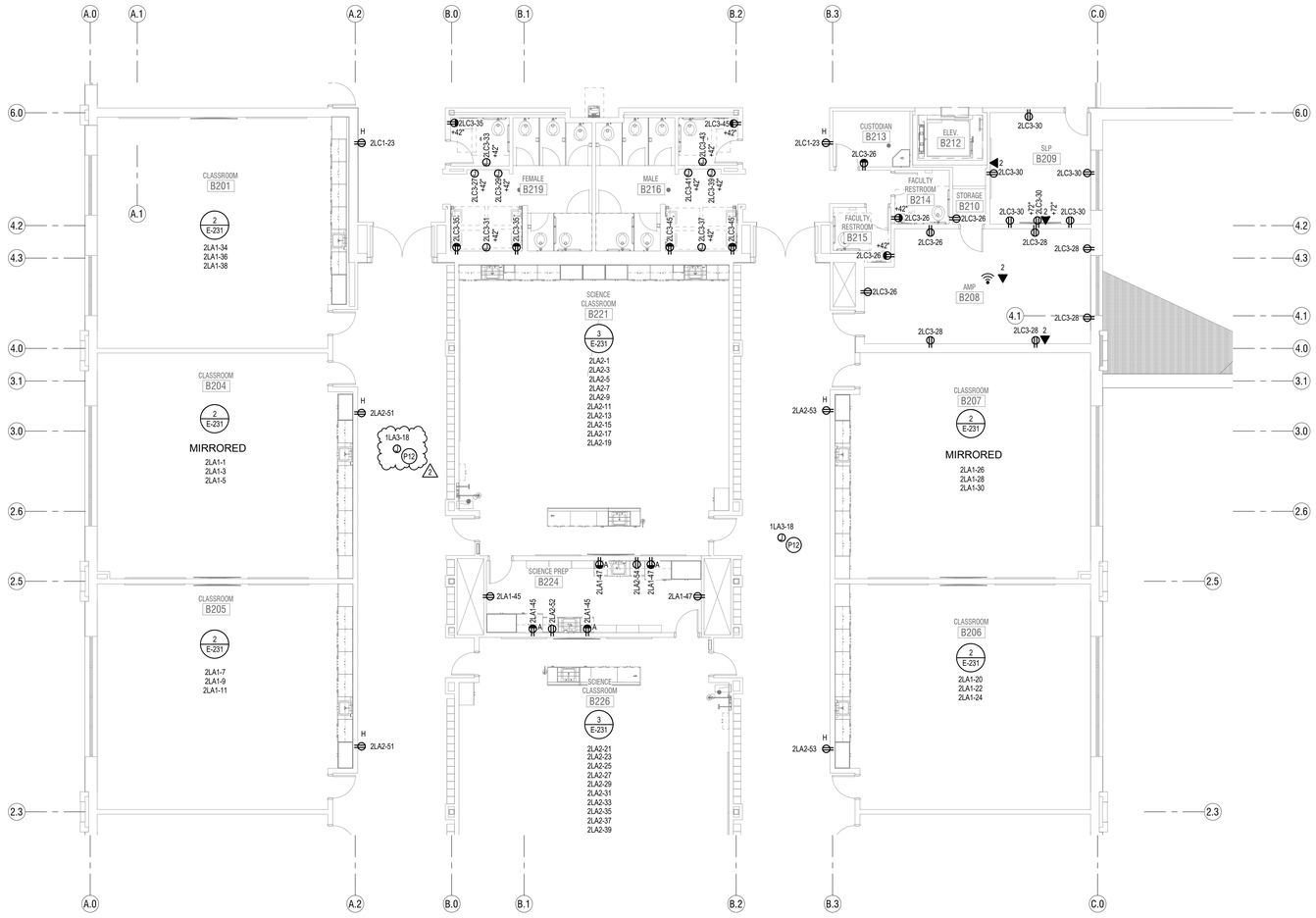
5/28/2024 1:31:38 PM

POWER GENERAL NOTES:

1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

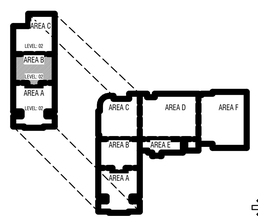
KEYED NOTES (#)

P12 POWER FOR VAV BOX TRANSFORMER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.



1 **LEVEL 2 FLOOR PLAN - AREA B - POWER**
SCALE: 1/8" = 1'-0"

KEY PLAN



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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LICENSED PROFESSIONAL ENGINEER 377441 04-26-2024 STATE OF UTAH

LEVEL 2 - AREA B - POWER

E-222

5/28/2024 1:31:41 PM

POWER GENERAL NOTES:

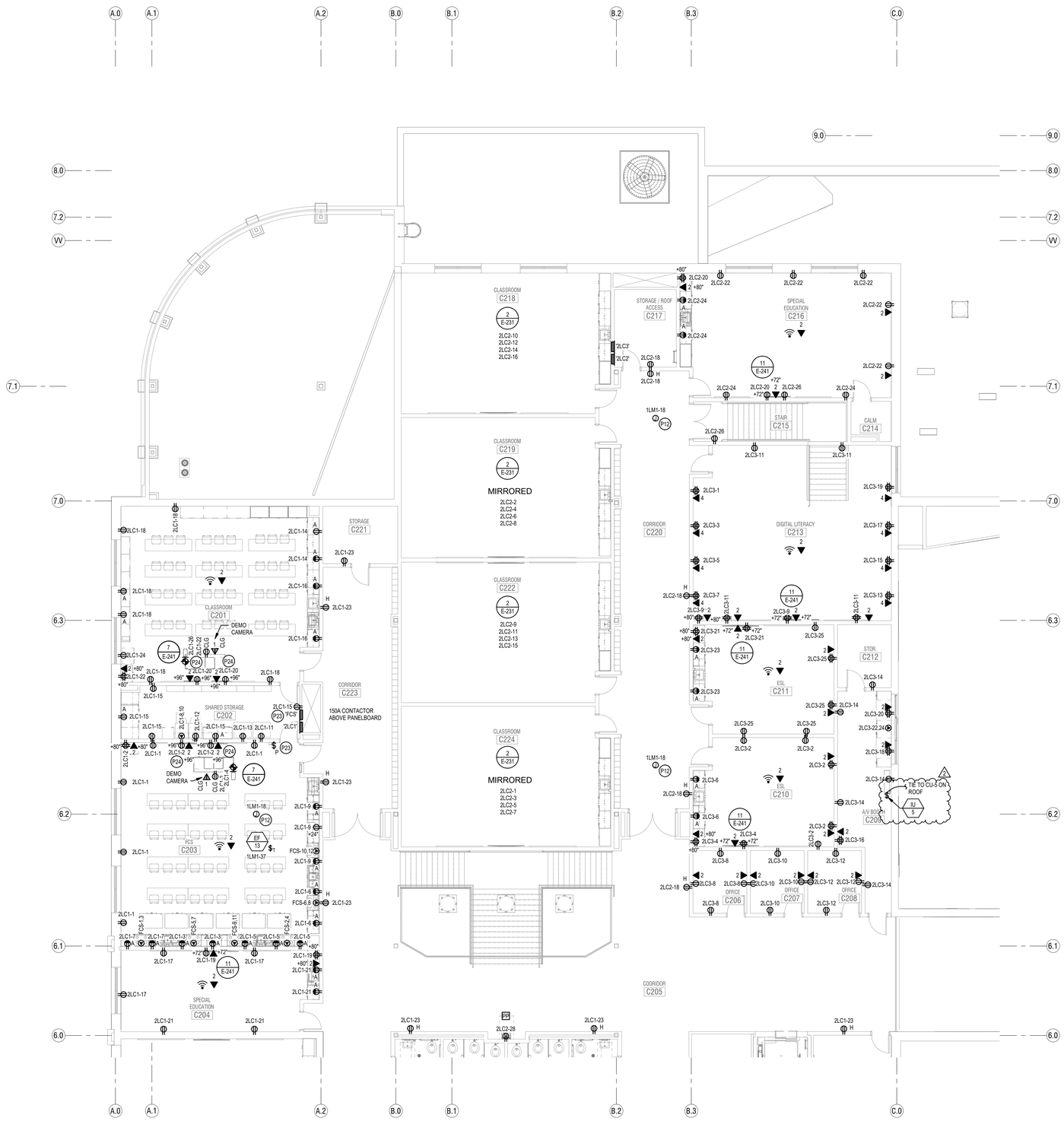
1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

KEYED NOTES (#)

P12 POWER FOR VAV BOX TRANSFORMER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.

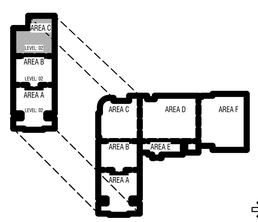
P23 RUN A 2" RGS CONDUIT THROUGH THE ROOF TO THE IDF/MDF BELOW IN THE APPROXIMATE LOCATION SHOWN FOR FUTURE WIRELESS ANTENNA LOCATION. CONDUIT IS TO EXTEND 5' ABOVE THE ROOF. PROVIDE A WEATHERHEAD ON THE END OF THE CONDUIT.

P24 PROVIDE A 25 KW INVERTER WITH 480V, 3Ø INPUT AND 480V, 3Ø OUTPUT TO POWER EMERGENCY LIGHTING PANELS.



1 **LEVEL 2 FLOOR PLAN - AREA C - POWER**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	02/22/24	ADDENDUM 5

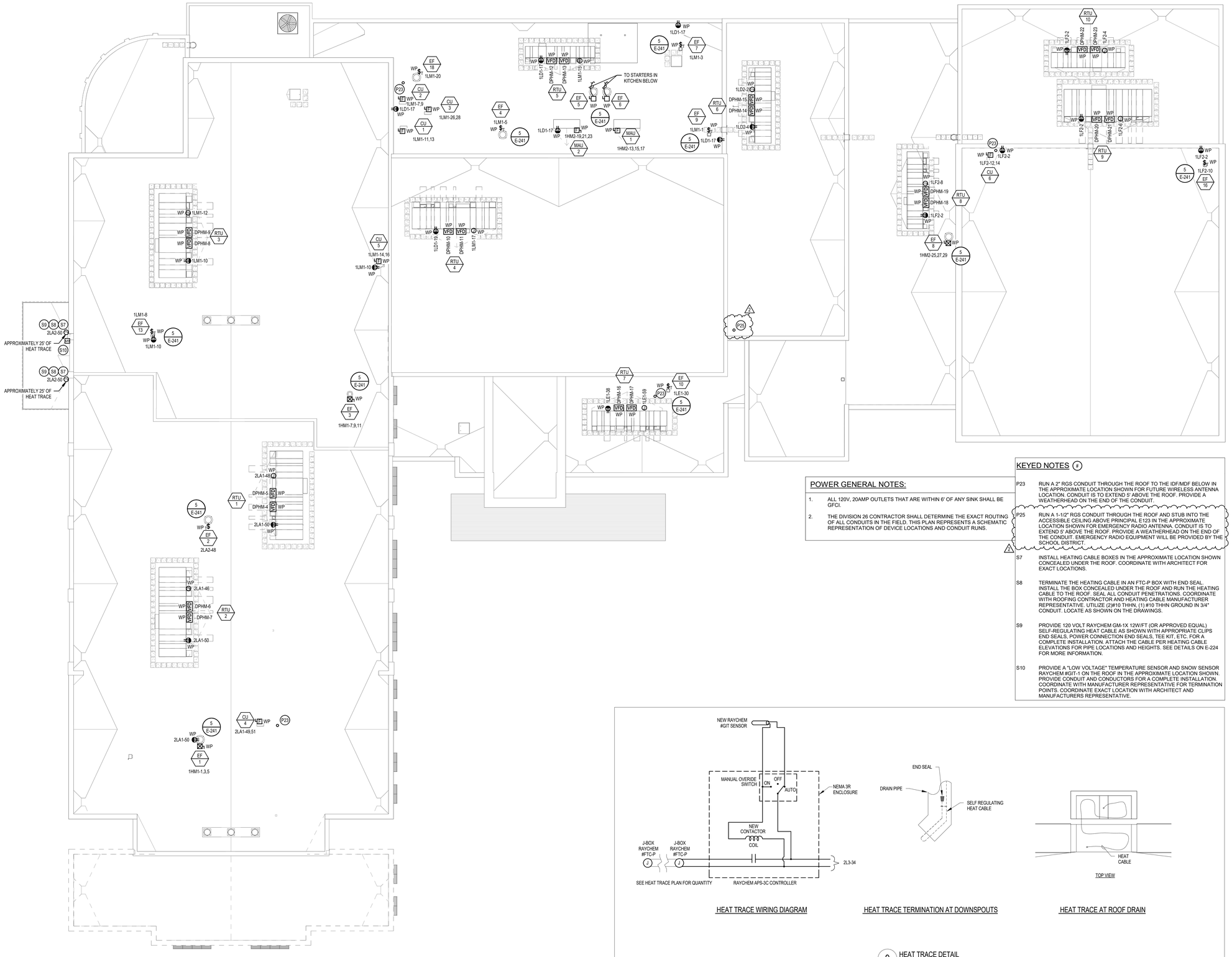
PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — STATE OF UTAH — 772411 — 04-26-2024

LEVEL 2 - AREA C - POWER

E-223

5/28/2024 7:19:44 PM



1 **OVERALL ROOF PLAN - POWER**
SCALE: **1/16" = 1'-0"**

POWER GENERAL NOTES:

1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

KEYED NOTES (#)

P23 RUN A 2" RGS CONDUIT THROUGH THE ROOF TO THE IDF/MDF BELOW IN THE APPROXIMATE LOCATION SHOWN FOR FUTURE WIRELESS ANTENNA LOCATION. CONDUIT IS TO EXTEND 5' ABOVE THE ROOF. PROVIDE A WEATHERHEAD ON THE END OF THE CONDUIT.

P25 RUN A 1-1/2" RGS CONDUIT THROUGH THE ROOF AND STUB INTO THE ACCESSIBLE CEILING ABOVE PRINCIPAL E123 IN THE APPROXIMATE LOCATION SHOWN FOR EMERGENCY RADIO ANTENNA. CONDUIT IS TO EXTEND 5' ABOVE THE ROOF. PROVIDE A WEATHERHEAD ON THE END OF THE CONDUIT. EMERGENCY RADIO EQUIPMENT WILL BE PROVIDED BY THE SCHOOL DISTRICT.

S7 INSTALL HEATING CABLE BOXES IN THE APPROXIMATE LOCATION SHOWN CONCEALED UNDER THE ROOF. COORDINATE WITH ARCHITECT FOR EXACT LOCATIONS.

S8 TERMINATE THE HEATING CABLE IN AN FTC-P BOX WITH END SEAL. INSTALL THE BOX CONCEALED UNDER THE ROOF AND RUN THE HEATING CABLE TO THE ROOF. SEAL ALL CONDUIT PENETRATIONS. COORDINATE WITH ROOFING CONTRACTOR AND HEATING CABLE MANUFACTURER REPRESENTATIVE. UTILIZE (2)#10 THHN, (1) #10 THHN GROUND IN 3/4" CONDUIT. LOCATE AS SHOWN ON THE DRAWINGS.

S9 PROVIDE 120 VOLT RAYCHEM GM-1X 12W/FT (OR APPROVED EQUAL) SELF-REGULATING HEAT CABLE AS SHOWN WITH APPROPRIATE CLIPS END SEALS, POWER CONNECTION END SEALS, TEE KIT, ETC. FOR A COMPLETE INSTALLATION. ATTACH THE CABLE PER HEATING CABLE ELEVATIONS FOR PIPE LOCATIONS AND HEIGHTS. SEE DETAILS ON E-224 FOR MORE INFORMATION.

S10 PROVIDE A "LOW VOLTAGE" TEMPERATURE SENSOR AND SNOW SENSOR RAYCHEM #GIT-1 ON THE ROOF IN THE APPROXIMATE LOCATION SHOWN. PROVIDE CONDUIT AND CONDUCTORS FOR A COMPLETE INSTALLATION. COORDINATE WITH MANUFACTURER REPRESENTATIVE FOR TERMINATION POINTS. COORDINATE EXACT LOCATION WITH ARCHITECT AND MANUFACTURERS REPRESENTATIVE.

HEAT TRACE WIRING DIAGRAM

HEAT TRACE TERMINATION AT DOWNSPOUTS

HEAT TRACE AT ROOF DRAIN

9 HEAT TRACE DETAIL
SCALE: NONE

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST
790 NORTH 400 WEST
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SALT LAKE CITY UT 84103

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HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

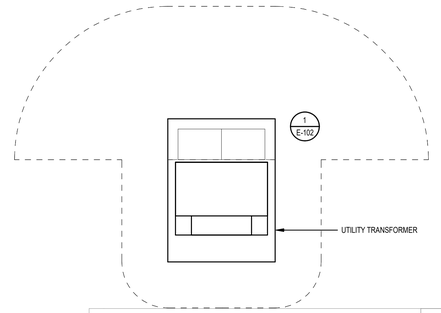
MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

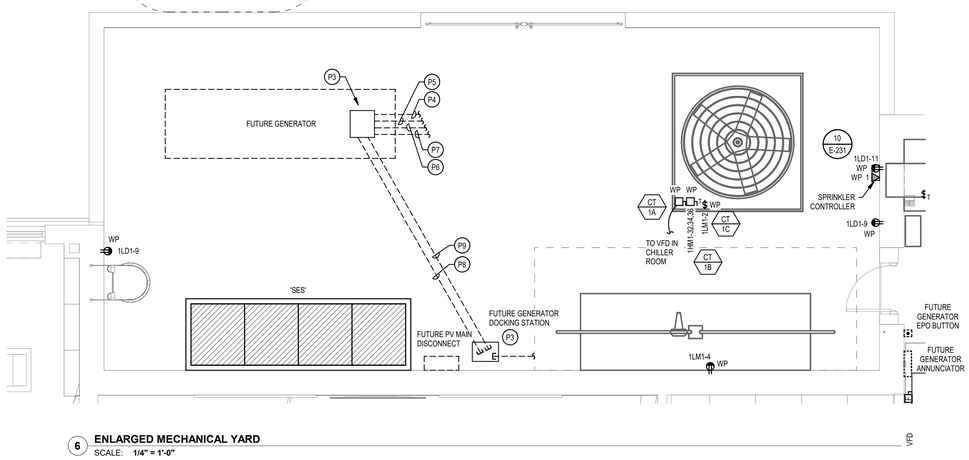
PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 2 - ROOF PLAN - OVERALL - POWER

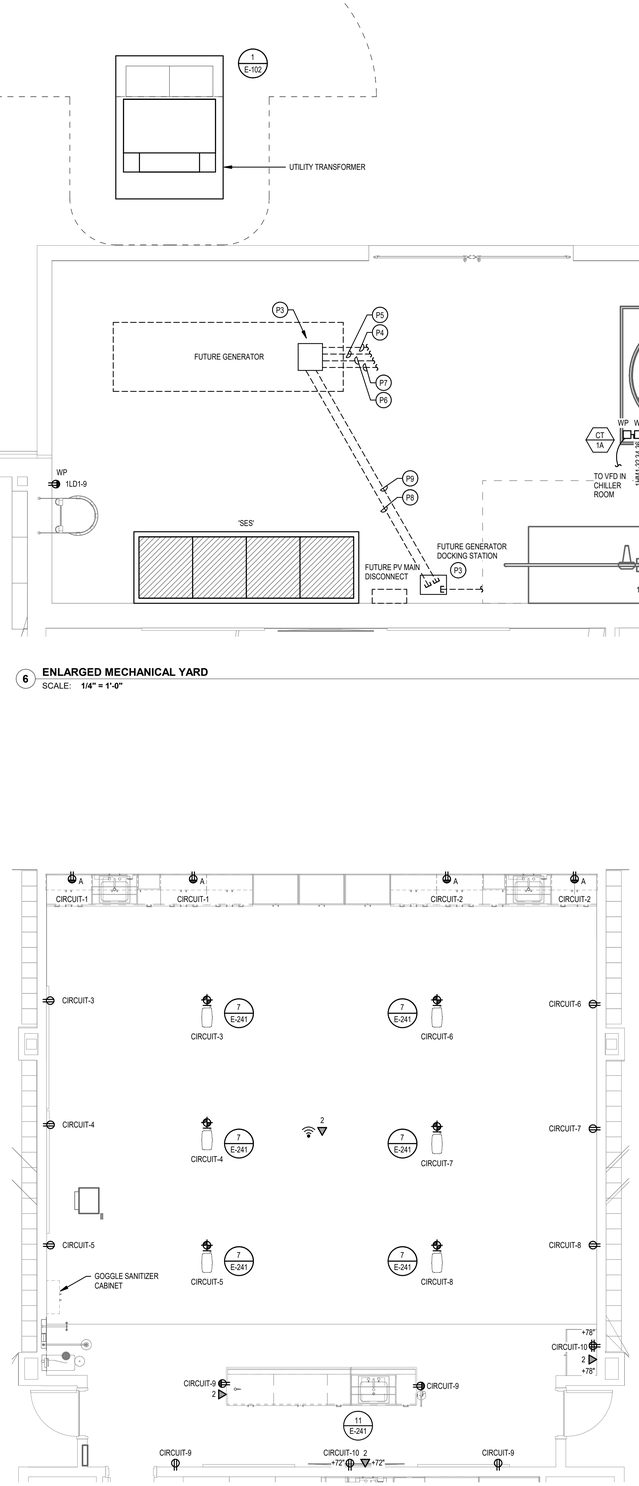
E-224

5/8/2024 1:31:51 PM

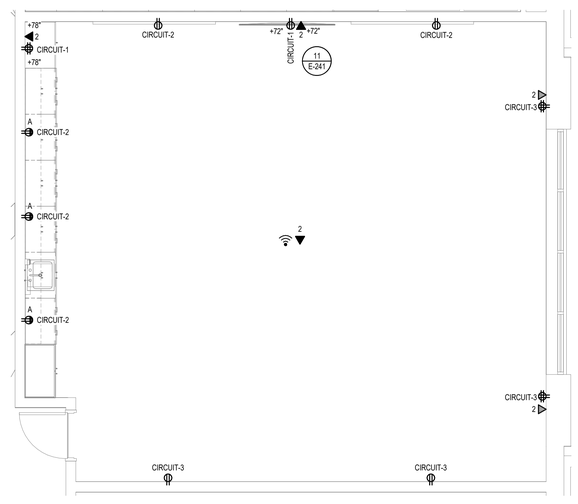




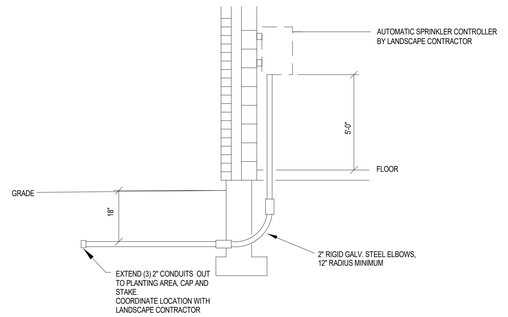
6 ENLARGED MECHANICAL YARD
SCALE: **1/4" = 1'-0"**



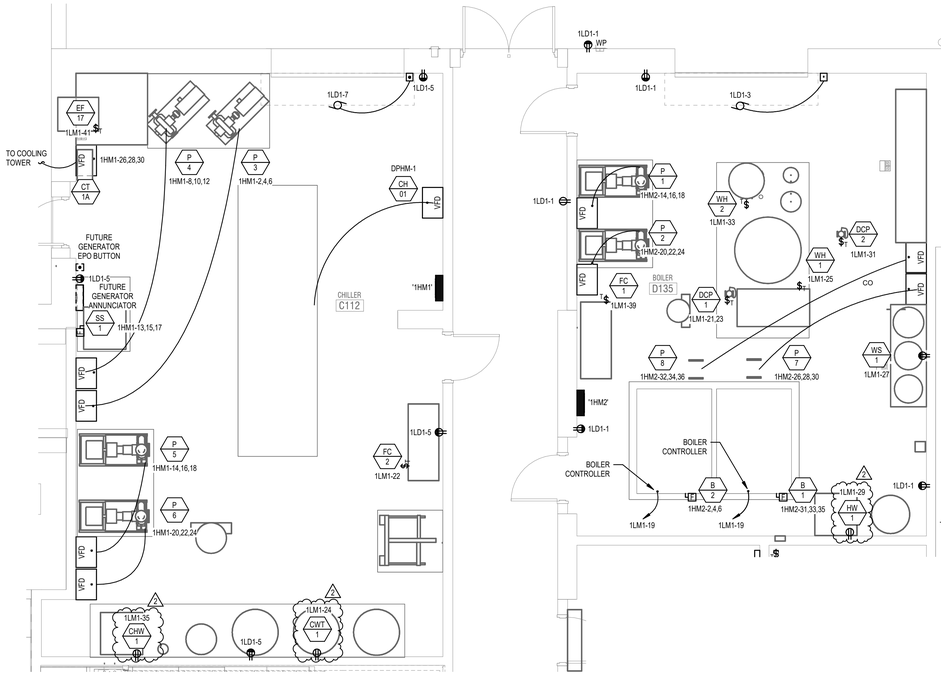
3 TYPICAL SCIENCE CLASSROOM
SCALE: **1/4" = 1'-0"**



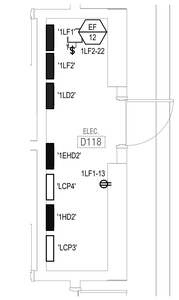
2 TYPICAL CLASSROOM
SCALE: **1/4" = 1'-0"**



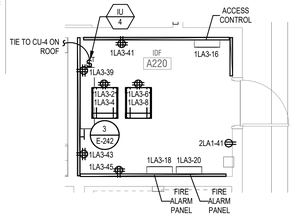
10 AUTOMATIC SPRINKLER CONTROLLER
SCALE: NONE



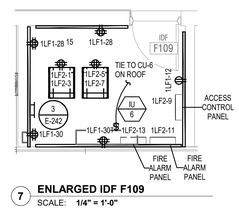
9 ENLARGED CHILLER AND BOILER ROOMS
SCALE: **1/4" = 1'-0"**



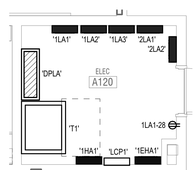
8 ENLARGED ELEC. D118
SCALE: **1/4" = 1'-0"**



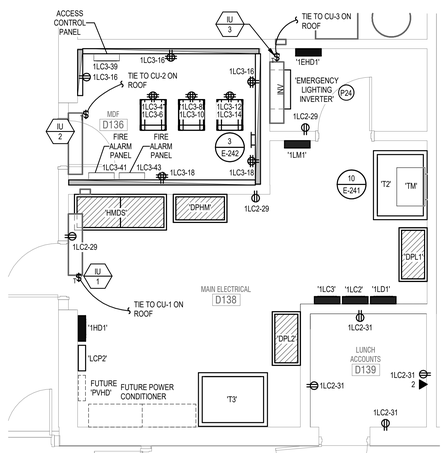
5 ENLARGED IDF A220
SCALE: **1/4" = 1'-0"**



7 ENLARGED IDF F109
SCALE: **1/4" = 1'-0"**



1 ENLARGED ELEC A120
SCALE: **1/4" = 1'-0"**



4 ENLARGED MAIN/EMERGENCY ELECTRICAL ROOMS
SCALE: **1/4" = 1'-0"**

POWER GENERAL NOTES:

1. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
2. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS AND CONDUIT RUNS.

KEYED NOTES (#)

- P3 PROVIDE HUBBELL QUAZITE 24" X 36" PG STYLE IN-GRADE JUNCTION BOX WITH HEAVY DUTY COVER. CONFIRM PLACEMENT WITH OWNER PRIOR TO ROUGH-IN. REFER TOT HE SITE DETAILS FOR MORE INFORMATION.
- P4 1" CONDUIT TO MDF FOR DATA TO FUTURE GENERATOR. INSERT PULL STRING & LABEL.
- P5 3/4" CONDUIT TO CHILLER ROOM FOR FUTURE GENERATOR ANNUNCIATOR & EPO BUTTON. INSERT PULL STRING & LABEL.
- P6 3/4" CONDUIT TO BUILDING AUTOMATION SYSTEM. INSERT PULL STRING & LABEL.
- P7 3/4" CONDUIT TO FUTURE TRANSFER SWITCH LOCATION IN EMERGENCY ELECTRICAL ROOM D137.
- P8 2" CONDUIT FOR POWER TO FUTURE GENERATOR DOCKING STATION LOCATION.
- P9 1" CONDUIT FOR FUTURE GENERATOR CONTROLS TO FUTURE GENERATOR DOCKING STATION LOCATION.
- P24 PROVIDE A 25 KW INVERTER WITH 480V, 3Ø INPUT AND 480V, 3Ø OUTPUT TO POWER EMERGENCY LIGHTING PANELS.

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

DESCRIPTION:
DATE: 05/22/24 ADDENDUM 5
MARK:

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — STATE OF UTAH — 04-19-2024

CONSTRUCTION DOCUMENTS

LEVEL 1 - ENLARGED POWER PLANS

E-231

5/8/2024 1:31:57 PM

KITCHEN EQUIPMENT SCHEDULE

UNIT NAME			ELECTRICAL INPUT					FEEDER						DISCONNECT / CONNECTION AT UNIT			
										WIRE					MOUNTING		
TYPE	No.	DESCRIPTION	LOAD	TYPE	VOLTS	PHASE	AMPS	QTY	CONDUIT SIZE	QTY	SIZE	EQPT GND	NOTE	CONNECTION TYPE	HEIGHT		REMARKS
K	5	PROOFER CABINET	16.7	FLA	120 V	1	17 A	1	3/4"	2	10	10	14A	NEMA 5-30R			IN UTILITY DISTRIBUTION SYSTEM
K	7	20 QT MIXER	8	FLA	120 V	1	8 A	1	3/4"	2	12	12	18A	NEMA 5-20R	CORD DROP		CORD DROP WITH GFCI RECEPTACLE
K	10	CONVECTION OVEN	15.4	FLA	120 V	1	15 A	1	3/4"	2	12	12	13A	NEMA 5-20R			IN UTILITY DISTRIBUTION SYSTEM
K	14	CAN OPENER	10	FLA	120 V	1	10 A	1	3/4"	2	12	12	18A	NEMA 5-20R	CORD DROP		CORD DROP WITH GFCI RECEPTACLE. SHARES CORD DROP WITH EQUIPMENT K-17
K	15	KETTLE	5	FLA	120 V	1	5 A	1	3/4"	2	12	12	13A	NEMA 5-20R			IN UTILITY DISTRIBUTION SYSTEM
K	17	FOOD PROCESSOR	3.5	FLA	120 V	1	4 A	1	3/4"	2	12	12	18A	NEMA 5-20R	CORD DROP		CORD DROP WITH GFCI RECEPTACLE. SHARES CORD DROP WITH EQUIPMENT K-14
K	18	COMBINATION OVEN	4.3	FLA	208 V	1	4 A	1	3/4"	2	12	12	14A	NEMA 6-20R			IN UTILITY DISTRIBUTION SYSTEM
K	21	PLANETARY MIXER	9.5	FLA	120 V	1	10 A	1	3/4"	2	12	12	13A	NEMA 5-20R	+18"		
K	24	PASS-THRU REFRIGERATOR	5.9	FLA	120 V	1	6 A	1	3/4"	2	12	12	13A	NEMA 5-20R	+86"		
K	25	PASS-THRU HEATED CABINET	3	KVA	208 V	1	14 A	1	3/4"	2	12	12	14A	NEMA 6-20R	+86"		
K	26	ICE CUBER	11.9	FLA	120 V	1	12 A	1	3/4"	2	12	12	13A	NEMA 5-20R	+48"		
K	30	HOT FOOD WELL	15.8	FLA	208 V	3	16 A	1	3/4"	3	10	10	12A	DIRECT	STUB UP		PROVIDE HANDLE CLAMP ON CIRCUIT BREAKER
K	32	MILK COOLER	2.7	FLA	120 V	1	3 A	1	3/4"	2	12	12	13A	NEMA 5-20R	STUB UP		
K	34	WAREWASHER	138.9	FLA	208 V	3	139 A	1	2"	3	2/0	6	9A	DISCONNECT			200A NEMA 4X NON-FUSED DISCONNECT, INTERCONNECT TABLE LIMIT SWITCH TO DISHWASHER
K	36	SCRAP COLLECTOR	5.5	FLA	208 V	1	6 A	1	3/4"	2	12	12	9A	DISCONNECT			30A NEMA 4X NON-FUSED DISCONNECT
K	40	WALK-IN COOLER LIGHTS AND HEAT TAPE	0.35	KVA	120 V	1	3 A	1	3/4"	2	12	12	12A	DIRECT	DROP FROM ABOVE		
K	40.1	WALK-IN COOLER EVAPORATOR	1.1	FLA	120 V	1	1 A	1	3/4"	2	12	12	1A	THERM. SW.	DROP FROM ABOVE		
K	40.2	WALK-IN COOLER CONDENSOR	5	FLA	208 V	3	5 A	1	3/4"	3	12	12	10A	DISCONNECT	ROOF		30A NEMA 3R FUSED DISCONNECT WITH 10A FUSES
K	41	WALK-IN FREEZER LIGHTS AND HEAT TAPE	0.35	KVA	120 V	1	3 A	1	3/4"	2	12	12	12A	DIRECT	DROP FROM ABOVE		
K	41.1	WALK-IN FREEZER EVAPORATOR	9.8	FLA	208 V	1	10 A	1	3/4"	2	12	12	10A	DISCONNECT	DROP FROM ABOVE		30A NEMA 3R FUSED DISCONNECT WITH 15A FUSES
K	41.2	WALK-IN FREEZER CONDENSOR	16.4	FLA	208 V	3	16 A	1	3/4"	2	10	10	10A	DISCONNECT	ROOF		30A NEMA 3R FUSED DISCONNECT WITH 20A FUSES
K	42	FRENCH FRY WARMER	4.2	FLA	120 V	1	4 A	1	3/4"	2	12	12	13A	NEMA 5-20R	+42"		
K	44	CASHIER COUNTER	10	FLA	120 V	1	10 A	1	3/4"	2	12	12	13A	NEMA 5-20R	STUB UP		
K	47	UTILITY DISTRIBUTION SYSTEM	40	FLA	208 V	3	40 A	1	1 1/2"	4	2	8	12A	DIRECT	DROP FROM ABOVE		100A LOAD CENTER. PROVIDE SHUNT TRIP BREAKER. INTERLOCK WITH HOODS.
K	48	MICROWAVE	14.4	FLA	208 V	1	14 A	1	3/4"	2	12	12	14A	NEMA 6-20R	+60"		
K	52	WARMING CABINET	12	FLA	120 V	1	12 A	1	3/4"	2	12	12	13A	NEMA 5-20R	+24"		
K	53	DISPLAY CASE REFRIGERATED	4.2	FLA	120 V	1	4 A	1	3/4"	2	12	12	13A	NEMA 5-20R	+48"		

STARTER/DISCONNECT/CONNECTION AT UNIT NOTES:

1. MANUAL STARTER WITH THERMAL OVERLOAD.
2. MANUAL STARTER WITH THERMAL OVERLOAD PROTECTION & LOW VOLTAGE RELAY / CONTACTOR FOR ATC CONTROL.
3. COMBINATION MAGNETIC STARTER / FUSED DISCONNECT.
4. COMBINATION MAGNETIC STARTER / MOTOR CIRCUIT PROTECTOR (MCP)
5. COMBINATION VARIABLE FREQUENCY DRIVE / MOTOR CIRCUIT PROTECTOR (MCP)
6. REDUCED VOLTAGE STARTER
7. COMBINATION TWO-SPEED STARTED / FUSED DISCONNECT
8. COMBINATION TWO-SPEED STARTER / MOTOR CIRCUIT PROTECTOR (MCP)
9. NON-FUSED DISCONNECT SWITCH
10. FUSED DISCONNECT SWITCH
11. BREAKER AND ENCLOSURE
12. DIRECT CONNECTION
13. DUPLEX RECEPTACLE OUTLET
14. SPECIAL PURPOSE OUTLET
15. SHUNT-TRIP DISCONNECT
16. TOGGLE SWITCH
17. MAGNETIC STARTER
18. DROP CORD OUTLET

A. FURNISHED, INSTALLED & CONNECTED UNDER DIVISION 26.
B. FURNISHED & INSTALLED UNDER ANOTHER DIVISION REQUIRING CONNECTIONS UNDER DIVISION 26
C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIVISION 26
D. FURNISHED, INSTALLED & CONNECTED UNDER ANOTHER DIVISION.
E. FURNISHED BY OWNER, INSTALLED & CONNECTED BY DIVISION 26

GENERAL NOTES:

1. VERIFY THE REQUIREMENTS OF THE POS SYSTEM WITH THE SUPPLIER INCLUDING ELECTRICAL REQUIREMENTS AND THE INTERCONNECTION REQUIREMENTS.
2. PROVIDE DATA CONDUIT AS REQUIRED BY POS SUPPLIER. VERIFY INTERCONNECTION REQUIREMENTS BETWEEN COMPONENTS.
3. CONNECT FLEX TO JUNCTION BOX MOUNTED IN BASE OF COUNTER. INTERCONNECT CONTROLS.
4. CONNECT FLEX TO JUNCTION BOX MOUNTED IN BASE OF COUNTER. INTERCONNECT SWITCH. RUN POWER TO LIGHTS AT SNEEZE GUARD, THROUGH SNEEZE GUARD SUPPORT LEGS.
5. CONNECT FLEX TO OUTLET MOUNTED IN BASE OF COUNTER. INTERCONNECT WITCH WITH OUTLET.
6. SIZE ALL FUSES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

KEYED NOTES (X)

K1 INTERCONNECT TO EXHAUST SYSTEM. COORDINATE ALL WORK WITH THE KITCHEN EQUIPMENT INSTALLER AND MECHANICAL CONTRACTOR PRIOR TO ANY ROUGH-IN.

K2 PROVIDE ALL REQUIRED CONNECTIONS TO HOOD LIGHTS. COORDINATE ALL WORK WITH THE KITCHEN EQUIPMENT INSTALLER AND HOOD INSTALLER PRIOR TO ANY ROUGH-IN.

K3 UTILITY DISTRIBUTION SYSTEM IS PROVIDED BY THE KITCHEN EQUIPMENT SUPPLIER/INSTALLER. ELECTRICAL CONTRACTOR TO PROVIDE FEEDER AND FEEDER CONNECTIONS. ALL ASSOCIATED OUTLETS ARE PROVIDED AND INSTALLED BY THE KITCHEN EQUIPMENT SUPPLIER/INSTALLER. COORDINATE ALL WORK PRIOR TO ANY ROUGH-IN.

K4 TO LIGHTS BY KITCHEN EQUIPMENT SUPPLIER. COORDINATE ALL WORK AND CONNECTIONS WITH THE KITCHEN EQUIPMENT INSTALLER.

K5 TO HEATER BY KITCHEN EQUIPMENT SUPPLIER. COORDINATE ALL WORK AND CONNECTIONS WITH THE KITCHEN EQUIPMENT INSTALLER.

KITCHEN ELECTRICAL NOTES:

1. COORDINATE EXACT LOCATION, TERMINATIONS, AND MOUNTING HEIGHTS WITH EQUIPMENT MANUFACTURER DRAWINGS AND OWNER IN FIELD PRIOR TO ANY INSTALLATION. REFER TO THE EQUIPMENT INSTALLATION DRAWINGS FOR ADDITIONAL INFORMATION.
2. VERIFY ALL MOUNTING HEIGHTS PRIOR TO INSTALLATION WITH THE EQUIPMENT INSTALLER/SUPPLIER.
3. CONTRACTOR SHALL COORDINATE EXACT ELECTRICAL REQUIREMENTS WITH EQUIPMENT MANUFACTURER FOR EACH SPECIFIC MODEL AND PIECE OF EQUIPMENT. PROVIDE ELECTRICAL SERVICE AS REQUIRED.
4. ALL COVER PLATES IN THE KITCHEN SHALL BE STAINLESS STEEL.
5. THE CONTRACTOR SHALL PROVIDE ALL DISCONNECT SWITCHES, STARTERS, ETC. AS REQUIRED BY NEC. VERIFY ALL ELECTRICAL REQUIREMENTS WITH THE EQUIPMENT INSTALLER/SUPPLIER PRIOR TO ROUGH-IN.
6. THE ELECTRICAL CONTRACTOR TO PROVIDE ALL HARDWIRED CONNECTIONS TO EQUIPMENT.
7. PROVIDE WATERTIGHT FITTINGS, BOXES, COUPLINGS, ETC. IN ALL PREP AREAS THAT ARE EXPOSED TO SPRAY DOWN.
8. ANY CONNECTION TO EQUIPMENT SHALL BE MADE USING SEALTIGHT CONDUIT AND WATERTIGHT FITTINGS.
9. ALL DISCONNECT SWITCHES LOCATED IN THE KITCHEN AREAS SHALL BE RATED FOR SPRAY DOWN, NEMA 4X STAINLESS STEEL.
10. ALL EQUIPMENT ROUGH-IN REQUIREMENTS SHALL BE COORDINATED WITH THE EQUIPMENT SUPPLIER PRIOR TO ANY ROUGH-IN. CONTRACTOR TO OBTAIN CUT SHEETS FOR EACH PIECE OF EQUIPMENT FROM THE EQUIPMENT SUPPLIER AND VERIFY EXACT ROUGH-IN LOCATIONS. IF THE CONTRACTGOR DAILS TO COORDINATE THE LOCATIONS WITH THE SUPPLIER, THE CONTRACTOR FIX THE ROUGH-IN AT NO ADDITIONAL COST TO THE OWNER.

ELECTRICAL NOTES

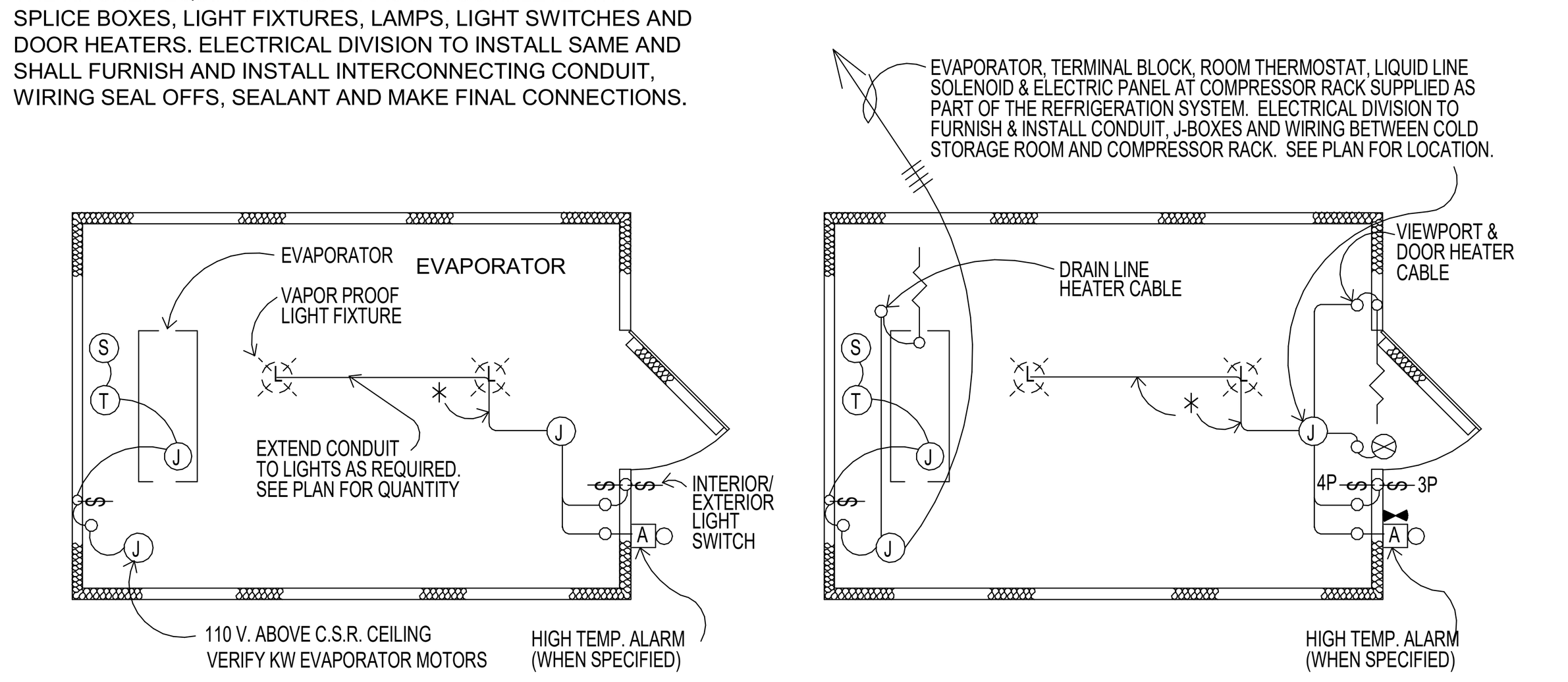
1. ELECTRICAL PLAN SHOWS ROUGH-IN POINTS AND SCHEDULED CONNECTIONS. KITCHEN EQUIPMENT CONTRACTOR WILL PROVIDE DIMENSIONED ROUGH-IN DRAWINGS FOR CONSTRUCTION.
2. ELECTRICAL SYSTEM IS DESIGNED FOR 120/208 VOLTS, 3 PHASE, 60 HERTZ, 4 WIRE SYSTEM.
3. ELECTRICAL DIVISION SHALL FURNISH AND INSTALL ALL JUNCTION BOXES, RECEPTACLES, COVER PLATES, PULL BOXES, CONDUIT AND WIRING EXCEPT WHERE NOTED. RECEPTACLES AND COVER PLATES SHALL BE BRUSHED STAINLESS STEEL FURNISHED BY ELECTRICAL DIVISION.
4. ALL CONDUIT RUNS INDICATED FOR REFRIGERATION LINES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL DIVISION. CONDUIT SHALL HAVE 12" (600MM) MINIMUM RADIUS BENDS.
5. KITCHEN EQUIPMENT CONTRACTOR SHALL FURNISH AND INSTALL VAPOR PROOF VENTILATOR LIGHTS COMPLETE WITH LAMPS. INTERCONNECTING CONDUIT, WIRING WITH WALL SWITCH FURNISHED AND INSTALLED BY THE ELECTRICAL DIVISION.
6. ADDITIONAL CONVENIENCE RECEPTACLES, TELEPHONE AND INTERCOM JACKS AND TEMPERATURE MONITORING SYSTEM ETC. SHALL BE LOCATED BY THE ELECTRICAL ENGINEER/ ARCHITECT AND AS REQUIRED BY CODE.
7. PRE-FABRICATED COLD STORAGE ROOMS ARE FURNISHED BY THE KITCHEN EQUIPMENT CONTRACTOR COMPLETE WITH SPLICE BOXES, LIGHT FIXTURES, LAMPS, LIGHT SWITCHES AND DOOR HEATERS. ELECTRICAL DIVISION TO INSTALL SAME AND SHALL FURNISH AND INSTALL INTERCONNECTING CONDUIT, WIRING SEAL OFFS, SEALANT AND MAKE FINAL CONNECTIONS.
10. ELECTRICAL DIVISION SHALL FURNISH AND INSTALL ALL INTERCONNECTING CONDUIT AND WIRING BETWEEN KITCHEN FURNISHED LOW TEMP COLD STORAGE ROOM EVAPORATOR TERMINAL EQUIPMENT CONTRACTOR BLOCK, SWITCH, FAN DOOR SWITCH AND COMPRESSOR CONTROL PANEL.

NOTE: ELECTRICAL MOUNTING

ALL WALL MOUNT ELECTRICAL RECEPTACLE AND J-BOXES ARE TO BE FLUSH MOUNTED IN WALLS WITH NO EXPOSED CONDUIT SHOWING ON SURFACE OF WALLS. ARCHITECT TO PROVIDE MINIMUM WALL FURRING IF REQUIRED.

NOTE: WALK-IN ELECTRICAL

ALL CONDUIT SHALL BE RUN ON THE EXTERIOR CEILING OF ALL COLD STORAGE ROOMS AND SHALL PENETRATE THE CEILING AT A POINT WHERE THE CONDUIT CAN DROP DIRECTLY TO THE POINT OF CONNECTION. UNDER NO CIRCUMSTANCES, WILL ELECTRICAL CONDUIT BE PERMITTED ON THE INTERIOR.



REFRIGERATOR

FREEZER

- (J) JUNCTION BOX
- (T) THERMOSTAT
- (S) LIQUID LINE SOLENOID
- ○ EYS & NIPPLE FOR CEILING PENETRATION TO SPLICE BOX
- HEATED VACUUM VENT

C.S.R. - COLD STORAGE ROOM

* EMT RIGID CONDUIT RUN ABOVE C.S.R. CEILING BY ELEC. DIVISION (TYP)

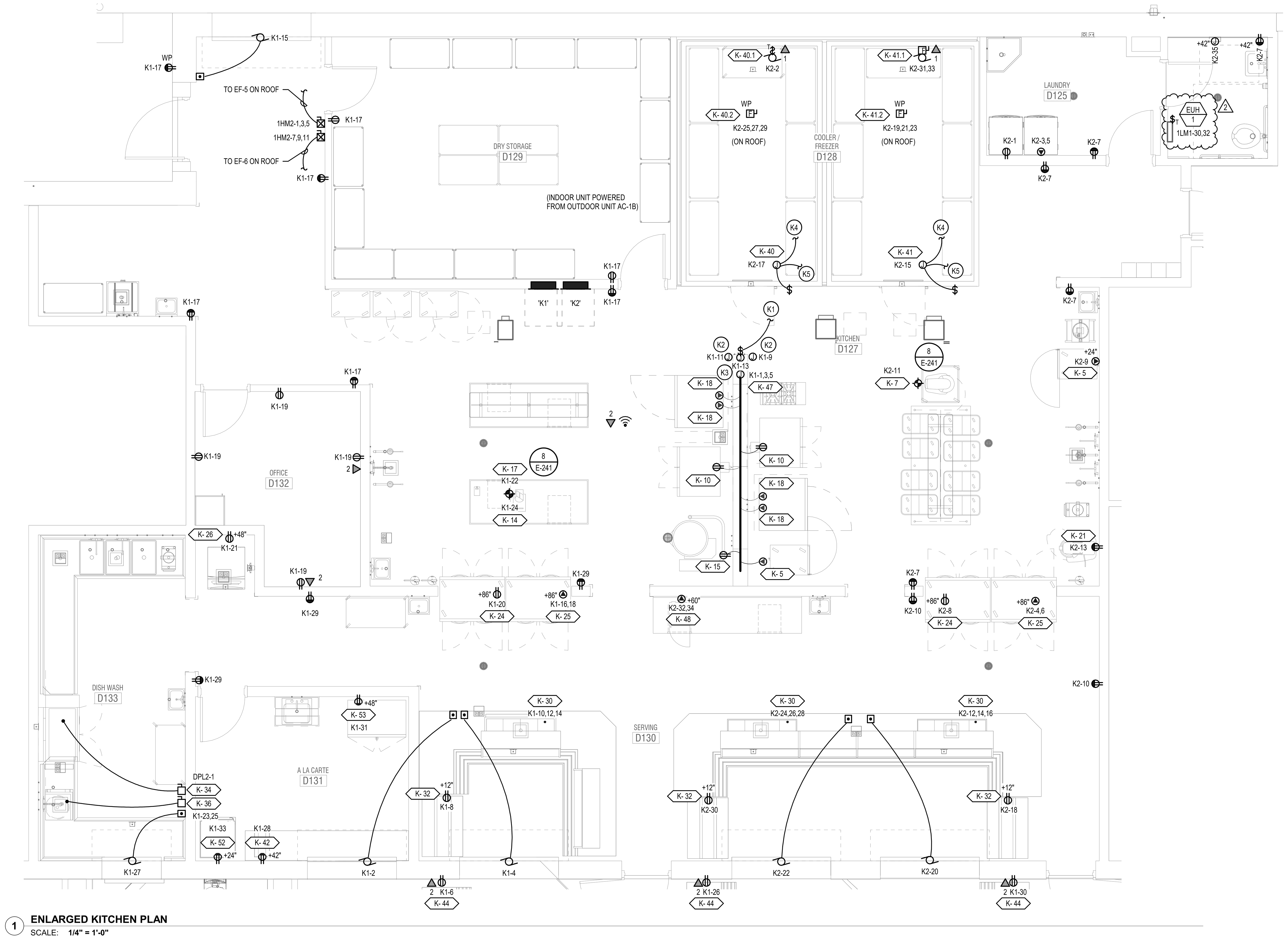
110 V. ABOVE COLD STORAGE ROOM CEILING

.2 KW LIGHTS (EACH)
.4 KW VIEWPORT & DOOR HEATER (FREEZER)
.2 KW HIGH TEMP. ALARM (WHEN SPECIFIED)

NOTES:

1. LIGHT FIXTURES, SWITCH BOXES, SWITCHES, & SPLICE BOXES ARE FURNISHED LOOSE WITH COLD STORAGE ROOMS. ELECTRICAL DIVISION TO INSTALL ALL ITEMS FURNISHED LOOSE INCLUDING ALL INTERCONNECTING CONDUIT & WIRING.
2. EVAPORATORS FOR COLD STORAGE ROOM ARE FURNISHED & INSTALLED COMPLETE WITH ROOM THERMOSTAT, LIQUID LINE SOLENOID & DISCONNECT SWITCH. ELECTRICAL DIVISION TO PROVIDE INTERCONNECTING CONDUIT & WIRING FORM BUILDING SERVICE TO ALL COMPONENTS.
3. ELECTRICAL DIVISION TO PROVIDE ALL BUILDING SERVICES INCLUDING J-BOXES, INTERCONNECTING CONDUIT & WIRING FROM BUILDING SERVICE TO COMPONENTS.
4. EYS FITTING FURNISHED WITH COLD STORAGE ROOMS. ELECTRICAL DIVISION TO INSTALL, WIRE & SEAL BY ACCEPTED INDUSTRY PRACTICE.
5. STAINLESS STEEL ESCUTCHEON PLATES & HOLES THROUGH INSULATED PANELS ARE FURNISHED WITH COLD STORAGE ROOM. ELECTRICAL DIVISION TO SEAL ALL PENE-TRATIONS WITH CAULKING ON THE C.S.R. INTERIOR & EXTERIOR AND INSTALL INTERIOR & EXTERIOR ESCUTCHEON PLATES.
6. EVAPORATOR FAN MOTORS FOR REFRIGERATORS RUN CONTINUOUSLY. DO NOT WIRE INTERNALLY WITH THERMOSTAT. EVAPORATOR FAN MOTORS FOR FREEZERS CYCLE WITH FREEZER DEFROST.

TYPICAL COOLER/FREEZER ELECTRICAL DIAGRAM



1 ENLARGED KITCHEN PLAN
SCALE: 1/4" = 1'-0"

A B C D E
1 2 3 4 5 6

5/28/2024 1:31:54 PM

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
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HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

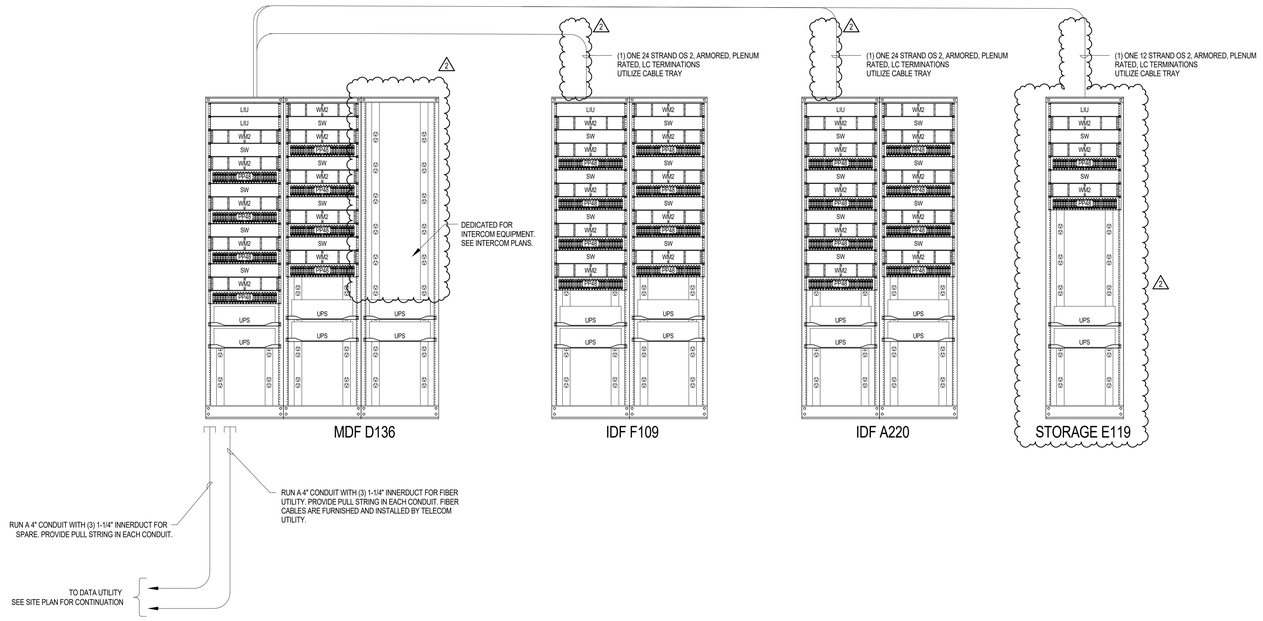
MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

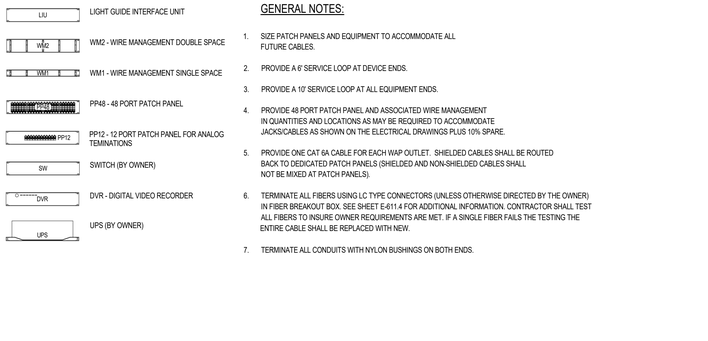
REGISTERED PROFESSIONAL ENGINEER No. 77411 05-01-2024 STATE OF UTAH

ENLARGED KITCHEN PLAN

E-232

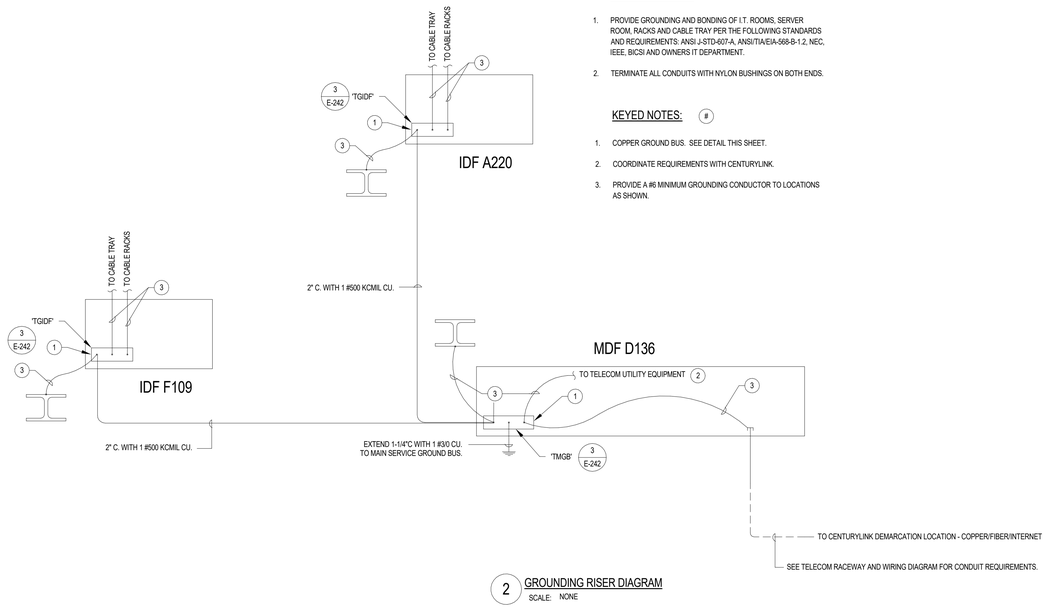


1 TELECOM RACEWAY AND WIRING DIAGRAM
SCALE: NONE



GENERAL NOTES:

1. SIZE PATCH PANELS AND EQUIPMENT TO ACCOMMODATE ALL FUTURE CABLES.
2. PROVIDE A 6' SERVICE LOOP AT DEVICE ENDS.
3. PROVIDE A 10' SERVICE LOOP AT ALL EQUIPMENT ENDS.
4. PROVIDE 48 PORT PATCH PANEL AND ASSOCIATED WIRE MANAGEMENT IN QUANTITIES AND LOCATIONS AS MAY BE REQUIRED TO ACCOMMODATE JACKS/CABLES AS SHOWN ON THE ELECTRICAL DRAWINGS PLUS 10% SPARE.
5. PROVIDE ONE CAT 6A CABLE FOR EACH WAP OUTLET. SHIELDED CABLES SHALL BE ROUTED BACK TO DEDICATED PATCH PANELS (SHIELDED AND NON-SHIELDED CABLES SHALL NOT BE MIXED AT PATCH PANELS).
6. TERMINATE ALL FIBERS USING LC TYPE CONNECTORS (UNLESS OTHERWISE DIRECTED BY THE OWNER) IN FIBER BREAKOUT BOX. SEE SHEET E-611.4 FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL TEST ALL FIBERS TO INSURE OWNER REQUIREMENTS ARE MET. IF A SINGLE FIBER FAILS THE TESTING THE ENTIRE CABLE SHALL BE REPLACED WITH NEW.
7. TERMINATE ALL CONDUITS WITH NYLON BUSHINGS ON BOTH ENDS.



GENERAL NOTES:

1. PROVIDE GROUNDING AND BONDING OF I.T. ROOMS, SERVER ROOM, RACKS AND CABLE TRAY PER THE FOLLOWING STANDARDS AND REQUIREMENTS: ANSI J-STD-607-A, ANSI/TIA/EIA-568-B-1.2, NEC, IEEE, BICSI AND OWNERS IT DEPARTMENT.
2. TERMINATE ALL CONDUITS WITH NYLON BUSHINGS ON BOTH ENDS.

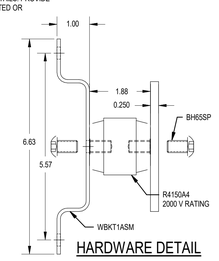
KEYED NOTES: (#)

1. COPPER GROUND BUS. SEE DETAIL THIS SHEET.
2. COORDINATE REQUIREMENTS WITH CENTURYLINK.
3. PROVIDE A #6 MINIMUM GROUNDING CONDUCTOR TO LOCATIONS AS SHOWN.

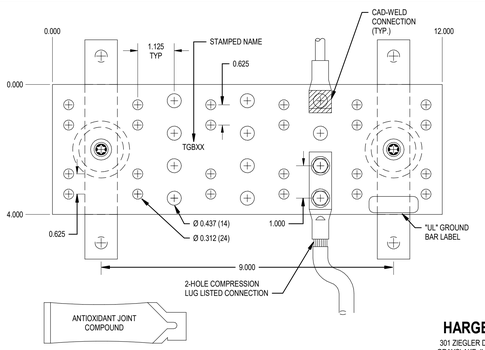
2 GROUNDING RISER DIAGRAM
SCALE: NONE

NOTES:

1. SUPPORT FROM WALL 12 INCHES ABOVE FINISHED GRADE, UNLESS NOTED OTHERWISE.
2. PROVIDE IN MAIN TELECOMMUNICATION ROOM.
3. EXTEND BONDING CONDUCTOR BACK TO MAIN ELECTRICAL SERVICE SERVICE BONDING BAR.
4. SEE SPECIFICATION SECTION 260452 FOR DETAILS. PROVIDE MANUFACTURER AND PART NUMBER INDICATED OR APPROVED EQUIVALENT.



HARDWARE DETAIL



HCAJC1/2

HARGER
301 ZIEGLER DRIVE
GRAYSLAKE, IL 60030
(847) 548-8700

PART NO. GBI14212TGB
BICSI CU GROUND BAR ASSEMBLY

3 TELECOMMUNICATIONS GROUNDING BUS BAR - TMGB
SCALE: NTS

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	02.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 771411 04-01-2024 STATE OF UTAH

DATA RISERS

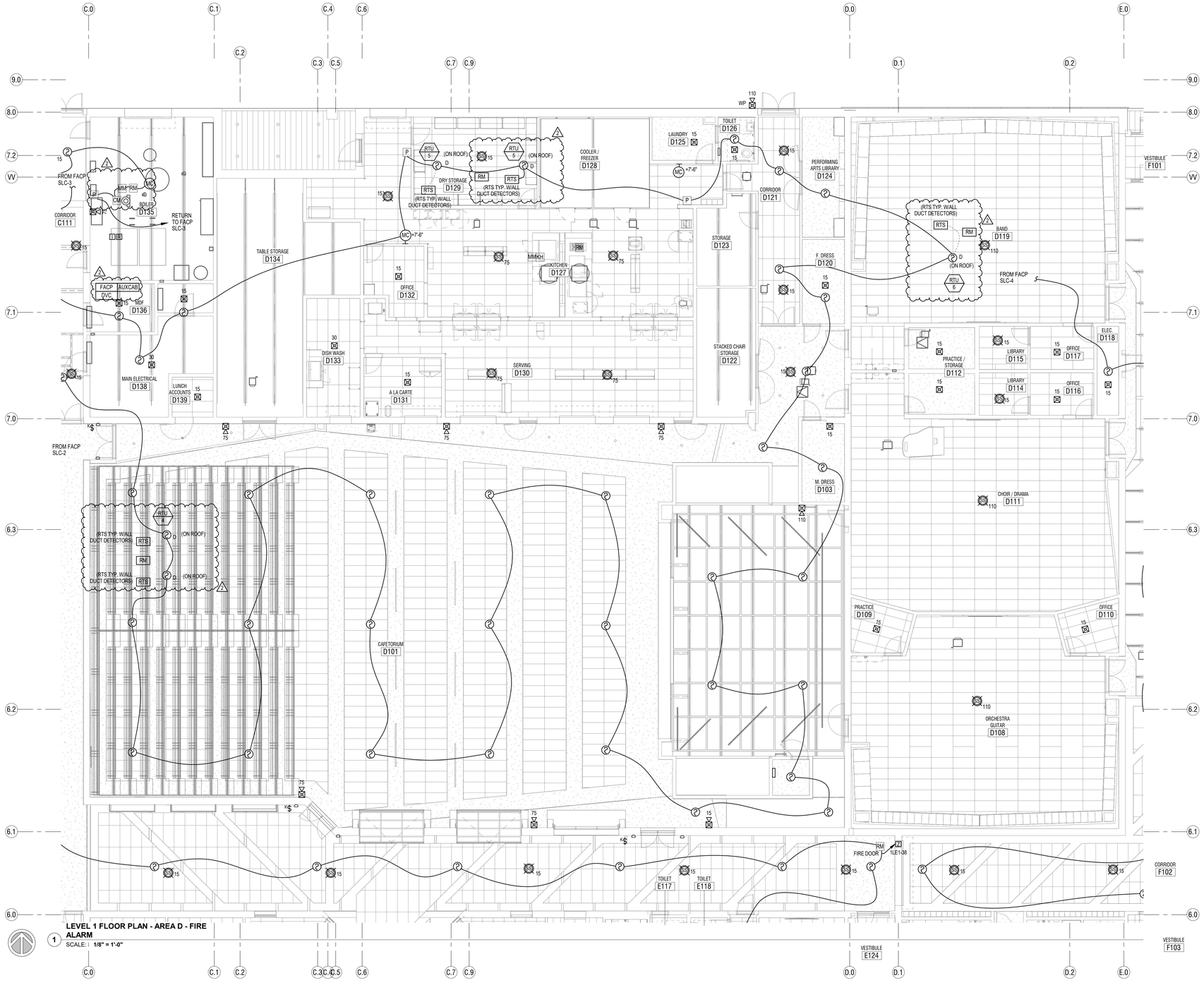
E-242

5/28/2024 8:48:39 PM

SYSTEMS GENERAL NOTES:

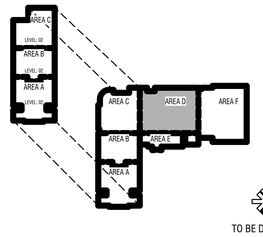
1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)



1 LEVEL 1 FLOOR PLAN - AREA D - FIRE ALARM
SCALE: 1/8" = 1'-0"

KEY PLAN



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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 1 - AREA D - FIRE ALARM

E-314

5/28/2024 1:32:19 PM

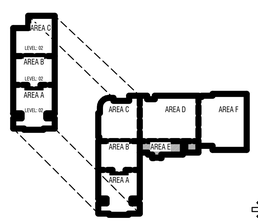
SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

1 **LEVEL 1 FLOOR PLAN - AREA E - FIRE ALARM**
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	02/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — STATE OF UTAH — 772411 — 04-26-2024

LEVEL 1 - AREA E - FIRE ALARM

E-315

5/28/2024 1:02:11 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
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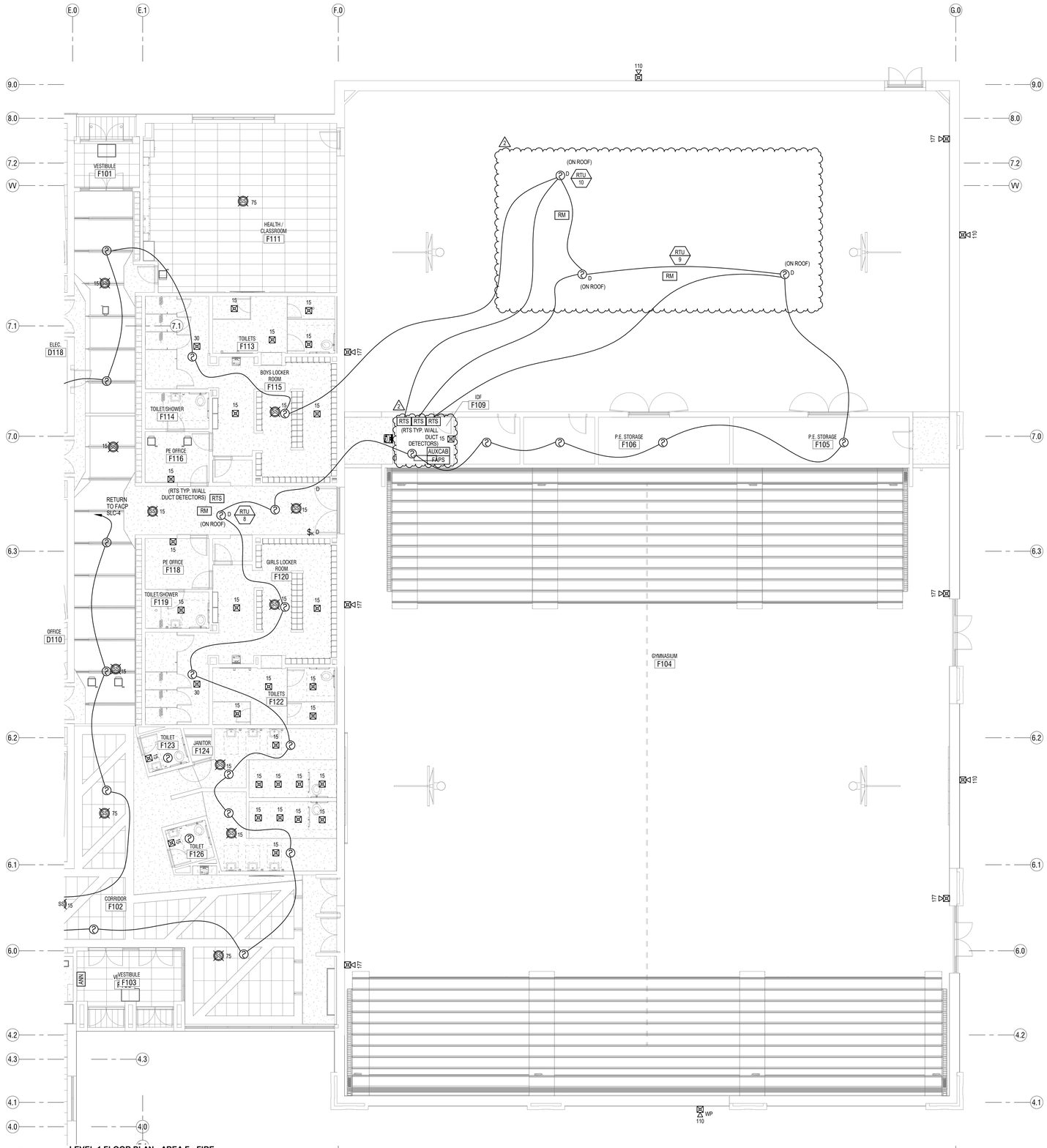
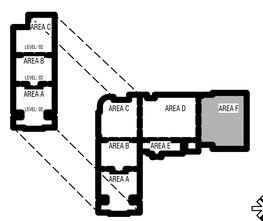
KEYED NOTES (#)



LEVEL 1 FLOOR PLAN - AREA F - FIRE ALARM
SCALE: 1/8" = 1'-0"

KEY PLAN



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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — 377411 — 04-26-2024 — STATE OF UTAH

LEVEL 1 - AREA F - FIRE ALARM

E-316

5/28/2024 1:52:13 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
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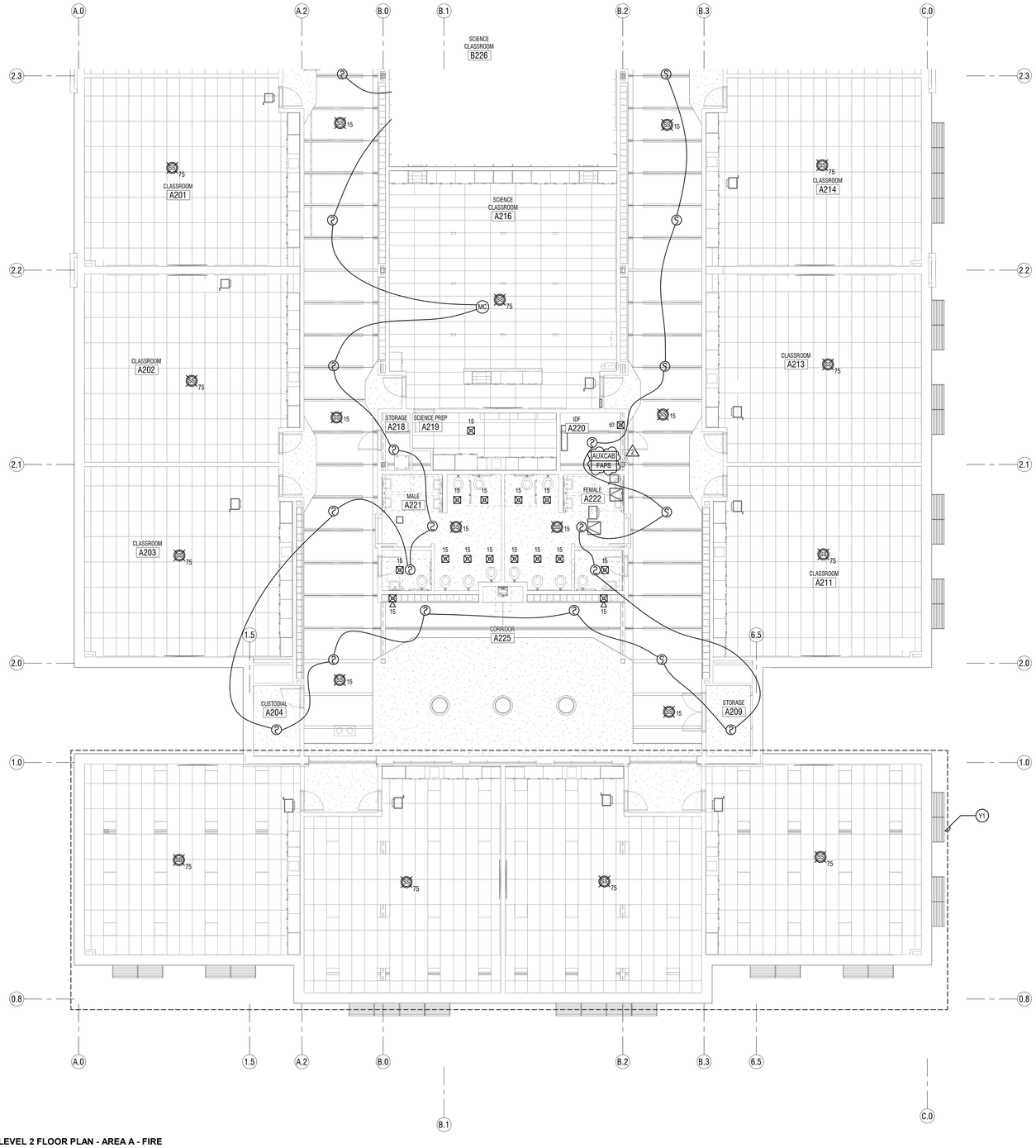
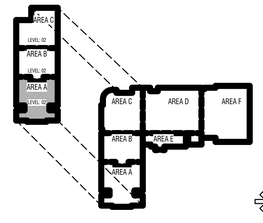
KEYED NOTES (#)

Y1 UNDER THE BASE BID, INCLUDE ALL WORK IN THIS AREA AS SHOWN ON THE PLANS. UNDER ALTERNATE #1, THIS AREA WILL BE REMOVED FROM THE PROJECT. PROVIDE A SEPARATE COST TO BE ISSUED AS A CREDIT FOR ALL WORK IN THIS AREA AS SHOWN ON THE PLANS.



LEVEL 2 FLOOR PLAN - AREA A - FIRE ALARM
SCALE: 1/8" = 1'-0"

KEY PLAN



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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — STATE OF UTAH — 6-2-2024

LEVEL 2 - AREA A - FIRE ALARM

E-321

5/30/2024 12:15 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
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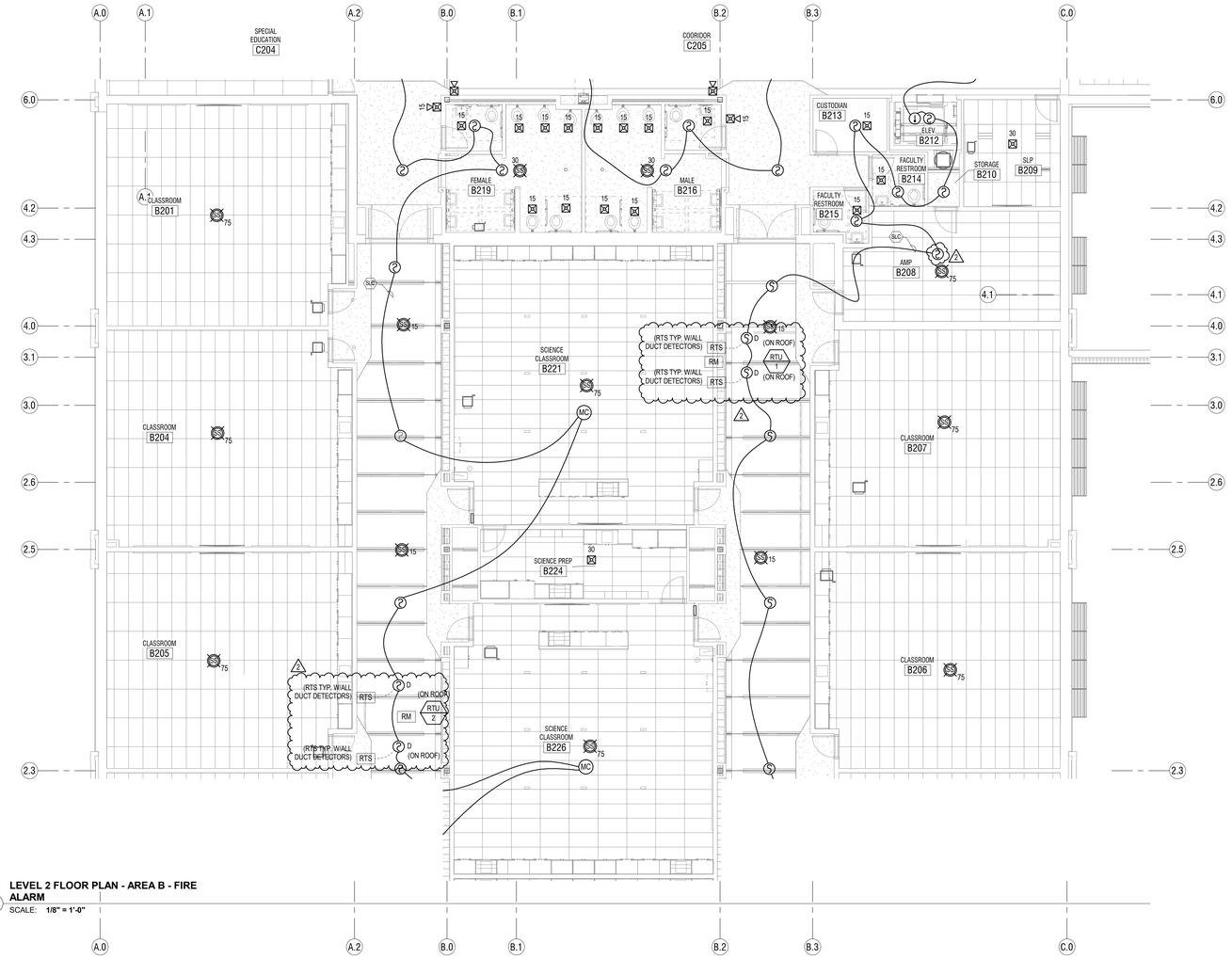
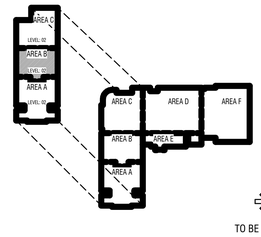
KEYED NOTES (#)



1 **LEVEL 2 FLOOR PLAN - AREA B - FIRE ALARM**
SCALE: 1/8" = 1'-0"

KEY PLAN



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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377411 04-26-2024 STATE OF UTAH

CONSTRUCTION DOCUMENTS

LEVEL 2 - AREA B - FIRE ALARM

E-322

5/28/2024 1:32:18 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
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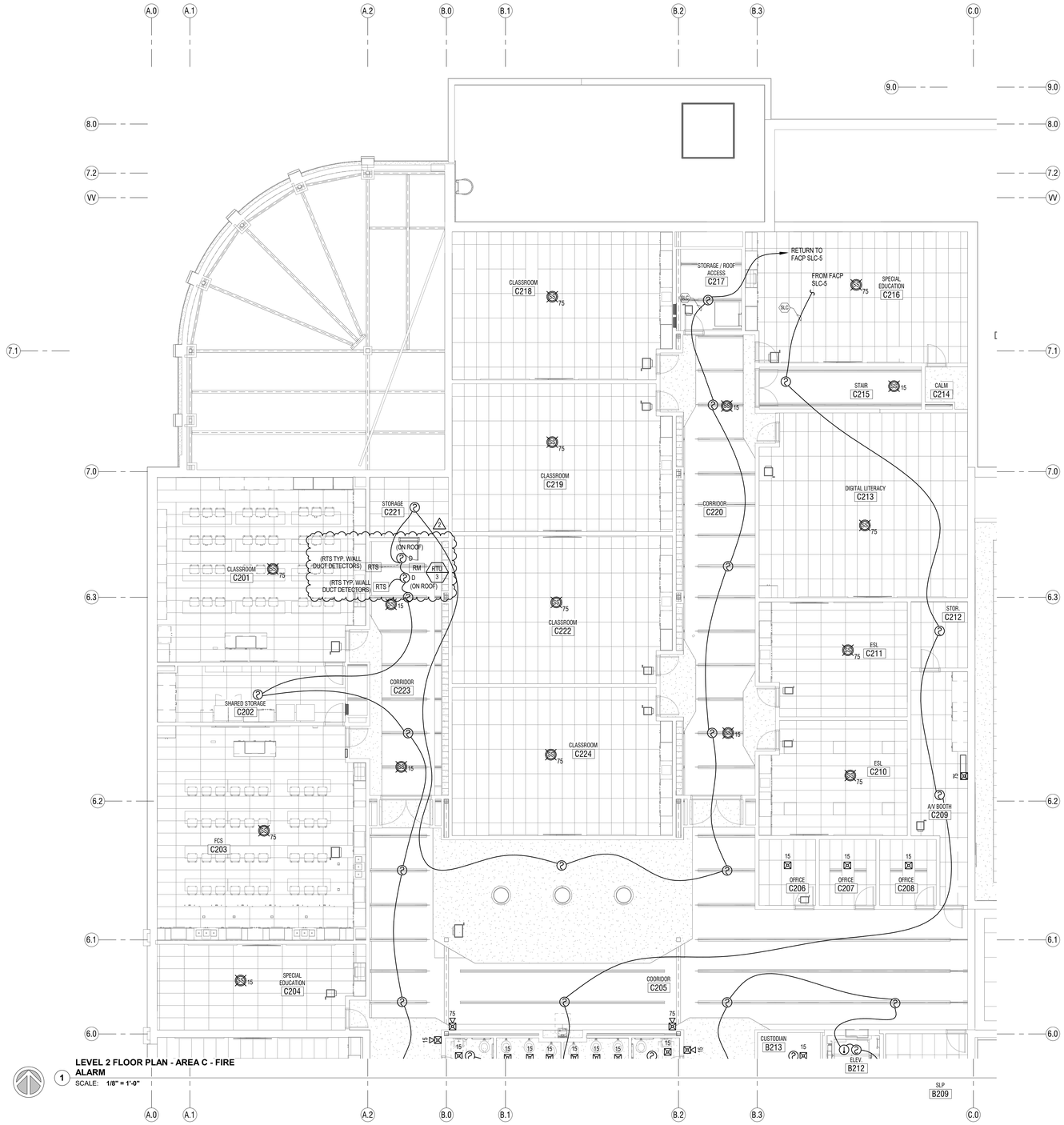
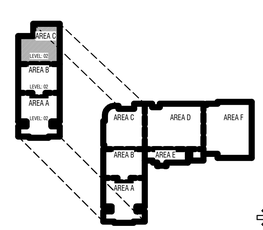
KEYED NOTES (#)



1 LEVEL 2 FLOOR PLAN - AREA C - FIRE ALARM
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — STATE OF UTAH — 04-26-2024

LEVEL 2 - AREA C - FIRE ALARM

E-323

5/28/2024 12:17 PM

OPERATIONS MATRIX

FIRE ALARM INPUT	FIRE ALARM OUTPUT: ACTIVATE ALARM INDICATOR	ACTIVATE AUDIBLE ALARM	ACTIVATE SUPERVISORY INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE TROUBLE INDICATOR	ACTIVATE AUDIBLE TROUBLE INDICATOR	TRANSMIT ALARM SIGNAL	TRANSMIT SUPERVISORY SIGNAL	TRANSMIT TROUBLE SIGNAL	RELEASE EGRESS MAGLOCKS/UNLOCK EXITS	RELEASE MAGNETICALLY HELD SMOKE DOORS	SHUT DOWN KITCHEN HOOD MAKE UP AIR	SHUT DOWN AIR HANDLER UNITS
SMOKE DETECTORS	●	●					●			●	●	●	●
HEAT DETECTORS	●	●					●			●	●	●	●
DUCT DETECTORS			●	●				●					●
PULL STATIONS	●	●					●			●	●	●	●
WATERFLOW SWITCHES	●	●					●			●	●	●	●
VALVE TAMPER SWITCHES			●	●				●					
KITCHEN HOOD			●	●				●				●	●
FIRE ALARM AC POWER FAIL					●	●			●				
FIRE ALARM LOW BATTERY					●	●			●				
OPEN CIRCUIT					●	●			●				
GROUND FAULT					●	●			●				
NAC SHORT CIRCUIT					●	●			●				
LOSS OF AC TO BUILDING					●	●			●	●	●		

CIRCUIT/CONDUCTOR LEGEND

- (L1) SLC-1 (1-#14/2 TWISTED PAIR) 1SLC (CLASS A)
- (L2) SLC-2 (1-#14/2 TWISTED PAIR) 1SLC (CLASS A)
- (L3) SLC-3 (1-#14/2 TWISTED PAIR) 1SLC (CLASS A)
- (L4) SLC-4 (1-#14/2 TWISTED PAIR) 1SLC (CLASS A)
- (L5) SLC-5 (1-#14/2 TWISTED PAIR) 1SLC (CLASS A)
- (N1) NAC-1 (2-#14 THHN) FAPS1-1 (CLASS A) ORANGE/BLUE
- (N3) NAC-2 (2-#14 THHN) FAPS1-2 (CLASS A) ORANGE/BLUE
- (N4) NAC-3 (2-#14 THHN) FAPS1-3 (CLASS A) ORANGE/BLUE
- (N5) NAC-4 (2-#14 THHN) FAPS2-1 (CLASS A) ORANGE/BLUE
- (N6) NAC-5 (2-#14 THHN) FAPS2-2 (CLASS A) ORANGE/BLUE
- (N7) NAC-6 (2-#14 THHN) FAPS3-1 (CLASS A) ORANGE/BLUE
- (N8) NAC-7 (2-#14 THHN) FAPS3-2 (CLASS A) ORANGE/BLUE
- (N9) NAC-8 (2-#14 THHN) FAPS4-1 (CLASS A) ORANGE/BLUE
- (N10) NAC-9 (2-#14 THHN) FAPS4-2 (CLASS A) ORANGE/BLUE
- (S1) SPKR CKT. #1 (#16/2 TWISTED SHIELDED) AMP1-1/2 (CLASS A)
- (S3) SPKR CKT. #2 (#16/2 TWISTED SHIELDED) AMP1-3/4 (CLASS A)
- (S4) SPKR CKT. #3 (#16/2 TWISTED SHIELDED) AMP2-1/2 (CLASS A)
- (S5) SPKR CKT. #4 (#16/2 TWISTED SHIELDED) AMP3-1/2 (CLASS A)
- (S6) SPKR CKT. #5 (#16/2 TWISTED SHIELDED) AMP3-3/4 (CLASS A)
- (S7) SPKR CKT. #6 (#16/2 TWISTED SHIELDED) AMP5-1/2 (CLASS A)
- (S8) SPKR CKT. #7 (#16/2 TWISTED SHIELDED) AMP5-3/4 (CLASS A)
- (S9) SPKR CKT. #8 (#16/2 TWISTED SHIELDED) AMP7-1/2 (CLASS A)
- (S10) SPKR CKT. #9 (#16/2 TWISTED SHIELDED) AMP7-3/4 (CLASS A)
- (V1) LOC HARNESS WIRING ; REMOTE MICROPHONE WIRING; AUDIO CKT. WIRING; REMOTE ANNUNCIATOR WIRING. (2-#16/2 TWISTED SHIELDED, 1-#14/2 AWG)
- (X1) DIGITAL AUDIO LOOP (DAL) WIRING (CLASS A) (1-#16/2 TWP UNSHIELDED BELDEN 5320UJ, BELDEN 5320UM, OR BETTER)
- (X2) SYNC CIRCUIT WIRING (CLASS A) (2-#14 THHN STRANDED) PINK/PURPLE
- (WA) REMOTE TEST SWITCH WIRING (#14/4 AWG)
- (A1) AUX-1 (2-#14 SOLID) FAAUX1-1 (AUXILIARY DOOR) RED/BLACK
- (A2) AUX-2 (2-#14 SOLID) FAAUX2-1 (AUXILIARY DOOR) RED/BLACK
- (A3) AUX-3 (2-#14 SOLID) FAAUX2-2 (AUXILIARY DOOR) RED/BLACK
- (A4) AUX-4 (2-#14 SOLID) FAAUX2-3 (BEAM DETECTOR POWER) RED/BLACK
- (A5) AUX-5 (2-#14 SOLID) FACP-AUX1 (BEAM DETECTOR POWER) RED/BLACK
- (A6) AUX-6 (2-#14 SOLID) FACP-AUX2 (BLUE STROBE POWER) RED/BLACK

FIRE ALARM SYMBOL LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT

SYMBOL	DESCRIPTION	MANUF. & PART #	MOUNTING	MOUNT IN
FACP	FIRE ALARM CONTROL PANEL	NOTIFIER - ONYX SERIES NFS2-3030	CABINET TOP @ 6'-2"	NOTIFIER - CAB D-4
DVC	DIGITAL VOICE CONTROL PANEL	NOTIFIER - DVC	IN FACP CABINET	IN FACP CABINET
FAPS	FIRE ALARM POWER SUPPLY CABINET	NOTIFIER - FCPS-24S8 & DAA2-5070	CABINET TOP @ 6'-2"	NOTIFIER - CAB EQ D-4 (NAC POWER SUPPLY & AMPLIFIER)
FAAUX	FIRE ALARM DOOR HOLDER POWER	NOTIFIER - FCPS-24S8	IN FAPS CABINET	IN FAPS CABINET WHERE REQUIRED
ANN	FIRE ALARM REMOTE ANNUNCIATOR	NOTIFIER - FDU-80	FIELD VERIFY	3 GANG DEEP - MOUNTED FLUSH, 48" TO TOP
MIC	REMOTE MICROPHONE	NOTIFIER - RM-1	FIELD VERIFY	IN REMOTE ANNUNCIATOR CABINET
-S-	SMOKE DETECTOR	NOTIFIER - FSP-851	CEILING	4 SQ. DEEP W/ MUD RING - MOUNTED FLUSH
DD	DUCT SMOKE DETECTOR	NOTIFIER - FSP-851R / DNR	INDICATED DUCT	DNR HOUSING
P	PULL STATION	NOTIFIER - NBG-12LX	WALL @ 48" TO CENTER OF BOX	4 SQ. DEEP W/ SINGLE GANG MUD RING - MOUNTED FLUSH
	HEAT DETECTOR	NOTIFIER - FSH-851	CEILING	4 SQ. DEEP W/ MUD RING - MOUNTED FLUSH
TX/RX	BEAM SMOKE DETECTOR-TX/RX	NOTIFIER - BEAM200S	FIELD VERIFY	VERIFY
R	BEAM SMOKE DETECTOR-REFLECTOR	NOTIFIER - BEAM200S	FIELD VERIFY	VERIFY
RTS	REMOTE TEST SWITCH	NOTIFIER - RTS-151KEY	CEILING MOUNTED NEAR UNIT	SINGLE GANG 2-1/2" DEEP OR MOUNT DIRECTLY TO CEILING
MC	*MULTI CRITERIA DETECTOR W/CO DET.	NOTIFIER - FCO-851	CEILING	4 SQ. DEEP W/ MUD RING - MOUNTED FLUSH
MM	MONITOR MODULE	NOTIFIER - FMM-1		4 SQ. DEEP - MOUNTED FLUSH
CM	CONTROL MODULE	NOTIFIER - FCM-1		4 SQ. DEEP - MOUNTED FLUSH
RM	RELAY MODULE	NOTIFIER - FRM-1		4 SQ. DEEP - MOUNTED FLUSH
SPSCRV	**SPEAKER / STROBE - CEILING	NOTIFIER - SPSCRV	CEILING	4 SQ. DEEP W/ DOUBLE GANG MUD RING - MOUNTED FLUSH
SSRV	**SPEAKER / STROBE	NOTIFIER - SPSRV	WALL @ 84" TO CENTER OF BOX	4 SQ. DEEP W/ DOUBLE GANG MUD RING - MOUNTED FLUSH
WP SSRK	**SPEAKER / STROBE (WEATHERPROOF)	NOTIFIER - SPSRK	WALL @ 10' TO CENTER OF BOX	4 SQ. DEEP W/ DOUBLE GANG MUD RING - MOUNTED FLUSH
SCR	**STROBE - CEILING MOUNT	NOTIFIER - SCR	CEILING	4 SQ. DEEP W/ SINGLE GANG MUD RING - MOUNTED FLUSH
SR	**STROBE	NOTIFIER - SR	WALL @ 84" TO CENTER OF BOX	4 SQ. DEEP W/ SINGLE GANG MUD RING - MOUNTED FLUSH
SPRV	**SPEAKER	NOTIFIER - SPRV		4 SQ. DEEP W/ DOUBLE GANG MUD RING - MOUNTED FLUSH
DH	24VDC MAGNETIC DOOR HOLDERS	ABH - 2500	FIELD VERIFY	WALL MOUNT - DOUBLE GANG/NEW=FLUSH - EXIST =SURFACE
F/SD	FIRE/SMOKE DAMPER	BY OTHERS	BY OTHERS	BY OTHERS
ANSUL	KITCHEN HOOD SYSTEM	BY OTHERS	VERIFY	VERIFY
ZM	RELAY MODULE	NOTIFIER - FZM-1	IN FACP CABINET	4 SQ. DEEP - MOUNTED FLUSH

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
E	EXISTING	AWG	AMERICAN WIRE GAUGE
G	WITH GUARD / PROTECTIVE COVER	TWP	TWISTED PAIR
P	PENDENT MOUNT	TWSP	TWISTED SHIELDED PAIR
R	RESIDENTIAL (110V)	FPLP	FIRE POWER LIMITED PLENUM
S	SOUNDER BASE	FPLR	FIRE POWER LIMITED RISER
WP	WEATHERPROOF		
EOL	END OF LINE RESISTOR		
EOLR	END OF LINE RELAY		

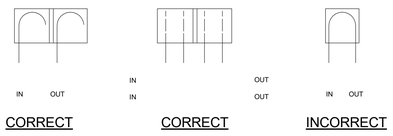
SP 2W SPEAKER WATTAGE TAP SETTING; SS 1W 75 STROBE CANDELA SETTING 30

-S- L1D100 DEVICE ADDRESS OR L1M100 P
(L - DENOTES LOOP #)
(D or M - DENOTES DETECTOR OR MODULE #)

1-#14/2 TWP — WIRE TYPE ABBREVIATED; CONDUCTOR COUNT; WIRE SIZE; # OF CABLES (IF OMITTED ONLY 1 CABLE NEEDED)

* FCO-851 INTELLIQUAD DETECTOR-FOUR SENSING ELEMENTS:
CARBON MONOXIDE DETECTOR - FLAME DETECTOR
SMOKE DETECTOR - THERMAL DETECTOR

** NEW FIRE ALARM SYSTEM INSTALLATION IN EXISTING AREAS OF THE BUILDING:
ALL SURFACE MOUNT CABLE RUNS SHALL BE IN LEGRAND-WIREMOLD PN05 OR PN10 LOW-VOLTAGE LATCHING RACEWAY.
SURFACE MOUNTED DEVICES, SPEAKERS, AND SPEAKER-STROBES SHALL BE IN MATCHING WIREMOLD 2300 SERIES
TWO-GANG EXTRA DEEP DEVICE BOXES. INSTALLING CONTRACTOR SHALL COORDINATE WITH THE SCHOOL DISTRICT
THE RACEWAY FINISHES AND ROUTING PRIOR TO INSTALLATION.



CORRECT CORRECT INCORRECT

WHEN INSTALLING DEVICES, CONDUCTORS SHALL NOT BE SPLICED. SPLICES OR CONNECTIONS SHALL OCCUR ONLY AT DEVICES OR APPLIANCES.

WIRING METHODS
SCHEMATIC: NO SCALE

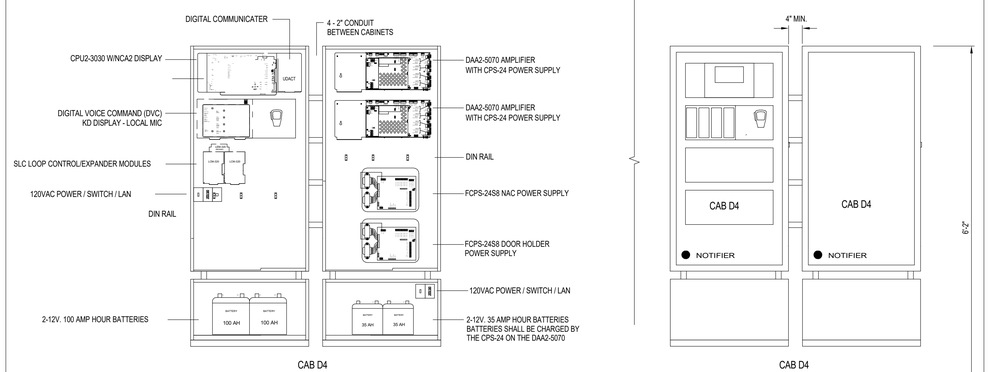
ADDITIONAL FIRE ALARM SYSTEM INSTALLATION NOTES:
- ALL SPEAKER WIRE SHALL BE #16/2 TWISTED AND SHIELDED.
- ALL FIELD SELECTABLE WATTAGE TAPS ON SPEAKERS SHALL BE SET TO 1/2 WATT UNLESS OTHERWISE NOTED ON PLANS.
- ALL SPEAKER/STROBES SHALL BE RED IN COLOR.
- IN SLC-1 AREA - REMOVE ALL EXISTING SLC CABLE AND INSTALL #14/2 TWISTED CABLE. REUSE EXISTING CONDUIT AND RACEWAY WHERE POSSIBLE. INSTALL BLANK COVERS ON ALL EXISTING BOXES NOT BEING REUSED. FIELD VERIFY EXISTING FIRE/SMOKE DAMPER LOCATIONS AND TIE TO NEW FACP.
- IN SLC-2 AREA - DO NOT USE EXISTING CABLE TRAY UNLESS ABSOLUTELY NECESSARY.
- THE DIGITAL AUDIO LOOP THAT CONNECTS ALL AMPLIFIERS WITH THE DVC SHALL BE CLASS "A". CONDUCTORS FOR THE DIGITAL AUDIO LOOP SHALL BE BELDEN 5320UJ, BELDEN 5320UM, OR BETTER AS APPROVED BY THE CACHE COUNTY SCHOOL DISTRICT. DAVE FULLMER (435) 994-0350.
- ALL CABLE RAN TO MAGNETIC DOOR HOLDERS SHALL BE 2-#14 SOLID IN RED AND BLACK.
- PHASE 1 TO BE COMPLETED BY AUGUST 10 2016.
- PHASE 2 TO BE COMPLETED WITH FINAL CONSTRUCTION.
- REMOVE ALL EXISTING DEVICES AND INSTALL BLANK COVERS.
- SET ALL SPEAKER TAP SWITCHES TO 70 VOLTS

THIS IS AN ADDRESSABLE FIRE ALARM SYSTEM. COORDINATE DEVICE ADDRESSES AND MAPPING WITH DAVE FULLMER - CCSD (435) 994-0350.

GENERAL NOTES:

1. POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST REMAIN SEPARATED IN CABINET. ALL POWER-LIMITED CIRCUIT WIRING MUST REMAIN AT LEAST 0.25" AWAY FROM ANY NONPOWER-LIMITED CIRCUIT WIRING. FURTHERMORE, ALL POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST ENTER AND EXIT THE CABINET THROUGH DIFFERENT KNOCKOUTS AND/OR CONDUITS.
2. T-TAPPING SHALL NOT BE PERMITTED.
3. POWER FOR ALL FIRE ALARM PANELS AND FIRE ALARM POWER SUPPLIES MUST BE PROVIDED BY A DEDICATED CIRCUIT.
4. SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETE AND FINAL.
5. INSTALLATION SHALL COMPLY WITH NEC, NFPA 72 AND ALL OTHER APPLICABLE CODES AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
6. DO NOT INSTALL ANY SMOKE OR HEAT DETECTOR WITHIN 3 FEET OF ANY AIR DIFFUSER.
7. CONDUCTORS SHALL NOT BE SPLICED. SPLICES OR CONNECTIONS SHALL OCCUR ONLY AT DEVICES OR APPLIANCES.
8. APPROVED STAMPED DRAWINGS SHALL BE PROVIDED BY THE SCHOOL DISTRICT. HOWEVER, UPON COMPLETION, THE INSTALLING CONTRACTOR SHALL PROVIDE AS BUILT DRAWINGS TO CCSD - DAVE FULLMER (435) 994-0350 IN ELECTRONIC FORM AND HARD COPIES PRINTED TO SCALE ON MYLAR.
9. THE SIGNALING LINE CIRCUITS (SLC) AND NOTIFICATION APPLIANCE CIRCUITS (NAC'S) SHALL BE WIRED AS SHOWN ON THE DRAWINGS IN SEPARATE CONDUITS UNLESS OTHERWISE APPROVED BY THE SCHOOL DISTRICT AND THE LOCAL AUTHORITY HAVING JURISDICTION. (NO CHANGES WITHOUT WRITTEN APPROVAL FROM DAVE FULLMER (435) 994-0350).
10. WIRE (THHN) COLOR SHALL BE ORANGE/BLUE FOR SIGNALING CIRCUITS, PINK/PURPLE FOR FAPS (SYNC & TROUBLE), YELLOW JACKET FOR PHONE CONNECTIONS.
11. THE MAIN FIRE ALARM CABINET SHALL BE "D" SIZE WITH A GLASS DOOR.
12. UPON COMPLETION, THE INSTALLING CONTRACTOR SHALL PERFORM FINAL TESTING OF THE ENTIRE SYSTEM, AND SHALL COORDINATE AND PERFORM A FINAL FIRE ALARM SYSTEM INSPECTION WITH THE LAHJ.
13. ALL RACEWAY SHALL BE 3/4" EMT UNLESS NOTED OTHERWISE.
14. ALL WIRE CONNECTIONS IN MAIN FACP SHALL BE ON DIN RAIL FIRST THEN TO MAIN BOARD WITH SAME COLOR OF WIRE. PROVIDE LABEL FOR EACH. Red
15. FIELD SELECTABLE AUDIBILITY SETTINGS OF NOTIFICATION APPLIANCES SHALL BE SET TO: WATTAGE TAP SETTINGS ON ALL VOICE EVACUATION SPEAKERS SHALL BE SET TO 1/2 WATT UNLESS OTHERWISE NOTED ON THE DRAWINGS.
16. ALL FIRE ALARM SYSTEM 'J' BOX COVERS AND CONDUIT MUST BE DUCT SMOKE DETECTOR LOCATIONS MUST BE APPROVED BY CCSD DAVE FULLMER (435) 994-0350 PRIOR TO INSTALLATION. Red
17. ALL SPEAKERS, STROBES AND SPEAKER STROBES SHALL BE IN COLOR.
18. Red

FACP ROOM

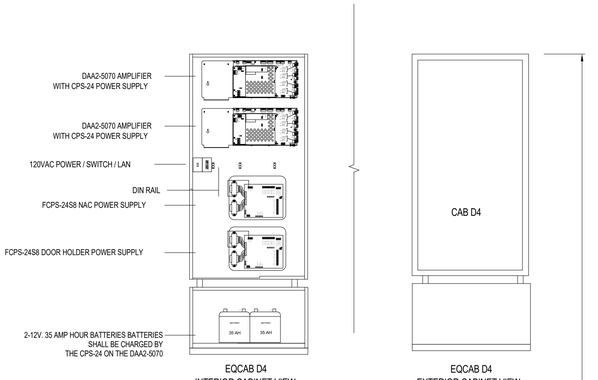


CAB D4
INTERIOR CABINET VIEW

CAB D4
EXTERIOR CABINET VIEW

FACP ROOM CABINET DETAIL
SCALE: NTS

FAPS-1, FAPS-2, FAPS-3 & FAPS-4 LOCATIONS



EQCAB D4
INTERIOR CABINET VIEW

EQCAB D4
EXTERIOR CABINET VIEW

FIRE ALARM POWER SUPPLY CABINET DETAIL
SCALE: NTS

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F. (801) 534-1150
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CONSTRUCTION DOCUMENTS

HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
5	05.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — STATE OF UTAH — 6-2-2024

FIRE ALARM SYMBOLS AND NOTES

E-332

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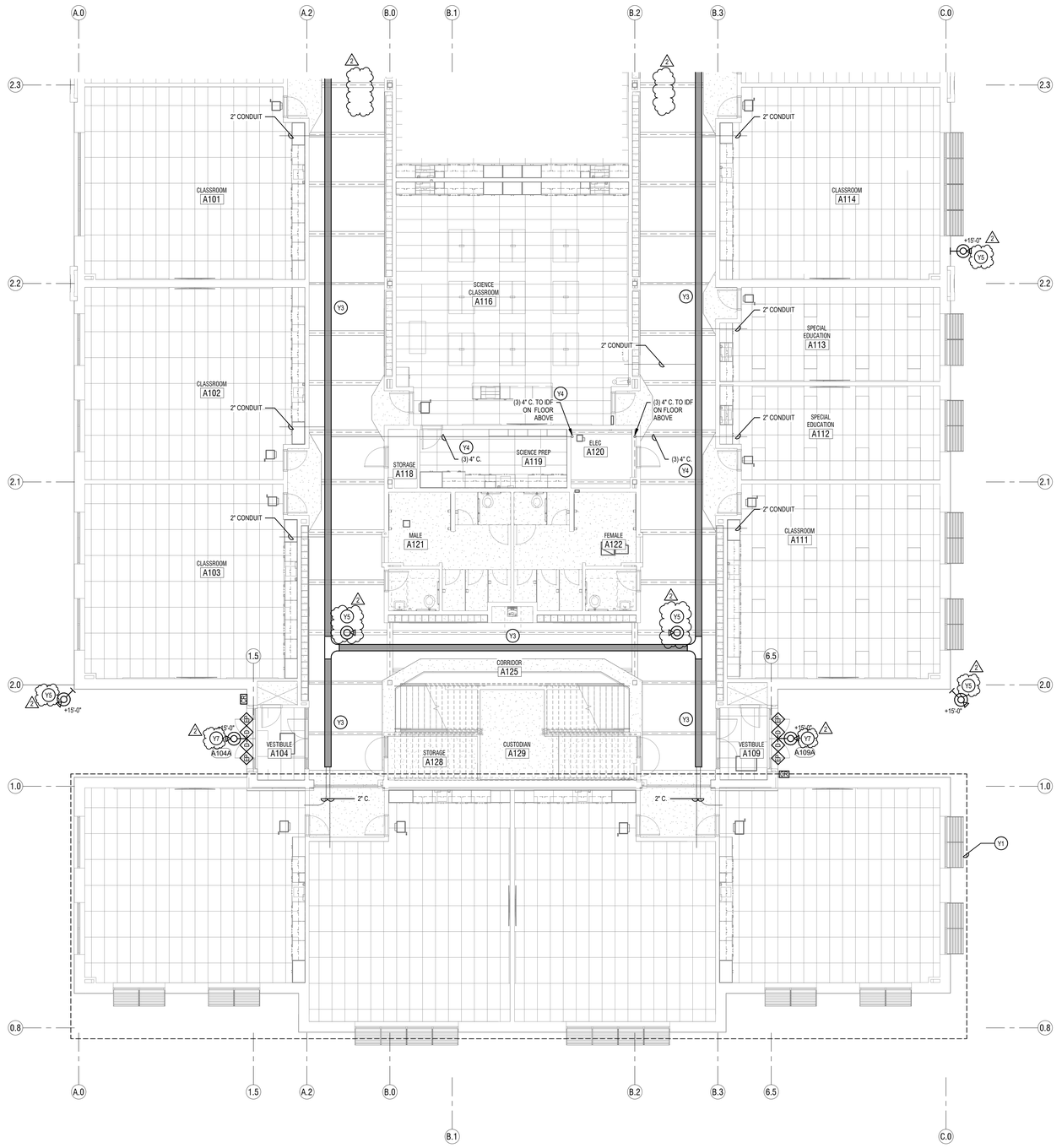


1 **LEVEL 1 FLOOR PLAN - AREA A - SYSTEMS**
SCALE: **1/8" = 1'-0"**

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

Y1 UNDER THE BASE BID, INCLUDE ALL WORK IN THIS AREA AS SHOWN ON THE PLANS. UNDER ALTERNATE #1, THIS AREA WILL BE REMOVED FROM THE PROJECT. PROVIDE A SEPARATE COST TO BE ISSUED AS A CREDIT FOR ALL WORK IN THIS AREA AS SHOWN ON THE PLANS.

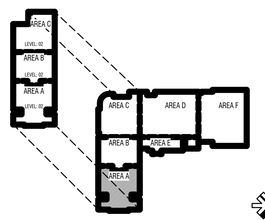
Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.

Y5 PROVIDE AXIS P3738-PLE CAMERA AND CAMERA MOUNT.

Y7 PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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750 NORTH 400 WEST
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SALT LAKE CITY, UT 84103

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
77411
04-26-2024

LEVEL 1 - AREA A - SYSTEMS

E-411

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SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

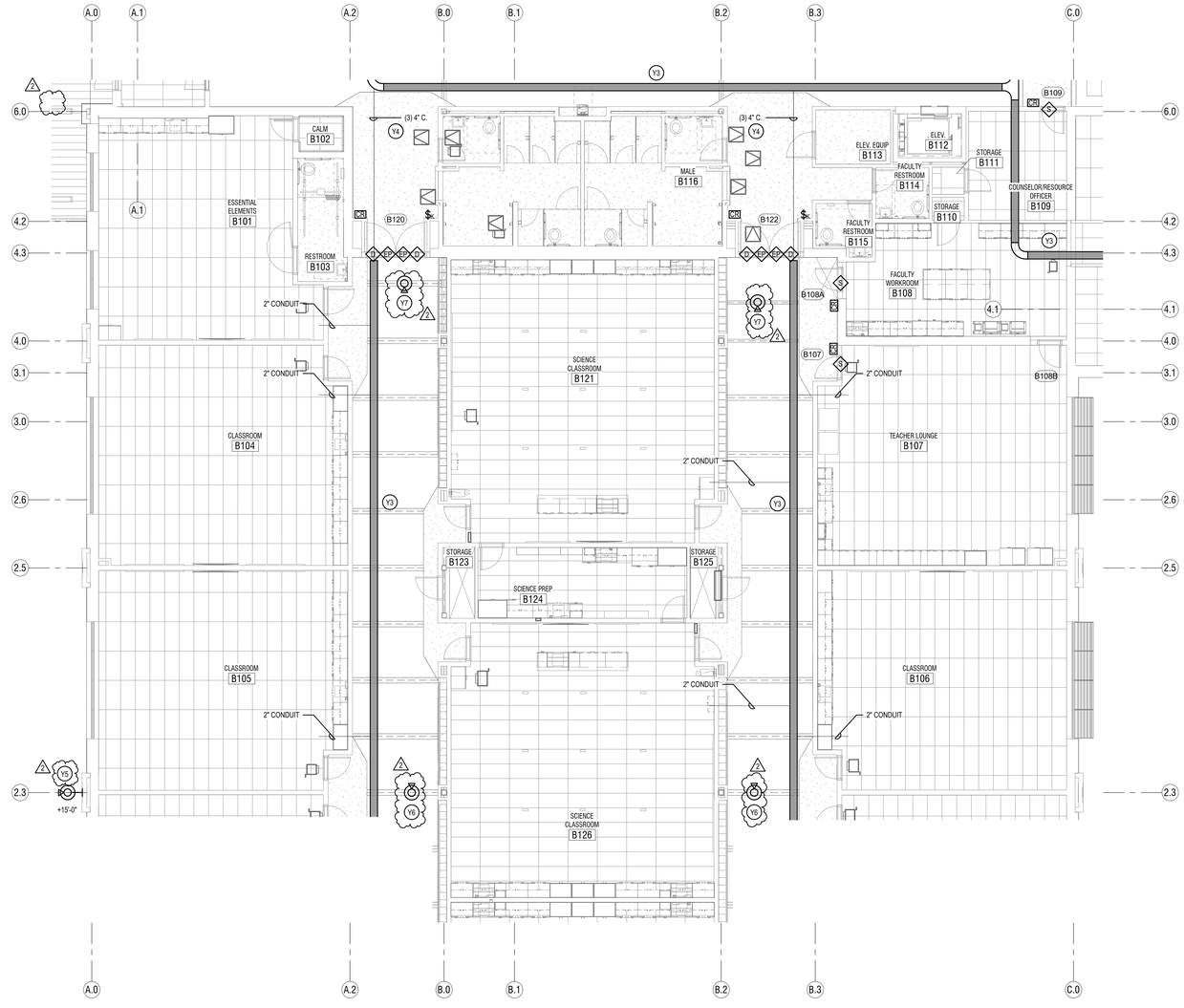
Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.

Y5 PROVIDE AXIS P3738-PLE CAMERA AND CAMERA MOUNT.

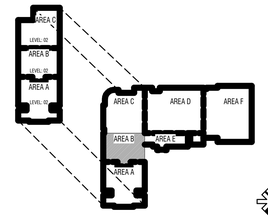
Y6 PROVIDE AXIS p4707-PLE CAMERA AND CAMERA MOUNT.

Y7 PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT.



1 **LEVEL 1 FLOOR PLAN - AREA B - SYSTEMS**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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www.envisionengineering.com

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
3	05.15.24	ADDENDUM 3
5	05.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LEVEL 1 - AREA B - SYSTEMS

E-412

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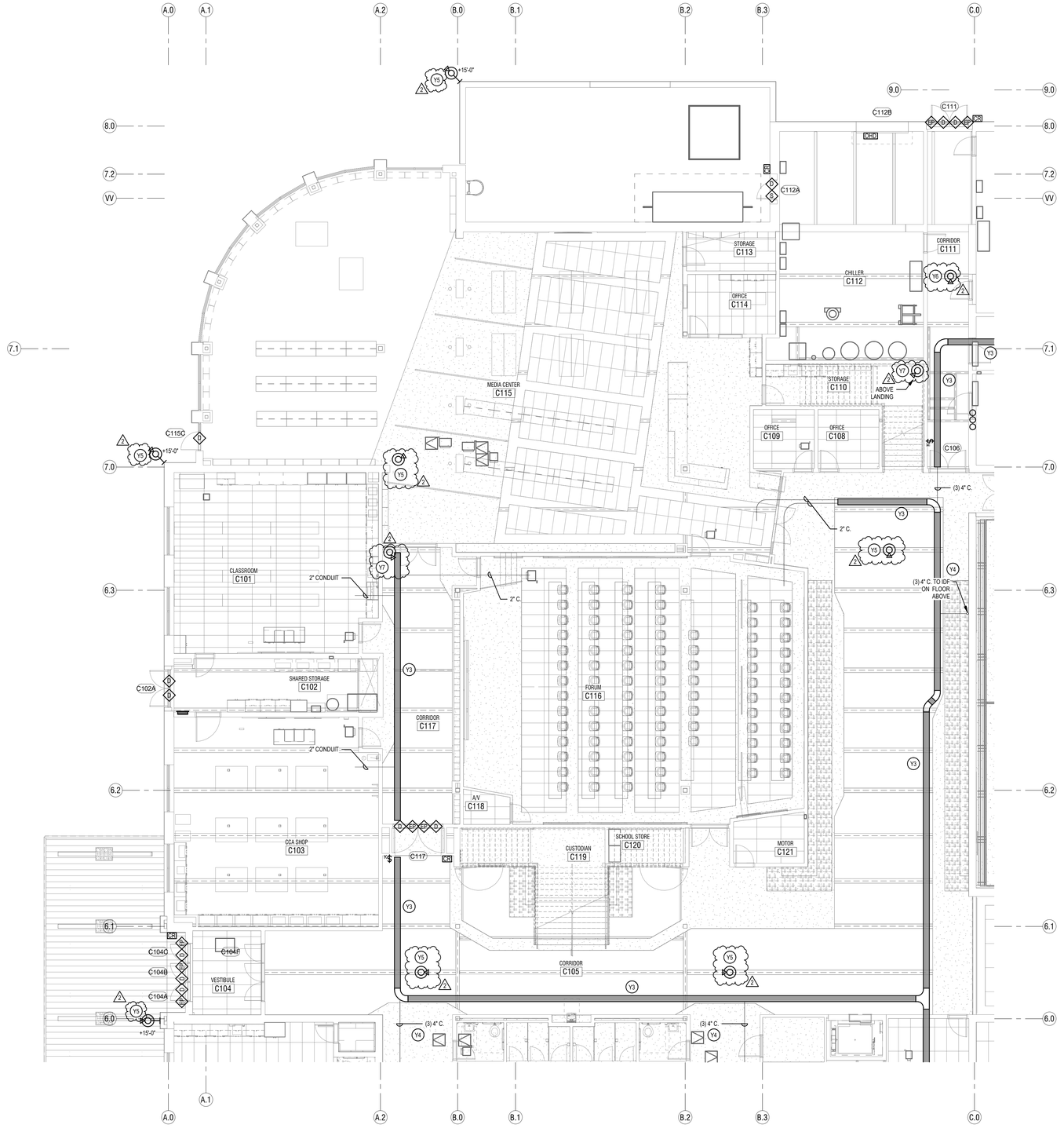


1 **LEVEL 1 FLOOR PLAN - AREA C - SYSTEMS**
SCALE: **1/8" = 1'-0"**

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

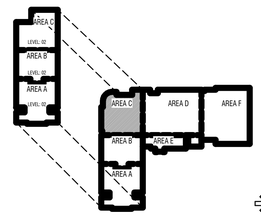
Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.

Y5 PROVIDE AXIS P3738-PLE CAMERA AND CAMERA MOUNT.

Y6 PROVIDE AXIS p4707-PLE CAMERA AND CAMERA MOUNT.

Y7 PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT.

KEY PLAN



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CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/13/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

LICENSED PROFESSIONAL ENGINEER
STATE OF UTAH
04-26-2024

LEVEL 1 - AREA C - SYSTEMS

E-413

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SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.

Y5 PROVIDE AXIS P3738-PLE CAMERA AND CAMERA MOUNT.

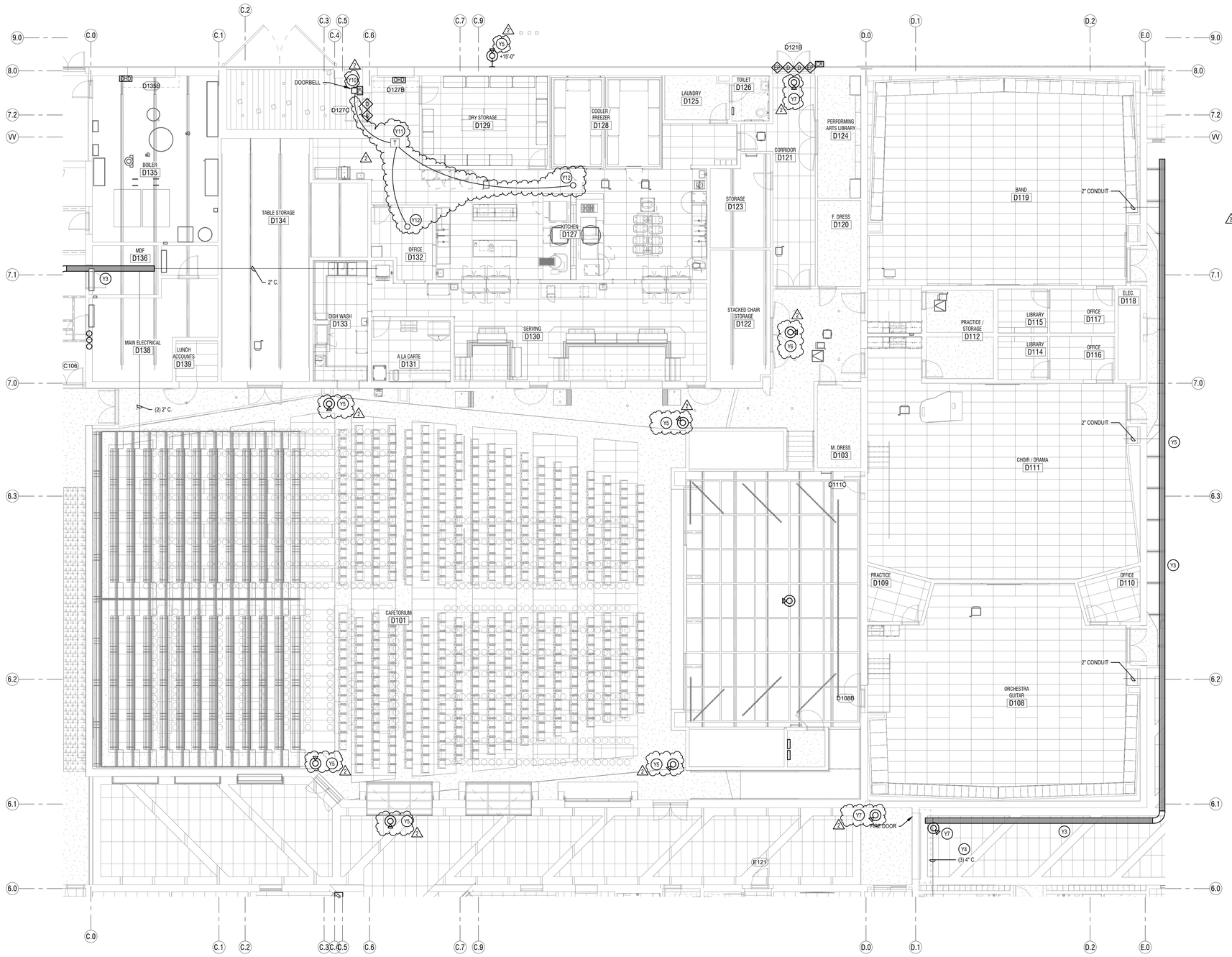
Y6 PROVIDE AXIS p4707-PLE CAMERA AND CAMERA MOUNT.

Y7 PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT.

Y10 PROVIDE EDWARDS SIGNALING #1768C-B (OR APPROVED EQUIVALENT) 24V LOW VOLTAGE WEATHERPROOF BUTTON FOR DOORBELL.

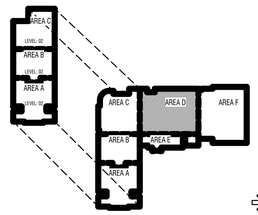
Y11 PROVIDE EDWARDS SIGNALING #559 (OR APPROVED EQUIVALENT) 40VA, 120V PRIMARY, 24V SECONDARY, CLASS 2 LOW VOLTAGE ENCLOSURE. MOUNT ABOVE THE ACCESSIBLE CEILING.

Y12 PROVIDE EDWARDS SIGNALING #339GI (OR APPROVED EQUIVALENT) 24V CHIME. CONFIRM MOUNTING LOCATIONS WITH THE OWNER.



1 **LEVEL 1 FLOOR PLAN - AREA D - SYSTEMS**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

ENVISION
ELECTRICAL ENGINEERING
240 E. MORRIS AVE. SUITE 200
SALT LAKE CITY, UT 84115
P (801) 534-1130
F (801) 534-1139
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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	06/20/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — 772411 — 06-21-2024 — STATE OF UTAH

LEVEL 1 - AREA D - SYSTEMS

E-414

5/28/2024 6:57 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

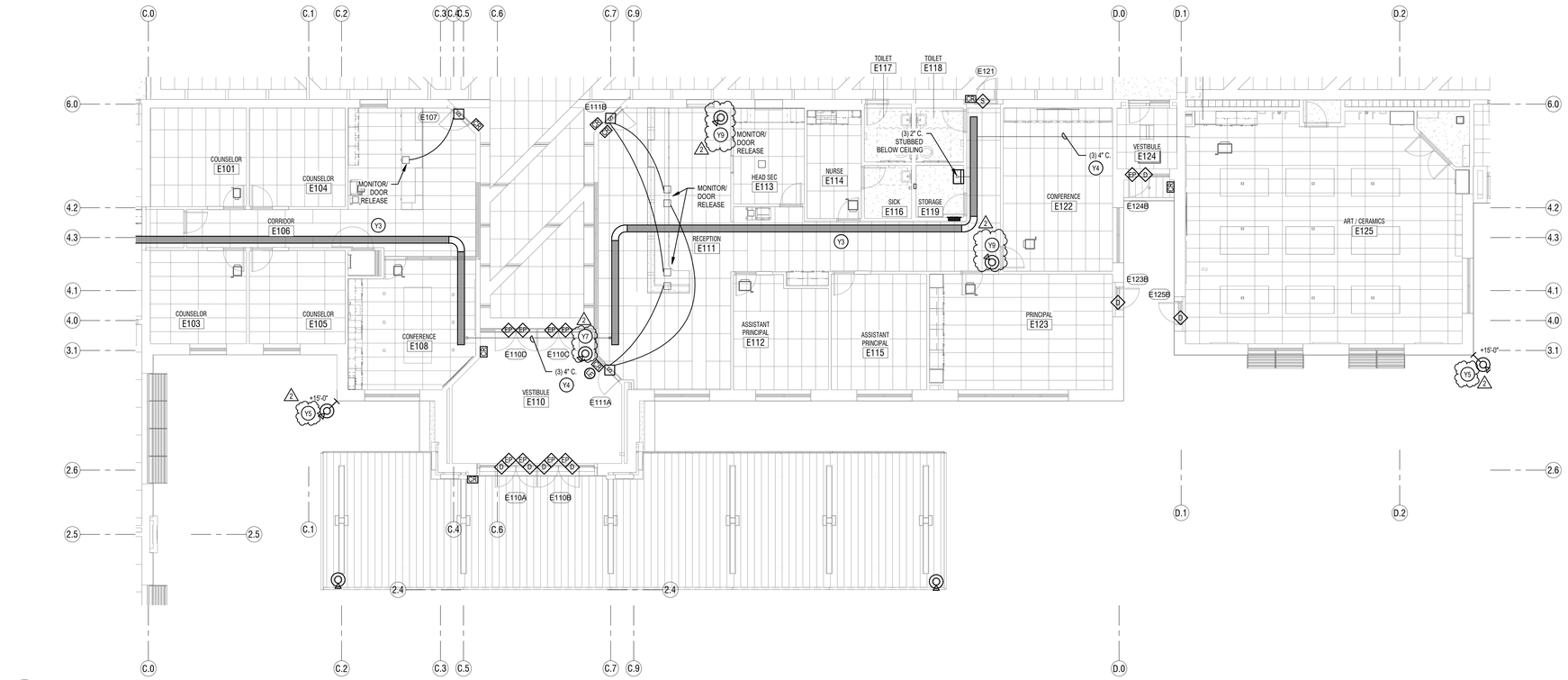
Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.

Y5 PROVIDE AXIS P3738-PLE CAMERA AND CAMERA MOUNT.

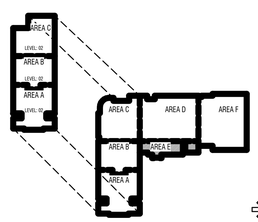
Y7 PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT.

Y9 THIS CAMERA IS ROUGH-IN ONLY. COIL 20' OF CABLE ABOVE CEILING AT THE CAMERA LOCATION SHOWN. TERMINATE CABLE AND TEST. DO NOT PROVIDE A CAMERA OR MOUNT AT THIS LOCATION.



1 **LEVEL 1 FLOOR PLAN - AREA E - SYSTEMS**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

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ELECTRICAL ENGINEERING
240 E. MORRIS AVE. SUITE 200
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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
3	05/15/24	ADDENDUM 3
5	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 9774411 04-26-2024 STATE OF UTAH

LEVEL 1 - AREA E - SYSTEMS

E-415

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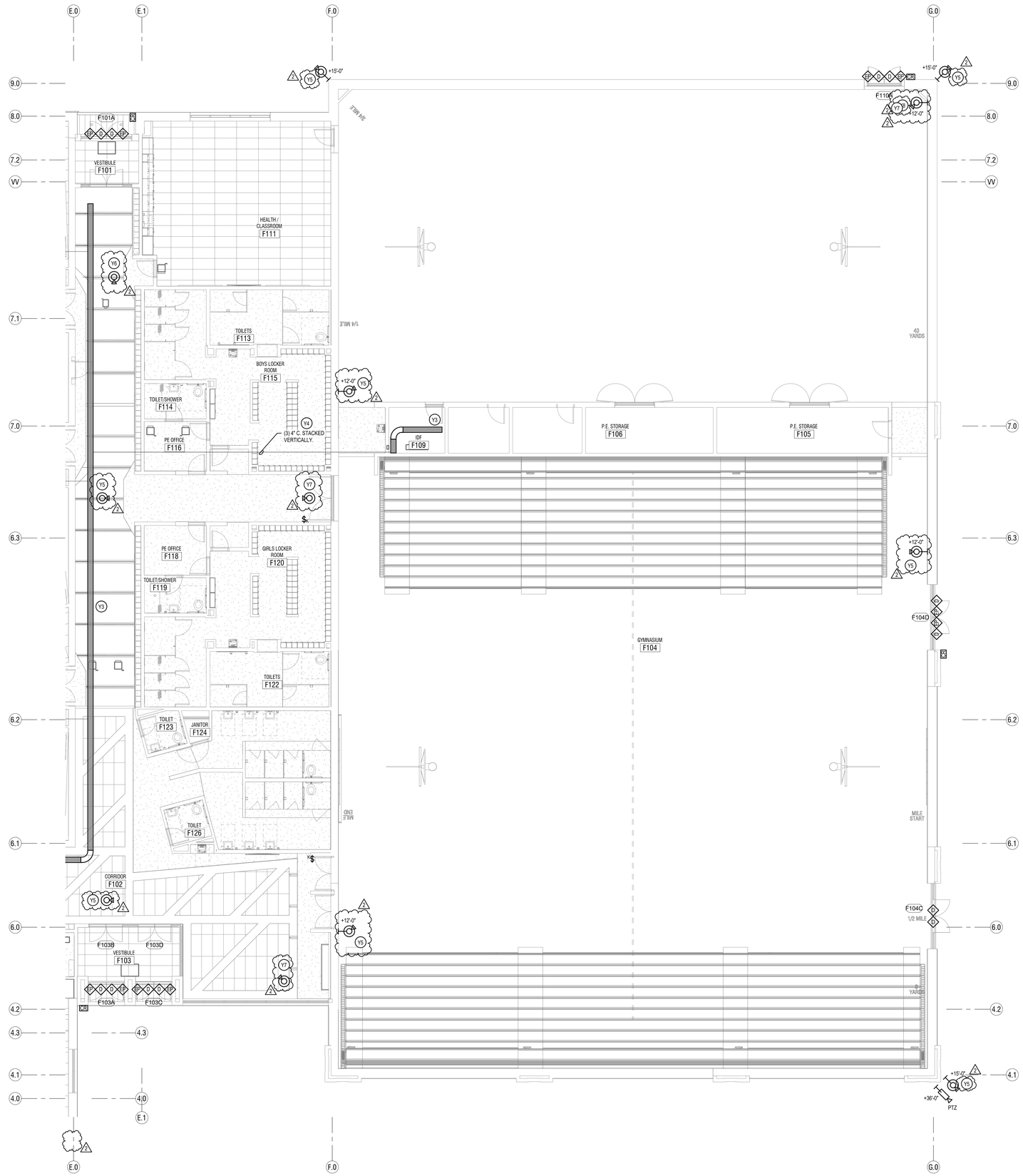


1 **LEVEL 1 FLOOR PLAN - AREA F - SYSTEMS**
SCALE: **1/8" = 1'-0"**

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.

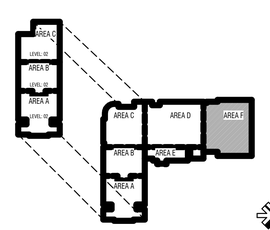
Y5 PROVIDE AXIS P3738-PLE CAMERA AND CAMERA MOUNT.

Y6 PROVIDE AXIS p4707-PLE CAMERA AND CAMERA MOUNT.

Y7 PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT.

Y8 PROVIDE AXIS Q6135-LE CAMERA AND CAMERA MOUNT.

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST
795 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY, UT 84103

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www.envisionengineering.com

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
12411
04-26-2024

LEVEL 1 - AREA F - SYSTEMS

E-416

5/28/2024 12:36 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
3. ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
4. CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.

KEYED NOTES (#)

Y1 UNDER THE BASE BID, INCLUDE ALL WORK IN THIS AREA AS SHOWN ON THE PLANS. UNDER ALTERNATE #1, THIS AREA WILL BE REMOVED FROM THE PROJECT. PROVIDE A SEPARATE COST TO BE ISSUED AS A CREDIT FOR ALL WORK IN THIS AREA AS SHOWN ON THE PLANS.

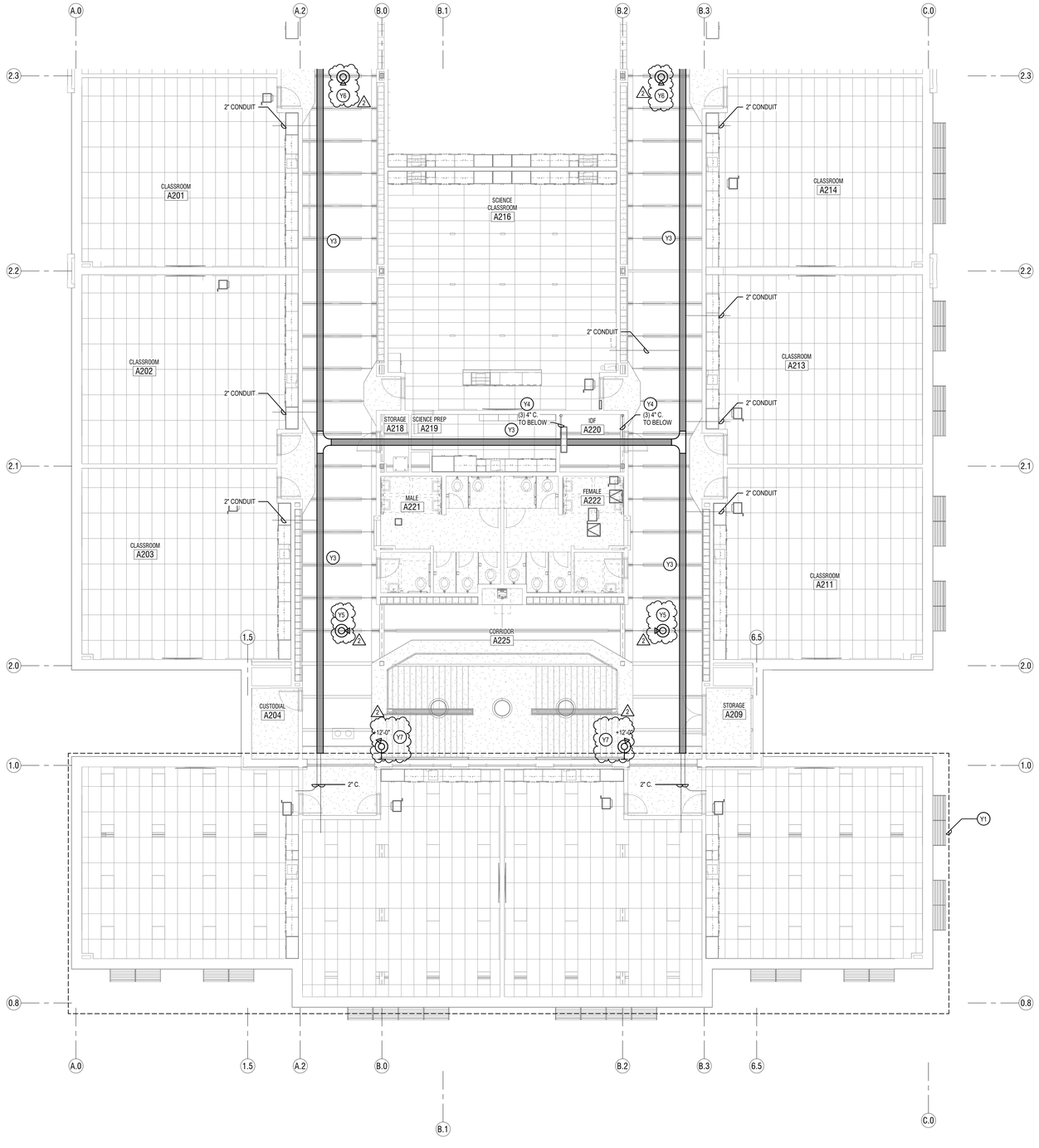
Y3 PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.

Y4 KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.

Y5 PROVIDE AXIS P3738-PLE CAMERA AND CAMERA MOUNT.

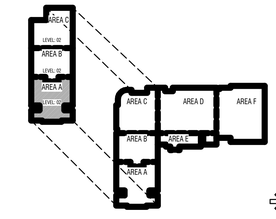
Y6 PROVIDE AXIS p4707-PLE CAMERA AND CAMERA MOUNT.

Y7 PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT.



1 **LEVEL 2 FLOOR PLAN - AREA A - SYSTEMS**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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255 SOUTH 200 WEST LOGAN, UT 84321
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ELECTRICAL
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F. (801) 534-1580
www.envisionengr.com

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05.15.24	ADDENDUM 3
	05.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
12411
04-01-2024

LEVEL 2 - AREA A - SYSTEMS

E-421

5/28/2024 10:37 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
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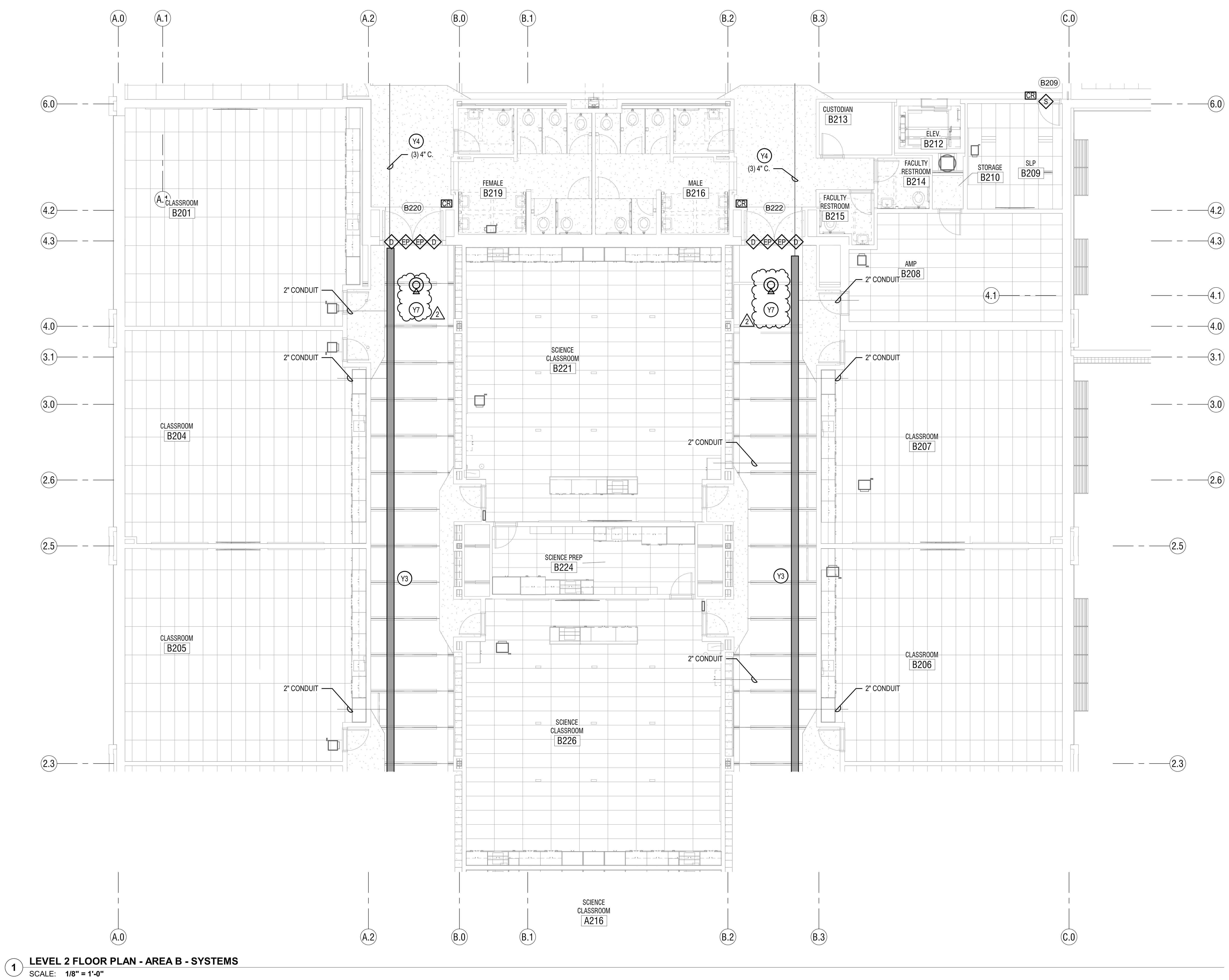
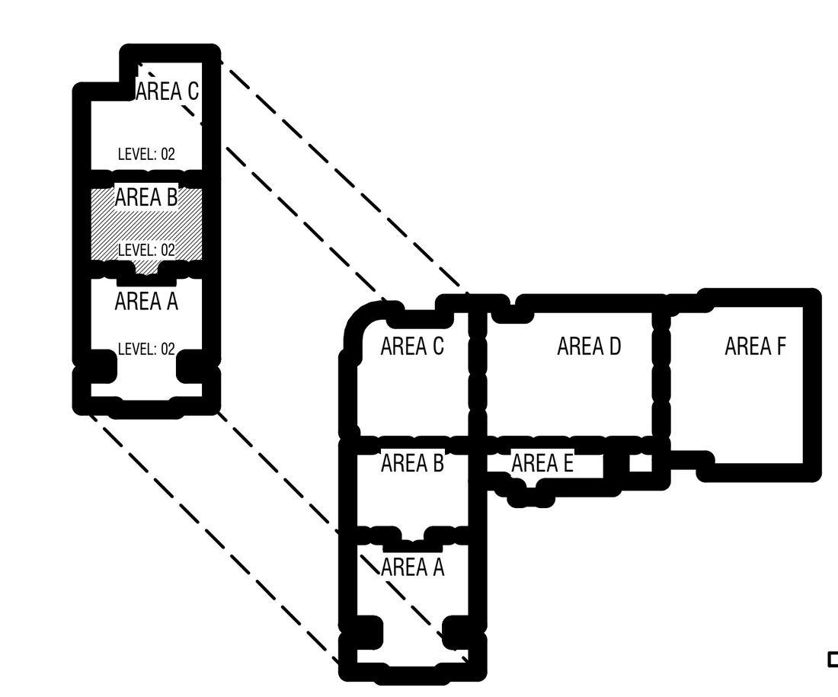
KEYED NOTES (#)

Y3	PROVIDE 12" WIDE BY 4" HIGH BASKET TYPE CABLE TRAY AS SHOWN. PROVIDE SOLID BOTTOM AND SOLID TOP COVER IN CABLE TRAYS IN ALL AREAS THAT ARE OPEN TO STRUCTURE. SEE DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. MOUNT CABLE TRAY 4" ABOVE ACCESSIBLE CEILINGS. IN OPEN CEILINGS, MOUNT CABLE TRAY AT 10'-0" TO BOTTOM OF TRAY. IN LOCATIONS WHERE DUCTWORK IS IN THE WAY, LOWER CABLE TRAY SO THERE IS 4" OF CLEAR SPACE BETWEEN THE TOP OF THE CABLE TRAY AND THE DUCTWORK.
Y4	KEEP ONE CONDUIT EMPTY FOR FUTURE USE. PROVIDE PULL STRING AND LABEL.
Y7	PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT. (2)



1 LEVEL 2 FLOOR PLAN - AREA B - SYSTEMS
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

ENVISION ENGINEERING
240 E. MORRIS AVE. SUITE 200
SALT LAKE CITY, UT 84115
P (801) 534-1130
F (801) 534-1080
www.envisioneng.com

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

PROJECT #:	123006
DRAWN BY:	Author
CHECKED BY:	Checker
ISSUED:	04.26.2024

REGISTERED PROFESSIONAL ENGINEER No. 77411 05-01-2024 STATE OF UTAH

LEVEL 2 - AREA B - SYSTEMS

E-422

5/28/2024 1:32:40 PM

SYSTEMS GENERAL NOTES:

1. COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
2. THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS, AND CONDUIT RUNS.
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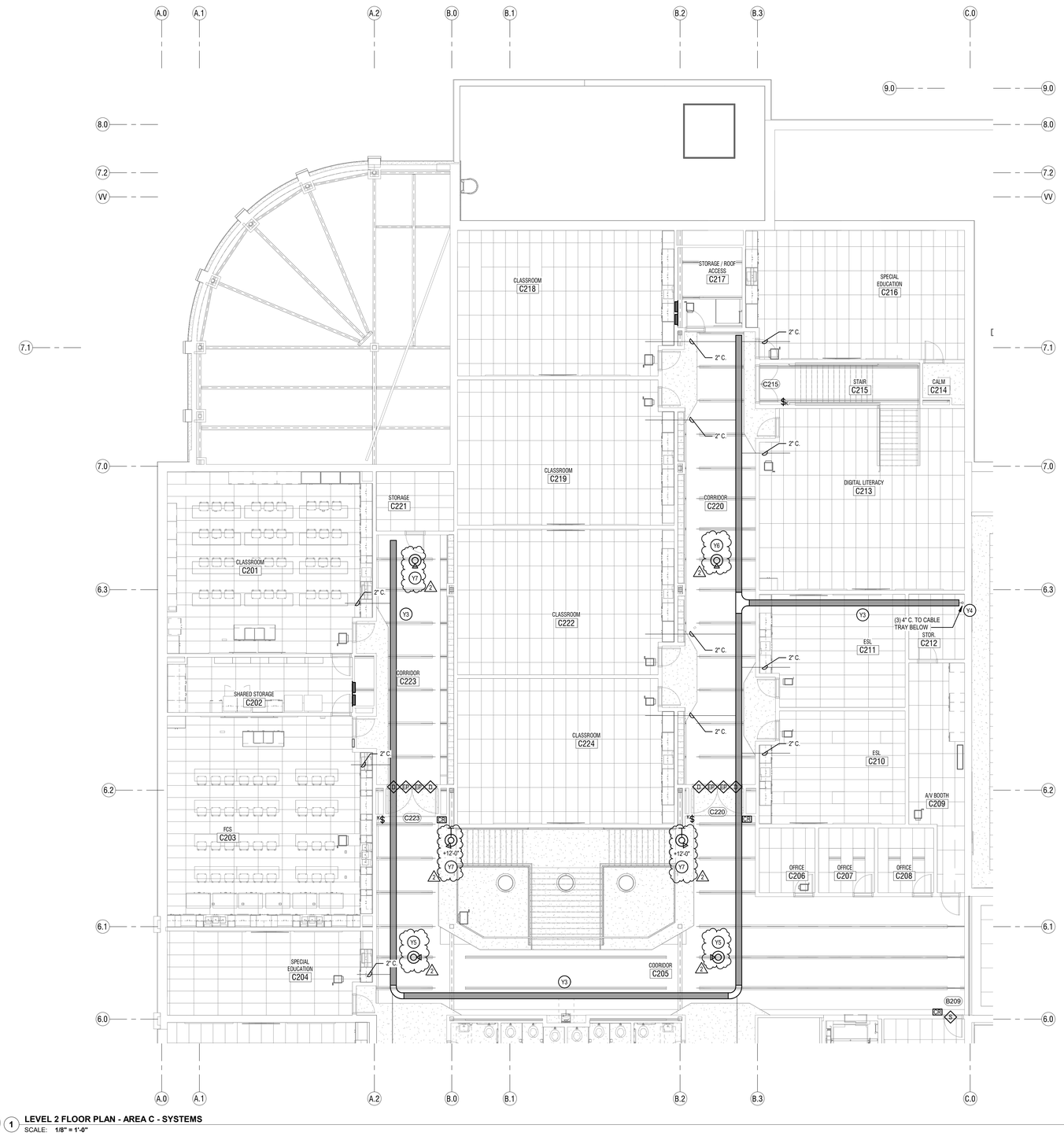
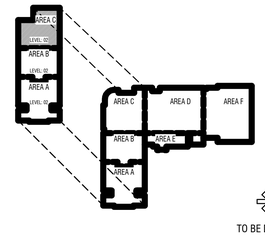
Y6 PROVIDE AXIS p4707-PLE CAMERA AND CAMERA MOUNT.

Y7 PROVIDE AXIS P3268-LVE CAMERA AND CAMERA MOUNT.



1 **LEVEL 2 FLOOR PLAN - AREA C - SYSTEMS**
SCALE: **1/8" = 1'-0"**

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 200 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY, UT 84103

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ELECTRICAL ENGINEERING
240 E. MORRIS AVE. SUITE 200
SALT LAKE CITY, UT 84115
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F. (801) 534-1580
www.envisionengr.com

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377411 04-26-2024 STATE OF UTAH

LEVEL 2 - AREA C - SYSTEMS

E-423

5/28/2024 1:52:42 PM

FIRE ALARM SCOPE COORDINATION TABLE

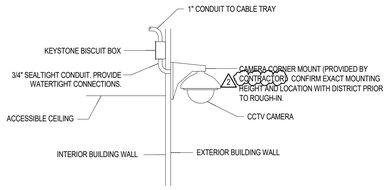
ITEM	FURNISHED AND TESTED BY		INSTALLED BY	
	CCSD	CONTRACTOR	CCSD	CONTRACTOR
FACP, FATP AND NAC PANELS		X		X
DEVICES (SMOKE DETECTORS, HORN/STROBES, CARBON MONOXIDE DETECTORS, MONITOR MODULES, CONTROL MODULES BASE CONNECTIONS , ETC.)		X		X
FIRE ALARM TWISTED PAIR CABLING		X		X
RACEWAY - CONDUIT, BACKBOXES, ETC.		X		X
PRINTED LABELING OF ALL PATCH PANELS, DEVICE FACEPLATES, WRAPS, ETC.		X		X
ALL CONSUMABLES (TAPE, STRING, TIE-WRAPS, VELCRO, ANCHORS, BOLTS, NUTS, SCREWS, WRAP LABELS, PRINTED LABELS, ETC.)		X		X

ACCESS CONTROLS SCOPE COORDINATION TABLE

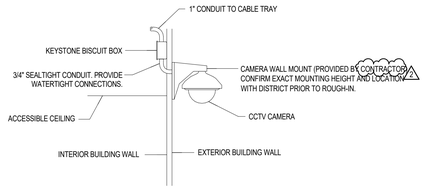
ITEM	FURNISHED BY		INSTALLED AND TESTED BY	
	CCSD	CONTRACTOR	CCSD	CONTRACTOR
SWITCHES	X		X	
PANELS		X		X
CARD READER AND HARDWARE CABLING (4 ELEMENT ACCESS CONTROL CABLE, YELLOW JACKET)		X		X
RACEWAY - CONDUIT, CABLE TRAY, BACKBOXES, ETC.		X		X
PRINTED LABELING OF ALL PATCH PANELS, DEVICE FACEPLATES, WRAPS, ETC.		X		X
ALL CONSUMABLES (TAPE, STRING, TIE-WRAPS, VELCRO, ANCHORS, BOLTS, NUTS, SCREWS, WRAP LABELS, PRINTED LABELS, ETC.)		X		X

VIDEO SURVEILLANCE SCOPE COORDINATION TABLE

ITEM	FURNISHED BY		INSTALLED AND TESTED BY	
	CCSD	CONTRACTOR	CCSD	CONTRACTOR
SWITCHES	X		X	
NVR (NETWORK VIDEO RECORDER) SERVER, MONITORS, ETC.	X		X	
SECURITY CAMERAS, AND MOUNTS (A)		X		X
SECURITY CAMERA LICENSEWARE (A)	X		X	
ALL 4-PAIR HORIZONTAL CABLING ORANGE (CAT 6A CABLES)		X		X
RACEWAY - CONDUIT, CABLE TRAY, BACKBOXES, ETC.		X		X
PRINTED LABELING OF ALL PATCH PANELS, DEVICE FACEPLATES, WRAPS, ETC.		X		X
ALL CONSUMABLES (TAPE, STRING, TIE-WRAPS, VELCRO, ANCHORS, BOLTS, NUTS, SCREWS, WRAP LABELS, PRINTED LABELS, ETC.)		X		X



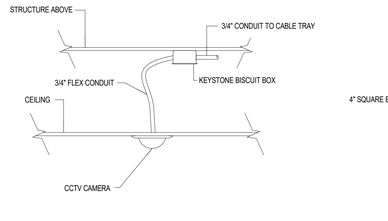
2 EXTERIOR CORNER MOUNTED CAMERA DETAIL
SCALE: NONE



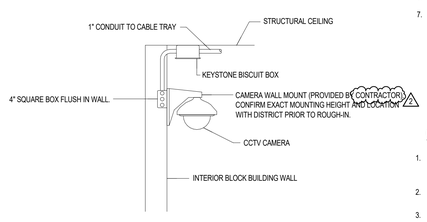
1 EXTERIOR WALL MOUNTED CAMERA DETAIL
SCALE: NONE

CCTV GENERAL NOTES:

1. COORDINATE ALL CAMERA LOCATIONS, WIRING AND ROUGH-IN REQUIREMENTS WITH OWNER AND SUPPLIER PRIOR TO ROUGH-IN.
2. INSTALL CABLES IN RACEWAYS AND CABLE TRAYS EXCEPT ABOVE LAY-IN TILE ACCESSIBLE CEILINGS. INSTALL CABLES IN RACEWAY WHERE ROUTED IN CONSOLES, CABINETS, DESKS, AND COUNTERS. INSTALL CABLING WITH HORIZONTAL AND VERTICAL CABLE GUIDES IN TELECOMMUNICATIONS SPACES WITH TERMINATING HARDWARE AND INTERCONNECTION EQUIPMENT. WHERE CABLES ARE ROUTED ABOVE ACCESSIBLE LAY-IN TILE SUSPENDED CEILINGS, SECURE AND SUPPORT CABLES WITH J-HOOKS A MINIMUM OF 8 INCHES (200 MM) ABOVE CEILINGS AND NOT MORE THAN 60 INCHES (1524 MM) APART; CABLE SHALL NOT BE RUN THROUGH STRUCTURAL MEMBERS OR IN CONTACT WITH PIPES, DUCTS, OR OTHER POTENTIALLY DAMAGING ITEMS. INSTALL CABLES IN OPEN CEILINGS (FINISHED AND UNFINISHED) IN RACEWAYS. WHERE RACEWAYS ARE INSTALLED IN FINISHED CEILINGS, PAINT RACEWAYS TO MATCH THE COLOR OF THE SURROUNDING SURFACE.
3. ALL CABLING NOT SPECIFICALLY IDENTIFIED IN THE RISER DIAGRAM SHALL BE MANUFACTURER RECOMMENDED CABLING.
4. FOR WALL MOUNT CAMERAS, PROVIDE JUNCTION BOX AT 12' UNLESS NOTED OTHERWISE. COORDINATE EXACT MOUNTING HEIGHT WITH DISTRICT PRIOR TO ROUGH-IN.
5. EACH CAMERA TO HAVE A DEDICATED CABLE DROP BACK TO DATA ROOM.
6. ALL CABLING SHALL BE PLENUM RATED.
7. CONTRACTOR TO TERMINATE AND TEST ALL CABLING (INCLUDING ALL CAMERA CABLING AND ANY FIBER OPTIC CABLES) AT CAMERA AND DATA RACK AS DIRECTED BY THE OWNER. CONFIRM ALL TERMINATION TYPES WITH THE OWNER PRIOR TO ANY TERMINATIONS AND TESTING. CONFIRM ALL TERMINATION LOCATIONS WITH THE OWNER PRIOR TO TERMINATING ANY CABLING.



4 INTERIOR CEILING MOUNTED CAMERA DETAIL
SCALE: NONE



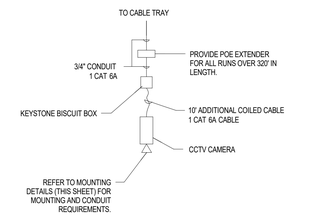
3 INTERIOR WALL MOUNTED CAMERA DETAIL
SCALE: NONE

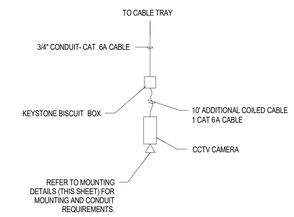
CCTV EQUIPMENT GENERAL NOTES:

1. CONFIRM ALL MOUNTING LOCATIONS AND HEIGHTS WITH THE OWNER AND ARCHITECT PRIOR TO ANY ROUGH-IN.
2. CONTRACTOR TO INSTALL ALL CABLING AS CALLED OUT.
3. ALL CABLING SHALL BE CAT 6A, PLENUM, ORANGE JACKET UNLESS NOTED OTHERWISE.
4. CONTRACTOR TO INSTALL OWNER FURNISHED EQUIPMENT.
5. SEE POWER AND SYSTEMS PLANS FOR ADDITIONAL REQUIREMENTS.

CCTV MOUNTING DIAGRAMS AS SHOWN ARE FOR BASIC CONCEPT AND LAYOUT. CONTRACTOR SHALL COORDINATE ALL ROUGH-IN REQUIREMENTS WITH THE OWNER PRIOR TO ANY ROUGH-IN.

NOTE:
CONTRACTOR SHALL SCHEDULE A PRE-INSTALL MEETING WITH THE SCHOOL DISTRICT AND ENGINEER FOR REVIEW OF THE INSTALLATION OF THE SYSTEM PRIOR TO ANY ROUGH-IN AND PRIOR TO SUBMITTAL SUBMISSION. IF THE CONTRACTOR DOES NOT SCHEDULE A PRE-INSTALL MEETING, THE CONTRACTOR SHALL MAKE ANY AND ALL CHANGES TO THE SYSTEM AS DIRECTED BY THE SCHOOL DISTRICT AT NO ADDITIONAL COST TO THE DISTRICT.





5 CCTV CAMERA WIRING DETAIL
SCALE: NONE

DOORS HELD OPEN BY ELECTRONIC DOOR HOLDERS:

DOORS THAT ARE HELD OPEN BY ELECTRONIC DOOR HOLDER SHALL FUNCTION AS FOLLOWS:

FIRE ALARM
UPON ACTIVATION OF THE FIRE ALARM SYSTEM THE DOORS BEING HELD OPEN WITH ELECTRONIC DOOR HOLDERS SHALL RELEASE AND CLOSE.

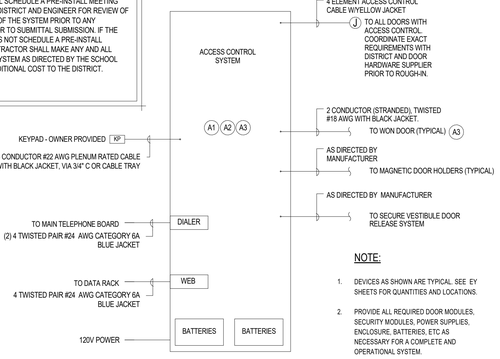
THE FIRE ALARM SYSTEM SHALL NOTIFY THE ACCESS CONTROL SYSTEM THAT THE FIRE ALARM HAS ACTIVATED AND UNLOCK ALL DOORS THAT ARE CONTROLLED THROUGH THE ACCESS CONTROL SYSTEM.

LOCK DOWN
UPON ACTIVATION OF A LOCK DOWN THE ACCESS CONTROL PANEL SHALL LOCK ALL DOORS CONTROLLED BY THE ACCESS CONTROL SYSTEM.

THE ACCESS CONTROL SYSTEM SHALL NOTIFY THE FIRE ALARM SYSTEM THAT A LOCK DOWN HAS BEEN INITIATED AND RELEASE ALL DOOR HELD OPEN WITH ELECTRONIC DOOR HOLDERS.

THE FIRE ALARM SYSTEM AND ACCESS CONTROL SYSTEM INTEGRATORS SHALL WORK CLOSELY TOGETHER AND WITH THE DISTRICT TO PROVIDE THE REQUIRED PROGRAMMING AND INPUTS SO DOORS FUNCTION AS STATED ABOVE.

NOTE:
CONTRACTOR SHALL SCHEDULE A PRE-INSTALL MEETING WITH THE SCHOOL DISTRICT AND ENGINEER FOR REVIEW OF THE INSTALLATION OF THE SYSTEM PRIOR TO ANY ROUGH-IN AND PRIOR TO SUBMITTAL SUBMISSION. IF THE CONTRACTOR DOES NOT SCHEDULE A PRE-INSTALL MEETING, THE CONTRACTOR SHALL MAKE ANY AND ALL CHANGES TO THE SYSTEM AS DIRECTED BY THE SCHOOL DISTRICT AT NO ADDITIONAL COST TO THE DISTRICT.



NOTE:

1. DEVICES AS SHOWN ARE TYPICAL. SEE EY SHEETS FOR QUANTITIES AND LOCATIONS.
2. PROVIDE ALL REQUIRED DOOR MODULES, SECURITY MODULES, POWER SUPPLIES, ENCLOSURE, BATTERIES, ETC AS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.

ACCESS CONTROL DOOR SEQUENCE OF OPERATIONS

EXTERIOR ACCESS CONTROLLED DOORS SHALL FUNCTION AS FOLLOWS:

1. THE EXTERIOR ACCESS CONTROLLED DOORS SHALL FUNCTION AS DIRECTED BY THE OWNER FOR LOCKING AND UNLOCKING DURING NORMAL HOURS OF OPERATIONS.
2. THE EXTERIOR ACCESS CONTROLLED DOORS SHALL GO INTO LOCK DOWN MODE AND LOCK ALL EXTERIOR DOORS ONCE THE LOCK DOWN / DURESS BUTTON IS PUSHED. PUSHING THE LOCK DOWN BUTTON AGAIN WILL RETURN ALL THE EXTERIOR DOORS THE STATE OF FUNCTION PRIOR TO THE LOCK DOWN BUTTON BEING PUSHED.
3. ONCE THE LOCK DOWN / DURESS BUTTON IS PUSHED AND THE ACCESS CONTROLLED DOORS ARE IN LOCK DOWN MODE, THE SYSTEM SHALL CALL THE MONITORING COMPANY AND NOTIFY THE MONITORING COMPANY THAT THE SCHOOL IS IN LOCK DOWN AND DISPATCH AS PREDETERMINED BY THE OWNER.

DOOR ROUGH-IN GENERAL NOTES:

1. CONTRACTOR SHALL WORK CLOSELY WITH THE DOOR HARDWARE SUPPLIER AND ACCESS CONTROL SYSTEM SUPPLIER FOR DOOR REQUIREMENTS, ROUGH-IN AND WIRING.
2. CONTRACTOR SHALL COORDINATE ALL JUNCTION BOX ROUGH-IN LOCATIONS WITH THE OWNER AND ACCESS SYSTEM CONTROL SYSTEM SUPPLIER PRIOR TO ANY ROUGH-IN.
3. ALL CABLING TO DEVICES THAT ARE INSTALLED WITHIN DOOR OR ON MULLIONS SHALL BE ROUTED THROUGH THE MULLIONS. COORDINATE INSTALLATION WITH THE WINDOW SYSTEM INSTALLER PRIOR TO ANY ROUGH-IN.

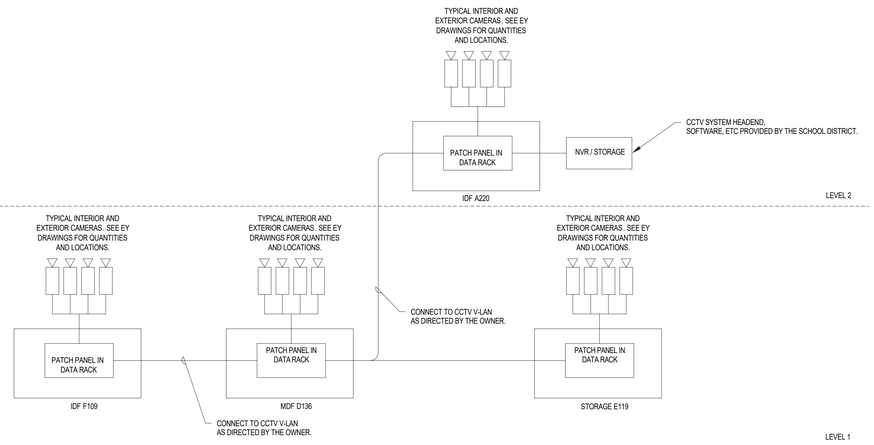
SECURITY / ACCESS CONTROL SYSTEM GENERAL NOTES:

1. ALLOW SUFFICIENT LENGTH OF CABLE FOR TERMINATION AT EACH END.
2. PLENUM RATED CABLE.
3. LABEL ALL CABLES AT BOTH ENDS WITH ROOM NUMBER.
4. COORDINATE ALL REQUIREMENTS WITH WEBER SCHOOL DISTRICT PRIOR TO ROUGH-IN.

ACCESS CONTROL KEYED NOTES: (A#)

1. ACCESS CONTROL SYSTEM TO POWER ALL ELECTRIFIED DOOR HARDWARE THROUGH THE ACCESS CONTROL SYSTEM. CONFIRM ALL REQUIREMENTS WITH THE DOOR HARDWARE SUPPLIER. PROVIDE ALL REQUIRED POWER SUPPLIES AS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
2. FIRE ALARM SYSTEM TO POWER ALL MAGNETIC DOOR HOLDERS, WHERE CALLED OUT THROUGH FIRE ALARM SYSTEM. CONFIRM ALL REQUIREMENTS WITH THE DOOR HARDWARE SUPPLIER. PROVIDE ALL REQUIRED POWER SUPPLIES AS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. ACCESS CONTROL SYSTEM TO CONTROL ALL WON DOORS AS CALLED OUT. CONFIRM ALL REQUIREMENTS WITH THE DOOR SUPPLIER. PROVIDE ALL REQUIRED DOOR CONTROLLERS AS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
4. REMOTE LINE INTERFACE (RLI): THE MODULE SHALL BE CAPABLE OF HAVING REMOTE INPUTS FOR LOCK/UNLOCK. PATRON DEVICES (PAT) AND RESET (RST) AND SHALL BE WITHIN 5,000 FEET OF THE LOK THE LINES BETWEEN THE LOK MODULE AND THE RLI SHALL BE FULLY SUPERVISED FOR LINE SHORTS, OPEN LINES, AND LINES SHORTED TO GROUND. THE LOCK/UNLOCK AND PAT INPUTS SHALL BEHAVE THE SAME AS THE LOCAL INPUTS OF THE SAME NAME WITH THE EXCEPTION THAT THE RLI PAT INPUT IS NOT IGNORED WHEN THE PANIC INPUT HAS BEEN ASSERTED. THE RESET INPUT SHALL BE CAPABLE OF RESTORING THE DOOR TO NORMAL OPERATION FROM THE PANIC AND FIRE MODES PROVIDED THE CAUSE FOR THE PANIC AND/OR FIRE CONDITION HAS BEEN RESTORED TO THE RLI INPUTS CAN ACTIVATE WITH DRY CONTACTS OR THEY CAN BE DRIVEN BY VOLTAGES BETWEEN 12-24 DC VOLTS. EACH CIRCUIT HAS A SEPARATE SELECTOR SWITCH FOR THE DRY CONTACT VS VOLTAGE STYLE INPUTS. LOK MODULE IS FURNISHED WITH THE WON DOOR. REFER TO SPECIFICATION 083613 FOR ADDITIONAL INFORMATION.

7 SECURITY SYSTEM / ACCESS CONTROLSYSTEM RISER DIAGRAM
SCALE: NONE



6 CCTV SYSTEM RISER DIAGRAM
SCALE: NONE

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

DESCRIPTION:	DATE:	MARK:
ADDENDUM 5	05/22/24	

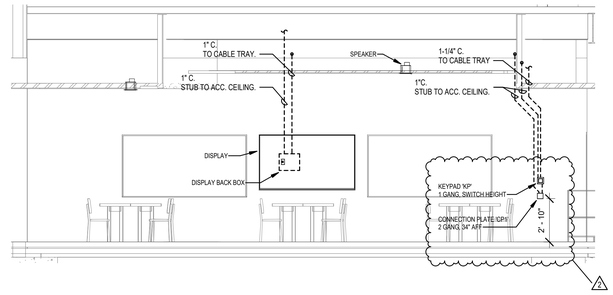
PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 177411 04-01-2024 STATE OF UTAH

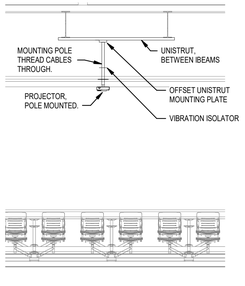
SECURITY DETAIL & RISERS

E-442

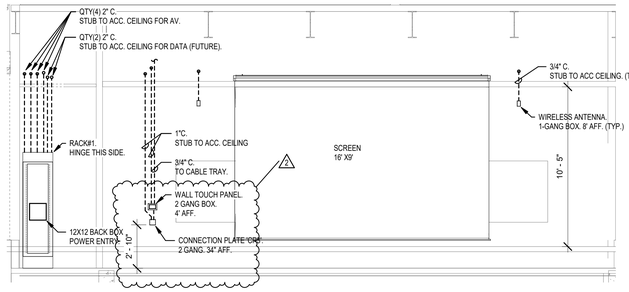
5/28/2024 1:52:43 PM



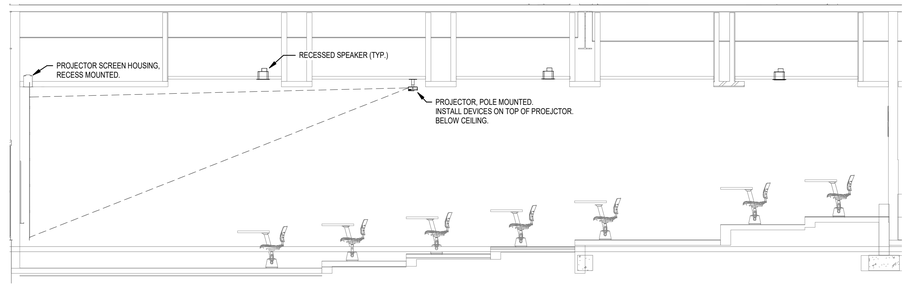
1 ENLARGED MEDIA CENTER 178 SECTION 1
SCALE: **1/4" = 1'-0"**



4 FORUM PROJECTOR MOUNTING ELEVATION
SCALE: **1/4" = 1'-0"**



2 FORUM AV ELEVATION FRONT
SCALE: **1/4" = 1'-0"**



3 ENLARGED FORUM 701 SECTION 1
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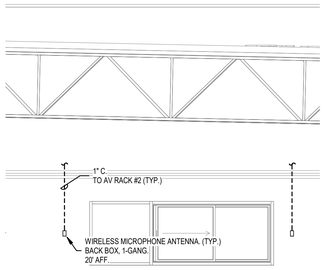
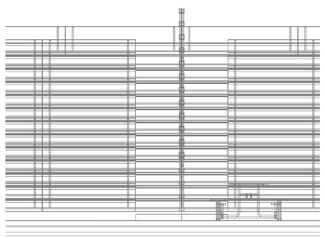
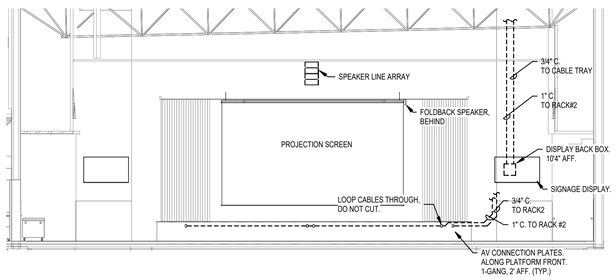
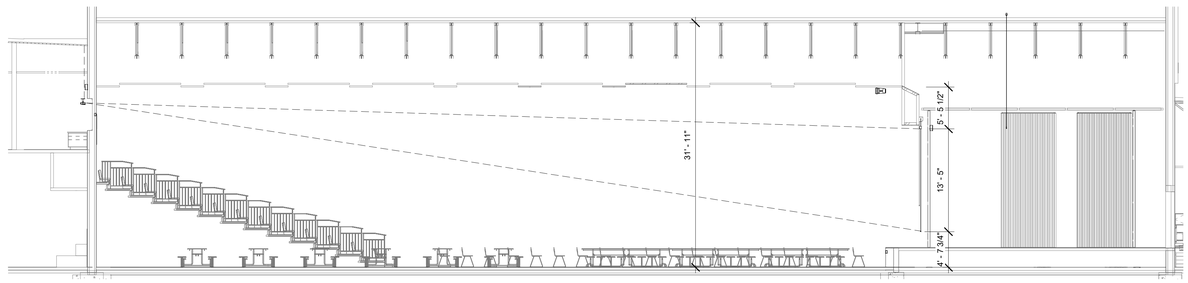




7 CAFETORIUM AV WIRELESS MIC ANTENNA ELEVATION
SCALE: **1/4" = 1'-0"**



6 ENLARGED CAFETORIUM 348 SECTION 2
SCALE: **1/8" = 1'-0"**



5 ENLARGED CAFETORIUM 348 SECTION 1
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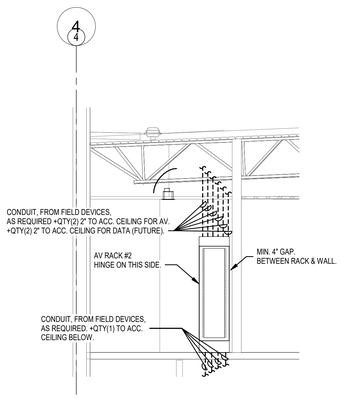
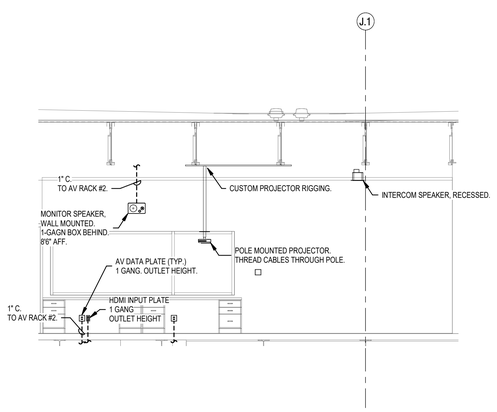
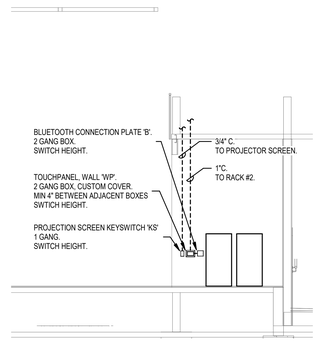


8 ENLARGED AV RACK#2 (CAFETORIUM) ELEVATION
SCALE: **1/4" = 1'-0"**



9 ENLARGED AV ROOM DESK ELEVATION
SCALE: **1/4" = 1'-0"**



10 CAFETORIUM AV CONTROLS ELEVATION
SCALE: **1/4" = 1'-0"**

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
	02/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
772411
04-26-2024

AUDIO VISUAL
SECTIONS AND
ELEVATIONS

E-531

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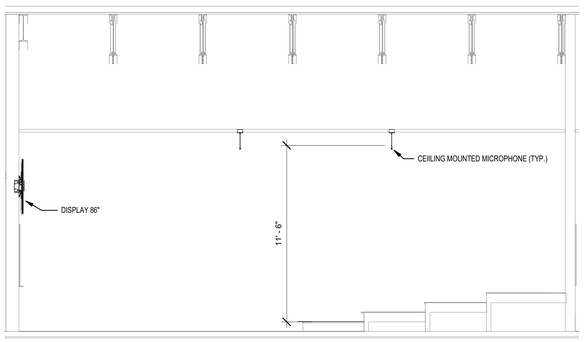
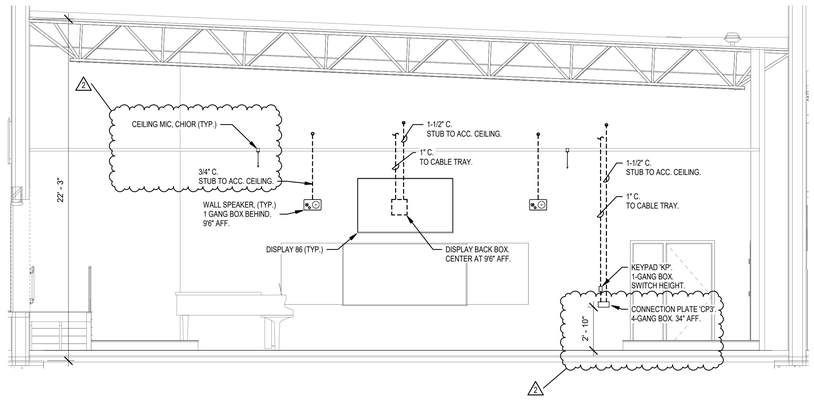
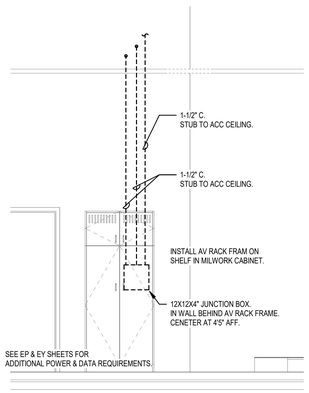


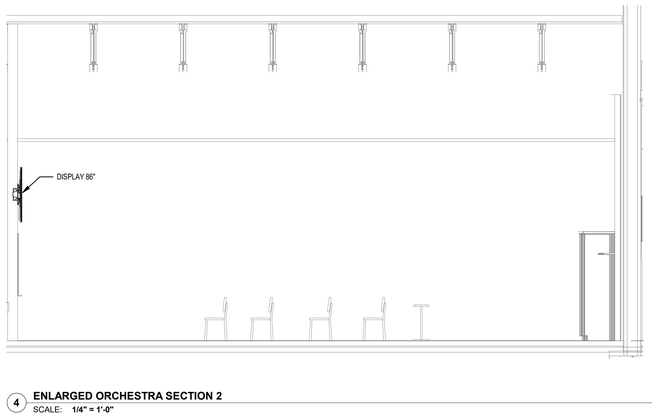
2 ENLARGED CHOIR/DRAMA SECTION 2
SCALE: **1/4" = 1'-0"**



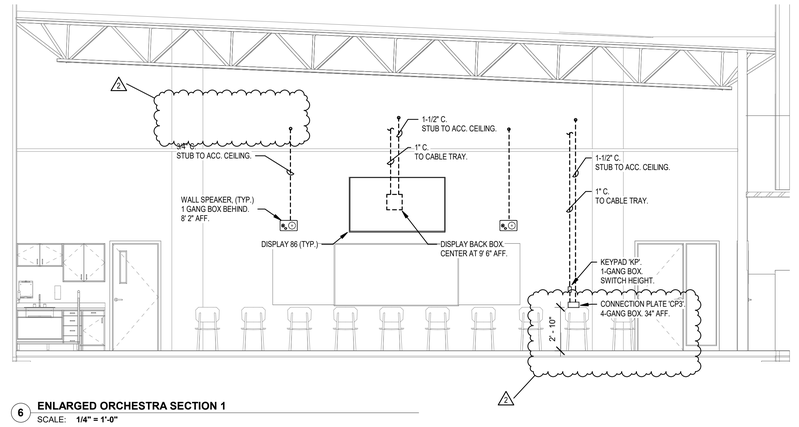
1 ENLARGED CHOIR/DRAMA SECTION 1
SCALE: **1/4" = 1'-0"**



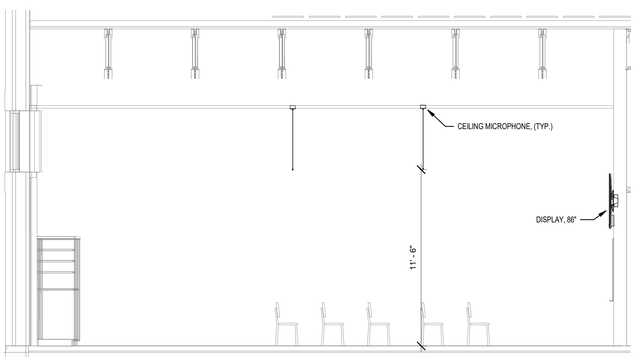
7 ENLARGED BAND, CHOIR & ORCHESTRA MILLWORK AV RACK ELEVATION (TYP.)
SCALE: **3/8" = 1'-0"**



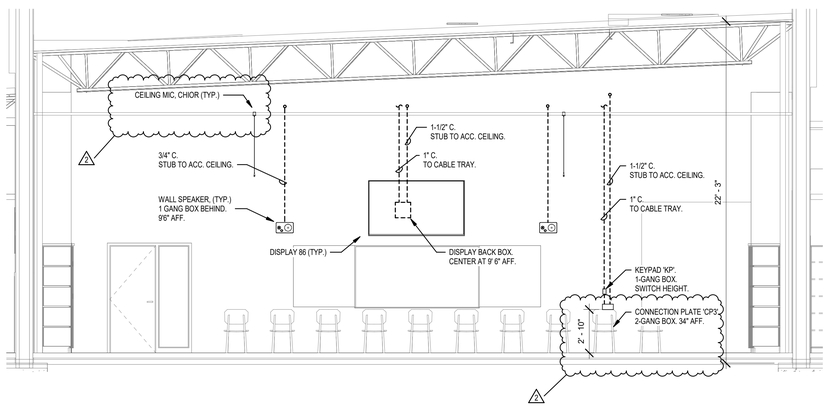
4 ENLARGED ORCHESTRA SECTION 2
SCALE: **1/4" = 1'-0"**



6 ENLARGED ORCHESTRA SECTION 1
SCALE: **1/4" = 1'-0"**



3 ENLARGED BAND SECTION 2
SCALE: **1/4" = 1'-0"**



5 ENLARGED BAND SECTION 1
SCALE: **1/4" = 1'-0"**

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HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
04-26-2024

AV -MUSIC ROOMS - SECTIONS AND ELEVATIONS

E-532

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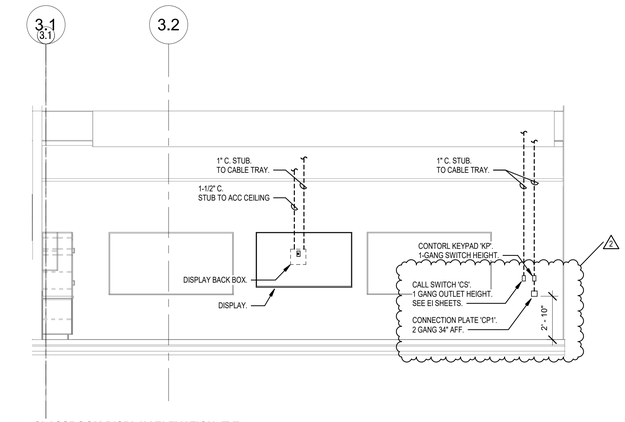
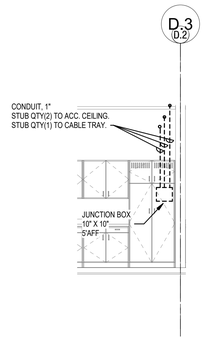
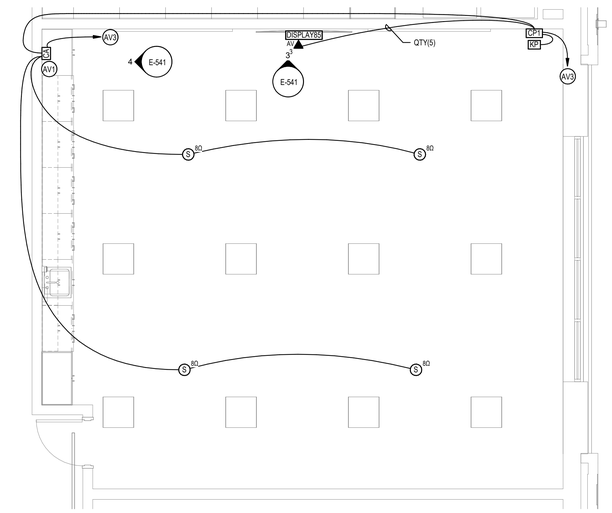


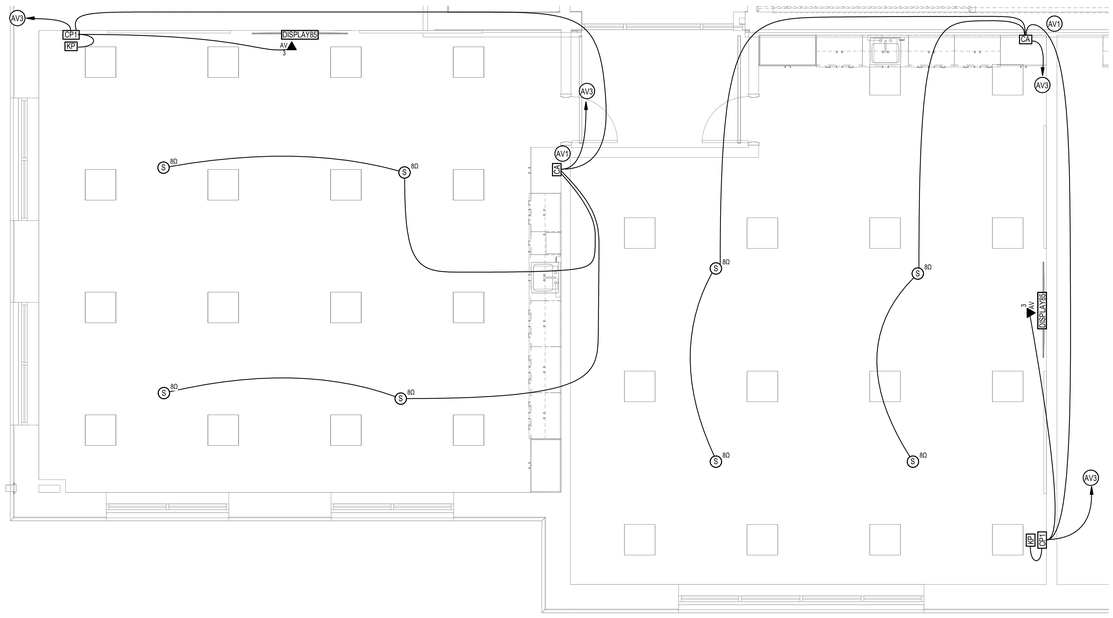
3 CLASSROOM DISPLAY ELEVATION, TYP.
SCALE: **1/4" = 1'-0"**



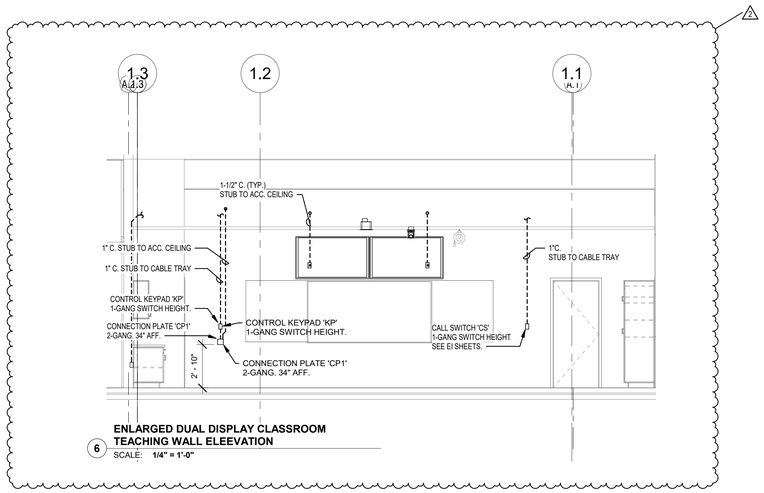
4 CLASSROOM JUNCTION BOX ELEVATION
SCALE: **1/4" = 1'-0"**



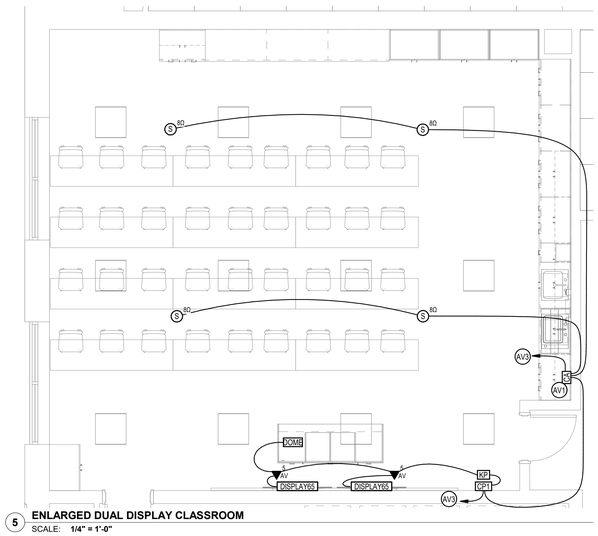
1 ENLARGED CLASSROOM A/V - PLANS
SCALE: **1/4" = 1'-0"**



2 ENLARGED ALTERNATE CLASSROOM
SCALE: **1/4" = 1'-0"**



6 ENLARGED DUAL DISPLAY CLASSROOM TEACHING WALL ELEEVATION
SCALE: **1/4" = 1'-0"**



5 ENLARGED DUAL DISPLAY CLASSROOM
SCALE: **1/4" = 1'-0"**

AUDIO VISUAL GENERAL NOTES:

1. NO CHANGES SHALL BE MADE WITHOUT THE AV CONSULTANT'S WRITTEN CONSENT.
2. TO MINIMIZE SIGNAL CROSS TALK, GROUP CABLES ACCORDING TO SIGNALS BEING CARRIED. MAINTAIN SEPARATION BETWEEN POWER AND ALL OTHER CABLE GROUPS OF AT LEAST 24", AND 6" BETWEEN ALL OTHER CABLE GROUPS WHEN RUN IN PARALLEL. GROUPS SHALL BE:
   - A. POWER.
   - B. CONTROL.
   - C. VIDEO.
   - D. MIC LEVEL AUDIO CABLES (LESS THAN -20dBM).
   - E. LINE LEVEL AUDIO CABLES (-20dBM TO +20dBM).
   - F. SPEAKER LEVEL CABLES (+20dBM OR GREATER).
   - G. DATA CABLES.
3. PROVIDE #6 AWG THHN WIRE W/ GREEN INSULATION FROM EACH AV EQUIPMENT CABINET TO THE NEAREST MAIN BUILDING GROUND. CONNECT GROUNDING WIRE TO BARE METAL ON EQUIPMENT CABINET.
4. COLORS OF ALL SOUND DEVICES THAT ARE EXPOSED, INCLUDING INPUT AND OUTPUT PLATES, VOLUME CONTROLS, SWITCHES, SPEAKERS, SPEAKER ENCLOSURES, SPEAKER MOUNTING HARDWARE, ETC. SHALL BE REVIEWED AND APPROVED BY OWNER PRIOR TO ORDERING.
5. CABLE ROUTES SHOWN ON DRAWINGS DO NOT ACTUALLY REFLECT THE RACEWAYS. THE RACEWAYS SHALL BE DETERMINED IN THE FIELD.
6. LABEL ALL THE WIRELESS HANDHELD MICROPHONES AND BELT PACKS WITH NAMES OR NUMBERS FOR EASY IDENTIFICATION.
7. REFER TO RISER DIAGRAMS AND EQUIPMENT LISTS FOR THE TYPES AND NUMBERS OF WIRES REQUIRED FOR EACH AV DEVICE.
8. SETUP COMPRESSORS AND LIMITERS IN ALL OF THE DSPS TO PROTECT THE AMPLIFIERS AND SPEAKERS. ALSO, SETUP A PASSWORD ON THE DSPS. TO CONTROL THE ACCESS TO THEM. COORDINATE W. OWNER TO DETERMINE APPROPRIATE PASSWORDS.
9. MOCKUP A TYPICAL CLASSROOM AV SYSTEM FIRST, TEST AND TRY OUT ALL THE FUNCTIONS OF THE SYSTEM AND PERFORMANCE OF EACH AV COMPONENT BEFORE PURCHASING EVERYTHING FOR ALL THE CLASSROOMS.
10. EQUALIZE ALL AUDIO SYSTEMS WITH DSP PRIOR TO SYSTEM COMMISSIONING.
11. AUDIO INPUT AND OUTPUT LEVELS SHALL BE BALANCED. EQUALIZERS SHALL BE SET TO THE FOLLOWING PARAMETERS AS MEASURED IN 1/3 OCTAVE BANDS FROM 10HZ TO 2 KHZ,
    - A. FLAT WITHIN PLUS OR MINUS 2 DBA, FROM 71HZ TO 17KHZ.
    - B. SLOPE DOWN ALONG AN APPROXIMATED 3 DBA PER OCTAVE SLOPE FROM 0 TO 71HZ AND 17KHZ AND UP.
12. USE SEPARATE CHANNEL FOR EACH ASSISTIVE LISTENING SYSTEM 'ALS' IN THE FACILITY. PROGRAM ALL RECEIVERS, REGARDLESS OF WHICH 'ALS' THEY ARE ASSOCIATED WITH SO THAT USERS' MAY SELECT ANY OF THE AVAILABLE CHANNELS.
13. ALL CABLES IN PLENUM SPACES SHALL BE PLENUM RATED. WHEN NON-PLENUM CABLE IS SPECIFIED, IN PLENUM SPACES, INTEGRATOR SHALL SUBSTITUTE PLENUM CABLE.

KEYED NOTES

AV1 INSTALL JUNCTION BOX, 10" X 10" IN WALL BEHIND CABINET, AT 18" AFF. UNLESS OTHERWISE NOTED, PROVIDE QTY. (3) 1" C. TO ACC. CEILING.

AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.

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250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER — 377441 — 04-26-2024 — STATE OF UTAH

AUDIO VISUAL ENLARGED PLANS - TYPICAL CLASSROOMS

E-541

5/28/2024 1:33:25 PM

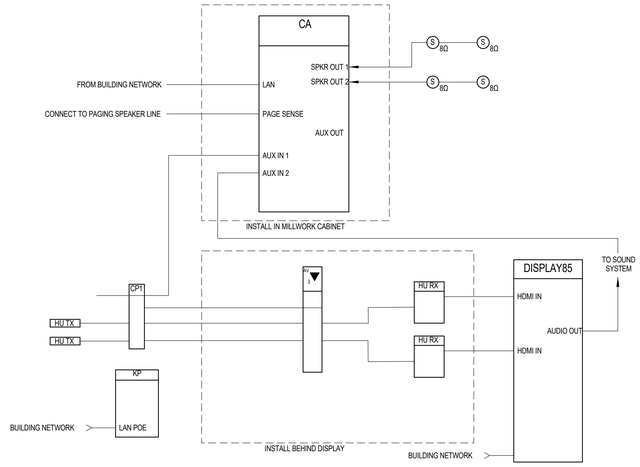
AV SYSTEM - TYPICAL CLASSROOM - EQUIPMENT LIST						
SYMBOL	DESCRIPTION	QTY/RM	SUPPLIER	MODEL	ROUGH-IN	CABLE
CA	CLASSROOM AMP	OFI	LIGHTSPEED	CASCADIA		WEST PENN 454
	PAGE SENSE CABLE			PAGE SENSE CABLE		WEST PENN 254346 - YELLOW
	JUNCTION BOX AMPLIFIER LOCATION	1	NR	10"X10"X4"	SEE ELEVATION DETAIL	
S 8Ω	RECESSED SPEAKER, DROP TILE KIT W/	OFP	ATLASIED	SD72W-KIT		WEST PENN 25225B
	TILE BRIDGE			81-8R		
	BACK CAN			CS95-8		
	BAFFLE			62-8		
	SPEAKER, BYPASS TRANSFORMER			SD72		
	ALTERNATE DROP TILE SPEAKER ASSEMBLY.		LIGHTSPEED	DRQ		
	BRIDGE, CAN & BAFFLE INCLUDED.					
DISPLAY85	DISPLAY	OFCI	COORDINATE W/ OWNER		BACK BOX REFER TO EP SHEETS FOR DETAILS.	
	DISPLAY WALL MOUNT	OFCI	COORDINATE W/ OWNER			
	JUNCTION BOX	1	BY DIV 26 SEE SCHEDULE			
CPT	TEACHER STATION CONNECTION PLATE 'CP1'	OFP	CUSTOM	SEE DETAIL	2 GANG BOX SEE ELEVATION DETAIL	WEST PENN 254346 WEST PENN 445
AV 3	TV CONNECTION PLATE 'AV3'	OFP	CUSTOM	SEE DETAIL	INSTALL IN DISPLAY BACK BOX	WEST PENN 254346
HU TX	HDMI & USB TRANSMITTER	2	EXTRON	DTP HDMI 4K 230		
HU RX	HDMI & USB RECEIVER	2	EXTRON	DTP HDMI 4K 230 RX		
KP	KEYPAD	OFP	EXTRON	MLC PLUS 50		
	CABLES, PATCH & CONNECTION, PER ROOM					
	GIGABIT PATCH CABLE, POE RATED, 6'	2	BELDEN			
	GIGABIT PATCH CABLE, POE RATED, 10'	1	BELDEN			
	HMDI PATCH CABLE, 6'	1	KRAMER			
	HDMI PATCH CABLE, 10'	1	KRAMER			
	USB PATCH CABLE	2	CUSTOM	VERIFY REQ W/ OWNER		
	3.5 MM TRS STEREO TO 3.5MM TRS, 10'	1	EXTRON			

A/R = AS REQUIRED; NIC= NOT IN CONTRACT; NR = NO REQUIREMENT, OFCI = OWNER FURNISHED CONTRACTOR INSTALLED; OFP = OBTAIN FROM PLANS; OFOI =OWNER FURNISHED & INSTALLED

GENERAL SYSTEM NOTES:

1. CLASSROOMS HAVE 8 OHM SPEAKERS.
2. COORDINATE WITH OWNER TO DETERMINE WHICH HDBASET DATA DROP TO CONNECT HU TX & HU RX TO. RUN CABLES FOR ALL CONNECTIONS.
3. PROVIDE ETHERNET CONTROL OF DISPLAY TO PROVIDE ON/OFF, AND SOURCE SELECTION.
4.

1. THIS RISER & EQUIPMENT LIST APPLY TO:
   1.1. TYPICAL CLASSROOMS
   1.2. SPECIAL EDUCATION CLASSROOMS



1 AV SYSTEM RISER - TYPICAL CLASSROOMS - RISER
SCALE: NONE

SIGNAGE SYSTEM EQUIPMENT LIST						
SYMBOL	DESCRIPTION	QTY/ROOM	SUPPLIER	MODEL	ROUGH-IN	CABLE
SIGNAGE80	DISPLAY, 80", 4K, HDMI INPUTS	OFCI	COORDINATE W/ OWNER			EXTRON HDMI PRO SERIES
	DISPLAY MOUNT, WALL TILT	OFCI	COORDINATE W/ OWNER		SEE EP SHEETS	
PLAYER	SIGNAGE PLAYER	OFCI	COORDINATE W/ OWNER			EXTRON HDMI PRO SERIES

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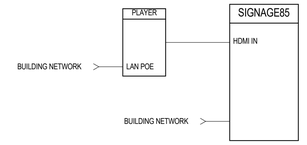

3 AV SYSTEM - SIGNAGE - RISER
SCALE: NONE

AV SYSTEM - TYPE 2 CLASSROOM - EQUIPMENT LIST						
SYMBOL	DESCRIPTION	QTY/RM	SUPPLIER	MODEL	ROUGH-IN	CABLE
CA	CLASSROOM AMP	OFI	LIGHTSPEED	CASCADIA		WEST PENN 454
	PAGE SENSE CABLE			PAGE SENSE CABLE		WEST PENN 254346 - YELLOW
	JUNCTION BOX AMPLIFIER LOCATION	1	NR	10"X10"X4"	SEE ELEVATION DETAIL	
S 8Ω	RECESSED SPEAKER, DROP TILE KIT W/	OFP	ATLASIED	SD72W-KIT		WEST PENN 25225B
	TILE BRIDGE			81-8R		
	BACK CAN			CS95-8		
	BAFFLE			62-8		
	SPEAKER, BYPASS TRANSFORMER			SD72		
DISPLAY85	DISPLAY	OFCI	COORDINATE W/ OWNER		BACK BOX REFER TO EP SHEETS FOR DETAILS.	
	DISPLAY WALL MOUNT	OFCI	COORDINATE W/ OWNER			
	JUNCTION BOX	1	BY DIV 26 SEE SCHEDULE			
CPT	TEACHER STATION CONNECTION PLATE 'CP1'	OFP	CUSTOM	SEE DETAIL	2 GANG BOX SEE ELEVATION DETAIL	WEST PENN 254346 WEST PENN 445
AV 3	TV CONNECTION PLATE 'AV3'	OFP	CUSTOM	SEE DETAIL	INSTALL IN DISPLAY BACK BOX	WEST PENN 254346
HU TX	HDMI & USB TRANSMITTER	2	EXTRON	DTP HDMI 4K 230		WEST PENN 254346
HU RX	HDMI & USB RECEIVER	2	EXTRON	DTP HDMI 4K 230 RX		WEST PENN 254346
	CABLES, PATCH & CONNECTION, PER ROOM					
	GIGABIT PATCH CABLE, POE RATED, 6'	2	BELDEN			
	GIGABIT PATCH CABLE, POE RATED, 10'	1	BELDEN			
	HMDI PATCH CABLE, 6'	1	KRAMER			
	HDMI PATCH CABLE, 10'	1	KRAMER			
	USB PATCH CABLE	2	CUSTOM	VERIFY REQ W/ OWNER		
	3.5 MM TRS STEREO TO 3.5MM TRS, 10'	1	EXTRON			
KP	KEYPAD & CONTROLLER	1	EXTRON	MLC PLUS 50	1-GANG BOX 1" C. TO ACCESSIBLE CEILING SPACE	

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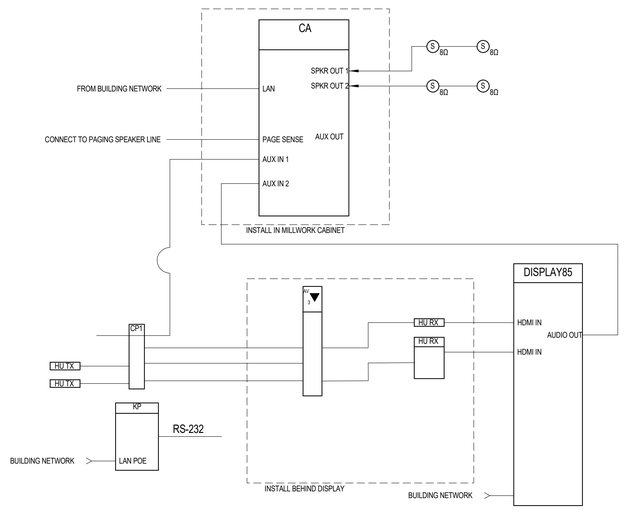
GENERAL SYSTEM NOTES:

1. CLASSROOMS HAVE 8 OHM SPEAKERS.
2. COORDINATE WITH OWNER TO DETERMINE WHICH HDBASET DATA DROP TO CONNECT HU TX & HU RX TO. RUN CABLES FOR ALL CONNECTIONS.
3. PROVIDE RS-232 CONTROL OF CEILING MOUNTED DOCUMENT CAMERA & ETHERNET CONTROL OF DISPLAY TO PROVIDE ON/OFF, AND SOURCE SELECTION.



4 VIDEO SYSTEM RISER LIBRARY)
SCALE: NONE

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255 SOUTH 200 WEST
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CONSTRUCTION DOCUMENTS

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	02.22.24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
772411
04-26-2024

AV RISER & EQUIPMENT LIST

E-571

5/28/2024 1:28:28 PM

AUDIO SYSTEM - CAFETORIUM - EQUIPMENT LIST

SYMBOL	DESCRIPTION	QTY/ROOM	SUPPLIER	MODEL	ROUGH-IN	CABLE
2	EQUIPMENT RACK, 46RU. 28" D. X 23.5" W.	1	MIDDLE ATLANTIC	SR-46-28	12X12XM" BACK BOX IN WALL	
	FRONT DOOR	1		PFD-46		
	VERTICAL POWER STRIP	1		PD-2420SC-NS	SEE DETAIL	
	RACK MOUNT DRAWER	1		UD3		
	VERTICAL CABLE LACING STRIP	4		LACE-44-0WP		
	HORIZONTAL LACING BAR	A/R		LBP-2A		
	SHELF, FIXED	2A		RSH		
TVSS	POWER CONDITIONER	A/R	FURMAN	CN-2400S	INSTALL IN RACK	
M2	MICROPHONE INPUT, DUAL	A/R	PRO-CO	WR1013A	1-GANG 4" DEEP 3/4"CM THROUGHOUT SEE ELEVATION	WEST PENN 454
CDREC	BLUETOOTH RECEIEVER	OFP	RDL	DD-BTN44	SEE DETAILS	WEST PENN 254346
B	CD RECORDER	1	TASCAM	SS-CDR-200		
WR4 ANT W WANTD	WIRELESS MICROPHONE SYSTEM				QTY(2) 1-GANG BOX FOR ANTENNA W/	GIGABIT PATCH CABLE - CONNECT TO AV NETWORK
	RECEIVER, 4CH	3	SHURE	ULXD4QGV=-G50	3/4" C. TO RACK.	WEST PENN 454 INSTALLED MIC CABLE. W NEUTRIK NC3MXX-B
	1/2 WAVE ANTENNA	2	SHURE	UA644+ SWB	INSTALL TRANSMITTER IN RACK.	WEST PENN 810
	REMOTE ANTENNA MOUNTING KIT	2	SHURE	UA505		
	POWERED ANTENNA DISTRIBUTOR	1	SHURE	UA844+ SWB		
	HANDHELD MIC	2	SHURE	ULXD2/SM58	STORE EQUIPMENT IN RACK.	
	BODY PACK TRANSMITTER & MIC	10	SHURE	ULXD1/MX153		
	TABLE TOP MICROPHONE CHARGER	6	SHURE	SBC220		
	TABLE TOP BATTERY CHARGER	1	SHURE	SBC800		
	SPARE BATTERIES	8	SHURE	SB900B		
	REMOTE ANTENNA MOUNTING KIT	2	SHURE	UA505		
DSP	DSP, AUDIO W/	A/R	Q-SYS	CORE 110F V2		WEST PENN 254246
	REQUIRED UCI, SCRIPTING, AND DANTE LICENSES					WEST PENN 454
AV NETWORK SWITCH	AV NETWORK SWITCH, 24X1G, POE+, 300W	1	NETGEAR AV LINE	GSM4230P		WEST PENN 254246 GIGBIT PATCH CABLES
ALS	ASSISTIVE LISTENING SYSTEM, 2 CH, DANTE ENABLED		LISTEN			GIGBIT PATCH CABLES
	SERVER	1		LW-150P-02-D		
	RECEIVERS	4		LW-200P-04		
CONSOLE	MIXING CONSOLE, 32CH	1	SOUND CRAFT	SI PERFORMER 3		GIGBIT PATCH CABLES
	DANTE CARD	1		DANTE CARD D		
AMP#1	AMP #1, 8 CH, 8K W	2	Q-SYS	CX-Q 8K8		WEST PENN 227
AMP#2	AMP #2	1	CROWN	DCI 2/600		WEST PENN 227
AMP#3	AMP #3	1	CROWN	DCI 2/300		WEST PENN 227
S6	FOLD BACK SPEAKER	2	COMMUNITY	I2-W8	1-GANG 3" DEEP BOX	WEST PENN 227
	SPEAKER FLYING HARDWARE	A/R	CUSTOM	CUSTOM	3/4" C. THROUGHOUT	
SMP	MONITOR SPEAKER CONNECTION PLATE	OFP	CUSTOM	SEE DETAIL	1 GANG BOX	WEST PENN 227
	PANEL MOUNT 4 POLE SPEAKON	1	NEUTRIK	NL4	1" C THROUGHOUT	
S10	MONITOR SPEAKER	1	EV	SX100+WE		
	MOUNTING HARDWARE	AR	CUSTOM	CUSTOM		
S2M	STEREO TO MON	A/R	EDCOR	S2M		
2	NETWORK JACK	2	CUSTOM	SINGLE GANG WITH 2 RJ45	1-GANG 3" DEEP BOX 3/4" C. THROUGHOUT	WEST PENN 254246
MC	CEILING MICROPHONE	OFP	AUDIO TECHNICA	U853AW	DEEP 3", 1-GANG BACK BOX 3/4" C. THROUGHOUT	WEST PENN 25291B
Aux	AUX INPUT	OFP	RDL		1-GANG 3" DEEP BOX 3/4" C. THROUGHOUT	WEST PENN 25291B
	LINE ARRAY SPEAKER	5	Q-SYS	WL3082	DEEP 1-GANG BOX	WEST PENN 25210
	CABLE CONNECTOR	A/R	NEUTRIK	NL8FC		
	ARRAY FRAME	1	Q-SYS	AF3082-S		
	PULL BACK BAR	1	Q-SYS	PB3082		
S6	CLASSROOM AMPLIFIER	OFCI	LIGHTSPEED	CASCADIA	INSTALL IN RACK	WEST PENN 454 WEST PENN 254346 - YELLOW

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VIDEO SYSTEM - CAFETORIUM - EQUIPMENT LIST

SYMBOL	DESCRIPTION	QTY	SUPPLIER	MODEL	ROUGH-IN	CABLE
	SURFACE MOUNTED SCREEN 160"X284" 12" BLACK DROP 16:9 PROFESSIONAL ELECTROL, MATT WHITE BLACK SCREEN CASE, PROJECTOR SCREEN SURFACE FACING AUDIENCE	1	DA-LITE	CUSTOM 38701		
UD	THREE POSITION CONTROL SWITCH	1	DA-LITE	AS RECOMMENDED BY DA-LITE	1-GANG 3" DEEP 3/4" CONDUIT THROUGHOUT SWITCH HEIGHT	AS RECOMMENDED BY MANUFACTURER
	LOW VOLTAGE CONTROLLER	1	DA-LITE	LVC-IV		
H	HDMI INPUT, WALL	A/R	EXTRON	DTP T HWP 4K 331 D	1-GANG 3" DEEP (2) 3/4"C. TO EQUIPMENT CABINET #2	WEST PENN 254246F
HDMI RX	HDMI RECEIVER, BEHIND DISPLAYS	A/R A/R	EXTRON	DTP R HWP 4K 331 D	1-GANG, 3" DEEP 3/4" C. TO EQUIPMENT CABINET #2	WEST PENN 254246F WEST PENN 25591
VS	HDMI SWITCHER & CONTROL PROCESSOR	A/R	EXTRON	DTP CROSS POINT 82 4K IPCP MA70		EXTRON HDMI PRO
DTPDA	DTP DA, 4 PORTS	1	EXTRON	DTP HD DA4 4K 230		EXTRON HDMI PRO EXTRON XTP DTP 24P
TTP	TOUCH PANEL, 5", TABLE TOP	1	EXTRON	TLP PRO 525T		WEST PENN 254246F
AV NETWORK SWITCH	AV NETWORK SWITCH	1	NETGEAR	AV LINE GSM4212PX		WEST PENN 254246
SIGNAGE80	SHARED WITH SIGNAGE SYSTEM	2				
	PROJECTOR, 16:9, 16K LUMENS W/LENS	1	PANASONIC	PT-RQ18K		EXTRON HDMI PRO
	LENS	1	PANASONIC	ET-D3LET30		
	PROJECTOR MOUNT, MICRO ADJUSTABLE	1	CHIEF	VCTU		
	INTEFACE PLATE	1	CHIEF	HCUW (INCLUDED)		
	CEILING MOUNTING	1	CUSTOM	CUSTOM		
	POLE	A/R	CUSTOM	CUSTOM		
	RIGGING	A/R	CUSTOM	CUSTOM		
	VIBRATION ISSOLATOR	1	MIDDLE ATLANTIC	CMA347		

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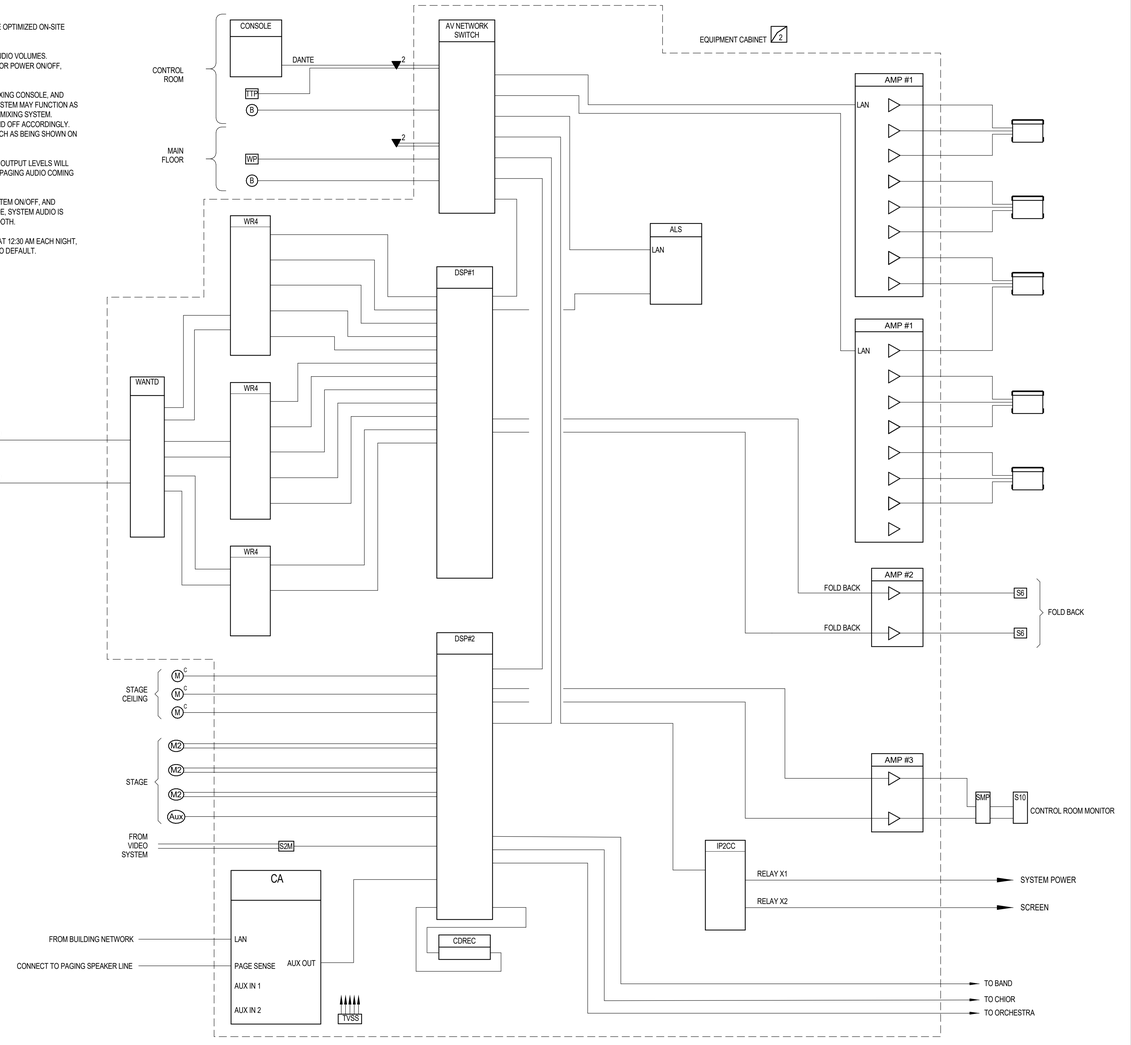
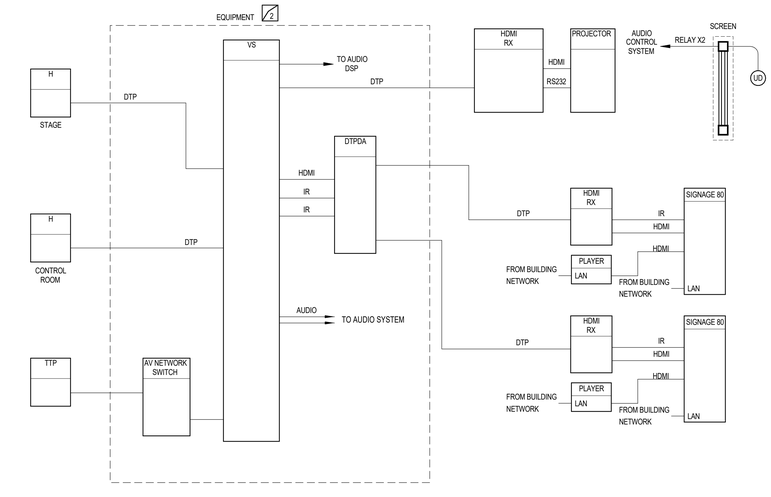
NOTES:

1. THE SPEAKER COVERAGE SETTINGS SHALL BE OPTIMIZED ON-SITE DURING THE INSTALLATION.
2. PROGRAM THE TOUCH PANEL TO CONTROL AUDIO VOLUMES. AUDIO/VIDEO SOURCE SELECTIONS, PROJECTOR POWER ON/OFF, PROJECTION SCREEN UP/DOWN.
3. PROGRAM THE DIGITAL PROCESSORS, THE MIXING CONSOLE, AND AUTOMANUAL SWITCH SO THAT THE AUDIO SYSTEM MAY FUNCTION AS EITHER AN AUTO MIXING SYSTEM OR MANUAL MIXING SYSTEM. PROGRAM LEDS ON THE SWITCH TO BE ON AND OFF ACCORDINGLY. ALSO PROVIDE CUSTOM LABELS ON THE SWITCH AS BEING SHOWN ON THE SWITCH DETAIL.
4. PROGRAM THE DSP SO THAT THE MAIN AUDIO OUTPUT LEVELS WILL BE AUTOMATICALLY LOWED THEN THERE IS A PAGING AUDIO COMING INTO THE SYSTEM.
5. CONFIGURE PLATFROM 'WP' TO PROVIDE SYSTEM ON/OFF, AND AUTO/MANUAL MODES. WHEN IN MANUAL MODE, SYSTEM AUDIO IS ROUTED THROUGH MIXING CONSOLE IN AV BOOTH.
6. CONFIGURE SYSTEM TO TURN SYSTEMS OFF AT 12:30 AM EACH NIGHT, AND RESET ALL SYSTEM ROUTINGS, LEVELS TO DEFAULT.



1 AUDIO SYSTEM (CAFETERIUM D104)
SCALE: NONE



1 VIDEO SYSTEM RISER (CAFETORIUM-1, D104-1)
SCALE: NONE

CONSTRUCTION DOCUMENTS

design west | architects
LOGAN, UT 84321
255 SOUTH 200 WEST
SALT LAKE CITY, UT 84103
795 NORTH 400 WEST

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

DESCRIPTION:
DATE: 05.22.24 ADDENDUM 5
MARK:

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 7711411 04-26-2024 STATE OF UTAH

AV RISER & EQUIPMENT LIST

E-573

E:\2025\25.13.25.PM

AV SYSTEM - GYM - EQUIPMENT LIST

SYMBOL	DESCRIPTION	QTY	SUPPLIER	MODEL	ROUGH-IN	CABLE
3	EQUIPMENT RACK, 46RU, 28" D. X 23.5" W.	1	MIDDLE ATLANTIC	SR-46-28	12X12X6" BACK BOX IN WALL	
	FRONT DOOR	1		PFD-46		
	VERTICAL POWER STRIP	1		PD-2420SC-NS	SEE DETAIL	
	RACK MOUNT DRAWER	1		UD3		
	VERTICAL CABLE LACING STRIP	4		LACE-44-OWP		
	HORIZONTAL LACING BAR	A/R		LBP-2A		
	BLANK PANEL	A/R		NR		
WR4	WIRELESS MICROPHONE SYSTEM				QTY(2) 1-GAGN BOX FOR ANTENNA W/	GIGABIT PATCH CABLE - CONNECT TO AV NETWORK
	RECEIVER, 4CH	1	SHURE	ULXD4QGV=-G50	3/4" C. TO RACK.	WEST PENN 225 INSTALLED MIC CABLE, W NEUTRIK NC3MXX-B
	1/2 WAVE ANTENNA	2	INCLUDED		INSTALL TRANSMITTER IN RACK.	
	HANDHELD MIC	2	SHURE	ULXD2/SM58	STORE EQUIPMENT IN RACK.	
	BODY PACK TRANSMITTER	2	SHURE	ULXD1/MX153		
	BATTERY CHARGING STATION	2	SHURE	SBC200		
	SPARE BATTERIES	4	SHURE	SB900B		
	SHELF FOR CHAGING STATION, (3RU)	1	NR	NR		
	REMOTE ANTENNA MOUNTING KIT	2	SHURE	UA505		
	1/8" THICK PLEXI-GLASS ANTENNA CONVER	2	AMERICAN TIME OR EQUAL	CUSTOM - HTTPS://WWW.AMERICAN-TIME.COM/GET-QUOTE-GUARD-BUILDER/		
DSP	DIGITAL SIGNAL PROCESSOR, W/	1	Q-SYS	CORE 110F V2		WEST PENN 25225
	UCI, SCRIPTING AND DANTE LICENSES	A/R				WEST PENN454
	AUDIO IO EXPANSION	A/R		QIO-ML4I, QIO-LO4, QIO-ML2X2		WEST PENN 254346
	GPIO EXPANSION	A/R		QIO-GPIX8		
	RELAY CONTOL MODULE	A/R	GLOBAL CACHE	ITACH IP2CC		
TVSS	POWER CONDITIONER & SEQUENCER	1	FURMAN	CN-2400S	INSTALL IN RACK	
AMP#1	AMPLIFER, 70V, 8 CHANEL	1	CROWN	DCI|2400	INSTALL IN RACK	WEST PENN 4246
	PORTABLE EQUIPMENT				PROVIDE TO OWNER, AND STORE IN RACK	
	MIC STAND	2	ATLAS IED	MS-203		
	MIC STAND BOOM	2	ATLAS IED	PB21XEB		
	HANDHELD MIC, WIRED	2	SHURE	BETA 58A	DRAWER	
	MICROPHONE CORD, 25'	2	AUDIO TECHNICA	AT8314-25		
	MIC CORD 50'	2	AUDIO TECHNICA	AT8314-50		
WP	WALL PLATE, TOUCH SCREEN CONTROLLER	OFP			SEE DETAIL	WEST PENN 254345
	WALL PLATE	1/PLATE	Q-SYS	TSC-70-G3		
	BACK BOX, AND COVER	1/PLATE	FSR	WB-PSTSC-70-G3		
B	BLUETOOTH CONNECTION PLATE	OFP			SEE DETAIL	WEST PENN 254345
	BLUETOOTH, FRMT A		RDL	D-BT1A		
	FRMT A RECEIVER, IN RACK	1	RDL	TX-TPR2A		
	1-GANG WIRE COVER	1	NR	NR		
	SPEAKER, MAIN FLOOR	OFP	COMMUNITY	R-35CO4X	1-GANG BOX	WEST PENN 25225B
	SURFACED, WHITE, 20W EACH	OFP	CUSTOM	FLYING HARDWARE	3/4" C. THROUGHOUT	
PS	SPEAKER, BLEACHERS, WHITE 200 W. 70V	OFP	COMMUNITY	IC6-208ZT26	CUSTOM MOUNTING	WEST PENN 25225B
	SAFETY CABLE EYEBOLT MOUNT		CUSTOM	CUSTOM	IP81152	
	HORIZONTAL MOUNTING BRACKET			IUB2082W		
SUB	SPEAKER, SUB	OFP	COMMUNITY	ISS-115W		WEST PENN 25227B
AMP#2	AMPLIFER, 70V, FOR SUB	1	BIAMP	ALC-404D	INSTALL IN RACK	
ALS	ASSISTIVE LISTNING SYSTEM, 2 CH	1	LISTEN	LW-100P-02		
	RECEIVERS	4		LWR-1020		
S2M	STEREO TO MONO	A/R	EDCOR	S2M		
AV SWITCH	AV SWITCH, 30 PORT, POE+, 300w	1	NETGEAR AVLINE	GSM4230P (OR EQUAL)		GIGABIT PATCH CABLES, LEN AS REQUIRED
MA	MICROPHONE & AUX INPUT PLATE	OFP	RDL	D-J3M	1 GANG BOX	WEST PENN 454
					3/4" C THROUGHOUT	
MD MDR	MICROPHONE & DANTE BLEACHER CONNECTION PLATE	OFP	SEE DETAIL			CUSTOM XLR PATCH CABLE
	PANELMOUNT ETHERCON COUPLER					LAIRD ETHERCON PATCH CABLE CAT6-EC-XXX, DENOTES LENGTH
	PANEL MOUNT, XLR JACK					
	XLR PATCH CABLE	1/PLATE	CUSTOM			CANARE L-2TS
	LOCKING 3 PIN XLR MALE		NEUTRIK	NC3MXX-EMC		
	LOCKING 3 PIN XLR FEMALE		NEUTRIK	NC3FXX-EMC		
	MICROPHONE & DANTE REAR BLEACHER PLATE	OFP	SEE DETAIL			CUSTOM XLR PATCH CABLE
	PANELMOUNT ETHERCON JACK					
	PANEL MOUNT, XLR COUPLER, MAKE TO FEMALE					
IP2CC	IP CONTACT CLOSURE MODULE	OFP	GLOBAL CACHE	ITACH IP2CC		GIGBIT PATCH CABLE, POE RATED
CA	ZONE MODULE	1	LIGHTSPEED	CASCADIA		

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AV SYSTEM - GYM SCREEN - EQUIPMENT LIST

SYMBOL	DESCRIPTION	QTY/ROOM	SUPPLIER	MODEL	ROUGH-IN	CABLE
	PROJECTOR SCREEN, WALL MOUNT, MOTORIZED, 110V 216" X 121-1/2", W/	1	DRAPER	CL510		
	LOW VOLTAGE CONTROL INTERFACE	1		LVC-IV		
	ROCKER AND KEY SWITCH	1		KS1/SS-1R		

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AV SYSTEM - AUX GYM - EQUIPMENT LIST

SYMBOL	DESCRIPTION	QTY	SUPPLIER	MODEL	ROUGH-IN	CABLE
3	EQUIPMENT RACK, 46RU, 28" D. X 23.5" W.			SPECIFIED AS PART OF GYM SYSTEM		
WR4	WIRELESS MICROPHONE SYSTEM				QTY(2) 1-GANG BOX FOR ANTENNA W/	GIGABIT PATCH CABLE - CONNECT TO AV NETWORK
	RECEIVER, 4CH	1	SHURE	ULXD4QGV=-G50	3/4" C. TO RACK.	WEST PENN 225 INSTALLED MIC CABLE, W NEUTRIK NC3MXX-B
	1/2 WAVE ANTENNA	2	INCLUDED		INSTALL TRANSMITTER IN RACK.	
	HANDHELD MIC	1	SHURE	ULXD2/SM58	STORE EQUIPMENT IN RACK.	
	BODY PACK TRANSMITTER	1	SHURE	ULXD1/MX153		
	BATTERY CHARGING STATION	1	SHURE	SBC200		
	SPARE BATTERIES	2	SHURE	SB900B		
	SHELF FOR CHAGING STATION, (3RU)	1	NR	NR		
	REMOTE ANTENNA MOUNTING KIT	2	SHURE	UA505		
	1/8" THICK PLEXI-GLASS ANTENNA CONVER	2	AMERICAN TIME OR EQUAL	CUSTOM - HTTPS://WWW.AMERICAN-TIME.COM/GET-QUOTE-GUARD-BUILDER/		
DSP	DIGITAL SIGNAL PROCESSOR, W/	1	Q-SYS	CORE 110F V2		
	UCI, SCRIPTING AND DANTE LICENSES	A/R				
	AUDIO IO EXPANSION	A/R		QIO-ML4I, QIO-LO4, QIO-ML2X2		
	GPIO EXPANSION	A/R	QIO-GPIX8	QIO-GPIX8		
	RELAY CONTOL MODULE	A/R	GLOBAL CACHE	ITACH IP2CC		
TVSS	POWER CONDITIONER & SEQUENCER	1	FURMAN	CN-1800S	INSTALL IN RACK	
AMP#3	AMPLIFER, 70V 8 CHANEL	1	CROWN	DCI|2400	INSTALL IN RACK	
	PORTABLE EQUIPMENT				PROVIDE TO OWNER, AND STORE IN RACK	
	MIC STAND	2	ATLAS IED	MS-203		
	MIC STAND BOOM	2	ATLAS IED	PB21XEB		
	HANDHELD MIC, WIRED	2	SHURE	BETA 58A	DRAWER	
	MICROPHONE CORD, 25'	2	AUDIO TECHNICA	AT8314-25		
	MIC CORD 50'	2	AUDIO TECHNICA	AT8314-50		
WP	WALL PLATE, TOUCH SCREEN CONTROLLER	OFP			SEE DETAIL	WEST PENN 4246AF
	WALL PLATE	1/PLATE	Q-SYS	TSC-70-G3		
	BACK BOX, AND COVER	1/PLATE	FSR	WB-PSTSC-70-G3		
B	BLUETOOTH CONNECTION PLATE	OFP			SEE DETAIL	WEST PENN 4246AF
	BLUETOOTH, FRMT A		RDL	D-BT1A		
	FRMT A RECEIVER, IN RACK	1	RDL	TX-TPR2A		
	1-GANG WIRE COVER	1	NR	NR		
	SPEAKER, MAIN FLOOR	OFP	COMMUNITY	R-35CO4X	1-GANG BOX	
	SURFACED, WHITE, 200W EACH	OFP	CUSTOM	FLYING HARDWARE	3/4" C. THROUGHOUT	WEST PENN 25225B
SUB	SPEAKER, SUB	OFP	COMMUNITY	ISS-115W		
AMP#4	AMPLIFER, 70V, FOR SUB	1	BIAMP	ALC-404D	INSTALL IN RACK	
ALS	ASSISTIVE LISTNING SYSTEM, 2 CH			SPECIFIED AS PART OF GYM SYSTEM		
	RECEIVERS					
S2M	STEREO TO MONO	A/R	EDCOR	S2M		
AV SWITCH	AV SWITCH, 30 PORT, POE+, 300w			SPECIFIED AS PART OF GYM SYSTEM		
ZONE MODULE	ZONE MODULE	OFCI	LIGHTSPEED	CASCADIA		

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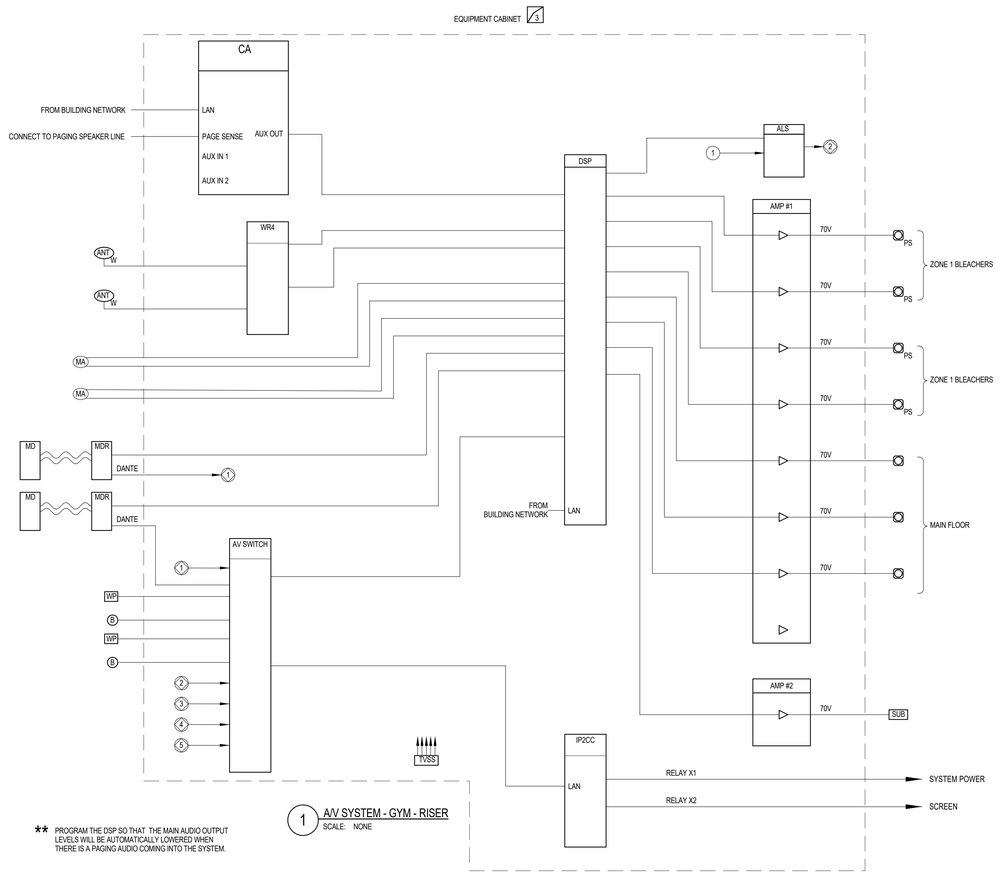
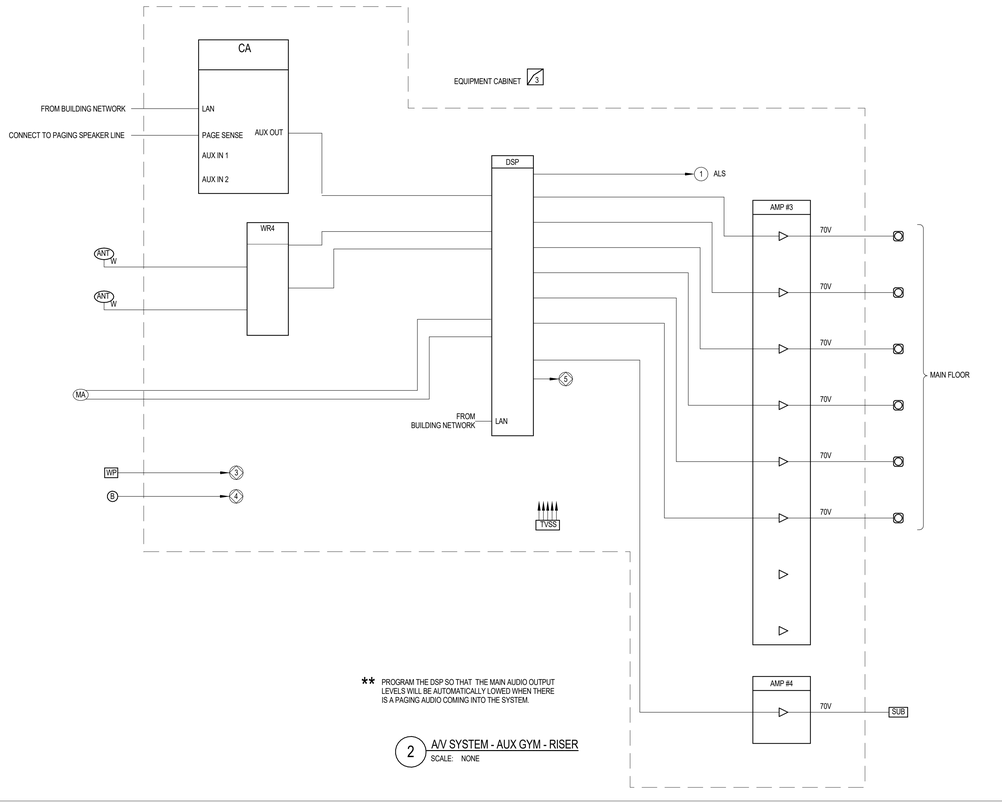


** PROGRAM THE DSP SO THAT THE MAIN AUDIO OUTPUT LEVELS WILL BE AUTOMATICALLY LOWERED WHEN THERE IS A PAGING AUDIO COMING INTO THE SYSTEM.

1 A/V SYSTEM - GYM - RISER
SCALE: NONE



** PROGRAM THE DSP SO THAT THE MAIN AUDIO OUTPUT LEVELS WILL BE AUTOMATICALLY LOWED WHEN THERE IS A PAGING AUDIO COMING INTO THE SYSTEM.

2 A/V SYSTEM - AUX GYM - RISER
SCALE: NONE

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

DESCRIPTION:	DATE:	MARK:
ADDENDUM 5	05/22/24	

PROJECT #: 123006
DRAWN BY: SB
CHECKED BY: AH
ISSUED: 04.26.2024

AV RISER & EQUIPMENT LIST

E-575

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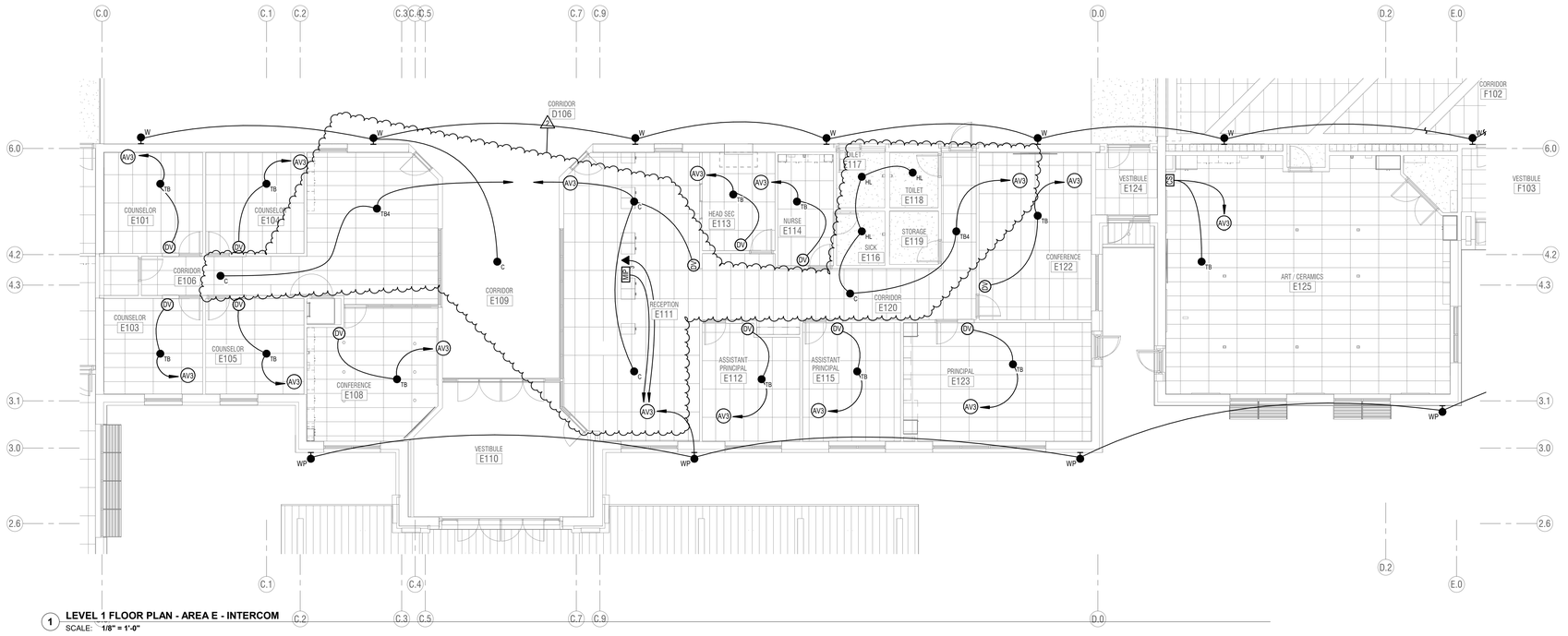
INTERCOM GENERAL NOTES:

1. RUN 1 CAT6 CABLE WITH CONDUIT FROM THE INTERCOM MAIN CONTROLLER TO THE DIGITAL TELEPHONE HEADEND EQUIPMENT. PROGRAM THE OWNER SUPPLIED TELEPHONE SYSTEM SO THAT A DIGITAL TELEPHONE CAN PERFORM THE CALL CLASSROOM INTERCOM SYSTEM & PAGING FUNCTIONS OF AN INTERCOM CONSOLE.
2. WIRE ALL VOLUME CONTROLS SO THEY CONTROL ONLY SINGLE SPEAKER.
3. INTERCOM SYSTEM RISER DIAGRAMS, LAYOUTS, AND EQUIPMENT LISTS ARE BASED ON SIGNAL FLOWS OF AUDIO ENHANCEMENT EQUIPMENT. IF APPROVED ALTERNATE EQUIPMENT IS CHOSEN, LAYOUTS AND DIAGRAMS MAY BE DIFFERENT THAN THOSE SHOWN ON DRAWINGS. ADDITIONAL BOXES, PLATES, CABLES, RACK SPACES, AND POWER OUTLETS MAY BE REQUIRED AS DETERMINED BY THE INTEGRATOR WHO CHOOSES THE ALTERNATE EQUIPMENT. ALTERNATE EQUIPMENT INTEGRATOR SHALL BE RESPONSIBLE TO COORDINATE ALL CHANGES REQUIRED BY ALTERNATE EQUIPMENT TO ENSURE TURN-KEY SYSTEM WITH SIMILAR FUNCTIONALITY TO THAT SPECIFIED.
4. PROGRAM AND INSTALL REQUIRED RELAY CABLES AND CONDUITS BETWEEN THE ACCESS CONTROL SYSTEM AND THE INTERCOM SYSTEM AS DESIRED BY OWNER. PROGRAM THE INTERCOM SYSTEM SO THAT THE SYSTEM MAY TRIGGER ACCESS CONTROL SYSTEM WHEN RELAYS ARE ENERGIZED OR DE-ENERGIZED.
5. AV SYSTEMS INTEGRATORS WHO WISH TO BID ON THIS PROJECT MUST BE TRAINED AND CERTIFIED BY CLASSROOM VOICE LIFT SYSTEM MANUFACTURER SPECIFIED FOR THIS PROJECT.
6. PROVIDE #6 AWG THHN WIRE W/ GREEN INSULATION FROM EACH AV EQUIPMENT CABINET TO THE NEAREST MAIN BUILDING GROUND. CONNECT GROUNDING WIRE TO BARE METAL ON EQUIPMENT CABINET.
7. COLORS OF ALL EXPOSED INTERCOM DEVICES INCLUDING INPUT & OUTPUT PLATES, VOLUME CONTROLS, SWITCHES, SPEAKERS, AND SPEAKER ENCLOSURES SHALL BE REVIEWED BY OWNER PRIOR TO ORDERING.
8. CLASSROOM AMPLIFIERS MAY BE LOCATED ON WALL, CEILINGS, OR IN MILLWORK CABINETS. REFER TO PLANS FOR SPECIFIC DEVICE LOCATIONS.
9. INSTALL CLOCKS CENTERED, 6" ABOVE TOP OF DOOR FRAME.
10. CONFIGURE INTERCOM AND CSAS SYSTEMS TO PROVIDE EMERGENCY SIGNALING FROM CSAS TO INTERCOM.

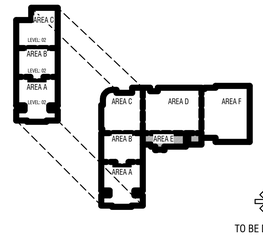
KEYED NOTES (#)

AV3 TO DATA RACK IN NEAREST MDF/IDF CLOSET.



1 **LEVEL 1 FLOOR PLAN - AREA E - INTERCOM**
SCALE: 1/8" = 1'-0"

KEY PLAN



TO BE DETERMINED

CONSTRUCTION DOCUMENTS

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HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER 377411 05-9-2024 STATE OF UTAH

LEVEL 1 - AREA E - INTERCOM

E-615

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INTERCOM SYSTEM - SCHOOL - EQUIPMENT LIST

SYMBOL	DESCRIPTION	QTY	SUPPLIER	MODEL	ROUGH-IN	CABLE
1 2 3	EQUIPMENT CABINET:	FURNISHED AND INSTALLED BY DIV 27 DATA INSTALLER SEE			(5) 2" C. TO CABLE TRAY	
	POWER CONDITIONER	1	FURMAN	CN-2400N		
	POWER STRIP, RACK MOUNT	1	MIDDLE ATLANTIC	PD-2415SC-NS		
E AMP	ZONE MODULE RACK MOUNT KIT	OFP A/R	TELECOR	eAMP	INSTALLS IN RACK.	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS YELLOW PATCH CABLES
VC	VOLUME CONTROL SWITCH	OFP	TELECOR	ECS-1	1-GANG C. DEEP SEE ELEVATION	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
TB	TALKBACK SPEAKER,8", ROUND, CEILING RECESSED ZONE MODULE 8" SPEAKER, * GRILL ROUND BACKBOX TILE SUPPORT	OFP	TELECOR	 INCLUDED W/ SPEAKER ES8-TB-MA-R H10 CC1	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT. PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
TB	TALKBACK SPEAKER, 8", SQUARE SURFACE MOUNT ZONE MODULE 8" SPEAKER & GRILL SH20-BB	OFP	TELECOR	 INCLUDED W/ SPEAKER ES8-TB-MA-SQ SD72 JGBX	 3/4" C. TO ACCESSIBLE CEILING PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
B4	TALKBACK MULTI-SPEAKER, 8", ROUND, CEILING ZONE MODULE 8" SPEAKER, * GRILL ROUND BACKBOX TILE SUPPORT	OFP	TELECOR	 INCLUDED W/ SPEAKER ES8-TB-MA-R H10 CC1	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT. PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
TB4	TALKBACK SPEAKER, 8", SQUARE SURFACE MOUNT ZONE MODULE 8" SPEAKER & GRILL SH20-BB	OFP	TELECOR	 INCLUDED W/ SPEAKER ES8-TB-MA-SQ SD72 JGBX	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT. PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
W	WALL MOUNT SPEKER, INTERNAL RECESSED WALL MOUNT BOX SPEAKER & GRILLE	OFP	ATLAS IED	 VP-77 VP14MB	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT.	
WP H	HORN & GRILLE WITH WEATHERPROOF BACK BOX WALL MOUNT RECESSED +8' AFF	OFP	ATLAS IED	VT(F)-157UC MR EXTENSION RING FP MOUNTING PLATE	4-11/16" SQ X 2-1/8" DEEP 3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT. PAINT GRILL IN COLOR AS SELECTED BY ARCHITECT	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
HL	SPEAKER, RECESSED, HAROLID RECESSED ENCLOSURE MOUNTING RING SPEAKER	OFP	ATLAS IED	 CS-95-8 P78-8 SD-72W	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT.	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
C	SPEAKER, RECESSED, DROP TILE RECESSED ENCLOSURE TILE BRIDGE SPEAKER	OFP	ATLAS IED	 CS-95-8 81-MR SD-72W	3/4" C TO ACC. CEILING OR NEXT SPEAKER IN CIRCUIT.	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
AMP#	POWER AMPLIFIER, 4CH, AMP #1, AMP #2	OFP	CROWN	DCI 4|300		
NETWORK SWITCH	NETWORK SWITCH	OFCI	COORDINATE W/ OWNER		INSTALL IN RACK	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS
PP	PATCH PANEL	A/R	OWNER		INSTALL IN RACK	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS YELLOW KEYSTONE JACKS YELLOW PATCH CABLES
CS	CALL SWITCH	OFP	TELECOR	ECS-11	SEE DETAIL	YELLOW PATCH CABLES
DV	DIGITAL VOLUME CONTROL	OFP	TELCOR	ECS-5		
ESIP	SIP INTERFACE	OFP	TELECOR	ESIP	INSTALL IN RACK	YELLOW PATCH CABLES
3	DATA JACK RECEPTION	OFP	CUSTOM	SEE DETAIL	1-GANG, 3" DEEP 3/4" C. TO CABLE TRAY	REFER TO SECTION 27-1500 FOR DATA CABLE REQUIREMENTS YELLOW KEYSTONE JACK
EPORT ESIP EMH ECL TMS	SYSTEM HEADEND W/ TOUCH MONITOR (BY OWNER) KEYBOARD (BY OWNER) MOUSE (BY OWNER) CONFIGURATION PORT MICROPHONE ADMIN CONSOLE SIP INTERFACE MANAGEMENT GATEWAY VISUAL CONSOLE SOFTWARE CONTROL INTERFACE MEDIA SOURCE	 OFCI OFCI OFCI 2 1 1 1 1 1 1 1	TELECOR	3500-0500 COORDIANTE W/ OWNER COORDIANTE W/ OWNER COORDIANTE W/ OWNER EPORT MCC-PM-MA E300-MA ESIP EMH eDSKT-1.1 ECL TMS-MA	 INSTALL IN RECEPTION INSTALL IN RECEPTION 	
MIP	MEDIA INPUT PLATE PLATE MAOUNT XLR, LATCHING FEMALE	1	CUSTOM	SEE DETAIL	1-GANG, 3" DEEP 3/4" C TO RACK	WEST PENN 454

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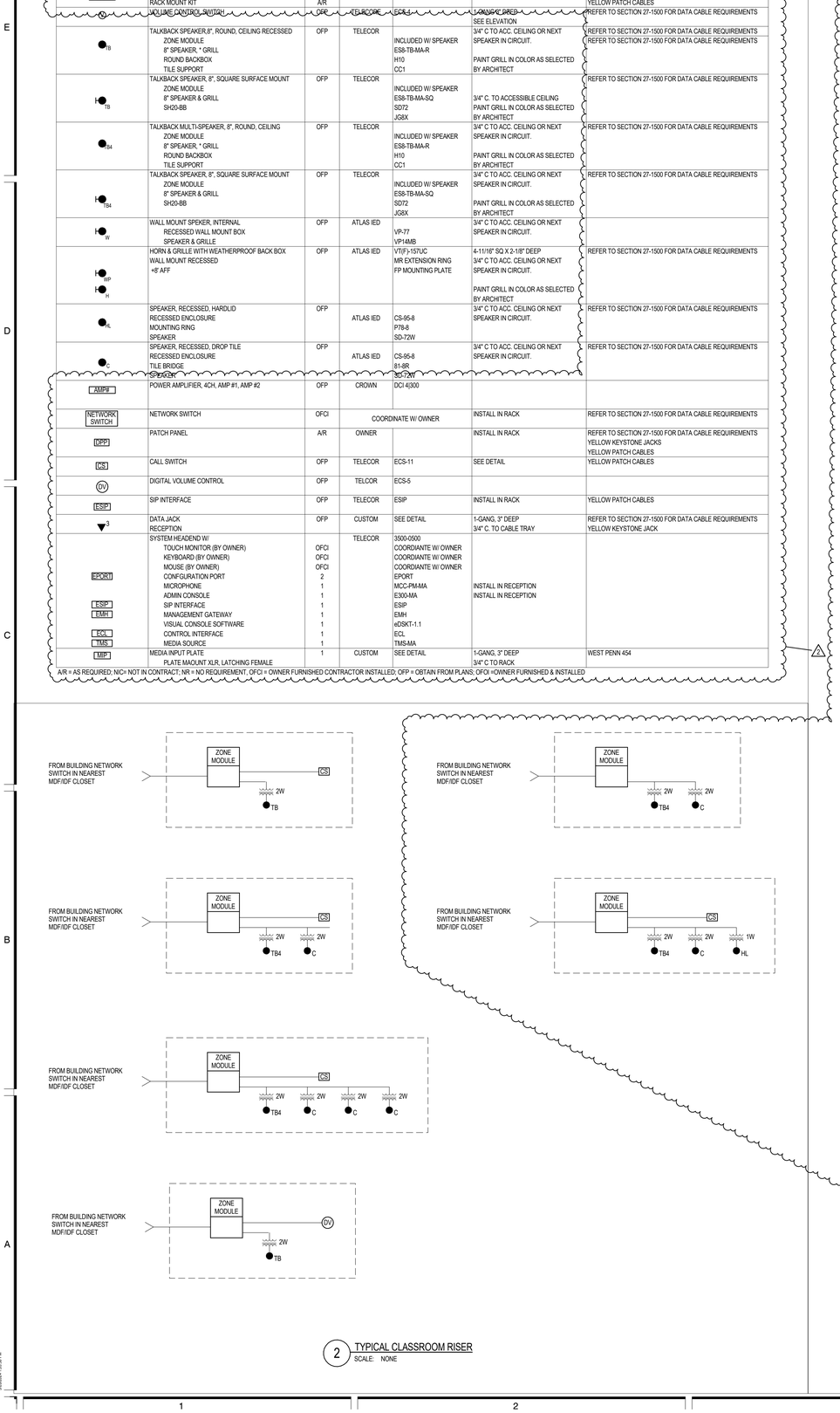

NOTES:

1. TO DISTINGUISH INTERCOM SYSTEM, USE YELLOW COLOR CODE ON KEYSTONES, CABLES, AND PATCH CABLES
2. TAP HAROLID SPEAKERS IN RESTROOMS AND CONFINED SPACES AT 1W, TAP ALL OTHERS AT 2W.

1 INTERCOM RISER
SCALE: NONE

2 TYPICAL CLASSROOM RISER
SCALE: NONE

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CACHE COUNTY SCHOOL DISTRICT

CONSTRUCTION DOCUMENTS

MARK:	DATE:	DESCRIPTION:
	05/15/24	ADDENDUM 3
	05/22/24	ADDENDUM 5

PROJECT #: 123006
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 04.26.2024

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
05-31-2024

INTERCOM - RISER & EQUIP LIST

E-671

SECTION 00 0110
TABLE OF CONTENTS - BID PACKAGE #2

PROCUREMENT AND CONTRACTING REQUIREMENTS

1.01 DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS

1.02 DC - DESIGN CRITERIA

SPECIFICATIONS

2.01 DIVISION 01 -- GENERAL REQUIREMENTS

2.02 DIVISION 02 -- EXISTING CONDITIONS (NOT USED)

2.03 DIVISION 03 -- CONCRETE

K. 31 2500 - Temporary Erosion Control

2.23 DIVISION 32 -- EXTERIOR IMPROVEMENTS

A. 32 1123 - Aggregate Base Courses
B. 32 1216 - Asphalt Paving
C. 32 1313 - Concrete Paving
D. 32 1313 - Concrete Paving-USU Specification
E. 32 1373 - Concrete Paving Joint Sealants
F. 32 1613M - Driveway, Sidewalk, Curb, Gutter (Modified)
G. 32 1723 - Pavement Markings
H. 32 1813 - Synthetic Grass Surfacing
I. 32 1823.13 -Baseball Field Surfacing
J. 32 3113 - Chain Link Fences and Gates
K. 32 3119 - Decorative Metal Fences and Gates
L. 32 3300 - Site Furnishings
M. 32 8400 - Planting Irrigation
N. 32 8423 - Underground Sprinklers
O. 32 9113 - Soil Preparation
P. 32 9223 - Sodding
Q. 32 9300 - Plants
R. 32 9419 -Landscape Surfacing

2.24 DIVISION 33 -- UTILITIES

A. 33 1100 - Water Utilities & Piping
B. 33 1119 Fire Suppression Water System
C. 33 3100 - Sanitary Sewer Systems
D. 33 4100 - Storm Drain System

2.25 DIVISION 34 -- TRANSPORTATION

2.26 DIVISION 40 -- PROCESS INTEGRATION

END OF SECTION 00 0110

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SECTION 07 1713
BENTONITE PANEL WATERPROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Bentonite clay waterproofing panels and accessories.

1.02 RELATED REQUIREMENTS

A. Section 07 2100 - Thermal Insulation: Rigid insulation board used as protection board.

1.03 REFERENCE STANDARDS

A. NRCA (WM) - The NRCA Waterproofing Manual; 2021.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate required flashings, sealing at openings.

C. Certificate: Certify that products meet or exceed specified requirements.

D. Manufacturer's Installation Instructions: Indicate special preparation of substrate, panel attachment methods, and perimeter conditions requiring special attention.

E. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing work of the type specified and with at least five years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Maintain bentonite products dry. Protect with waterproof cover.

1.07 FIELD CONDITIONS

A. Maintain ambient temperatures above 40 degrees F for 24 hours before and during application.

1.08 WARRANTY

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

B. Provide five year manufacturer warranty for waterproofing failing to resist penetration of water.
   1. Exception: Where such failures are the result of structural failures of building. Hairline cracking of concrete due to temperature change or shrinkage is not considered a structural failure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design: Carlisle Coatings and Waterproofing, CCW MiraCLAY.

B. Other Acceptable Manufacturers - Bentonite Panel Waterproofing:
   1. Carlisle Coatings and Waterproofing, Inc; CCW MiraCLAY: www.carlisleccw.com/#sle.
   2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 MATERIALS

A. Bentonite: Granulated pure, dry, bentonite clay comprised of 90 percent minimum sodium montmorillonite; 90 percent minimum passing No. 20 mesh sieve and 10 percent maximum passing No. 200 mesh sieve.

B. Waterproofing system accessories supplied by waterproofing membrane manufacturer to include but not be limited to:
   1. Sealant: Sealant is used for detailing at terminations and penetrations. Also used to fill minor voids in concrete and as a fillet in angle changes.
   2. Granules: Granules used for horizontal to vertical transitions and for detailing at seams and slab penetrations.

3. Waterstop: Waterstop at cold concrete pours and between pre-cast concrete panels where they occur.
4. Membrane to Substrate Fasteners: Fasteners, of the type and length suitable for the substrate, shall be used in conjunction with washers, of at least 1” diameter to attach the geotextile/bentonite clay waterproofing membrane to the substrate.
5. The Geotextile/Bentonite membrane shall consist of geotextile panels of sodium bentonite clay sandwiched between two layers of needle-punched woven and non-woven polypropylene fabrics.
6. Drainage Composite: As recommended by the manufacturer for each condition.
7. Perimeter Drainage System: Where required.

C. Geotextile-Faced Panels: One layer of non-woven polypropylene geotextile fabric, center core filled with self healing, self expanding bentonite clay granules and one layer of woven polypropylene geotextile fabric; all layers needlepunched together with high-strength polypropylene yarn.

2.03 ACCESSORIES

A. Fasteners: Galvanized nails.

B. Adhesive: Manufacturer's recommended type.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify substrate surfaces are smooth and durable; free of matter detrimental to application of waterproofing system.

C. Verify that items that penetrate surfaces to receive waterproofing are securely installed.

3.02 PREPARATION

A. Clean and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions.

B. Remove concrete fins, projections, and form ties.

C. Fill holes, cracks, honeycombs at least 1/8 inch thick, extending 3 inches, minimum, beyond defect.

3.03 INSTALLATION - GENERAL

A. Location: At elevator pit only.

B. Install panels in accordance with manufacturer's instructions and NRCA (WM) applicable requirements.

C. Prevent geotextile/bentonite clay waterproofing membrane from hydrating before being covered with overburden. When threat of rain is imminent or backfill is not immediate, geotextile/bentonite clay waterproofing membrane should be covered with polyethylene sheeting.

D. Cut panels parallel to corrugations to prevent bentonite loss.

E. Seal construction joints with joint seal.

3.04 INSTALLATION - VERTICAL SURFACES

A. Install single-ply panels with masonry nails , starting at base of foundation.

B. Fold panels around corners with corrugations vertical, and install unfolded panels with corrugations horizontal.

C. Lap adjoining panels 1-1/2 inches.

D. Install one extra layer of panels at external corners.

3.05 INSTALLATION - BELOW SLABS UNDER HYDROSTATIC CONDITIONS

A. Install polyethylene sheet over subgrade; lap joints 4 inches.

B. Lay single-ply panels in slab form, and align panels with edge of slab; do not lay panels over pile caps or footings supporting slab edges, and stagger joints of adjoining panel rows.

C. Lap joints 1-1/2 inch, minimum, and secure laps to prevent displacement.

D. Extend panels up vertical surfaces at least 12 inches and to overlap vertically applied bentonite panels.

E. Install joint seal in 1 inch high beads around penetrations through panels and 1/2 inch high beads around chair legs not placed on pads; cover beads with polyethylene sheet collars, cut to size.

F. Lay joint seal continuously along and around protrusions, penetrations, and at abutting walls; secure to prevent movement.

3.06 PROTECTION

A. Do not permit traffic over unprotected or uncovered waterproofing.

B. Cover installed waterproofing with temporary polyethylene sheeting; remove sheeting just before backfilling begins.

END OF SECTION 07 1713

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SECTION 07 5400
THERMOPLASTIC (KEE) MEMBRANE ROOFING - BASE BID

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Mechanically Fastened Membrane Roofing System.
   2. Roof Insulation.
   3. Vapor Retarder.
   4. FiberClad Coated Metal
   5. Tapered Roof Insulation
   6. Coverboard
   7. Walkways

B. Related Sections:
   1. Division 01 – General Conditions.
   2. Division 06 – Wood, Plastics, and Composites.
   3. Division 07 – Thermal and Moisture Protection.
   4. Division 22 – Plumbing.
   5. Division 23 – HVAC.

1.02 REFERENCES

A. Comply with all References in effect, most active, or latest version as of the date of the Contract Documents.

B. American Society of Civil Engineers (ASCE) (www.asce.org) 7 - Minimum Design Loads for Buildings and Other Structures.

C. ASTM International (ASTM) (www.astm.org):
   1. C578 - Standard Specification for Preformed Cellular Polystyrene Thermal Insulation.
   2. C1177 - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.
   3. C1278 - Standard Specification for Fiber-Reinforced Gypsum Panel.
   4. C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
   5. C1549 - Standard Test Method for Determination of Solar Reflectance near Ambient Temperature Using a Portable Solar Reflectometer.
   6. D751 - Standard Test Methods for Coated Fabrics
   7. D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting
   8. D1149 - Standard Test Methods for Rubber Deterioration - Cracking in an Ozone Controlled Environment.
   9. D1204 - Standard Test Method for Linear Dimensional Changes for Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature.
   10. D2136 - Standard Test Method for Coated Fabrics - Low-Temperature Bend Test.
   11. D4397 - Standard specification for Polyethylene sheeting for construction, industrial and agricultural applications.
   12. D4434 - Standard Specification for Poly (Vinyl Chloride) Sheet Roofing.
   13. D5635 - Standard Test Method for Dynamic Puncture Resistance of Roofing Membrane Specimens.
   14. D6754 - Standard Specification for Ketone Ethylene Ester Based Sheet Roofing.
   15. E108 - Standard Test Methods for Fire Tests of Roof Coverings.
   16. E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.

D. Energy Star (www.energystar.gov) - Qualified Products.

E. Factory Mutual Insurance Co. (FM) (www.fmglobal.com):
   1. 4470 - Approval Standard for Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for Use in Class 1 and Noncombustible Roof

Deck Construction.
2. Property Loss Prevention Data Sheet 1-28 - Design Wind Loads.
3. Property Loss Prevention Data Sheet 1-49 - Perimeter Flashing.

F. National Roofing Contractors Association (NRCA) - Roofing and Waterproofing Manual.

G. NSF/ANSI 347 – Sustainability Assessment for Single Ply Membranes.

H. 2010 Americans with Disabilities Act. (ADAAG) (www.ada.gov).

I. 2015 International Building Code. (2015 IBC).

1.03 PERFORMANCE REQUIREMENTS

A. General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.

B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.

C. FMG Listing: Provide roofing membrane, base flashings, and component materials that comply with requirements in FMG 4450 and FMG 4470 as part of a membrane roofing system and that are listed in FMG's "Approval Guide" for Class 1 or noncombustible construction, as applicable. Identify materials with FMG markings.
1. Fire/Windstorm Classification: Class 1A-90.
2. Hail Resistance: MH.

D. Roofing System Design: Provide a membrane roofing system that is identical to systems that have been successfully tested by a qualified testing and inspecting agency to resist the factored design uplift pressures calculated according to SPRI's "Wind Load Design Guide for Fully Adhered and Mechanically Fastened Roofing Systems."

1.04 SUBMITTALS

A. Under provisions of Division 01.

B. Product Data: For each type of product indicated.

C. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other Work.
1. Base flashings and membrane terminations.
2. Tapered insulation, including slopes.
3. Insulation fastening patterns.

D. Samples for Verification: For the following products:
1. 12 by 12 inch square of sheet roofing, of color specified, including T-shaped side and end lap seam.
2. 12 by 12-inch square of roof insulation.
3. 12 by 12-inch (300-by-300-mm) square of walkway pads or rolls.
4. 12 inch (300-mm) length of metal termination bars.
5. Six (6) fasteners of each type.

E. Installer Certificates: Signed by roofing system Manufacturer certifying that Installer is approved, authorized, or licensed by manufacturer to install roofing system.

F. Manufacturer Certificates: Signed by roofing manufacturer certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
1. Submit evidence of meeting performance requirements.

G. Qualification Data: For Installer and manufacturer.

H. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of roofing system.

I. Maintenance Data: For roofing system to include in maintenance manuals.

J. Warranties: Special warranties specified in this Section.

K. Inspection Report: Copy of roofing system Manufacturer's inspection report of completed roofing installation.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system Manufacturer to install Manufacturer's product and that is eligible to receive Manufacturer's warranty.

B. Manufacturer Qualifications: A qualified manufacturer with 20 Years experience manufacturing the same membrane without formulation changes. The roofing membrane formulation and system shall be identical to that used for this Project, per applicable change, by law. The membrane and accessories must be produced by the warranted manufacturer. No Private Label Products will be accepted.

C. Source Limitations: Obtain components for membrane roofing system approved by roofing membrane manufacturer.

D. Fire-Test-Response Characteristics: Provide membrane roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
   1. Exterior Fire-Test Exposure: Class A; ASTM E108, for application and roof slopes indicated.

E. Pre-installation Conference: Conduct conference at Project site. Comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:
   1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.
   2. Review methods and procedures related to roofing installation, including manufacturer’s written instructions. Note: Contractor shall have written manufacturer specifications, roof drawings, roof drawing notes and scope of work of work on site during the construction period.
   3. Review and finalize a construction schedule and verification of material availability.
   4. Review structural loading limitations, prior to loading.
   5. Review all details, including base flashings, special details, roof drainage, roof penetration schedule, equipment curb and any conditions that will affect the roofs construction or integrity.
   6. Review Contractors Risk Management Plan and OSHA approved Safety Program
   7. Review roof observation and repair procedures during and after roof installation.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.

B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
   1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

1.07 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.08 WARRANTY

A. Special Warranty: Manufacturer's standard form, without monetary limitation, in which manufacturer agrees to repair or replace components of membrane roofing system that fail in materials or workmanship within specified warranty period. Failure includes roof leaks.
   1. Special warranty includes roofing membrane, base flashings, roofing membrane accessories, roof insulation, fasteners, walkway products and other components of membrane roofing system.
   2. Warranty Period: Twenty (20) Year NDL, Non-Prorated, from date of Substantial Completion.
   3. Warranty shall include a 1inch Hail Warranty and shall have no exclusions for ponding conditions.

B. Special Project Warranty: Submit roofing Installer’s warranty, on warranty form at end of this Section, signed by Installer, covering Work of this Section, including all components of membrane roofing system such as roofing membrane, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, roof pavers, and walkway products, for the following warranty period:
   1. Warranty Period: Two (2) years from date of Substantial Completion.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. Design Basis: Contract Documents and are based on products by:
   1. Seaman Corporation - Fibertite. (www.fibertite.com).
      a. ASTM D6754, Ketone Ethylene Ester (KEE) Sheet Roofing, FiberTite-SM Membrane.

B. Substitutions: Under provisions of Division 01:
   1. Approved Equal: Submitting Manufacturers will be subject to compliance with stated requirements. Substitution request must be submitted 10 days prior to bid date. Provide products, by the manufacturer, that meet or exceed the stated manufacturers qualifications, performance requirements, fire test requirements, physical properties and warranty requirements.
      a. Thickness: 45 mils (1.1 mm), nominal.
      b. Color: Off White/ Thermal Tan.
      c. Inter-ply Reinforcement to be 18 x 19 / 840 X 1,000 denier with reinforced polyester knit fabric that includes an adhesive coating that promotes a molecular bond between the base fabric and the top and bottom membrane facer films.
      d. Maximum sheet width 6 feet (or up to 74 inches).
   2. Substitution request must comply with the following minimum physical properties, Substitutes will only be considered if properties are provided in the same format, as below, for comparison purposes.
      a. Test Method Result

Thickness (nominal)	ASTM D751	0.045 (1.14mm)
Breaking Strength	ASTM D751 Grab	375 x 350 lbs
Tensile Strength	ASTM D882	8500 psi (598 kgf/cm2)
Tear Strength	ASTM D751	100 lbs (445 N)
Dynamic Puncture	ASTM D5635	25 joules
Low Temperature Flex	ASTM D2136	-40 degrees F
Dimensional Stability	ASTM D1204	<1.0%
Seam Strength	ASTM D751	100% of fabric strength
Coating Adhesion	ASTM D751	Cannot initiate coating peel

Hydrostatic Resistance	ASTM D751	750 psi (46 kgf/cm2)
Oil Resistance	MIL-C-20696C	No swelling, cracking, or leaking
Ozone Resistance	ASTM D1149	No effect
Solar Reflectance Index (SRI)	ASTM E1980	98.54

3. All Manufacturers submitting for an approved substitution must produce a membrane which contains the solid state polymer “KEE” or Elvaloy component.

2.02 AUXILIARY MATERIALS

A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with membrane roofing.
   1. Liquid-type auxiliary materials shall meet VOC limits of authorities having jurisdiction.

B. Manufacturer's standard sheet flashing of same material, type, reinforcement, thickness, and color as KEE sheet membrane.

C. Bonding Adhesive: Manufacturers standard solvent based bonding adhesive, for membrane and for base flashing applications.

D. Insulation Adhesive: Manufacturers approved low rise or Two-Part Polyurethane Insulation Adhesive.

E. Manufacturer's standard predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors.

F. Fasteners: Factory-coated steel fasteners and metal plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer.

G. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, termination reglets, cover strips, and other accessories, as required and approved by the manufacturer.

H. FiberClad coated, heat weldable sheet metal capable of being formed into a variety of shapes and profiles. 24 gauge. G90 galvanized metal sheet with a 20 mil (0.5 mm) coating. 4 ft by 8 ft (1.2 m x
   1. m) or 4 ft by 10 ft (1.2 m x 3.0 m).

I. Wall Vents: 24 gauge galvanized or PVC clad steel. Net free area of 39.6 sq.in. each. Shall be shaped to keep out rain water. Shall have 1/8 inch or finer bug screen.

J. Sump Pans: Install a prefabricated insulation sumped drain, 36 by 36 inch min. at each roof drain, overflow drain, and reinforce, per Manufacturers approved detail requirement.

2.03 ROOF INSULATION

A. General: Provide preformed roof insulation boards that comply with requirements and referenced standards, selected from manufacturer's standard sizes and of thicknesses indicated.

B. Polyisocyanurate Board Insulation: ASTM C1289, Type II, 20 psi, felt or glass-fiber mat facer on both major surfaces.

C. Equivalent products by following Manufacturers are acceptable:
   1. Atlas Roofing Corp. (www.atlasroofing.com).
   2. Hunter Panels. (www.hpanels.com).
   3. Substitutions: As approved by the Membrane Manufacturer and under provisions of Division 01.

D. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated utilizing Polyisocyanurate Insulation.
   1. EPS insulation type II, ASTM 578, is an acceptable alternate for tapered insulation at cricket conditions only.
      a. Density: 1.50 pcf minimum.

2.04 INSULATION ACCESSORIES

A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.

B. Fasteners: Factory-coated steel fasteners and metal or plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roof insulation to substrate, and acceptable to roofing system manufacturer.

C. Sump Pans: Install a prefabricated insulation sumped drain, 36 by 36 inch min. at each roof drain, overflow drain, and reinforce, per Manufacturers approved detail requirement.

2.05 COVER BOARDS

A. Cover Board: Glass mat faced gypsum panels, ASTM C1177/C1177M, fire resistant type, 5/8 inch thick.
   1. See Section 09 2116 - Gypsum Board Assemblies
      a. Location: See parapet walls and cap details in drawings.

2.06 WALKWAYS

A. Flexible Walkways: Install contrasting color flexible walkways, fully adhered and acceptable to the membrane roofing system manufacturer, warranted for the duration-equal to the specified system warranty.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of roofing system:
   1. Verify that roof openings and penetrations are in place and set and braced and that roof drains are securely clamped in place.
   2. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations, terminations and that nailers match thicknesses of insulation.
   3. Verify that surface plane flatness and fastening of steel roof deck comply with requirements in Division 5 Section "Steel Decking."

3.02 PREPARATION

A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.

B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

C. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

3.03 INSULATION INSTALLATION

A. Coordinate installing membrane roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.

B. Comply with membrane roofing system manufacturer's written instructions for installing roof insulation.

C. Install tapered insulation under area of roofing to conform to slopes indicated.

D. Install insulation under area of roofing to achieve required LTTR R Value of 34.0 Min. Install two equal layers of insulation, with joints of each succeeding layer staggered from joints of previous layer, half lapped in each direction.

E. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.

F. Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch with insulation.
   1. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
   2. Fasten insulation according to requirements in FMG's "Approval Guide" for specified Windstorm Resistance Classification.
   3. Fasten insulation to resist uplift pressure at corners, perimeter, and field of roof.

G. Sump Pans: Install a prefabricated insulation sumped drain, 36 by 36 inch min. at each roof drain, overflow drain, and reinforce, per Manufacturers approved detail requirement.

3.04 MECHANICALLY FASTENED ROOFING MEMBRANE INSTALLATION

A. Install roofing membrane over area to receive roofing according to roofing system manufacturer's written instructions. Unroll roofing membrane and allow relaxing before installing.

B. Start installation of roofing membrane in presence of roofing system manufacturer's technical personnel.

C. Accurately align roofing membranes and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

D. Mechanically fasten roofing membrane securely at terminations, penetrations, and perimeter of roofing.

E. Apply roofing membrane with side laps shingled with slope of roof deck where possible.

F. Seams: Clean seam areas, overlap roofing membrane, and hot-air weld side and end laps of roofing membrane according to manufacturer's written instructions to ensure a watertight seam installation.
   1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of roofing membrane.
   2. Verify field strength of seams a minimum of twice daily, repair seam sample areas, label with date / location and retain for manufacturers technical manager’s review.
   3. Repair tears, voids, and lapped seams in roofing membrane that does not meet requirements.

G. Spread sealant or mastic bed over deck drain flange at deck drains and securely seal roofing membrane in place with clamping ring.

H. In-Splice Attachment: Secure one edge of roofing membrane using fastening plates or metal battens centered within membrane splice and mechanically fasten roofing membrane to roof deck. Field-splice seam.

3.05 BASE FLASHING INSTALLATION

A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.

B. Apply solvent-based bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.

C. Flash penetrations and field-formed inside and outside corners with sheet flashing.

D. Clean seam areas and overlap and firmly roll sheet flashings into the adhesive. Weld side and end laps to ensure a watertight seam installation.

E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

3.06 WALKWAY INSTALLATION

A. Flexible Walkways: Install walkway products in locations indicated. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

3.07 FIELD QUALITY CONTROL

A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion and submit report to Architect.
   1. Notify Architect or Owner 72 hours in advance of date and time of inspection.

B. Repair or remove and replace components of membrane roofing system where test results or inspections indicate that they do not comply with specified requirements.

C. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.08 PROTECTING AND CLEANING

A. Protect membrane roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.

B. Correct deficiencies in or remove membrane roofing system that does not comply with requirements, repair substrates, and repair or reinstall membrane roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

3.09 ROOFING INSTALLER'S WARRANTY

A. WHEREAS of , herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:
   1. Owner:
   2. Address:
   3. Building Name/Type:
   4. Address:
   5. Area of Work:
   6. Acceptance Date:
   7. Warranty Period:
   8. Expiration Date:

B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period,

C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.

D. This Warranty is made subject to the following terms and conditions:
   1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:
      a. lightning;
      b. peak gust wind speed exceeding 70 mph (m/sec);
      c. fire;
      d. failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
      e. faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the work;
      f. vapor condensation on bottom of roofing; and

g. Activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.

2. When work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
3. Roofing Installer is responsible for damage to work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of work.
4. During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to the extent said alterations affect work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate work, thereby reasonably justifying a limitation or termination of this Warranty.
5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to the extent said change affects work covered by this Warranty.
6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect work and to examine evidence of such leaks, defects, or deterioration.
7. This Warranty is recognized to be the only warranty of Roofing Installer on said work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original work according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this day of , .
   1. Authorized Signature:
   2. Name:
   3. Title:

END OF SECTION 07 5400

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SECTION 07 5419
SINGLE-PLY PVC THERMOPLASTIC ROOFING - BID ALTERNATE #2

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Mechanically attached PVC thermoplastic roofing membrane.

B. Insulation, flat and tapered.

C. Vapor retarder.

D. Roofing cant strips, stack boots, roofing expansion joints, and walkway pads.

1.02 RELATED REQUIREMENTS

A. Section 07 6200 - Sheet Metal Flashing and Trim: Counterflashings, reglets and _____.

1.03 REFERENCE STANDARDS

A. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.

B. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation; 2023.

C. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2017.

D. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2023a.

E. ASTM D4434/D4434M - Standard Specification for Poly(Vinyl Chloride) Sheet Roofing; 2021.

F. FM DS 1-28 - Wind Design; 2015, with Editorial Revision (2024).

G. FM DS 1-29 - Roof Deck Securement and Above-Deck Roof Components; 2016, with Editorial Revision (2022).

H. NRCA (RM) - The NRCA Roofing Manual; 2024.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide manufacturer's written information listed below.
   1. Product data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, and fasteners.

C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, and paver layout.

D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

E. Warranty:
   1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
   2. Submit installer's certification that installation complies with all warranty conditions for the waterproof membrane.

F. Installer's qualification statement.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system Manufacturer to install Manufacturer's product and that is eligible to receive Manufacturer's warranty.

B. Manufacturer Qualifications: A qualified manufacturer with 20 Years experience manufacturing the same membrane without formulation changes. The roofing membrane formulation and system shall be identical to that used for this Project, per applicable change, by law. The membrane and accessories must be produced by the warranted manufacturer. No Private Label Products will be accepted.

C. Source Limitations: Obtain components for membrane roofing system approved by roofing membrane manufacturer.

D. Fire-Test-Response Characteristics: Provide membrane roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
   1. Exterior Fire-Test Exposure: Class A; ASTM E108, for application and roof slopes indicated.

E. Pre-installation Conference: Conduct conference at Project site. Comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:
   1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.
   2. Review methods and procedures related to roofing installation, including manufacturer's written instructions. Note: Contractor shall have written manufacturer specifications, roof drawings, roof drawing notes and scope of work of work on site during the construction period.
   3. Review and finalize a construction schedule and verification of material availability.
   4. Review structural loading limitations, prior to loading.
   5. Review all details, including base flashings, special details, roof drainage, roof penetration schedule, equipment curb and any conditions that will affect the roofs construction or integrity.
   6. Review Contractors Risk Management Plan and OSHA approved Safety Program.
   7. Review roof observation and repair procedures during and after roof installation.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact.

B. Protect products in weather protected environment, clear of ground and moisture.

C. Protect foam insulation from direct exposure to sunlight.

1.07 FIELD CONDITIONS

A. Do not apply roofing membrane during unsuitable weather.

B. Do not apply roofing membrane when ambient temperature is below 40 degrees F or above ____ degrees F.

C. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

1.08 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
   1. Warranty Term: 20 years.
   2. For repair and replacement include costs of both material and labor in warranty.
   3. Exceptions NOT Permitted:
      a. Damage due to wind of speed greater than 56 mph but less than 90 mph.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design: Carlisle SynTec: www.carlisle-syntec.com/#sle.

B. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ROOFING APPLICATIONS

A. PVC Membrane Roofing: One ply membrane, mechanically fastened, over insulation.

B. Roofing Assembly Performance Requirements and Design Criteria:
   1. Wind Uplift:
      a. Designed to withstand wind uplift forces calculated with ASCE 7.
      b. Design Wind Speed: In accordance with local building code and authorities having jurisdiction (AHJ).

2.03 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

A. Membrane:
   1. Material: Polyvinyl chloride (PVC) complying with ASTM D4434/D4434M.
   2. Reinforcing: Internal fabric.
   3. Thickness: 60 mils (0.060 inch), minimum.
   4. Sheet Width: Factory fabricated into largest sheets possible.
   5. Color: White.
   6. Products:
      a. Carlisle SynTec Systems; SureFlex PVC.

B. Seaming Materials: As recommended by membrane manufacturer.

C. Membrane Fasteners: As recommended and approved by membrane manufacturer.
   1. Carlisle SynTec Systems; HP-X Fastener: #15 threaded fastener with #3 Phillips drive. Use with Carlisle SynTec Systems Piranha Fastening Plate for mechanically fastened membrane systems on steel or plywood decks.

D. Vapor Retarder: Material approved by roof manufacturer complying with requirements of fire rating classification; compatible with roofing and insulation materials.
   1. Fire-retardant adhesive.

E. Flexible Flashing Material: Same material as membrane.

2.04 COVER BOARDS

A. Cover Board: Glass mat faced gypsum panels, ASTM C1177/C1177M, fire resistant type, 5/8 inch thick.
   1. Product: See Section 09 2116 Gypsum Board Assemblies
      a. Location: See parapet walls and cap details in drawings.

2.05 INSULATION

A. Polyisocyanurate (ISO) Board Insulation: Complies with ASTM C1289, Type II, Class 2
   1. Grade and Compressive Strength: Grade 2, 20 psi, minimum.

B. Expanded Polystyrene (EPS) Board Insulation: Complies with ASTM C578, Type II, is an acceptable alternate for tapered insulation at cricket conditions only.
   1. Location: Crickets only
   2. Density: 1.5 pcf minimum

2.06 ACCESSORIES

A. Prefabricated Flashing Accessories:
   1. Corners and Seams: Same material as membrane, in manufacturer's standard thicknesses.
   2. Penetrations: Same material as membrane, with manufacturer's standard cut-outs, rigid inserts, clamping rings, and flanges.

3. Walkway Rolls: Sure-Flex Heat Weldable Walkway Rolls; 80 mils (0.080 inch) thick; gray membrane.
4. Contour Rib Profile: Manufacturer's standard extruded PVC; 1-1/4 inch tall, 2-1/8 inch wide, 3/8 inch profile.
5. Miscellaneous Flashing: Non-reinforced PVC membrane; 80 mils (0.080 inch) thick, in manufacturer's standard lengths and widths.

B. Insulation Fasteners: Appropriate for purpose intended and approved by roofing manufacturer.

C. Membrane Adhesive: As recommended by membrane manufacturer.
1. Products:

D. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.

E. Sealants: As recommended by membrane manufacturer.
1. Products:

F. Cleaner: Manufacturer's standard, clear, solvent-based cleaner.

G. Edgings and Terminations: Manufacturer's standard edge and termination accessories.
1. Snap-On Edge System:
2. Anchor Bar Fascia System:
3. Drip Edge:
4. Coping:
5. PVC Coated Sheet Metal.
6. Termination Bar.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces and site conditions are ready to receive work.

B. Verify deck is supported and secure.

C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.

D. Verify deck surfaces are dry and free of snow or ice.

E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 INSTALLATION - GENERAL

A. Perform work in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.

B. Do not apply roofing membrane during unsuitable weather.

C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.

D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

3.03 INSTALLATION - GENERAL

A. Perform work in accordance with manufacturer's instructions.

B. Do not apply roofing membrane during unsuitable weather.

C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.

D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

3.04 INSULATION INSTALLATION

A. Attachment of Insulation:
   1. Mechanically fasten insulation to deck in accordance with roofing manufacturer's instructions and Factory Mutual requirements.

B. Lay subsequent layers of insulation with joints staggered minimum 6 inches from joints of preceding layer.

C. Lay boards with edges in moderate contact without forcing, and gap between boards no greater than 1/4 inch. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.

D. Do not apply more insulation than can be completely waterproofed in the same day.

3.05 MEMBRANE APPLICATION

A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.

B. Shingle joints on sloped substrate in direction of drainage.

C. Seam Welding:
   1. Seam Welding: Overlap edges and ends and seal seams by heat welding, minimum 2 inches.
   2. Cover all seams with manufacturer's recommended joint covers.
   3. Probe all seams once welds have thoroughly cooled. (Approximately 30 minutes.)
   4. Repair all deficient seams within the same day.
   5. Seal cut edges of reinforced membrane after seam probe is complete.

D. Mechanical Attachment:
   1. Apply membrane and mechanical attachment devices in accordance with manufacturer's instructions.

E. At intersections with vertical surfaces:
   1. Extend membrane over cant strips and up a minimum of 4 inches onto vertical surfaces.
   2. Fully adhere flexible flashing over membrane and up to nailing strips.

F. Coordinate installation of roof drains and sumps and related flashings.

G. Daily Seal: Install daily seal per manufacturers instructions at the end of each work day. Prevent infiltration of water at incomplete flashings, terminations, and at unfinished membrane edges.

3.06 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements for general requirements for field quality control and inspection.

B. Require site attendance of roofing and insulation material manufacturers daily during installation of the Work.

3.07 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Remove bituminous markings from finished surfaces.

C. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their documented instructions.

D. Repair or replace defaced or damaged finishes caused by work of this section.

3.08 PROTECTION

A. Protect installed roofing and flashings from construction operations.

B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

END OF SECTION 07 5419

SECTION 08 4313
ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Aluminum-framed storefront, with vision glass.

B. Aluminum doors and frames.
   1. **NOTE:** On doors receiving exit devices no universal preps are allowed and the doors shall be prepared specifically for the exit device functions as scheduled.

C. Weatherstripping.

1.02 RELATED REQUIREMENTS

A. Section 08 4229 - Automatic Entrances.

B. Section 08 7100 - Door Hardware: Hardware items other than specified in this section.

C. Section 08 8000 - Glazing: Glass and glazing accessories.

1.03 REFERENCE STANDARDS

A. AAMA CW-10 - Care and Handling of Architectural Aluminum from Shop to Site; 2015.

B. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2020.

C. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2021.

D. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2021.

E. ASTM E283/E283M - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2019.

F. ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2014 (Reapproved 2021).

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate with installation of other components that comprise the exterior enclosure.

B. Preinstallation Meeting: Conduct a preinstallation meeting one week before starting work of this section; require attendance by all affected installers.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, door hardware, and internal drainage details.

C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related work, expansion and contraction joint location and details, and field welding required.
   1. **NOTE**: On doors receiving exit devices no universal preps are allowed and the doors shall be prepared specifically for the exit device functions as scheduled.

D. Samples: Submit two samples 2 by 4 inches in size illustrating finished aluminum surface, glass, glazing materials.

E. Manufacturer's Certificate: Certify that the products supplied meet or exceed the specified requirements.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in performing work of type specified and with at least three years of documented experience.

B. Installer Qualifications: Company specializing in performing work of type specified and with at least three years of documented experience.

C. Prior to ordering aluminum doors, frames and hardware, provide a mock-up of a pair of entrance doors with the scheduled hardware found in the Project Manual. Upon written approval of the mock-up by the Owner, Architect and their Consultants and after submittal review and acceptance and after the pre-installation meeting as required by this Section, aluminum doors and frames may be fabricated and hardware may be ordered.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Handle products of this section in accordance with AAMA CW-10.

B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

1.08 FIELD CONDITIONS

A. Do not install sealants when ambient temperature is less than 40 degrees F. Maintain this minimum temperature during and 48 hours after installation.

1.09 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Correct defective Work within a five year period after Date of Substantial Completion.

C. Provide five year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.01 BASIS OF DESIGN -- FRAMING FOR INSULATING GLAZING

A. Center-Set Style, Thermally-Broken:
   1. Basis of Design: Kawneer: Trifab VersaGlaze 451T Framing System at exterior openings; www.kawneer.com.
   2. Vertical Mullion Dimensions: 2 inches wide by 4-1/2 inches deep.

B. Center-Set Style, Not Thermally-Broken:
   1. Basis of Design: Kawneer: Trifab VersaGlaze 451 Framing System at interior openings and interior vestibule doors; www.kawneer.com.
   2. Vertical Mullion Dimensions: 2 inches wide by 4-1/2 inches deep.

C. Substitutions: See Section 01 6000 - Product Requirements.

2.02 BASIS OF DESIGN -- SWINGING DOORS

A. Wide Stile, Single Glazing:
   1. Basis of Design: Kawneer: 500 Standard Entrance System at interior openings including interior vestibule doors; www.kawneer.com.
   2. Thickness: 1-3/4 inches.

B. Wide Stile, Insulating Glazing, Not Thermally-Broken
   1. Basis of Design: Kawneer: 500 Standard Entrance System at exterior openings for Not Thermally-Broken; Kawneer 500T Insulpour for Thermally-Broken; www.kawneer.com.
   2. Thickness: 1-3/4 (at Not Thermal-Broken) and 2-1/4" (at Thermal-Broken) inches.

C. Substitutions: See Section 01 6000 - Product Requirements.
   1. For any product not identified as "Basis of Design", submit information as specified for substitutions.

2.03 MANUFACTURERS

A. Aluminum-Framed Storefront and Doors:
   1. EFCO Corporation; _____: www.efcocorp.com/#sle.
   2. Kawneer North America; _____: www.kawneer.com/#sle.
   3. Manko Window Systems, Inc; _____: www.mankowindows.com/#sle.
   4. Oldcastle BuildingEnvelope; _____: www.oldcastlebe.com/#sle.

5. Tubelite, Inc; _____: www.tubeliteinc.com/#sle.
6. YKK AP America Inc; _____: www.ykkap.com/#sle.
7. Substitutions: See Section 01 6000 - Product Requirements.

2.04 ALUMINUM-FRAMED STOREFRONT

A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
   1. Finish Color: As select by architect from manufactures full range of colors.
   2. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners and attachments concealed from view; reinforced as required for imposed loads.
   3. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.
   4. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
   5. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.
   6. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.
   7. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.
   8. Maintain continuous air barrier and/or vapor retarder seal throughout assembly, primarily in line with inside pane of glazing and inner sheet of infill panel, and heel bead of glazing compound.

B. Performance Requirements
   1. Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load.
      a. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
   2. Air Leakage: 0.06 cfm/sq ft maximum leakage of storefront wall area when tested in accordance with ASTM E283/E283M at 1.57 psf pressure difference.

2.05 COMPONENTS

A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
   1. Framing members for interior applications need not be thermally broken.
   2. Glazing Stops: Flush.

B. Glazing: See Section 08 8000.

C. Swing Doors: Glazed aluminum.
   1. Thickness: 1-3/4 and 2-1/4 inches inches.
   2. Top Rail: 5 inches wide.
   3. Vertical Stiles: 5 inches wide.
   4. Bottom Rail: 10 inches wide.
   5. Glazing Stops: Square.
   6. Finish: Same as storefront.

2.06 MATERIALS

A. Extruded Aluminum: ASTM B221 (ASTM B221M).

B. Fasteners: Stainless steel.

C. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

2.07 FINISHES

A. Class I Color Anodized Finish: AAMA 611 AA-M12C22A42 Integrally colored anodic coating not less than 0.7 mils thick.

B. Color: As selected by Architect from manufacturer's full range.

C. Touch-Up Materials: As recommended by coating manufacturer for field application.

2.08 HARDWARE

A. Other Door Hardware: See Section 08 7100.

B. Weatherstripping: Wool pile, continuous and replaceable; provide on all doors.

C. Sill Sweep Strips: Resilient seal type, retracting, of neoprene; provide on all doors.

D. Automatic Door Operators and Actuators: See Section 08 4229.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify dimensions, tolerances, and method of attachment with other work.

B. Verify that storefront wall openings and adjoining water-resistive and/or air barrier seal materials are ready to receive work of this section.

3.02 INSTALLATION

A. Install wall system in accordance with manufacturer's instructions.

B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.

C. Provide alignment attachments and shims to permanently fasten system to building structure.

D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

E. Provide thermal isolation where components penetrate or disrupt building insulation.

F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.

G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing.

H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.

I. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.03 TOLERANCES

A. Maximum Variation from Plumb: 0.06 inch per 3 feet non-cumulative or 0.06 inch per 10 feet, whichever is less.

B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

3.04 ADJUSTING

A. Adjust operating hardware and sash for smooth operation.

3.05 CLEANING

A. Remove protective material from pre-finished aluminum surfaces.

B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths, and take care to remove dirt from corners and to wipe surfaces clean.

3.06 PROTECTION

A. Protect installed products from damage until Date of Substantial Completion.

END OF SECTION 08 4313

SECTION 08 8000
GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Insulating glass units.

B. Glazing units.

C. Glazing compounds.

1.02 RELATED REQUIREMENTS

A. Section 07 2500 - Weather Barriers.

B. Section 07 9200 - Joint Sealants: Sealants for other than glazing purposes.

C. Section 08 1113 - Hollow Metal Doors and Frames: Glazed lites in doors and borrowed lites.

D. Section 08 1416 - Flush Wood Doors: Glazed lites in doors.

E. Section 08 3200 - Sliding Glass Doors: Glazing provided by door manufacturer.

F. Section 08 4229 - Automatic Entrances: Glazing provided as part of door assembly.

G. Section 08 4313 - Aluminum-Framed Storefronts: Glazing provided as part of storefront assembly.

H. Section 10 2800 - Toilet, Bath, and Laundry Accessories: Mirrors.

1.03 REFERENCE STANDARDS

A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials; Current Edition.

B. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test; 2015 (Reaffirmed 2020).

C. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.

D. ASTM C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers; 2005 (Reapproved 2019).

E. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.

F. ASTM C1036 - Standard Specification for Flat Glass; 2021.

G. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2018.

H. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2016 (Reapproved 2023).

I. ASTM C1376 - Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass; 2021a.

J. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023d.

K. ASTM E1300 - Standard Practice for Determining Load Resistance of Glass in Buildings; 2016.

L. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation; 2019.

M. GANA (SM) - GANA Sealant Manual; 2008.

N. ITS (DIR) - Directory of Listed Products; Current Edition.

O. NFRC 100 - Procedure for Determining Fenestration Product U-factors; 2023.

P. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence; 2023.

Q. NFRC 300 - Test Method for Determining the Solar Optical Properties of Glazing Materials and Systems; 2023.

R. UL (DIR) - Online Certifications Directory; Current Edition.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by each of the affected installers.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data on Insulating Glass Unit, Glazing Unit, and Plastic Film Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.

C. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available colors.

D. Samples: Submit one samples 12 by 12 inch in size of glass units, showing coloration.

E. Samples: Submit 2 inch long bead of glazing sealant, color as selected.

F. Certificate: Certify that products of this section meet or exceed specified requirements.

G. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years documented experience.

1.07 FIELD CONDITIONS

A. Do not install glazing when ambient temperature is less than 40 degrees F.

B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.08 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Insulating Glass Units: Provide a five (5) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including providing products to replace failed units.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Float Glass Manufacturers:
   1. Guardian Glass, LLC; _____: www.guardianglass.com/#sle.
   2. Pilkington North America Inc; _____: www.pilkington.com/na/#sle.
   3. Vitro Architectural Glass (formerly PPG Glass): www.vitroglazings.com/#sle.

B. Mirrored Glass Manufacturers:
   1. Pilkington North America Inc; Pilkington Mirropane Transparent Mirror: www.pilkington.com/na/#sle.
   2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES

A. Provide type and thickness of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of glass.
   1. Design Pressure: Calculated in accordance with ASCE 7.
   2. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.

3. Seismic Loads: Design and size glazing components to withstand seismic loads and sway displacement in accordance with the requirements of ASCE 7
4. Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
5. Glass thicknesses listed are minimum.

B. Weather-Resistive Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure water-resistive barrier, vapor retarder, and/or air barrier.
1. In conjunction with weather barrier related materials described in other sections, as follows:
   a. Water-Resistive Barriers: See Section 07 2500.
2. To maintain a continuous vapor retarder and/or air barrier throughout glazed assembly from glass pane to heel bead of glazing sealant.

C. Thermal and Optical Performance: Provide exterior glazing products with performance properties as indicated. Performance properties are in accordance with manufacturer's published data as determined with the following procedures and/or test methods:
1. Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
2. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
3. Solar Optical Properties: Comply with NFRC 300 test method.

2.03 GLASS MATERIALS

A. Float Glass: Provide float glass based glazing unless otherwise indicated.
1. Annealed Type: ASTM C1036, Type I - Transparent Flat, Class 1 - Clear, Quality - Q3.
2. Kind HS - Heat-Strengthened Type: Complies with ASTM C1048.
3. Kind FT - Fully Tempered Type: Complies with ASTM C1048.
4. Fully Tempered Safety Glass: Complies with ANSI Z97.1 or 16 CFR 1201 criteria for safety glazing used in hazardous locations.
5. Thicknesses: As indicated; provide greater thickness as required for exterior glazing wind load design.

2.04 INSULATING GLASS UNITS

A. Manufacturers:
1. Glass: Any of the manufacturers specified for float glass.

B. Insulating Glass Units: Types as indicated.
1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
2. Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
3. Metal-Edge Spacers: Aluminum, bent and soldered corners.
4. Spacer Color: Bronze.
5. Edge Seal:
   a. Dual-Sealed System: Provide polyisobutylene sealant as primary seal applied between spacer and glass panes, and silicone, polysulfide, or polyurethane sealant as secondary seal applied around perimeter.
6. Color: Black.
7. Purge interpane space with dry air, hermetically sealed.
8. Capillary Tubes: Provide tubes from air space for insulating glass units without inert type gas that have a change of altitude greater than 2500 feet between point of fabrication and point of installation to permit pressure equalization of air space.
   a. Breather Tubes: Seal or crimp breather tubes upon installation in accordance with insulating glass fabricator's requirements.
   b. Inert gas may be installed in the field into air space in accordance with insulating glass fabricator's and installer's requirements.

C. Type IG-1 - Insulating Glass Units: Vision glass, double glazed.

1. Applications: Exterior glazing unless otherwise indicated.
2. Space between lites filled with air.
3. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
    a. Tint: Clear.
    b. Coating: Self-cleaning type, on #1 surface.
    c. Coating: Low-E (passive type), on #2 surface.
4. Inboard Lite: Annealed float glass, 1/4 inch thick, minimum.
    a. Tint: Clear.
5. Total Thickness: 1 inch.
6. Thermal Transmittance (U-Value), Summer - Center of Glass: 26, nominal.
7. Visible Light Transmittance (VLT): 32% to 64% percent, nominal.
8. Solar Heat Gain Coefficient (SHGC): 0.19 to 0.27, nominal.

D. Type IG-3 - Insulating Glass Units: Spandrel glazing.
1. Applications: Exterior spandrel glazing unless otherwise indicated.
2. Space between lites filled with air.
3. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
    a. Tint: Clear.
    b. Coating: Same as on vision units, on #2 surface.
4. Inboard Lite: Heat-strengthened float glass, 1/4 inch thick.
    a. Tint: Clear.
    b. Opacifier Color: as selected by architect from manufactures full range.
5. Total Thickness: 1 inch.
6. Thermal Transmittance (U-Value), Summer - Center of Glass: _____, nominal.

E. Type IG-5 - Insulating Glass Units: Safety glazing.
1. Applications:
    a. Glazed lites in exterior doors.
    b. Glazed sidelights and panels next to doors.
    c. Other locations required by applicable federal, state, and local codes and regulations.
    d. Other locations indicated on drawings.
2. Space between lites filled with air.
3. Glass Type: Same as Type IG-1 except use fully tempered float glass for both outboard and inboard lites.
4. Tint: Clear.
5. Total Thickness: 1 inch.
6. Thermal Transmittance (U-Value), Summer - Center of Glass: 26, nominal.
7. Visible Light Transmittance (VLT): 32% to 64% percent, nominal.
8. Solar Heat Gain Coefficient (SHGC): 0.19 to 0.27, nominal.
9. Visible Light Reflectance, Outside: 64 percent, nominal.

F. Type IG-6 - Insulating Glass Units: Obscured glass and Vision glass, double glazed.
1. Applications: Exterior glazing unless otherwise indicated. To be installed at exterior windows of toilet rooms and locker rooms.
2. Space between lites filled with air.
3. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
    a. Tint: Clear.
    b. Coating: Self-cleaning type, on #1 surface.
    c. Coating: Low-E (passive type), on #2 surface.
4. Inboard Lite: Obscured float glass, 1/4 inch thick, minimum.
    a. Tint: Clear.
5. Total Thickness: 1 inch.
6. Thermal Transmittance (U-Value), Summer - Center of Glass: 26, nominal.
7. Visible Light Transmittance (VLT): 32% to 64% percent, nominal.
8. Solar Heat Gain Coefficient (SHGC): 0.19 to 0.27, nominal.

2.05 BASIS OF DESIGN - INSULATING GLASS UNITS

A. Basis of Design - Insulating Glass Units: Vision glazing, with low-e coating.
   1. Applications: Exterior insulating glass glazing unless otherwise indicated.
   2. Space between lites filled with air.
   3. Total Thickness: 1 inch.
   4. Thermal Transmittance (U-Value), Summer - Center of Glass: 26, nominal.
   5. Visible Light Transmittance (VLT): 32% to 64% percent, nominal.
   6. Solar Heat Gain Coefficient (SHGC): 0.19 to 0.27, nominal.
   7. Visible Light Reflectance, Outside: 64 percent, nominal.
   8. Glazing Method: Dry glazing method, gasket glazing.
   9. Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
   10. Spacer Color: Black.
   11. Edge Seal:
   12. Color: Black.
   13. Purge interpane space with dry air, hermetically sealed.
   14. Basis of Design - Vitro Architectural Glass (formerly PPG Glass): www.vitroglazings.com/#sle.
   15. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
       a. Low-E Coating: Vitro Architectural Glass (formerly PPG Glass) Solarban 70 glass on #2 surface.
       b. Glass: Clear.
   16. Inboard Lite: Heat-strengthened float glass, 1/4 inch thick.
   17. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of another acceptable manufacturer.
   18. Substitution Procedures: See Section 01 6000 - Product Requirements.

2.06 GLAZING UNITS

A. Type G-2 - Monolithic Interior Vision Glazing:
   1. Applications: Interior glazing unless otherwise indicated.
   2. Glass Type: Annealed float glass.
   3. Tint: Clear.
   4. Thickness: 1/4 inch, nominal.

B. Type G-3 - Monolithic Safety Glazing: Non-fire-rated.
   1. Applications:
      a. Glazed lites in doors, except fire doors.
      b. Glazed sidelights to doors, except in fire-rated walls and partitions.
      c. Other locations required by applicable federal, state, and local codes and regulations.
      d. Other locations indicated on drawings.
   2. Glass Type: Fully tempered safety glass as specified.
   3. Tint: Clear.
   4. Thickness: 1/4 inch, nominal.
   5. Manufacturers:
      a. Capital Glass; www.capitolglassco.com.
      b. Substitutions: See Section 01 6000 - Product Requirements.

C. Type M-1 - Transparent One-Way Mirror: Mirror quality float glass with pyrolytic (hard coat) type coating located on high light level surface of glass; ASTM C1376.
   1. Applications: Locations as indicated on drawings.
   2. Thickness: 1/4 inch.
   3. Glass Tint: Clear .
   4. Glass Type: Fully tempered.
   5. Manufacturers:

a. Pilkington North America Inc; Pilkington Mirropane Transparent Mirror: www.pilkington.com/na/#sle.
b. Substitutions: See Section 01 6000 - Product Requirements.

2.07 GLAZING COMPOUNDS

A. Type GC-2 - Butyl Sealant: Single component; ASTM C920 Grade NS, Class 12-1/2, Uses M and A, Shore A hardness of 10 to 20; black color.

B. Type GC-5 - Silicone Sealant: Single component; neutral curing; capable of water immersion without loss of properties; nonbleeding, nonstaining; ASTM C920 Type S, Grade NS, Class 25, Uses M, A, and G; with cured Shore A hardness range of 15 to 25; _____ color.

C. Manufacturers:
1. Dow Corning Corporation: www.dowcorning.com/construction/#sle.Dow Corning Corporation: www.dowcorning.com/construction/#sle.
2. Tremco Commercial Sealants & Waterproofing; Proglaze: www.tremcosealants.com/#sle.
3. Substitutions: See Section 01 6000 - Product Requirements.

2.08 ACCESSORIES

A. Setting Blocks: Silicone, with 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot of glazing or minimum 4 inch by width of glazing rabbet space minus 1/16 inch by height to suit glazing method and pane weight and area.

B. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness; ASTM C864 Option II. Continuous by one half the height of the glazing stop by thickness to suit application, self adhesive on one face.

C. Glazing Tape, Back Bedding Mastic Type: Preformed, butyl-based, 100 percent solids compound with integral resilient spacer rod applicable to application indicated; 5 to 30 cured Shore A durometer hardness; coiled on release paper; black color.
1. Width: As required for application.
2. Thickness: As required for application.
3. Spacer Rod Diameter: As required for application.

D. Glazing Splines: Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; color black.

E. Glazing Clips: Manufacturer's standard type.

PART 3 EXECUTION

3.01 VERIFICATION OF CONDITIONS

A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.

B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.

C. Verify that sealing between joints of glass framing members has been completed effectively.

3.02 PREPARATION

A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to substrates.

B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.

C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

3.03 INSTALLATION, GENERAL

A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.

B. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.

C. Set glass lites in proper orientation so that coatings face exterior or interior as indicated.

D. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, and paint.

3.04 INSTALLATION - DRY GLAZING METHOD (GASKET GLAZING)

A. Application - Exterior and/or Interior Glazed: Set glazing infills from either the exterior or the interior of the building.

B. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.

C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.

D. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

3.05 INSTALLATION - WET/DRY GLAZING METHOD (PREFORMED TAPE AND SEALANT)

A. Application - Exterior Glazed: Set glazing infills from the exterior of the building.

B. Cut glazing tape to length and set against permanent stops, 3/16 inch below sight line. Seal corners by butting tape and dabbing with butyl sealant.

C. Apply heel bead of butyl sealant along intersection of permanent stop with frame ensuring full perimeter seal between glass and frame to complete the continuity of the air and vapor seal.

D. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.

E. Rest glazing on setting blocks and push against tape and heel bead of sealant with sufficient pressure to attain full contact at perimeter of pane or glass unit.

F. Install removable stops, with spacer strips inserted between glazing and applied stops 1/4 inch below sight lines.
   1. Place glazing tape on glazing pane of unit with tape flush with sight line.

G. Fill gap between glazing and stop with _____ type sealant to depth equal to bite of frame on glazing, but not more than 3/8 inch below sight line.

H. Apply cap bead of _____ type sealant along void between the stop and the glazing, to uniform line, flush with sight line. Tool or wipe sealant surface smooth.

3.06 INSTALLATION - WET/DRY GLAZING METHOD (TAPE AND SEALANT)

A. Application - Interior Glazed: Set glazing infills from the interior of the building.

B. Cut glazing tape to length and install against permanent stops, projecting 1/16 inch above sight line.

C. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.

D. Rest glazing on setting blocks and push against tape to ensure full contact at perimeter of pane or unit.

E. Install removable stops, spacer shims inserted between glazing and applied stops at 24 inch intervals, 1/4 inch below sight line.

F. Fill gaps between pane and applied stop with _____ type sealant to depth equal to bite on glazing, to uniform and level line.

G. Carefully trim protruding tape with knife.

3.07 CLEANING

A. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.

B. Remove nonpermanent labels immediately after glazing installation is complete.

C. Clean glass and adjacent surfaces after sealants are fully cured.

D. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.

3.08 PROTECTION

A. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION 08 8000

SECTION 09 2116
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Acoustic sound putty packs

B. Gypsum sheathing.

C. Gypsum wallboard.

1.02 RELATED REQUIREMENTS

A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.

B. Section 06 1000 - Rough Carpentry: Wood blocking product and execution requirements.

C. Section 07 2100 - Thermal Insulation: Acoustic insulation.

D. Section 07 2500 - Weather Barriers: Water-resistive barrier over sheathing.

E. Section 07 8400 - Firestopping: Top-of-wall assemblies at fire-resistance-rated walls.

F. Section 07 9200 - Joint Sealants: Sealing acoustical gaps in construction other than gypsum board or plaster work.

1.03 REFERENCE STANDARDS

A. AISI S100 - North American Specification for the Design of Cold-Formed Steel Structural Members; 2016, with Supplement (2020).

B. AISI S220 - North American Standard for Cold-Formed Steel Nonstructural Framing; 2020.

C. AISI S240 - North American Standard for Cold-Formed Steel Structural Framing; 2015, with Errata (2020).

D. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.

E. ASTM A1003/A1003M - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members; 2015.

F. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2023.

G. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2017.

H. ASTM C1280 - Standard Specification for Application of Exterior Gypsum Panel Products for Use as Sheathing; 2018 (Reapproved 2023).

I. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2017.

J. ASTM C1629/C1629M - Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels; 2023.

K. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2021.

L. GA-216 - Application and Finishing of Gypsum Panel Products; 2021.

M. GA-600 - Fire Resistance and Sound Control Design Manual; 2021.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data:
   1. Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing gypsum board installation and finishing, with minimum five years of experience.

PART 2 PRODUCTS

2.01 METAL FRAMING MATERIALS

A. Steel Sheet: ASTM A1003/A1003M, subject to the ductility limitations indicated in AISI S220 or equivalent.

B. Manufacturers - Metal Framing, Connectors, and Accessories:
   1. Clarkwestern Dietrich Building Systems LLC; None - N/A: www.clarkdietrich.com/#sle.
   2. Jaimes Industries; None - N/A: www.jaimesind.com/#sle.
   3. Marino; None - N/A: www.marinoware.com/#sle.
   4. Phillips Manufacturing Co; None - N/A: www.phillipsmfg.com/#sle.
   5. SCAFCO Corporation; None - N/A: www.scafco.com/#sle.
   6. Steel Construction Systems; None - N/A: www.steelconsystems.com/#sle.
   7. Substitutions: See Section 01 6000 - Product Requirements.

C. Partition Head to Structure Connections: Provide mechanical anchorage devices that accommodate deflection and prevent rotation of studs while maintaining structural performance of partition.
   1. Structural Performance: Maintain lateral load resistance and vertical movement capacity required by applicable code, when evaluated in accordance with AISI S100.
   2. Material: ASTM A653/A653M steel sheet, SS Grade 50/340, with G60/Z180 hot-dipped galvanized coating.
   3. Provide components as listed in ICC Evaluation Service for use in ESR-1042 fire-rated and sound rated at head of partition joint systems indicated on drawings.
   4. Deflection, Sound, and Firestop Track:
      a. Provide mechanical anchorage devices as described above that accommodate deflection while maintaining the fire-rating of the wall assembly.

2.02 BOARD MATERIALS

A. Manufacturers - Gypsum-Based Board:
   1. American Gypsum Company; None - N/A: www.americangypsum.com/#sle.
   2. CertainTeed Corporation; None - N/A: www.certainteed.com/#sle.
   3. Continental Building Products; None - N/A: www.continental-bp.com/#sle.
   4. Georgia-Pacific Gypsum; None - N/A: www.gpgypsum.com/#sle.
   5. National Gypsum Company; None - N/A: www.nationalgypsum.com/#sle.
   6. PABCO Gypsum; None - N/A: www.pabcogypsum.com/#sle.
   7. USG Corporation; None - N/A: www.usg.com/#sle.
   8. Substitutions: See Section 01 6000 - Product Requirements.

B. Impact Resistant Wallboard:
   1. Application: Install at wood and metal shops, drama, and weight room.
   2. Surface Abrasion: Level 3, minimum, when tested in accordance with ASTM C1629/C1629M.
   3. Indentation: Level 1, minimum, when tested in accordance with ASTM C1629/C1629M.
   4. Soft Body Impact: Level 3, minimum, when tested in accordance with ASTM C1629/C1629M.
   5. Hard Body Impact: Level 2, minimum, when tested in accordance with ASTM C1629/C1629M.
   6. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
   7. Type: Fire-resistance-rated Type X, UL or WH listed.
   8. Thickness: 5/8 inch.
   9. Edges: Tapered.

C. Backing Board For Non-Wet Areas: Water-resistant gypsum backing board as defined in ASTM C1396/C1396M; sizes to minimum joints in place; ends square cut.
   1. Application: at all window jambs and sills, restrooms, and within 2 feet of all plumbing fixtures including drinking fountains or electric water coolers.
   2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.

3. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
4. Type X Thickness: 5/8 inch.
5. Edges: Tapered.
6. Products:
    a. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond XP Fire-Shield Gypsum Board: www.goldbondbuilding.com/#sle.
    b. Substitutions: See Section 01 6000 - Product Requirements.

D. Ceiling Board: Special sag resistant gypsum ceiling board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: ceilings in wet areas, unless otherwise indicated.
2. Thickness: 5/8 inch.
3. Edges: Tapered.

E. Exterior Sheathing Board: Sizes to minimize joints in place; ends square cut.
1. Application: Exterior sheathing, unless otherwise indicated.
2. Glass Mat Faced Sheathing: Glass mat faced gypsum substrate as defined in ASTM C1177/C1177M.
3. Core Type: Regular.
4. Regular Board Thickness: 1/2 inch.
5. Edges: Square.

F. Exterior Soffit Board: Exterior gypsum soffit board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Ceilings and soffits in protected exterior areas, unless otherwise indicated.
2. Types: Regular, in locations indicated.
3. Regular Type Thickness: 5/8 inch.
4. Edges: Tapered.

G. Roof Cover Board
1. Application: Parapets, unless otherwise indicated.
2. Type Thickness: 5/8 inch
3. Products:
    a. Georgia-Pacific Gypsum; Densdeck Prime, www.gpgypsum.com/#sle.
    b. Substitutions: See Section 01 6000 - Product Requirements
4. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion- resistance provisions in FM Global 4470, designed for fastening substrate board to roof deck.

2.03 GYPSUM BOARD ACCESSORIES

A. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness: 3-1/2" inch.

B. Acoustic Putty Packs installed at back boxes in sound rated walls and at interior of exterior fured walls. Products by 3M, Hilti, or equivilent.

C. Water-Resistive Barrier: See Section 07 2500.

D. Beads, Joint Accessories, and Other Trim: ASTM C1047, galvanized steel or rolled zinc, unless noted otherwise.
1. Corner Beads: Low profile, for 90 degree outside corners.
2. Expansion Joints:
    a. Type: V-shaped metal with factory-installed protective tape.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 BOARD INSTALLATION

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

B. Single-Layer Nonrated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.

C. Double-Layer Non-Rated: Use gypsum board for first layer, placed parallel to framing or furring members, with ends and edges occurring over firm bearing. Place second layer perpendicular to framing or furring members. Offset joints of second layer from joints of first layer.

D. Exposed Gypsum Board in Interior Wet Areas: Seal joints, cut edges, and holes with water-resistant sealant.

E. Exterior Sheathing: Comply with ASTM C1280. Install sheathing vertically, with edges butted tight and ends occurring over firm bearing.
   1. Paper-Faced Sheathing: Immediately after installation, protect from weather by application of water-resistive barrier.

F. Exterior Soffits: Install exterior soffit board perpendicular to framing, with staggered end joints over framing members or other solid backing.

3.03 FINISH AND TEXTURE

A. Finish Level: Level 4

B. Texture: None

3.04 INSTALLATION OF TRIM AND ACCESSORIES

A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
   1. Not more than 30 feet apart on walls and ceilings over 50 feet long.
   2. At exterior soffits, not more than 30 feet apart in both directions.

B. Corner Beads: Install at external corners, using longest practical lengths.

C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials.

END OF SECTION 09 2116

B1 PLAN - REFLECTED CEILING

1/8" = 1'-0" AREA D - LEVEL 01

GENERAL NOTES

1. KEYNOTES (#) THE FIRST TWO NUMBERS REPRESENT THE RELATED CSI MASTER FORMAT DIVISION. THE SECOND SET OF NUMBERS REPRESENTS AN IDENTIFYING MARK VALUE. NOT ALL VALUES MAY BE USED OR OCCUR IN THE DOCUMENT SET.

   ADDITIONALLY, KEYNOTES RETAIN THEIR ASSIGNED VALUE UNIVERSALLY THROUGHOUT THE SET. THE KEYNOTES LISTED BELOW, REPRESENT THE KEYNOTES FOUND AND UTILIZED ON THIS SHEET AND EACH LIST WILL DIFFER RESPECTIVE TO ITS' SHEET. THEREFORE, BASED ON ACTUAL KEYNOTES UTILIZED ON A GIVEN SHEET OF DRAWINGS, GAPS IN THE SEQUENCING WILL OCCUR.
2. CONTRACTOR SHALL COORDINATE LAY-OUT OF STRUCTURAL, MECHANICAL, SPRINKLER AND ELECTRICAL. NOTIFY ARCHITECT OF ANY CONFLICTS.
3. ALL INTERIOR DIMENSIONS ARE TO/FROM FACE OF STUD / MASONRY. ALL EXTERIOR DIMENSIONS ARE TO/FROM FACE OF GRID/FOUNDATION. DIMENSIONS MARKED 'CLEAR' OR 'CLR' ARE FROM FACE OF FINISH TO FACE OF FINISH AND SHALL BE MAINTAINED AND CANNOT BE FIELD ADJUSTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT.
4. SEE A-691 LEGEND FOR FINISH LEGEND
5. CEILING HEIGHT IS B.O. FINISHED CEILING HEIGHT ABOVE FINISHED FLOOR
6. MEASUREMENTS SPECIFYING "EQ" = EQUAL LENGTH OR WIDTH TO FILL REMAINDER OF LENGTH REQUIRED
7. CEILINGS WITH NO DIRECT MEASUREMENTS, ASSUME CEILING TO BE EQUALLY DISTANCED ON ALL SIDES OF ROOM
8. FIXTURES IN OPEN TO STRUCTURE AREAS ARE DIMENSIONED FROM WALL OR CENTERLINE OF ROOM
9. LIGHT FIXTURES WITH NO DIMENSIONS ARE TO BE CENTERED ON ROOM UNLESS OTHERWISE NOTED
10. FIXTURES WITHIN A.C.T. TO BE CENTERED IN GRID UNLESS OTHERWISE NOTED
11. FIXTURES ON GRID SHALL BE IN LINE WITH GRID CENTER ON CENTER UNLESS OTHERWISE NOTED
12. ROLLER SHADES PER FINISH PLANS. COORDINATE MANUAL AND POWER LOCATIONS WITH THE ELECTRICAL AND FINISH PLANS.
13. FIRE SPRINKLER HEADS, MOTION DETECTORS, LIGHT SENSORS, ETC. ARE TO BE CENTERED IN THE PANEL.
14. BID ALTERNATE 1 SHEETS SERIES A-800 INDICATED WITH: [dashed]
15. OPEN TO STRUCTURE CEILINGS TO HAVE GYPSUM AT WALLS EXTEND UP INTO FLUTES OF DECK, ANY MECHANICAL, PLUMBING OR STRUCTURAL PENETRATIONS THROUGH WALLS SHALL BE ENCLOSED, PROVIDED A CLEAN FINISH TIGHT AROUND FIXTURES, BEAMS, PIPES, DUCTS, ETC.

KEYNOTES

(#) MARK	DESCRIPTION
11.12	WALL MOUNTED MOTERIZED PROJECTION SCREEN

LEGEND

MATERIALS

- 4'-0" x 4'-0" SUSPENDED ACOUSTICAL LAY-IN CEILING SYSTEM
- PAINTED GYPSUM BOARD CEILINGS TYPICAL, U.N.O.
- EXPOSED STRUCTURE TO RECIEVE 1-HR CEMENTITIOUS SPRAY
- 8'-0" x 4'-0" PAINTED TO MATCH DECK ACOUSTIC TECTUM PANEL ATTACHED TO DECK. (NO EXPOSED FASTENERS)
- PREFINISHED METAL SOFFIT
- METAL DECK - O.T.S.

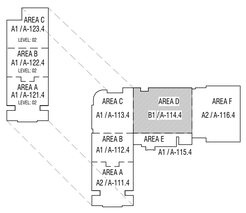
SYMBOLS

- 2x2' / 2x4' TROFFERS
- RECESSED FIXTURE
- SUSPENDED HIGHBAY FIXTURE
- SUSPENED LINEAR FIXTURES
- SURFACE MOUNTED LINEAR FIXTURES
- RECESSED LINEAR FIXTURES
- 8' LINEAR WALL SCONCE
- SQUARE LED LIGHTS
- 2x4 CEILING SOUND DIFFUSER PANEL
- ADJUSTABLE TRACK LIGHTING
- DECORATIVE PENDANT LIGHTS
- MOUNTED LAY IN LIGHT FIXTURE

AIR GRILLES/ACCESS PANELS:

- EXHAUST
- SUPPLY / FRESH
- RETURN / RELIEF
- ACCESS PANEL
- DENOTES CENTER OF ACT TILE AND DIRECTION FOR LAYOUT

KEY PLAN



design west | architects
255 SOUTH 200 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03
A05	MAY 2024	ADDENDUM 05

PROJECT #: 123005
DRAWN BY: FRANKS
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH STEPHEN M WILLIAMS 7/12/2024 LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

PLAN - LEVEL 01 - AREA D - REFLECTED CEILING

A-114.4

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GENERAL NOTES

1. KEYNOTES: (#) THE FIRST TOW NUMBERS REPRESENT THE RELATED CSI MASTER FORMAT DIVISON. THE SECOND SET OF NUMBERS REPRESENT AN IDENTIFING MARK VALUE. NOT ALL MAY BE USED OR OCCURE IN THE DOCUMENT SET.

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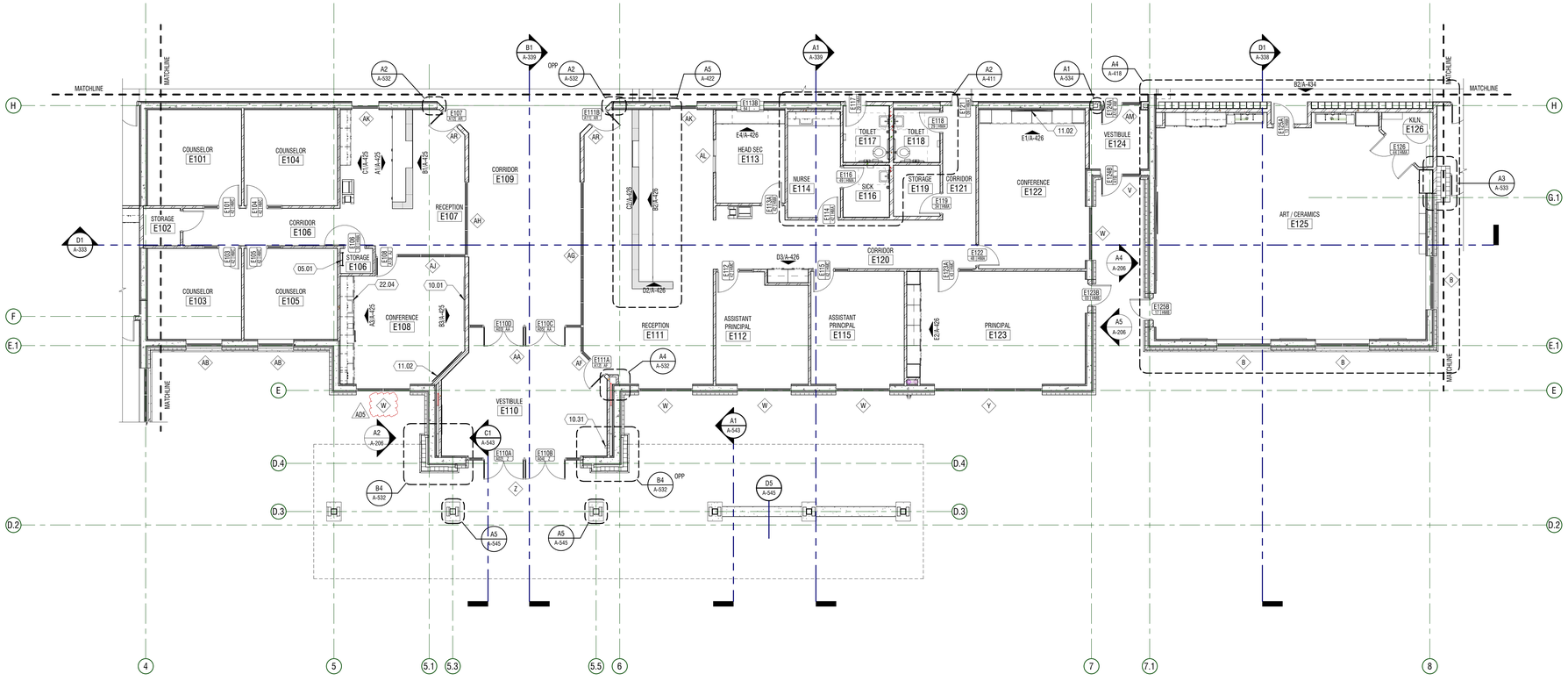
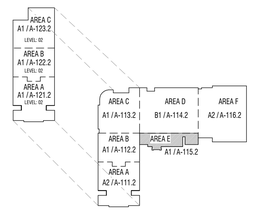
4. HOLLOW METAL FRAME AND ALUMINUM WINDOW TYPES (11) ARE SHOWN ON SHEET SERIES A-570. DIMENSIONS TO FRAMES WILL BE TO OUTSIDE EDGE OF FRAME. SEE BOTH THE FLOOR PLAN AND EXTERIOR ELEVATIONS FOR ALL WINDOW TYPE REFERENCES
5. SEE FINISH PLANS FOR SIGNAGE LOCATION, SIGNAGE SYMBOL
6. SEE SHEET SERIES G-004 & A-612 FOR ALL FIRE WALLS, SMOKE WALLS, WALLS TO CEILING LEVEL, SOUND WALLS
7. FEC = FIRE EXTINGUISHER IN SEMI-RECESSED CABINET
8. A1/A-101 INDICATES INTERIOR ROOM ELEVATIONS ON SHEET REFERENCED
9. SEE SITE PLANS FOR EXTERIOR STAIRS, RAILING AND RAMP DETAILS
10. ROLLER SHADES PER FINISH PLANS
11. BID ALTERNATE 1 SHEETS SERIES A-800 INDICATED WITH: [dashed box]

KEYNOTES

#	MARK	DESCRIPTION
	05.01	WALL MOUNTED LADDER WITH LOCKED ACCESS GATE
	10.01	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
	10.31	KNOX BOX
	11.02	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING. OWNER PROVIDED, CONTRACTOR INSTALLED
	22.04	SINK



KEY PLAN



NORTH

A1 PLAN - ANNOTATION

1/8" = 1'-0" AREA E - LEVEL 01

5/8/2024 4:18:25 PM

CONSTRUCTION DOCUMENTS

design west | architects
255 SOUTH 300 WEST LOGAN, UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

HYDE PARK MIDDLE SCHOOL
250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

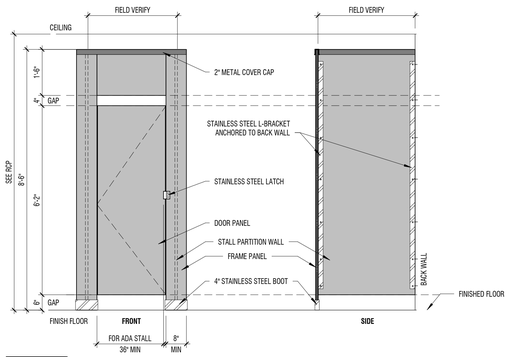
MARK:	DATE:	DESCRIPTION:
ADS	MAY 2024	ADDENDUM 05

PROJECT #: 123005
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5782241
REGISTERED
LICENSED ARCHITECT

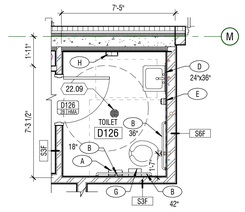
PLAN - LEVEL 01 - AREA E - ANNOTATION

A-115.2



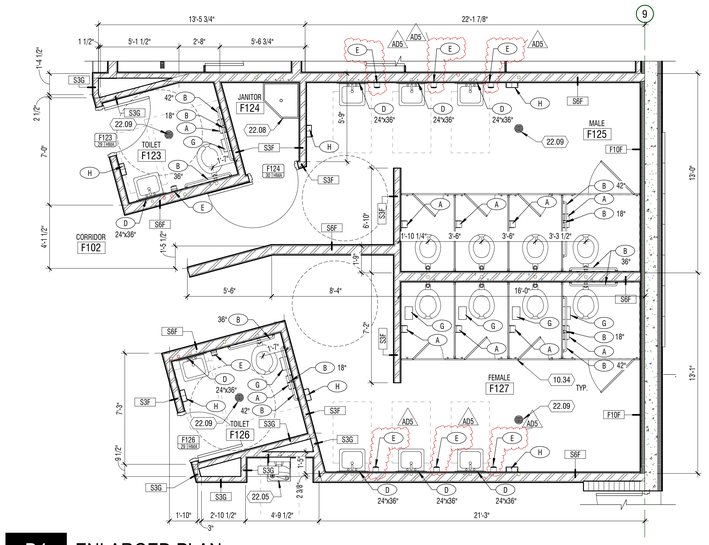
D1 BATHROOM PARTITIONS

1/2" = 1'-0"



D2 ENLARGED PLAN

1/4" = 1'-0" TOILET D126



D4 ENLARGED PLAN

1/4" = 1'-0" MALE F125 - FEMALE F127

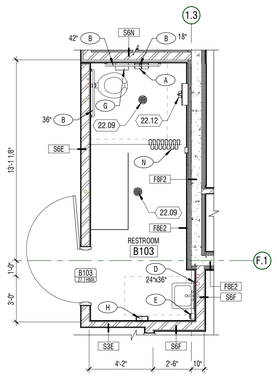
ACCESSORIES

- (A) TOILET TISSUE DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (B) GRAB BAR
  LENGTH INDICATED ON PLAN
- (C) PAPER TOWEL DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (D) MIRROR
  SIZE INDICATED ON PLAN
- (E) WALL MOUNTED SOAP DISPENSER
  OWNER FURNISHED, CONTRACTOR INSTALLED
- (F) FEMININE NAPKIN VENDOR
- (G) FEMININE NAPKIN DISPOSAL
- (H) ELECTRIC HAND DRYER
- (J) DIAPER CHANGING STATION
- (K) DRAIN PIPE PROTECTION
- (L) NOT USED
- (M) NOT USED
- (N) SHOWER CURTAIN
- (P) SHOWER SEAT

KEYNOTES

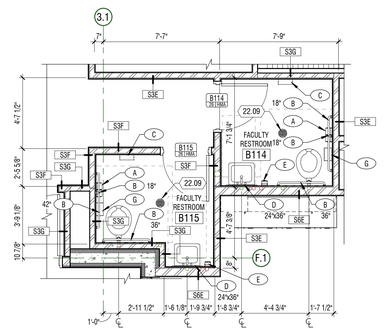
(#)

MARK	DESCRIPTION
10.34	PARTITIONS - SEE DETAIL D1/A-411
11.09	DISHWASHER - OWNER PROVIDED, CONTRACTOR INSTALLED
22.04	SINK
22.05	DRINKING FOUNTAIN
22.08	MOP SINK
22.09	FLOOR DRAIN - SLOPE FLOOR TO DRAIN
22.12	SHOWER HEAD



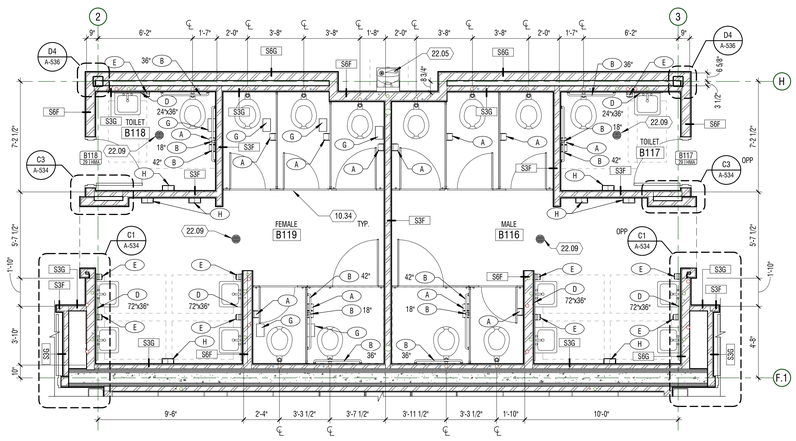
B1 ENLARGED PLAN

1/4" = 1'-0" RESTROOM B103



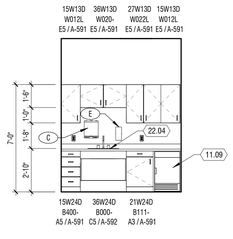
B2 ENLARGED PLAN

1/4" = 1'-0" FACULTY RESTROOM B114/B214 - B115/B215



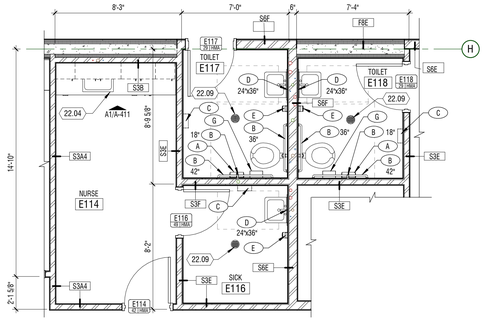
B4 ENLARGED PLAN

1/4" = 1'-0" MALE B116/B216 - FEMALE B119/B219



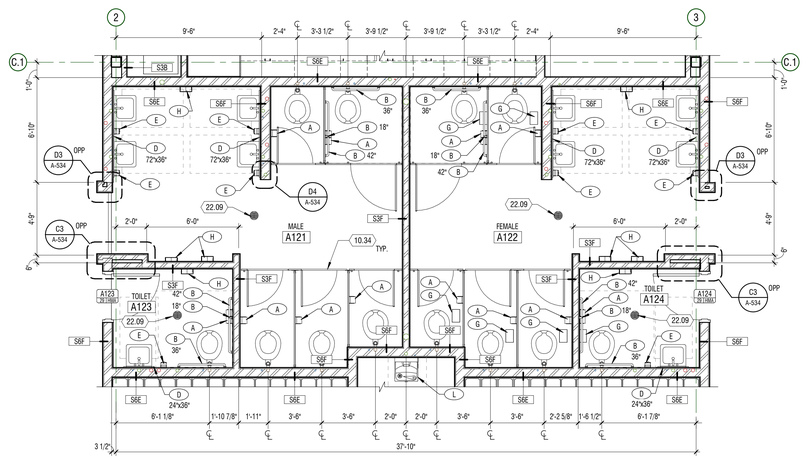
A1 INTERIOR ELEVATION

1/4" = 1'-0" NURSE E114



A2 ENLARGED PLAN

1/4" = 1'-0" NURSE E114 - SICK E116 - TOILET E117/E118



A4 ENLARGED PLAN

1/4" = 1'-0" MALE A121/A221 - FEMALE A122/A222

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

design west | architects
255 SOUTH 300 WEST
LOGAN, UT 84321
795 NORTH 400 WEST
SALT LAKE CITY UT 84103

MARK:	DATE:	DESCRIPTION:
ADS	MAY 2024	ADDENDUM 05

PROJECT #: 123005
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

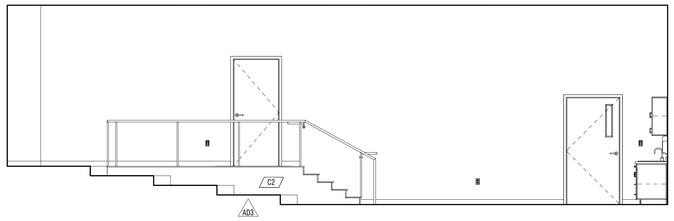
STATE OF UTAH
STEPHEN M. WILLIAMS
5/2/2024
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

ENLARGED VIEWS

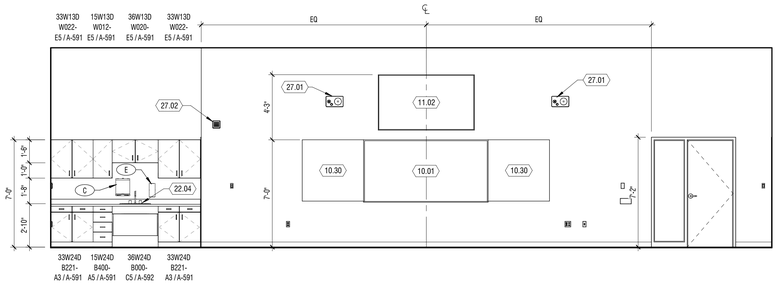
A-411

5/2/2024 2:16:37 PM



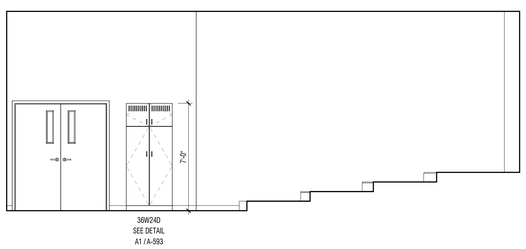
D1 INTERIOR ELEVATION

1/4" = 1'-0" CHOIR / DRAMA D111



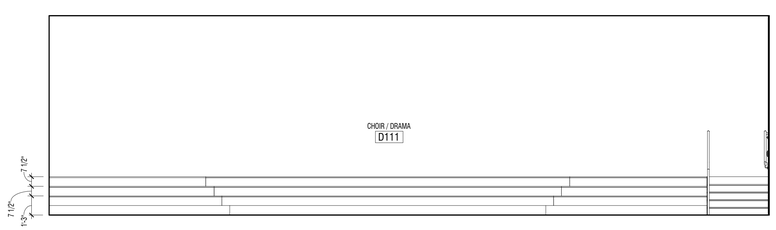
C1 INTERIOR ELEVATION

1/4" = 1'-0" CHOIR / DRAMA D111



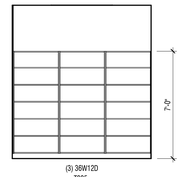
B1 INTERIOR ELEVATION

1/4" = 1'-0" CHOIR / DRAMA D111



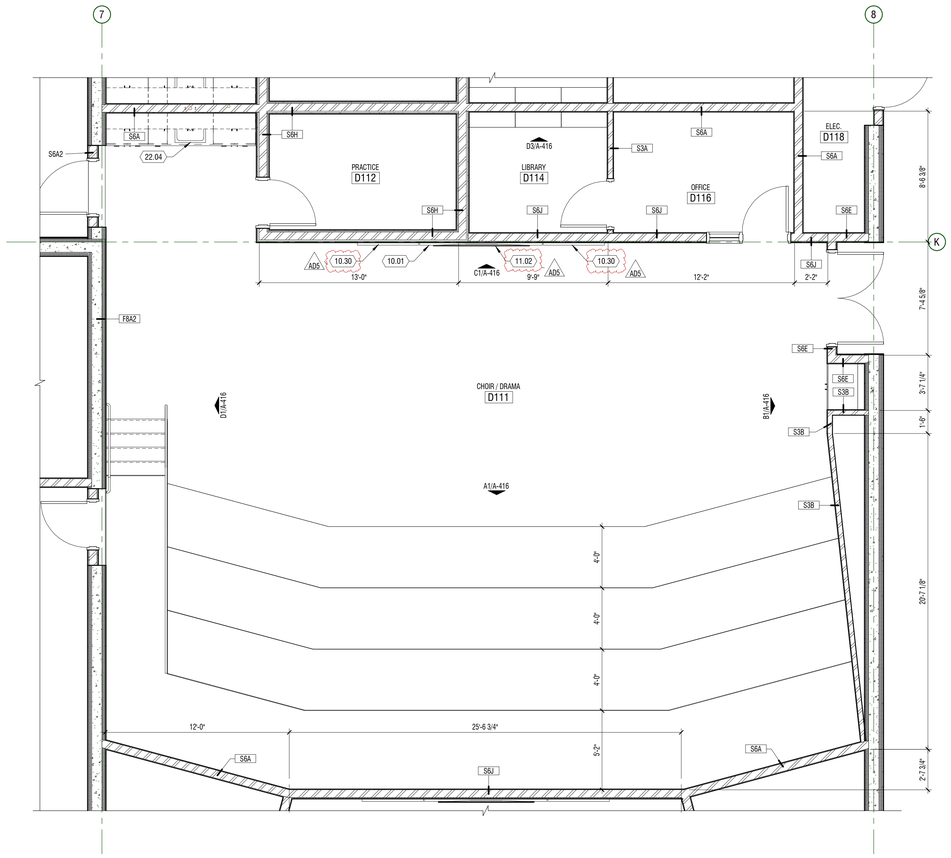
A1 INTERIOR ELEVATION

1/4" = 1'-0" D111 CHOIR / DRAMA



D3 INTERIOR ELEVATION

1/4" = 1'-0" LIBRARY D114



A3 ENLARGED PLAN

1/4" = 1'-0" D111 CHOIR / DRAMA

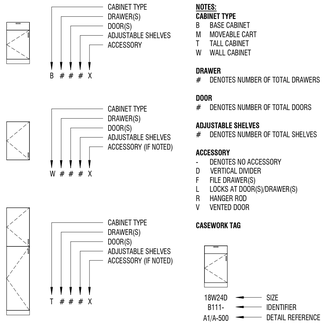
ACCESSORIES

- A — TOILET TISSUE DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
- B — GRAB BAR, LENGTH INDICATED ON PLAN
- C — PAPER TOWEL DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
- D — MIRROR, SIZE INDICATED ON PLAN
- AD5 / E — WALL MOUNTED SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
- F — FEMININE NAPKIN VENDOR
- G — FEMININE NAPKIN DISPOSAL
- H — ELECTRIC HAND DRYER
- J — DIAPER CHANGING STATION
- K — DRAIN PIPE PROTECTION
- L — NOT USED
- M — NOT USED
- N — SHOWER CURTAIN
- P — SHOWER SEAT

KEYNOTES

# MARK	DESCRIPTION
10.01	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
10.30	4'-0" x 4'-0" ACOUSTIC FELT TACK BOARD (FRAMELESS)
11.02 / AD5	WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING, OWNER PROVIDED, CONTRACTOR INSTALLED
22.04	SINK
27.01	SPEAKER
27.02	SPEAKER TALKBACK

CASEWORK KEY



NOTES:

CABINET TYPE
- B BASE CABINET
- M MOVEABLE CART
- T TALL CABINET
- W WALL CABINET

DRAWER
- # DENOTES NUMBER OF TOTAL DRAWERS

DOOR
- # DENOTES NUMBER OF TOTAL DOORS

ADJUSTABLE SHELVES
- # DENOTES NUMBER OF TOTAL SHELVES

ACCESSORY
- - DENOTES NO ACCESSORY
- D VERTICAL DIVIDER
- F FILE DRAWER(S)
- L LOCKS AT DOOR(S)/DRAWER(S)
- R HANGER ROD
- V VENTED DOOR

CASEWORK TAG

18W24D — SIZE
B111- — IDENTIFIER
A1/A-500 — DETAIL REFERENCE

design west | architects
255 SOUTH 300 WEST
795 NORTH 400 WEST
LOGAN, UT 84321
SALT LAKE CITY UT 84103

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
A03	MAY 2024	ADDENDUM 03
AD5	MAY 2024	ADDENDUM 05

PROJECT #: 123005
DRAWN BY: NIELSON
CHECKED BY: RIGBY
ISSUED: 05.02.2024

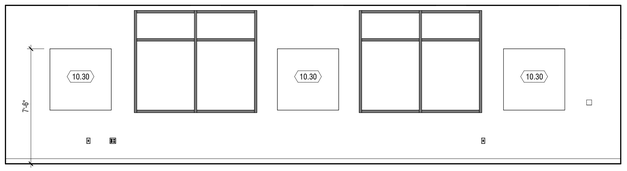
STATE OF UTAH — STEPHEN N WILLIAMS — 5/8/2024 — LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

ENLARGED VIEWS

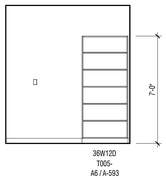
A-416

5/8/2024 2:19:44 PM



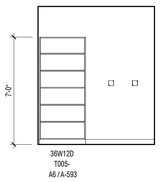
E1 INTERIOR ELEVATION

1/4" = 1'-0" ART / CERAMICS E125



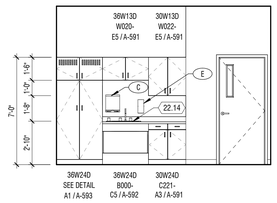
D1 INTERIOR ELEVATION

1/4" = 1'-0" KILN E126



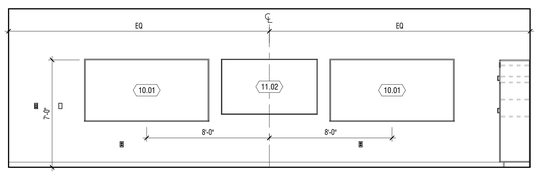
D2 INTERIOR ELEVATION

1/4" = 1'-0" KILN E126



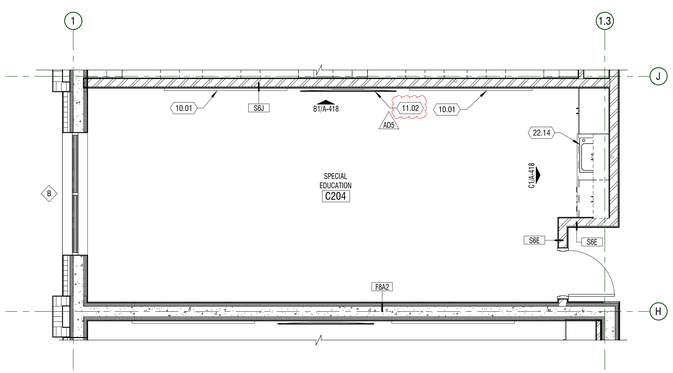
C1 INTERIOR ELEVATION

1/4" = 1'-0" SPECIAL EDUCATION C204



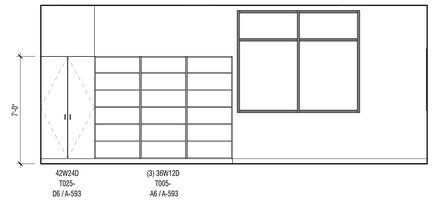
B1 INTERIOR ELEVATION

1/4" = 1'-0" SPECIAL EDUCATION C204



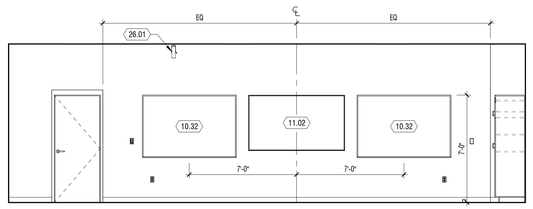
A1 ENLARGED PLAN

1/4" = 1'-0" SPECIAL EDUCATION C204



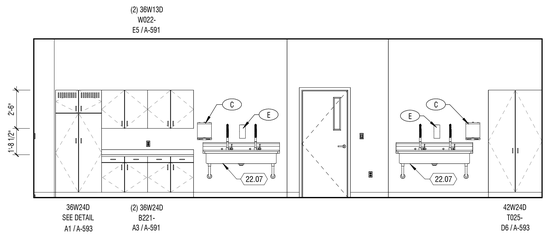
E4 INTERIOR ELEVATION

1/4" = 1'-0" ART / CERAMICS E125



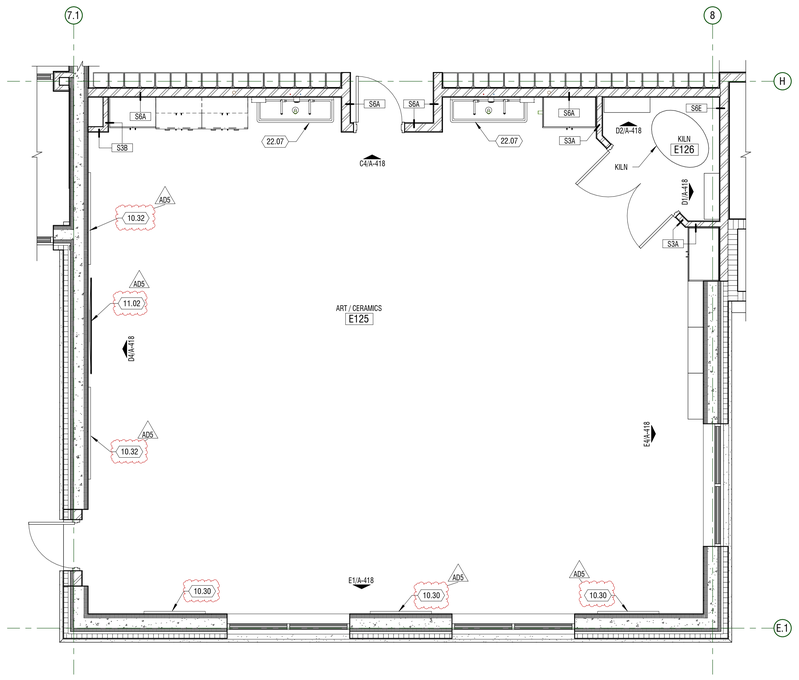
D4 INTERIOR ELEVATION

1/4" = 1'-0" ART / CERAMICS E125



C4 INTERIOR ELEVATION

1/4" = 1'-0" ART / CERAMICS E125



A4 ENLARGED PLAN

1/4" = 1'-0" ART / CERAMIS E124

ACCESSORIES

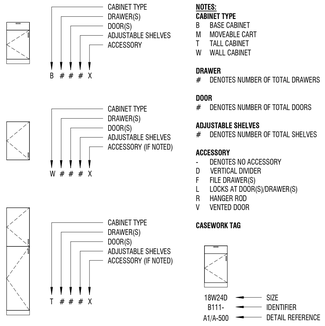
- A — TOILET TISSUE DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
- B — GRAB BAR, LENGTH INDICATED ON PLAN
- C — PAPER TOWEL DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
- D — MIRROR, SIZE INDICATED ON PLAN
- ADS E — WALL MOUNTED SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
- F — FEMININE NAPKIN VENDOR
- G — FEMININE NAPKIN DISPOSAL
- H — ELECTRIC HAND DRYER
- J — DIAPER CHANGING STATION
- K — DRAIN PIPE PROTECTION
- L — NOT USED
- M — NOT USED
- N — SHOWER CURTAIN
- P — SHOWER SEAT

KEYNOTES

— ADS

MARK	DESCRIPTION
10.01	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
10.30	4'-0" x 4'-0" ACOUSTIC FELT TACK BOARD (FRAMELESS)
10.32	WHITEBOARD 8'-0" X 4'-0". HIDDEN TAKLESS PAPER HOLDER ON TOP AND MARKER TRAY ON BOTTOM
11.02	ADS — WALL MOUNTED DIGITAL DISPLAY - SEE DETAIL E1/A-591 FOR MOUNTING. OWNER PROVIDED, CONTRACTOR INSTALLED
22.07	TROUGH WASH SINK
22.14	SINK W/BUBBLER
26.01	CEILING MOUNTED POWER CORD DROP - SEE ELECTRICAL

CASEWORK KEY



NOTES:

CABINET TYPE
- B BASE CABINET
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- T TALL CABINET
- W WALL CABINET

DRAWER
- # DENOTES NUMBER OF TOTAL DRAWERS

DOOR
- # DENOTES NUMBER OF TOTAL DOORS

ADJUSTABLE SHELVES
- # DENOTES NUMBER OF TOTAL SHELVES

ACCESSORY
- - DENOTES NO ACCESSORY
- D VERTICAL DIVIDER
- F FILE DRAWER(S)
- L LOCKS AT DOOR(S).DRAWER(S)
- R HANGER ROD
- V VENTED DOOR

CASEWORK TAG

design west | architects
255 SOUTH 300 WEST
LOGAN, UT 84321
795 NORTH 400 WEST
SALT LAKE CITY, UT 84103

HYDE PARK MIDDLE SCHOOL

250 W 200 S HYDE PARK, UTAH
CACHE COUNTY SCHOOL DISTRICT

MARK:	DATE:	DESCRIPTION:
ADS	MAY 2024	ADDENDUM 05

PROJECT #: 123005
DRAWN BY: NAVA
CHECKED BY: RIGBY
ISSUED: 05.02.2024

STATE OF UTAH
STEPHEN M WILLIAMS
5/2/2024
LICENSED ARCHITECT

CONSTRUCTION DOCUMENTS

ENLARGED VIEWS

A-418

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