

# FACPAC Contract Change Order Supplemental Information Form (Ref# 60467)

Form Status: Saved

Tier 1 Project: Phase 6 Additions and Renovations - Project #175-520

BG Number: 21-042

District: Beechwood Independent (HB678) (026)

Status: Active

Phase: Project Initiation (View Checklist)

Contract: DELTA ELECTRICAL CONTRACTORS, LTD, 0216, ELECTRICAL

Type: CM Bid Package

Proposed

Change Order Number	216-06
Time Extension Required	No
Date Of Change Order	8/1/2024
Change Order Amount To Date	

## Construction Contingency

Calculations below are project wide. Remaining negative Construction Contingency may require the submission of a revised BG1.

Current Approved Amount	\$1,533,894.48
Net Approved COs	\$134,347.24
Remaining After Approved COs	\$1,399,547.24
Net All COs	\$652,494.33
Remaining After All COs	\$881,400.15

This Requested Change Order Amount \$99,160.00

+/-

Change In A/E Fee This Change Order \$0.00

+/-

Change In CM Fee This Change Order \$0.00

+/-

Remaining Construction Contingency  
Balance

Contract Change Requested By Architect/Engineer; Construction Manager

Contract Change Reason Code Expansion of Scope

Change Order Description And Justification

Additional cost to add floor boxes in Video Room 129. \$14,831

Additional cost to add theater lighting and LED logo. \$23,603

Additional cost of adding power and data in various locations. \$60,726

Cost Benefit To Owner

Contract unit prices have been utilized Yes  
to support the cost associated with this

change order.

## Detailed Cost Breakdown

Contract unit prices have not been utilized, provide a detailed cost breakdown which separates labor, material, profit and overhead.

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<b>Detail Item</b>	<b>Amount</b>	<b>Percent of Total</b>
Labor		0.00%
Materials		0.00%
Profit and Overhead		
Bond Insurance		0.00%
<b>Cost Breakdown Total:</b>	<b>\$0.00</b>	
Cost for this Change Order supported by an alternate bid or competitive price quote		
Explain Why		

# Change Order Supplemental Information Form Signature Page (Online Form Ref# 60467)

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Architect

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Date

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Construction Manager

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Date

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Finance Officer

---

Date

---

Local Board of Education Designee

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Date



# AIA<sup>®</sup> Document G701/CMa<sup>™</sup> – 1992

## Change Order - Construction Manager-Adviser Edition

OWNER   
 CONSTRUCTION MANAGER   
 ARCHITECT   
 CONTRACTOR   
 FIELD   
 OTHER

PROJECT (Name and Address)  
 BEECHWOOD INDEPENDENT SCHOOLS PHASE 6B  
 54 BEECHWOOD ROAD  
 FORT MITCHELL, KY 41017

CHANGE ORDER NUMBER: 216-06  
 INITIATION DATE: 8/1/2024

TO CONTRACTOR (Name and Address)  
 DELTA ELECTRICAL CONTRACTORS

PROJECT NUMBERS: 000744  
 CONTRACT DATE: 5/17/2022  
 CONTRACT FOR: BID PACKAGE #216 ELECTRICAL

### THE CONTRACT IS CHANGED AS FOLLOWS:

Additional cost to add floor boxes in Video Room 129. \$14,831  
 Additional cost to add theater lighting and LED logo. \$23,603  
 Additional cost of adding power and data in various locations. \$60,726

The original Contract Sum was	3,579,818.00
Net change by previously authorized Change Orders	42,537.00
The Contract Sum prior to this Change Order was	3,622,355.00
The Contract Sum will be Increased by this Change Order in the amount of	99,160.00
The new Contract Sum including this Change Order will be	3,721,515.00

The Contract Time will be adjusted by 0 days.  
 The date of Substantial Completion as of the date of this Change Order therefore is 4/18/2024.

### NOT VALID UNTIL SIGNED BY THE CONSTRUCTION MANAGER, ARCHITECT, CONTRACTOR AND OWNER.

CODELL CONSTRUCTION COMPANY  
 \_\_\_\_\_  
 CONSTRUCTION MANAGER (Firm Name)  
 4475 ROCKWELL ROAD WINCHESTER, KY 40391  
 \_\_\_\_\_  
 ADDRESS

ROBERT EHMET HAYES & ASSOCIATES  
 \_\_\_\_\_  
 ARCHITECT (Firm Name)  
 2512 DIXIE HIGHWAY FORT MITCHELL, KY 41017  
 \_\_\_\_\_  
 ADDRESS

BY (Signature) \_\_\_\_\_  
 \_\_\_\_\_  
 (Typed Name) DATE:

BY (Signature) \_\_\_\_\_  
 \_\_\_\_\_  
 (Typed Name) DATE:

DELTA ELECTRICAL CONTRACTORS  
 \_\_\_\_\_  
 CONTRACTOR (Firm Name)  
 \_\_\_\_\_  
 ADDRESS

BEECHWOOD INDEPENDENT SCHOOLS BOARD OF EDUCATION  
 \_\_\_\_\_  
 OWNER (Firm Name)  
 50 BEECHWOOD ROAD FORT MITCHELL, KY 41017  
 \_\_\_\_\_  
 ADDRESS

BY (Signature) \_\_\_\_\_  
 \_\_\_\_\_  
 (Typed Name) DATE:

BY (Signature) \_\_\_\_\_  
 \_\_\_\_\_  
 (Typed Name) DATE:





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# Document G709™ – 2018

## Proposal Request

**PROJECT:** *(name and address)*  
Beechwood Schools - Phase 6B  
Improvements  
54 Beechwood Road  
Fort Mitchell, Kentucky 41017

**CONTRACT INFORMATION:**  
Contract For: Total Project  
  
Date: October 06, 2020

Architect's Project Number: 175-520  
Proposal Request Number: Twenty-Four  
(24)  
Proposal Request Date: March 15, 2023

**OWNER:** *(name and address)*  
Beechwood Independent Board of  
Education  
50 Beechwood Road  
Fort Mitchell, Kentucky 41017

**ARCHITECT:** *(name and address)*  
Robert Ehmet Hayes & Associates, PLLC  
  
2512 Dixie Highway  
Fort Mitchell, Kentucky 41017

**CONTRACTOR:** *(name and address)*  
Codell Construction Company  
  
4475 Rockwell Road  
Winchester, Kentucky 40391

The Owner requests an itemized proposal for changes to the Contract Sum and Contract Time for proposed modifications to the Contract Documents described herein. The Contractor shall submit this proposal within Zero (0) days or notify the Architect in writing of the anticipated date of submission.

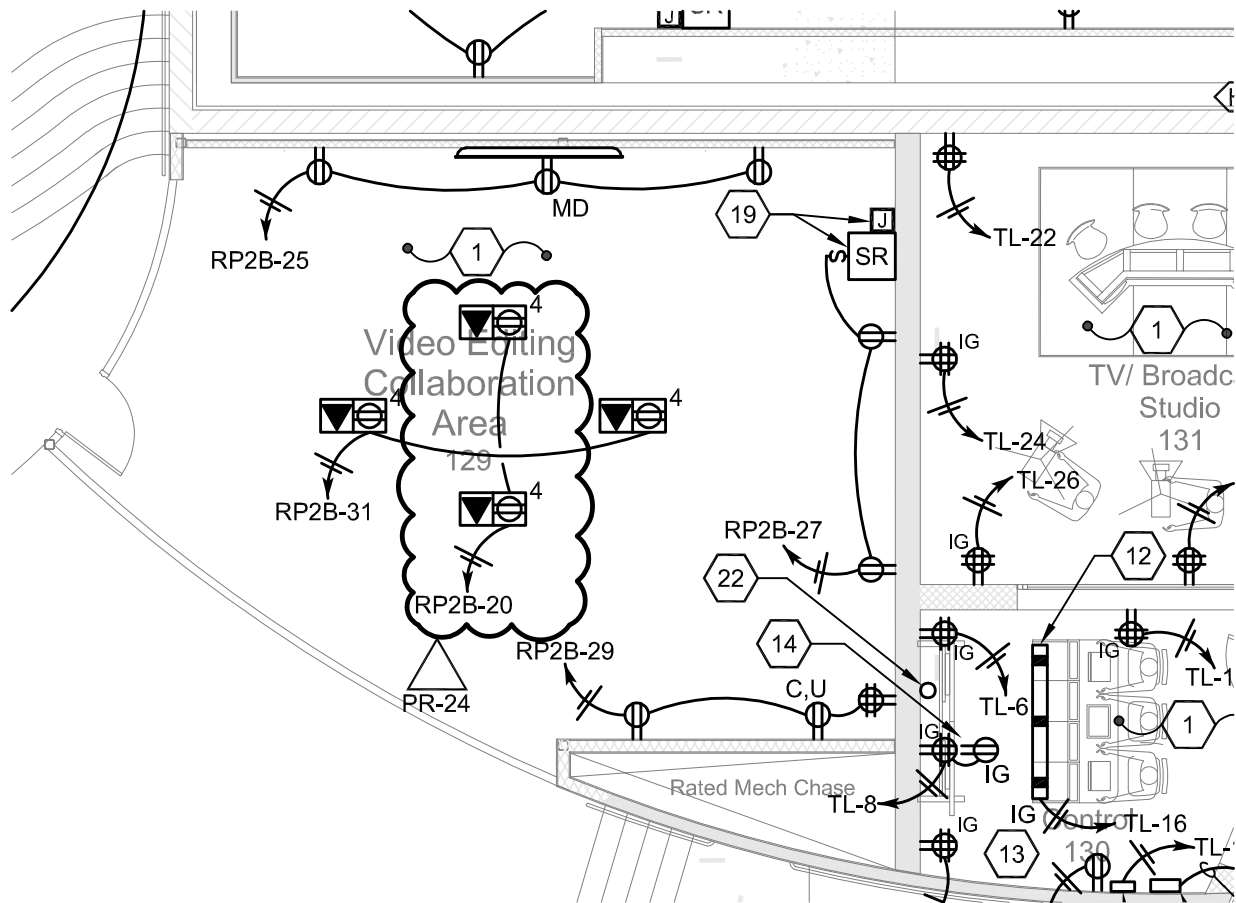
*(Insert a detailed description of the proposed modifications to the Contract Documents and, if applicable, attach or reference specific exhibits.)*

Additional floor boxes in Video Editing Collaboration Room 129 - see attached sketch SKE202c from STW.

**THIS IS NOT A CHANGE ORDER, A CONSTRUCTION CHANGE DIRECTIVE, OR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED IN THE PROPOSED MODIFICATIONS.**

**REQUESTED BY THE ARCHITECT:**

Joseph Ahrens Hayes, Member  
**PRINTED NAME AND TITLE**



1

# PARTIAL MAIN LEVEL - PR-24

NOT TO SCALE

STW PROJECT NO. 21022		
REVISIONS		
NO.	DESCRIPTION	DATE
1	PROPOSAL REQUEST #24	3/15/23
SCALE CHECK: THIS MARK SHOULD MEASURE EXACTLY 1/2" WHEN PLOTTED		

**BEECHWOOD SCHOOL**  
 PHASE 6B - BUILDING REPLACEMENT AND RENOVATIONS

ALL RIGHTS RESERVED.  
 THIS DOCUMENT IS THE PROPERTY OF SHROUT TATE WILSON CONSULTING ENGINEERS, PLLC AND SHALL NOT BE REPRODUCED IN WHOLE OR IN PART OR USED FOR CONSTRUCTION OF OTHER THAN THIS SPECIFIC PROJECT WITHOUT WRITTEN PERMISSION

DATE:	3/15/2023
SCALE:	NOT TO SCALE
SHEET NO.:	SKE2020c

Contractor: DELTA Electric  
 Submitted By: Eric Scheidt  
 Date: 4/24/23  
 Project Number: C762



**Beechwood Schools**

**Note: INCLUDE ALL APPROPRIATE BACKUP INVOICES FOR SUBCONTRACTORS AND MATERIALS**

CHANGE PROPOSAL #						
Scope Description: PR #24						
	QTY.	UNIT	RATE		SUBTOTAL	TOTAL
<b>MATERIAL:</b>						
1. SEE ATTACHED	1	E	\$ 3,226.71	\$	3,226.71	3,226.71
2.				\$	-	0.00
3.				\$	-	0.00
4.				\$	-	0.00
5.				\$	-	0.00
6.				\$	-	-
					<b>SUBTOTAL: \$ 3,226.71</b>	3,226.71
<b>TOOLS/ EQUIPMENT:</b>						
1. Technology	1		\$ 75.00	\$	75.00	75.00
2.				\$	-	-
3.				\$	-	-
4.				\$	-	-
5.				\$	-	-
6.				\$	-	-
					<b>SUBTOTAL: \$ 75.00</b>	75.00
<b>LABOR:</b>						
1. Straight Time	113.97	HRS @	\$65.00	\$	7,408.05	7,408.05
2. Third Shift	0.00	HRS @	\$82.00	\$	-	0.00
3. Overtime	0.00	HRS @	\$98.00	\$	-	0.00
4. On-Site Supervision	11.40	HRS @	\$75.00	\$	854.78	
5. Project Manager	5.70	HRS @	\$105.00	\$	598.34	
6. Safety	2.28	HRS @	\$65.00	\$	148.16	
7. Material Handling	2.28	HRS @	\$48.00	\$	109.41	
8. Clean-Up	1.14	HRS @	\$48.00	\$	54.71	
					<b>SUBTOTAL: \$ 9,173.45</b>	9,173.45
<b>SUB-CONTRACTORS</b>						
1. Nor-Com	1 LS		0	\$	-	0.00
2.	1 LS			\$	-	-
3.	1 LS			\$	-	-
4.	1 LS			\$	-	-
5.	1 LS			\$	-	-
6.	1 LS			\$	-	-
					<b>SUBTOTAL: \$ -</b>	0.00
<b>SUBTOTALS</b>						
MATERIAL/ TOOLS/ EQUIPMENT SUBTOTAL				\$	3,301.71	
LABOR SUBTOTAL				\$	9,173.45	
SUBCONTRACTOR SUBTOTAL				\$	-	
					<b>SUBTOTAL: \$ 12,475.16</b>	<b>\$ 12,475.16</b>
<b>OVERHEAD AND PROFIT</b>						
<i>Percentage</i>						
OVERHEAD AND PROFIT MARKUP				15%	\$ 1,871.27	
					<b>SUBTOTAL: \$ 1,871.27</b>	<b>\$ 1,871.27</b>
<i>Percentage</i>						
TAXES:				6.00%	\$ 193.60	
COMMERCIAL ACTIVITY TAX				0.00%	\$ -	
BOND:				2.00%	\$ 290.80	
					<b>SUBTOTAL: \$ 484.40</b>	<b>\$ 484.40</b>
<b>TOTAL COST:</b>		<b>\$14,831</b>				

**DELTA Electrical Contractors, LTD**  
**Phone: 513-421-7744 Fax: 513-421-8400**  
**Beechwood Schools Phase 6B : Beechwood 6B - PR #24**

**Job Number: CO105-5**  
**Bid Summary: Default**  
**Extension By Section**

Item #	Description	Quantity	Price	U	Ext Price	Labor Hr	U	Ext Lab Hr
--- Section #1 ---								
1001	3/4" EMT	130	95.99	C	124.79	7.50	C	9.75
1182	3/4" PVC Conduit	30	80.40	C	24.12	5.63	C	1.69
1185	1-1/2" PVC Conduit	30	229.21	C	68.76	6.38	C	1.91
1329	1-1/2" EMT Elbow	2	1,200.11	C	24.00	0.60	E	1.20
1344	3/4" GRC Elbow	2	587.14	C	11.74	0.60	E	1.20
1347	1-1/2" GRC Elbow	2	1,123.27	C	22.47	1.13	E	2.26
1445	3/4" Set Screw Steel Conn	4	21.58	C	0.86	0.15	E	0.60
1448	1-1/2" Set Screw Steel Conn	2	180.19	C	3.60	0.30	E	0.60
1465	3/4" Set Screw Steel Insul Throat Conn	4	87.30	C	3.49	0.15	E	0.60
1545	3/4" Set Screw Steel Cplg	17	45.61	C	7.75	0.18	E	3.06
1548	1-1/2" Set Screw Steel Cplg	6	198.04	C	11.88	0.33	E	1.98
1831	3/4" GRC Coupling	2	380.66	C	7.61	0.18	E	0.36
1834	1-1/2" GRC Coupling	2	359.99	C	7.20	0.30	E	0.60
2087	3/4" PVC Female Adaptor	2	48.41	C	0.97	0.24	E	0.48
2090	1-1/2" PVC Female Adaptor	2	90.96	C	1.82	0.38	E	0.76
2129	3/4" PVC Coupling	2	18.49	C	0.37	0.09	E	0.18
2132	1-1/2" PVC Coupling	2	36.01	C	0.72	0.18	E	0.36
2141	3/4" PVC Elbow	2	65.75	C	1.32	0.45	E	0.90
2144	1-1/2" PVC Elbow	2	176.54	C	3.53	0.68	E	1.36
2360	3/4" Conduit Hanger w/Bolt	16	90.00	C	14.63	37.50	C	6.09
2419	1/4" Beam Clamp	50	0.60	E	30.00	7.50	C	3.75
2469	4" Square Box (1/2 & 3/4 KO's)	1	269.95	C	2.70	0.45	E	0.45
2660	#12 THHN CU Stranded Wire	530	204.04	M	108.04	9.00	M	4.77
2935	Cat 6 Plenum (CMP) 23 Gauge 4-Pair Cable	1,600	622.14	M	995.42	23.10	M	36.96
3934	20A 1P 120/240V Bolt-On Circuit Breaker	1	18.28	E	18.28	0.60	E	0.60
4409	#14-12-10 Wire Termination Labor	3	0.00	E	0.00	0.27	E	0.81
5079	4" Square Flat Blank Cover	1	84.18	C	0.84	0.18	E	0.18
6133	Red Wirenuts	3	80.47	M	0.24	5.25	C	0.16
28661	Cat 6 Jack	16	9.55	E	152.80	0.60	E	9.60
69000	FLOORBOX	2	697.20	E	1,394.40	4.50	E	9.00
82094	2-INCH J-HOOK GALVANIZED	50	268.71	C	134.36	7.50	C	3.75
T0001	Test and Label CAT6 Cable	8	6.00	E	48.00	1.00	E	8.00
--- Section #1 Total ---					3,226.71			113.97
Job Total					3,226.71			113.97



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## Proposal Request

**PROJECT:** *(name and address)*  
Beechwood Schools - Phase 6B  
Improvements  
54 Beechwood Road  
Fort Mitchell, Kentucky 41017

**CONTRACT INFORMATION:**  
Contract For: Total Project  
  
Date: October 06, 2020

Architect’s Project Number: 175-520  
Proposal Request Number: Twenty Six  
(26)  
Proposal Request Date: June 23, 2023

**OWNER:** *(name and address)*  
Beechwood Independent Board of  
Education  
50 Beechwood Road  
Fort Mitchell, Kentucky 41017

**ARCHITECT:** *(name and address)*  
Robert Ehmet Hayes & Associates, PLLC  
  
2512 Dixie Highway  
Fort Mitchell, Kentucky 41017

**CONTRACTOR:** *(name and address)*  
Codell Construction Company  
  
4475 Rockwell Road  
Winchester, Kentucky 40391

The Owner requests an itemized proposal for changes to the Contract Sum and Contract Time for proposed modifications to the Contract Documents described herein. The Contractor shall submit this proposal within Zero (0) days or notify the Architect in writing of the anticipated date of submission.  
*(Insert a detailed description of the proposed modifications to the Contract Documents and, if applicable, attach or reference specific exhibits.)*

Theater lighting and backlit LED logo per STW PR #26 (attached)

**THIS IS NOT A CHANGE ORDER, A CONSTRUCTION CHANGE DIRECTIVE, OR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED IN THE PROPOSED MODIFICATIONS.**

**REQUESTED BY THE ARCHITECT:**

Joseph Ahrens Hayes, Member  
**PRINTED NAME AND TITLE**

## Proposal Request # 26

### Beechwood Independent Phase 6B Ft. Mitchell, Ky

Amy Sanders  
Robert Ehmet Hayes & Associates  
2512 Dixie Highway  
Ft. Mitchell, KY 41017

June 20, 2023

Beechwood Theater Lighting and Backlit LED Logo

Amy,

Please review and issue the following:

Please provide pricing for the addition of light fixtures as indicated on attached drawings E102. The new light fixture shall be manufactured by Gotham Lighting, model ICO-35/20-6AR-60D-120-EDXB or equivalent. The light fixture shall be DMX controlled and connected to the stage lighting relay panel (RP1) as indicated on the attached drawing. The light fixtures shall be installed underneath the theater balcony as indicated on the attached drawing.

Please provide pricing for the addition of a hardwired connection for Backlit LED logo as indicated on attached drawing E102. Provide power from spare circuit in panel RP2A as indicated on plan. Provide a dedicated lighting control network bridge and switching power pack for control. LED logo shall be time of day controlled. Field coordinate time of day scheduling with owner. Field coordinate exact junction box location with LED logo to provide a concealed connection.

Refer to attached Drawing E102 for design modifications.

**Attached Drawings: E102**

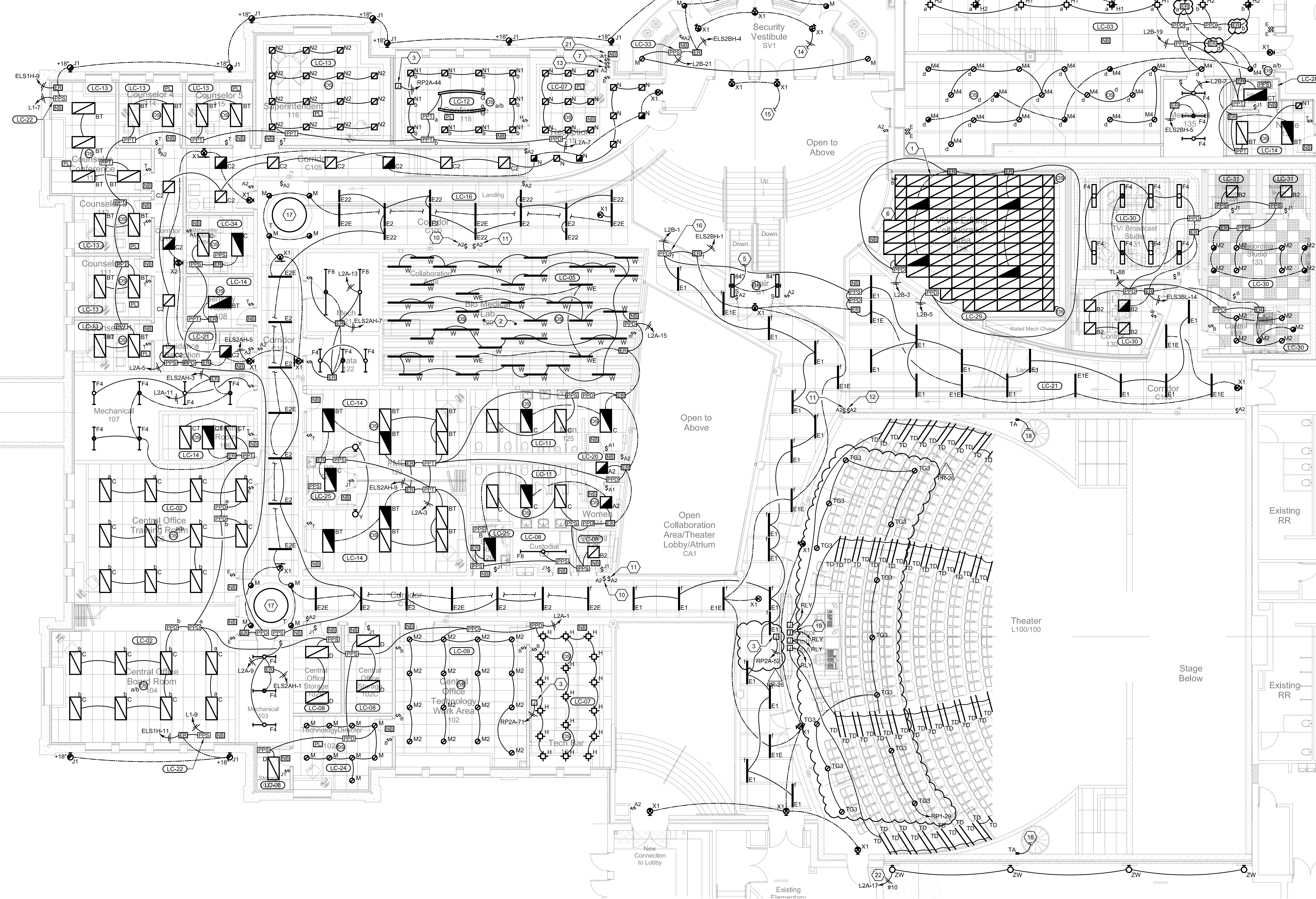


**GENERAL NOTES:**

- REFER TO SHEET E002 FOR ADDITIONAL GENERAL NOTES.
- REFER TO THEATRICAL DRAWINGS FOR ADDITIONAL COORDINATION AND ELECTRICAL REQUIREMENTS.
- MAKE ALL FINAL CONNECTIONS TO ALL THEATRICAL EQUIPMENT AND FIXTURES.
- REFER TO POWER DRAWINGS FOR QUANTITIES OF PLUG LOAD CONTROLLER MODULES WHERE PLUG LOAD CONTROL MODULES ARE INDICATED ON THIS DRAWING.
- ALL LIGHTING CONTROL TAGS THROUGHOUT THIS DRAWING HAVE BEEN UPDATED TO BE COORDINATED WITH LIGHTING CONTROL RISERS AND LIGHTING CONTROL SYSTEM SEGMENT DIAGRAM.

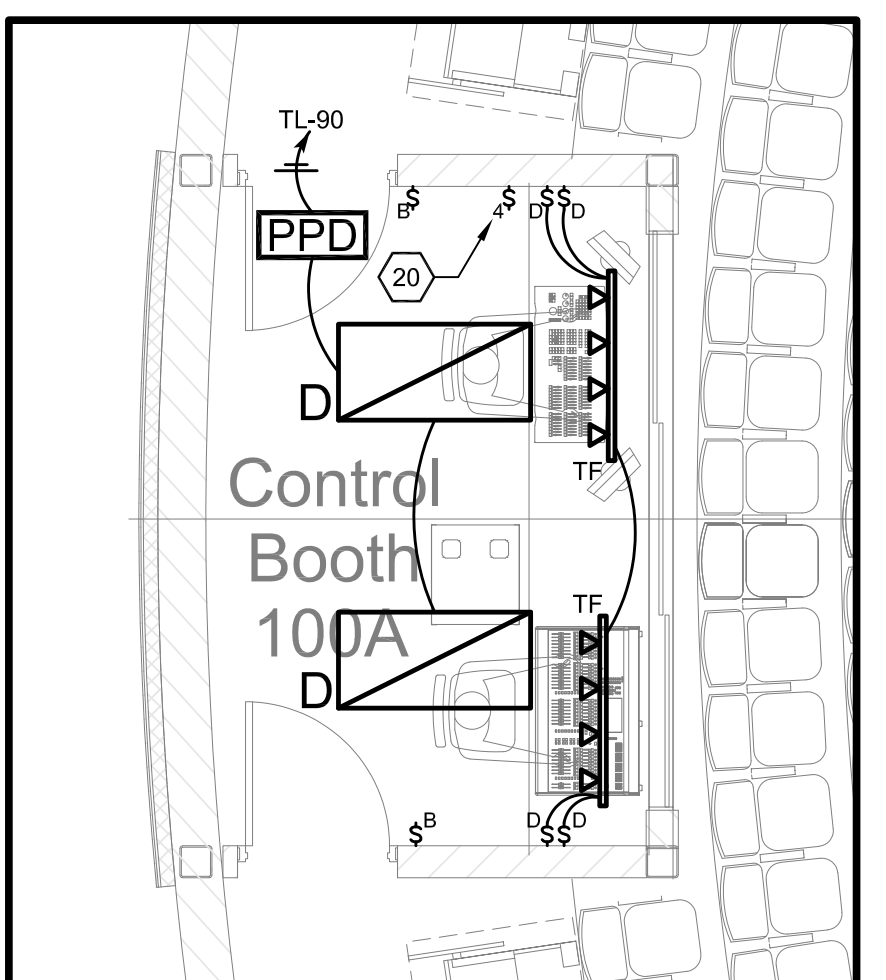
**SHEET KEYNOTES:**

- ARKTURA VAPOR TRAIL CEILING SYSTEM, ALL 2x4 LIGHTING FIXTURES IN THIS ROOM SHALL BE TYPE 'VT'. ALL 2x2 LIGHTING FIXTURES SHALL BE TYPE 'V2'.
- TYPE 'W' LIGHTING FIXTURES ARE TO BE PENDANT MOUNTED WITHIN THE 2" WIDE SECTIONS OF CEILING GRID, BOTTOM OF LIGHTING FIXTURES ARE TO BE FLUSH WITH CEILING.
- PROVIDE HARD WIRED CONNECTION FOR BACK LIT LED SIGN. PROVIDE DEDICATED LIGHTING CONTROL NETWORK BRIDGE AND SWITCHING POWER PACK FOR CONTROL. PROVIDE A DISCONNECT SWITCH ABOVE THE NEAREST CONCEALED ACCESSIBLE CEILING.
- SWITCH FOR CONTROL OF STAGE HOUSE LIGHTING.
- CIRCUIT CONTINUES FROM STAIR LIGHTING ON LOWER LEVEL. REFER TO SHEET E101.
- SPLIT CIRCUITING OF TYPE 'VT' AND 'V2' FIXTURES EAST-WEST.
- CONTROL FOR ALL TYPE 'T' TAPE LIGHTS, ACUITY FCS 77SN X DBL OR EQUAL. INTERFACE WITH BUILDING AUTOMATION SYSTEM U24 BACKNET CONNECTIONS. REFER TO LIGHTING CONTROL SYSTEM SEGMENT DIAGRAM.
- CIRCUIT CONTINUES FROM NEW MEDIA CENTER 134.
- CIRCUIT CONTINUES TO STUDY ROOM 134C.
- SWITCH FOR CONTROL OF CORRIDORS C100, C101, AND C102.
- SWITCH FOR CONTROL OF FIXTURES UNDERNEATH WALKWAY IN OPEN COLLABORATION AREA/THEATER LOBBY/ATRIUM CA1.
- SWITCH FOR CONTROL OF FIXTURES IN CORRIDOR C103.
- PROVIDE A2 SWITCH FOR CONTROL OF SECURITY VESTIBULE SV1. REFER TO LIGHTING CONTROL RISER.
- CIRCUIT CONTINUES UP FROM EGRESS LIGHTING IN VESTIBULE.
- CIRCUIT WITH EGRESS LIGHTING IN LOBBY ABOVE.
- ZONE CONNECTION TO NETWORK BRIDGE SERVING LOBBY. REFER TO SHEET E104, SHEET NOTE #12.
- MOUNT TYPE 'T' FIXTURE ON TOP OF DECORATIVE DRYWALL METAL STUD OPENING TO PROVIDE ACCENT LIGHTING AND CIRCUIT WITH TYPE 'T' FIXTURES IN LOBBY.
- CIRCUIT CONTINUES FROM LOWER LEVEL TO STAIR LIGHTING ON SECOND LEVEL. REFER TO SHEET E104.
- TRANSFORMER FOR CONNECTION TO STEP LIGHTS.
- SWITCH FOR CONTROL OF STAGE LIGHTING TYPE F8 FIXTURES.
- PROVIDE TYPE A1 SWITCH AND DEDICATED NETWORK BRIDGE. PROGRAM AT SWITCH AS A TOGGLE BETWEEN 'MASTER-ON / RESUME SCHEDULE' FOR ALL BUILDING LIGHTING CONTROLLED BY THIS LOW VOLTAGE LIGHTING CONTROL SYSTEM.
- PROVIDE NETWORK BRIDGE AND SWITCHING POWER PACK FOR THIS CIRCUIT.



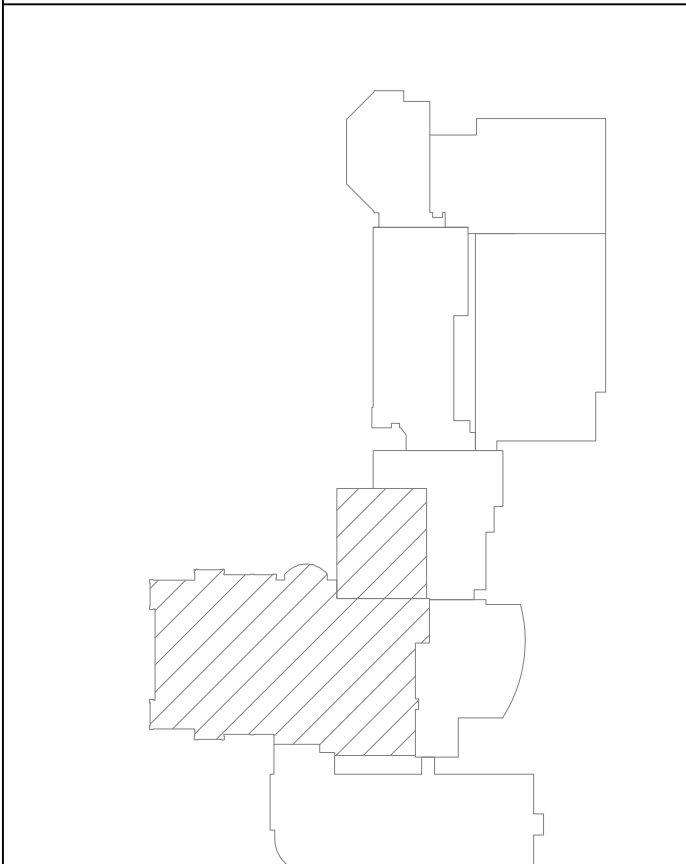
**1 PARTIAL MAIN LEVEL - LIGHTING**  
SCALE: 1/8" = 1'-0"

**2 ENLARGED CONTROL BOOTH**  
SCALE: 1/4" = 1'-0"



ADDENDUM #2 03.15.2022  
ADDENDUM #1 03.08.2022

**KEYPLAN**



Phase 6b - Building Replacement & Renovations  
**Beechwood Elementary School**  
Beechwood Independent Schools Board of Education  
Dr. Michael Stacy - Superintendent

SHEET TITLE	PARTIAL MAIN LEVEL - LIGHTING
BID SUBMITTAL	
BG #	19-078
DATE	12/13/2021

**E102**



03/15/2022

Contractor: DELTA Electric  
 Submitted By: Eric Scheidt  
 Date: 7/26/24  
 Project Number: C762



**Beechwood Schools**

**Note: INCLUDE ALL APPROPRIATE BACKUP INVOICES FOR SUBCONTRACTORS AND MATERIALS**

CHANGE PROPOSAL #						
Scope Description: PR #26						
	QTY.	UNIT	RATE		SUBTOTAL	TOTAL
<b>MATERIAL:</b>						
1. SEE ATTACHED	1	E	\$ 8,795.24	\$	8,795.24	8,795.24
2.				\$	-	0.00
3.				\$	-	0.00
4.				\$	-	0.00
5.				\$	-	0.00
6.				\$	-	0.00
SUBTOTAL:				\$	<b>8,795.24</b>	8,795.24
<b>TOOLS/ EQUIPMENT:</b>						
1. Technology	1		\$ 75.00	\$	75.00	75.00
2. Atrium Lift	1		\$ 1,500.00	\$	1,500.00	1,500.00
3.				\$	-	0.00
4.				\$	-	0.00
5.				\$	-	0.00
6.				\$	-	0.00
SUBTOTAL:				\$	<b>1,575.00</b>	1575.00
<b>LABOR:</b>						
1. Straight Time	115.45	HRS @	\$65.00	\$	7,504.25	7,504.25
2. Third Shift	0.00	HRS @	\$82.00	\$	-	0.00
3. Overtime	0.00	HRS @	\$98.00	\$	-	0.00
4. On-Site Supervision	11.55	HRS @	\$75.00	\$	865.88	865.88
5. Project Manager	5.77	HRS @	\$105.00	\$	606.11	606.11
6. Safety	2.31	HRS @	\$65.00	\$	150.09	150.09
7. Material Handling	2.31	HRS @	\$48.00	\$	110.83	110.83
8. Clean-Up	1.15	HRS @	\$48.00	\$	55.42	55.42
SUBTOTAL:				\$	<b>9,292.57</b>	9,292.57
<b>SUB-CONTRACTORS</b>						
1.	1 LS		0	\$	-	0.00
2.	1 LS			\$	-	-
3.	1 LS			\$	-	-
4.	1 LS			\$	-	-
5.	1 LS			\$	-	-
6.	1 LS			\$	-	-
SUBTOTAL:				\$	-	0.00
<b>SUBTOTALS</b>						
MATERIAL/ TOOLS/ EQUIPMENT SUBTOTAL				\$	10,370.24	
LABOR SUBTOTAL				\$	9,292.57	
SUBCONTRACTOR SUBTOTAL				\$	-	
SUBTOTAL:				\$	<b>19,662.81</b>	\$ 19,662.81
<b>OVERHEAD AND PROFIT</b>						
				<i>Percentage</i>		
OVERHEAD AND PROFIT MARKUP				15%	\$ 2,949.42	
SUBTOTAL:				\$	<b>2,949.42</b>	\$ 2,949.42
<b>TAXES:</b>						
				<i>Percentage</i>		
COMMERCIAL ACTIVITY TAX				6.00%	\$ 527.71	
BOND:				2.00%	\$ 462.80	
SUBTOTAL:				\$	990.51	\$ 990.51
<b>TOTAL COST:</b>		<b>\$23,603</b>				



**DELTA Electrical Contractors, LTD**  
**Beechwood Schools Phase 6B : Beechwood 6B - PR 26**

Job Number: CO105-11

Bid Summary: NECA2

Extension By Section

Item #	Description	Quantity	Price	U	Ext Price	Labor Hr	U	Ext Lab Hr
--- Section #1 ---								
1001	3/4" EMT	460	118.78	C	546.39	6.25	C	28.75
1465	3/4" Set Screw Steel Insul Throat Conn	28	87.30	C	24.44	0.13	E	3.64
1545	3/4" Set Screw Steel Cplg	46	45.61	C	20.98	0.15	E	6.90
2360	3/4" Conduit Hanger w/Bolt	58	90.00	C	51.75	31.25	C	17.97
2469	4" Square Box (1/2 & 3/4 KO's)	13	269.95	C	35.09	0.38	E	4.94
2471	4" Square x 2-1/8" Deep Box (1/2 & 3/4 KO's)	1	269.94	C	2.70	0.38	E	0.38
2660	#12 THHN CU Stranded Wire	1,449	204.04	M	295.65	7.50	M	10.87
2929	Telephone - 3 Pr. Plenum	405	1,763.98	M	714.41	15.00	M	6.08
4649	20A Prem Spec Grade SP Switch	1	3.24	E	3.24	0.31	E	0.31
5003	4" Square 1G RS Switch Cover	1	404.94	C	4.05	0.19	E	0.19
5079	4" Square Flat Blank Cover	13	240.52	C	31.27	0.15	E	1.95
6133	Red Wirenuts	42	251.93	M	10.58	4.38	C	1.84
7113	3/16X1 Nylon Anchor	2	19.36	C	0.39	11.25	C	0.23
7114	Ground Screw with Bare Pigtail	1	4.07	E	4.07	2.50	C	0.03
7121	10x1" TEK Screw	2	38.34	C	0.77	0.02	E	0.04
7123	6X1/4" Pan Head Tapping Screw	4	2.83	C	0.11	0.02	E	0.08
62151	1/2" Flex Assembly	1	8.40	E	8.40	1.25	E	1.25
T0001	Network Bridge	1	396.00	E	396.00	2.00	E	2.00
T0002	Switched Power Pack	1	210.00	E	210.00	2.00	E	2.00
T0003	Fixture Type TG3	13	495.00	E	6,435.00	2.00	E	26.00
--- Section #1 Total ---					8,795.29			115.45
Job Total					8,795.29			115.45



# AIA<sup>®</sup>

# Document G709™ – 2018

## Proposal Request

**PROJECT:** *(name and address)*  
Beechwood Schools - Phase 6B  
Improvements  
54 Beechwood Road  
Fort Mitchell, Kentucky 41017

**CONTRACT INFORMATION:**  
Contract For: Total Project  
  
Date: October 06, 2020

Architect's Project Number: 175-520  
Proposal Request Number: Forty (40)  
  
Proposal Request Date: January 22, 2024

**OWNER:** *(name and address)*  
Beechwood Independent Board of  
Education  
50 Beechwood Road  
Fort Mitchell, Kentucky 41017

**ARCHITECT:** *(name and address)*  
Robert Ehmet Hayes & Associates, PLLC  
  
2512 Dixie Highway  
Fort Mitchell, Kentucky 41017

**CONTRACTOR:** *(name and address)*  
Codell Construction Company  
  
4475 Rockwell Road  
Winchester, Kentucky 40391

The Owner requests an itemized proposal for changes to the Contract Sum and Contract Time for proposed modifications to the Contract Documents described herein. The Contractor shall submit this proposal within Zero (0) days or notify the Architect in writing of the anticipated date of submission.  
*(Insert a detailed description of the proposed modifications to the Contract Documents and, if applicable, attach or reference specific exhibits.)*

Electric changes in Media Center 134 (STW ESI #14)  
Reference sheet E202:  
Added power for TV's in rooms 102, 104, and 105.  
Added USB receptacles and circuits on Social Steps 134B.  
Reference sheet E204:  
Added power for TV in corridor C201.  
Added power and circuiting for horizontal ticker screens in rooms 206 and 208.  
Added power for vertical wall TV in room 208.  
Added power and circuiting for garage door in room 206.  
Added poke thru receptacles and circuiting in room 215.  
Reference sketch E204A:  
Added wiremold, power, and data for computer stations in room 208.  
Added Panel RP2C and 45 KVA Transformer T-RP2C in room 208 for computer station circuits.  
Reference Sheet E304:  
Added data drops directly adjacent to ticker receptacles.  
Reference sheet E501:  
Details referring to surface raceway added in room 208.  
Reference sheet E601:  
Panel RP2C and T-RP2C added to one-line diagram.  
Reference sheet E602:  
Loads changed in Panels RP2A, and RP3A.  
Added circuits in panels RP3A, RP2B, and RP3B.  
Reference Sheet E604:  
Added panel RP2C and associated circuits

**THIS IS NOT A CHANGE ORDER, A CONSTRUCTION CHANGE DIRECTIVE, OR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED IN THE PROPOSED MODIFICATIONS.**

**REQUESTED BY THE ARCHITECT:**

Joseph Ahrens Hayes, Member  
**PRINTED NAME AND TITLE**

**GENERAL NOTES:**

- REFER TO SHEET E002 FOR ADDITIONAL GENERAL NOTES.
- REFER TO THEATRICAL DRAWINGS FOR ADDITIONAL COORDINATION AND ELECTRICAL REQUIREMENTS.
- MAKE ALL FINAL CONNECTIONS TO ALL THEATRICAL EQUIPMENT AND FIXTURES.
- REFERENCE SYSTEMS SHEETS FOR MEDIA DISPLAYS, SHOWN ON THIS SHEET FOR REFERENCE.

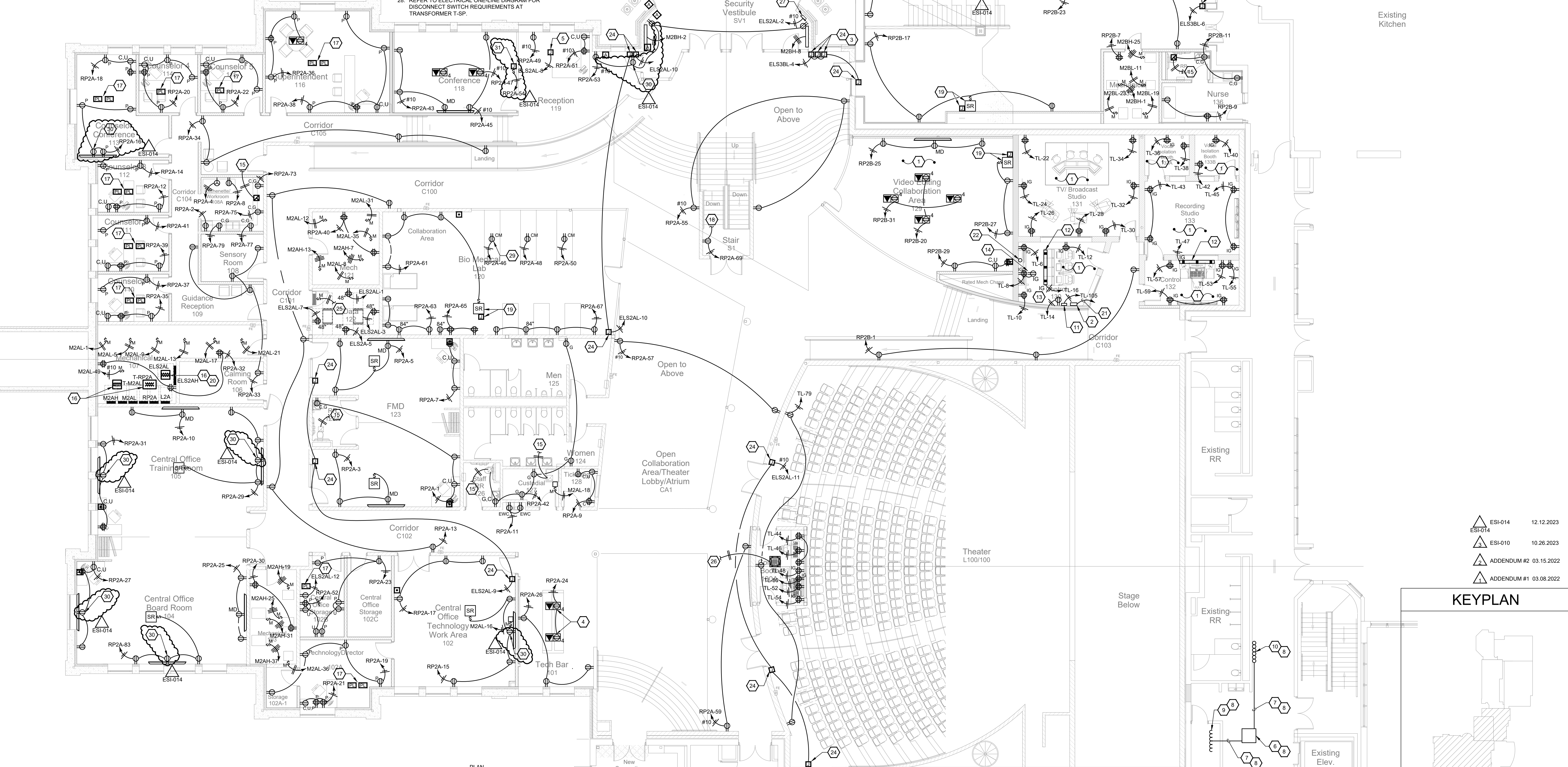
**SHEET KEYNOTES:**

- RECEPTACLE TO BE CONCEALED BEHIND OWNER PROVIDED TV. COORDINATE INSTALLATION HEIGHT WITH OWNER PRIOR TO INSTALLATION.
- INSTALL JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR POWER CONNECTION TO OWNER PROVIDED EQUIPMENT. ELECTRICAL CONTRACTOR TO MAKE EQUIPMENT CONNECTION COORDINATE WITH OWNER.

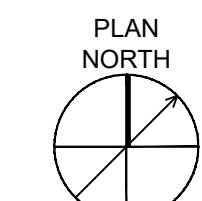
**SHEET KEYNOTES:**

- ALL RECESSED DEVICES SHALL HAVE THE ASSOCIATED JUNCTION BOX COMPLETELY WRAPPED WITH KINETICS ISOBACKER OUTLET BACKER PADS, HILTI CP 617 PUTTY PADS, OR EQUAL.
- INSTALL THEATRICAL ETC ECHO RELAY PANEL ERP. REFER TO ELECTRICAL ONE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
- SERVES SECURITY VESTIBULE AND LOBBY DOORS.
- PROVIDE FLOOR BOXES FOR CONNECTION TO FLIP UP RECEPTACLES ON COUNTER.
- PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR POWER CONNECTION TO POWERED DOOR OPERATORS AT SECURITY VESTIBULE AND RECEPTION. FIELD COORDINATE EXACT LOCATION. MAKE ALL FINAL CONNECTIONS.
- PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FACILITATING PANEL FEEDER INSTALLATION. FIELD COORDINATE EXACT LOCATION, SIZE, AND CONDUIT CONNECTIONS.
- APPROXIMATE ROUTING OF NEW FEEDERS SERVING NEW DISTRIBUTION PANELS DP1 AND DP2. FIELD COORDINATE EXACT ROUTING.
- CONTRACTOR MAY AT THEIR OPTION AND COST SAVINGS, PROVIDE FEEDER BUS IN LIEU OF RACEWAYS AND CONDUCTORS TO SERVE AS THE PANEL FEEDERS TO DISTRIBUTION PANELS DP1 AND DP2. IF FEEDER BUS IS UTILIZED, IT SHALL BE EQUIPPED WITH A DEDICATED GROUND BUSS BAR IN ADDITION TO PHASE AND NEUTRAL BUSS BARS.
- TURN CONDUITS DOWN AND PENETRATE FLOOR TO NEXT LEVEL. REFER TO SHEET E201.
- TURN CONDUITS UP AND PENETRATE FLOOR TO NEXT LEVEL. REFER TO SHEET E204.
- INSTALL THEATRICAL OPTO SPLITTER. PROVIDE POWER CONNECTION AS SHOWN.
- PROVIDE MULTIOUTLET STRIP. REFER TO THEATRICAL DRAWINGS FOR PROPERTIES AND LOCATIONS.
- INSTALL THEATRICAL CABLING RACEWAYS, REFER TO THEATRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

- INSTALL THEATRICAL WALL BOX. FIELD COORDINATE EXACT LOCATION. REFER TO THEATRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- ROUTE CIRCUIT THROUGH LIGHTING CONTROL SWITCHING POWER PACK FOR CONTROL OF THE EXHAUST FAN. REFER TO LIGHTING CONTROL RISER DIAGRAMS FOR ADDITIONAL REQUIREMENTS.
- SUSPEND TRANSFORMER FROM STRUCTURE. FIELD COORDINATE EXACT LOCATION.
- EXTEND RECEPTACLE CIRCUIT(S) IN THIS ROOM THROUGH PLUG-LOAD RELAYS. REFER TO LIGHTING CONTROL RISER DIAGRAMS FOR ADDITIONAL REQUIREMENTS.
- CIRCUIT CONTINUES, REFER TO SHEET E201, SHEET NOTE # 16.
- MOUNT SOUND REINFORCEMENT EQUIPMENT WITHIN NEMA 1 ENCLOSURE ABOVE ACCESSIBLE CEILING. REMOTE MOUNT ASSOCIATED ANTENNA IN CEILING NEAR CENTER OF ROOM. EXTEND CABLING AS REQUIRED BETWEEN SOUND REINFORCEMENT EQUIPMENT AND ANTENNA.
- TRANSFORMER T-ELS2AL.
- REFER TO ONE LINE DIAGRAM FOR CIRCUITING INFORMATION.
- PROVIDE EMPTY 3 INCH CONDUIT WITH PULL STRING TO STORAGE 137 FOR FUTURE CONNECTION TO ESPORTS DATA RACK. REFER TO SHEET NOTE 23.
- TURN CONDUIT DOWN FROM FUTURE CONNECTION TO ESPORTS DATA RACK. FIELD COORDINATE EXACT LOCATION. REFER TO SHEET NOTE 22.
- PROVIDE POWER CONNECTION TO ACCESS CONTROL/DOOR OPERATOR. FIELD COORDINATE EXACT REQUIREMENTS. MAKE ALL FINAL CONNECTIONS.
- CIRCUIT CONTINUES REFER TO SHEET NOTE #2 ON E206.
- CIRCUIT CONTINUES, REFER TO SHEET NOTE #3 ON E206.
- PROVIDE POWER CONNECTION TO FIRE ALARM REMOTE ANNUNCIATOR.
- REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR DISCONNECT SWITCH REQUIREMENTS AT TRANSFORMER T-SP.

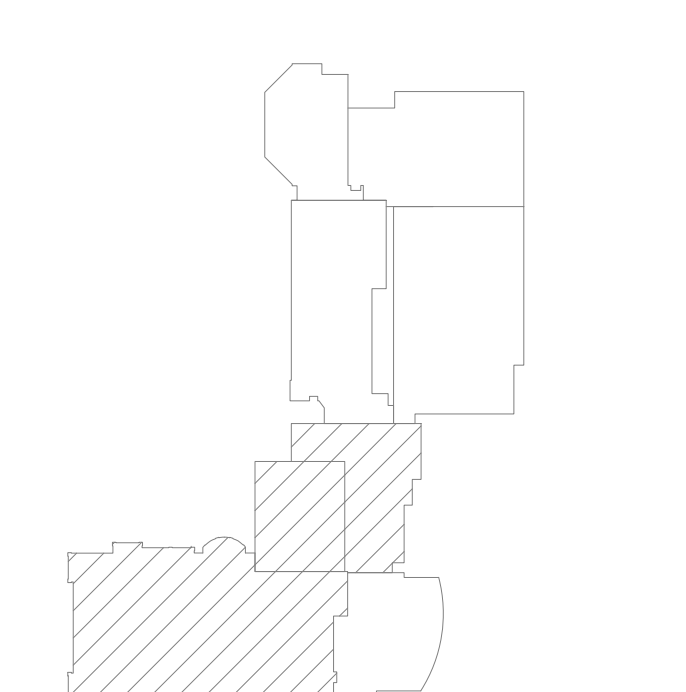


**1 PARTIAL MAIN LEVEL - POWER**  
SCALE: 1/8"=1'-0"



ES1-014	12.12.2023
ES1-010	10.26.2023
ADDENDUM #2	03.15.2022
ADDENDUM #1	03.08.2022

**KEYPLAN**



**SHROUT  
TATE  
MECHANICAL AND  
ELECTRICAL ENGINEERS**  
Langston - Louisville - Charleston  
www.steweng.com

03/15/2022

**Phase 6b - Building Replacement & Renovations  
Beechwood Elementary School**  
Beechwood Independent Schools Board of Education  
Dr. Michael Stacy - Superintendent

SHEET TITLE	PARTIAL MAIN LEVEL - POWER
BID SUBMITTAL	
BG #	19-078
DATE	12/13/2021

**E202**

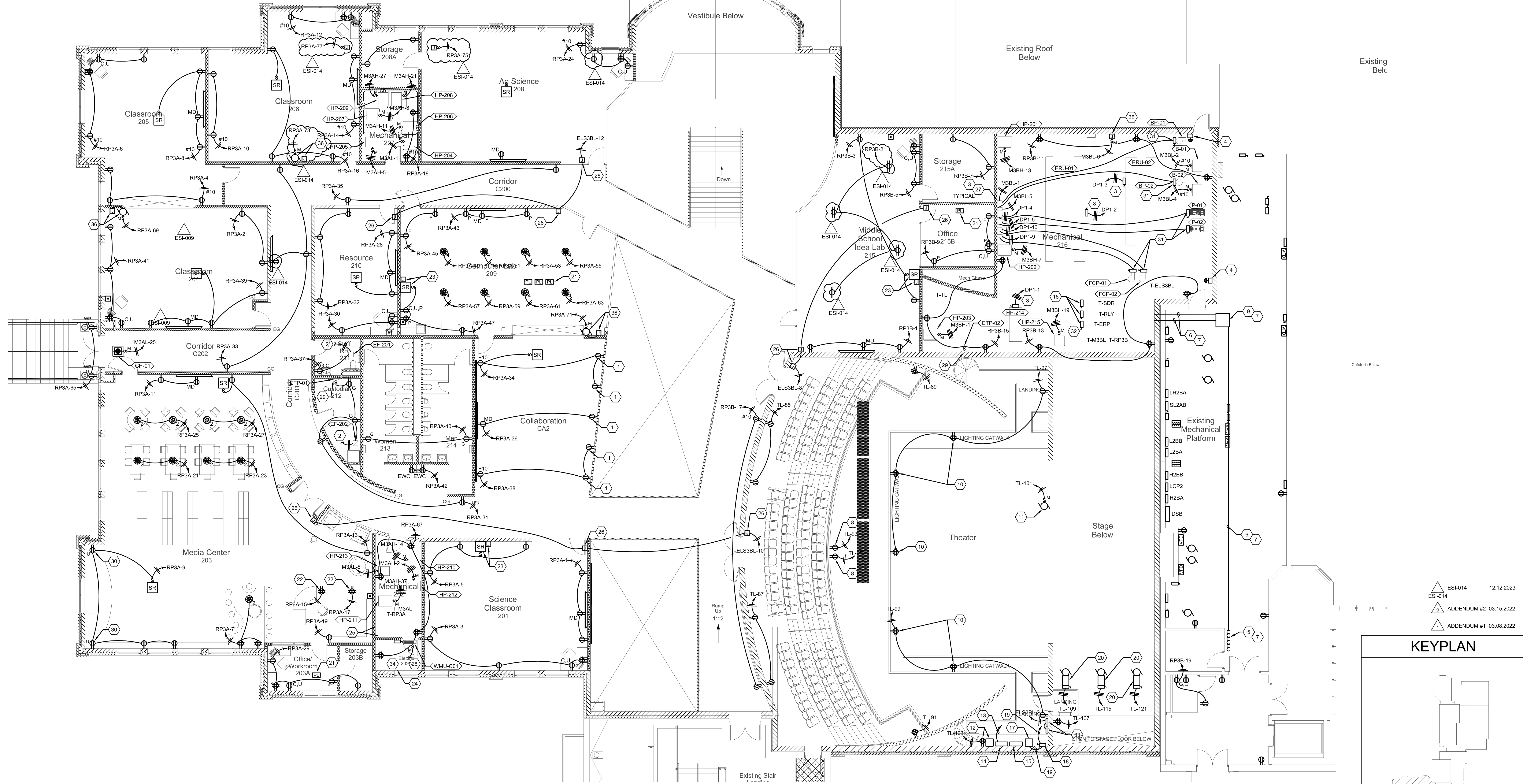


**GENERAL NOTES:**

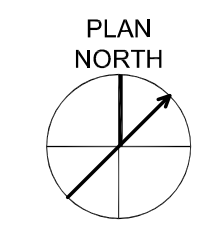
1. REFER TO SHEET E002 FOR ADDITIONAL GENERAL NOTES.
2. REFER TO THEATRICAL DRAWINGS FOR ADDITIONAL COORDINATION AND ELECTRICAL REQUIREMENTS.
3. MAKE ALL FINAL CONNECTIONS TO ALL THEATRICAL EQUIPMENT AND FIXTURES.

**SHEET KEYNOTES:**

1. OUTLETS TO BE MOUNTED AT RAISED COUNTER BUILT INTO RAILING. FIELD COORDINATE EXACT LOCATION.
2. ROUTE CIRCUIT THROUGH LIGHTING CONTROL POWER PACK FOR CONTROL OF THE EXHAUST FAN. REFER TO LIGHTING CONTROL RISER DIAGRAMS FOR ADDITIONAL REQUIREMENTS.
3. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR FEEDER CONDUCTORS AND DISCONNECT SWITCH INFORMATION.
4. PROVIDE EMERGENCY POWER OFF SWITCH (EPO) MOUNTED AT 4" TO BOTTOM ADJACENT TO DOOR FRAME. ROUTE 120 VOLT BOILER CIRCUITS (SERVING EACH B-01 AND B-02) IN SERIES THROUGH BOTH EPO SWITCHES. REFER TO DETAILS FOR WIRING DIAGRAM. EPO SWITCHES TO BE ALLEN BRADLEY 250 VOLT DPDT WITH RED 40 MM LATCHING PUSH BUTTON OR EQUAL.
5. TURN CONDUITS DOWN AND PENETRATE FLOOR TO NEXT LEVEL. REFER TO SHEET E202.
6. APPROXIMATE ROUTING OF NEW FEEDERS SERVING NEW DISTRIBUTION PANELS DP1 AND DP2. FIELD COORDINATE EXACT ROUTING.
7. CONTRACTOR MAY AT THEIR OPTION AND COST/SAVINGS, PROVIDE FEEDER BUSS IN LIEU OF RACEWAYS AND CONDUCTORS TO SERVE AS THE PANEL FEEDERS TO DISTRIBUTION PANELS DP1 AND DP2. IF FEEDER BUSS IS UTILIZED, IT SHALL BE EQUIPPED WITH A DEDICATED GROUND BUS BAR IN ADDITION TO PHASE AND NEUTRAL BUS BARS.
8. DEVICE TO SERVE PROJECTOR. REFER TO THEATRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
9. PROVIDE JUNCTION BOX FOR FACILITATING PANEL FEEDER INSTALLATION. FIELD COORDINATE EXACT LOCATION, SIZE, AND CONDUIT CONNECTIONS.
10. MOUNT DEVICE TO CATWALK RAILING. FIELD COORDINATE EXACT LOCATION.
11. PROVIDE POWER CONNECTION TO MOTORIZED PROJECTION SCREEN. FIELD COORDINATE EXACT LOCATION.
12. THEATRICAL LIGHTING NETWORK CONTROL RACK MOUNT ASSOCIATED QUADRUPEX RECEPTACLE WITHIN RACK AT 48" AFF.
13. PROVIDE NINE(9) LIFE SAFETY EMERGENCY POWER CIRCUITS FROM PANEL ELS3BL. REFER TO PANEL SCHEDULES.
14. INSTALL THEATRICAL EMERGENCY LIGHTING TRANSFER SWITCH ELTS.
15. INSTALL STAGE LIGHTING RELAY PANEL RLY. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
16. MOUNT DISCONNECT SWITCH SERVING TRANSFORMER SECONDARY ON A UNISTRUT STAND ADJACENT TO ASSOCIATED TRANSFORMER. REFER TO ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
17. INSTALL THEATRICAL STAGE LIGHTING DIMMER RACK SDR.
18. PROVIDE DISCONNECT SWITCH TO SERVE THEATRICAL STAGE LIGHTING DIMMER RACK SDR. REFER TO ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
19. REFER TO ONE LINE DIAGRAM FOR CIRCUITING INFORMATION.
20. INSTALL MOTOR STARTER TO SERVE THEATRICAL RIGGING MOTOR. PROVIDE 30IN(3) DISCONNECT SWITCH TO SERVE RIGGING MOTOR STARTER.
21. EXTEND RECEPTACLE CIRCUIT(S) IN THIS ROOM THROUGH PLUS-LOAD RELAYS. REFER TO LIGHTING CONTROL RISER DIAGRAMS FOR ADDITIONAL REQUIREMENTS.
22. MOUNT DEVICES WITHIN CASEWORK. FIELD COORDINATE EXACT LOCATIONS. COORDINATE LOCATIONS WITH ARCHITECT.
23. MOUNT SOUND REINFORCEMENT EQUIPMENT WITHIN NEMA 1 ENCLOSURE ABOVE ACCESSIBLE CEILING. REMOTE MOUNT ASSOCIATED ANTENNA IN CEILING NEAR CENTER OF ROOM. EXTEND CABLE AS REQUIRED BETWEEN SOUND REINFORCEMENT EQUIPMENT AND ANTENNA.
24. PROVIDE 33KW CENTRAL INVERTER AND BATTERY CABINET(S). REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
25. MOUNT SECTIONS OF PANEL RP3A ADJACENT TO EACH OTHER ON ADJACENT WALLS.
26. PROVIDE POWER CONNECTION TO ACCESS CONTROL/DOOR OPERATOR. FIELD COORDINATE EXACT REQUIREMENTS. MAKE ALL FINAL CONNECTIONS.
27. INSTALL COMBINATION VFD MOTOR CONTROLLER FURNISHED WITH MECHANICAL EQUIPMENT AND PROVIDE CONNECTION TO ASSOCIATED PUMP. COORDINATE WIRING REQUIREMENTS WITH SUPPLIER. (TYPICAL OF 6)
28. CIRCUIT CONTINUES, REFER TO SHEET NOTE #4 ON E206.
29. PROVIDE DIRECT CONNECTION TO ELECTRONIC TRAP PRIMER. COORDINATE LOCATION AND WIRING REQUIREMENTS WITH INSTALLER.
30. COORDINATE MOUNTING HEIGHT TO BE 20" ABOVE ARCHITECTURAL FEATURE AT THIS LOCATION.
31. PROVIDE NON-FUSED DISCONNECT SWITCH ON UNISTRUT STAND TO SERVE MECHANICAL EQUIPMENT. PROVIDE (1) NORMALLY-CLOSED AND (1) NORMALLY OPEN AUXILIARY CONTACT SWITCH TO SIGNAL ASSOCIATED VFD OF LOCAL SHUT DOWN. PROVIDE INTERLOCK WIRING BETWEEN DISCONNECT SWITCH AND ASSOCIATED VFD AS REQUIRED. FIELD COORDINATE EXACT WIRING REQUIREMENTS WITH MECHANICAL CONTRACTOR. MAKE ALL FINAL CONNECTIONS.
32. PROVIDE UNISTRUT STAND TO MOUNT PANEL MSBH.
33. INSTALL EMERGENCY BYPASS DETECTION KITS AND DMX BYPASS CONTROLLERS.
34. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR INVERTER/DISCONNECT SWITCH/FEEDER INFORMATION.
35. PROVIDE CONNECTION TO HEAT TRACE CONTROL PANEL. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN CONNECTIONS.
36. PROVIDE POWER CONNECTION FOR OVERHEAD DOOR. PROVIDE AND CONNECT DOOR CONTROLS. FIELD COORDINATE EXACT LOCATION.

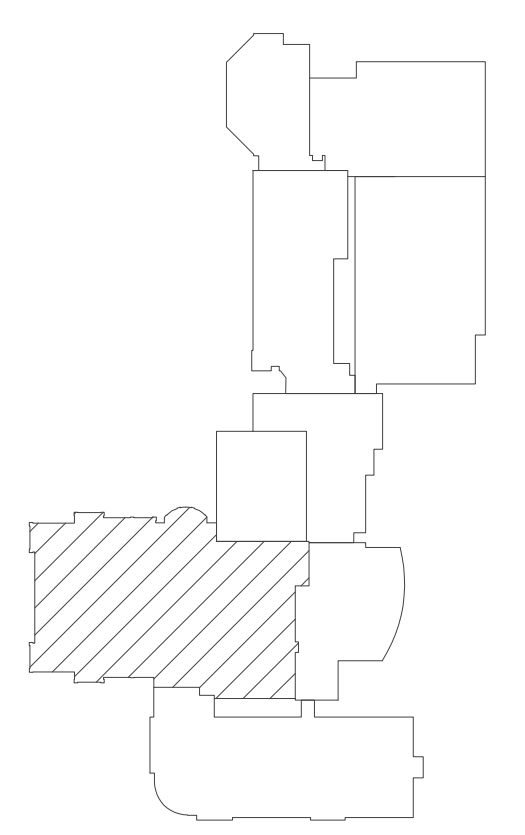


**1 PARTIAL SECOND LEVEL - POWER**  
SCALE: 1/8"=1'-0"



- ESI-014 12.12.2023
- ADDENDUM #2 03.15.2022
- ADDENDUM #1 03.08.2022

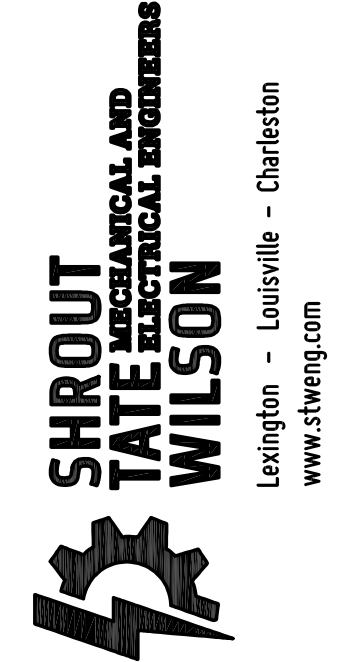
**KEYPLAN**



Phase 6b - Building Replacement & Renovations  
**Beechwood Elementary School**  
Beechwood Independent Schools Board of Education  
Dr. Michael Stacy - Superintendent

SHEET TITLE  
PARTIAL SECOND LEVEL - POWER  
BID SUBMITTAL  
BG # 19-078  
DATE 12/13/2021

**E204**



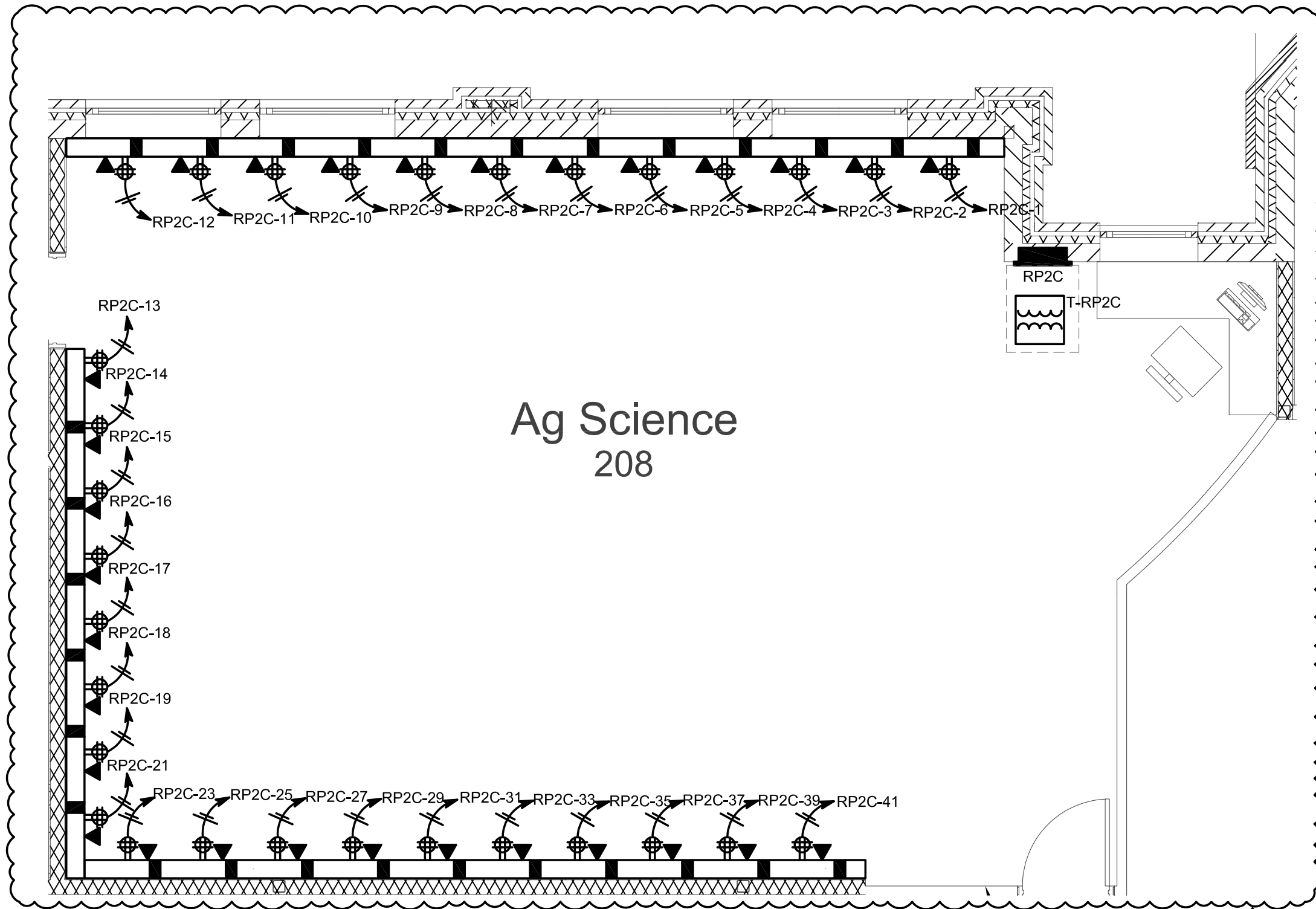
03/15/2022

03/15/2022

PLOTTED BY: paul.hockensmith

PRINTED: 12/12/2023 @ 11:42AM

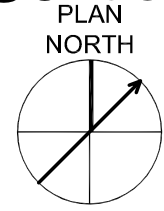
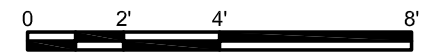
FILE NAME: G:\Draw211022 Beechwood Independent Phase 6B\Drawings\21022-ELEC-POWER.dwg



1

# ROOM 208 PARTIAL POWER DETAIL

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

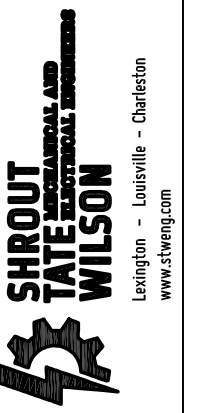


ESI-014

ESI-014 12.12.2023

STW PROJECT NO. XXXXXX

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PROJECT INFORMATION

ADDITIONAL PROJECT INFO

PROJECT ADDRESS

NO.	DATE	REVISIONS

SCALE CHECK

DATE: XXXXXX X, XXXX

SCALE:

SHEET NO. E204A

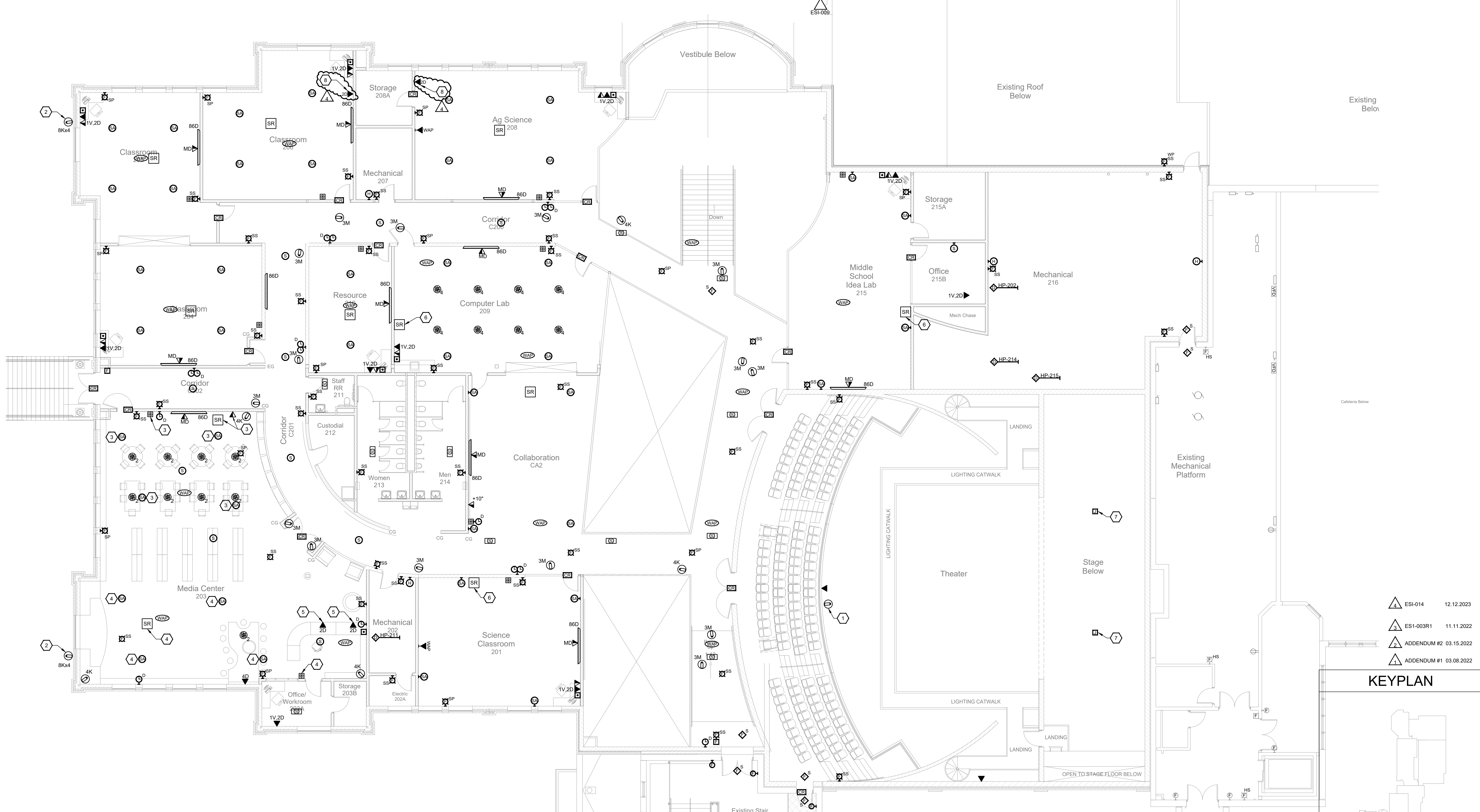


**GENERAL NOTES:**

1. REFER TO SHEET E002 FOR ADDITIONAL GENERAL NOTES.

**SHEET KEYNOTES:**

1. INSTALL THEATRICAL PAN-TILT-ZOOM CAMERA AT THIS LOCATION ON FACE OF THE BALCONY. REFER TO THEATRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
2. MOUNT AT UNDERSIDE OF EAVE. REFER TO ARCHITECTURAL DETAIL.
3. SOUND REINFORCEMENT EQUIPMENT SERVING THE NORTH SEATING AREA OF MEDIA CENTER 203.
4. SOUND REINFORCEMENT EQUIPMENT SERVING THE SOUTH SEATING AREA OF MEDIA CENTER 203.
5. MOUNT DEVICES WITHIN CASEWORK. FIELD COORDINATE EXACT LOCATIONS. COORDINATE LOCATIONS WITH ARCHITECT.
6. REFER TO POWER DRAWINGS FOR MOUNTING OF THIS UNIT.
7. PROVIDE FIRE ALARM CONNECTION TO SMOKE DAMPERS AS NECESSARY.
8. PROVIDE DATA DROP HIGH ON WALL. REFER TO EQUIPMENT MANUFACTURER FOR RECOMMENDED INSTALLATION LOCATION, HEIGHT, AND ORIENTATION.

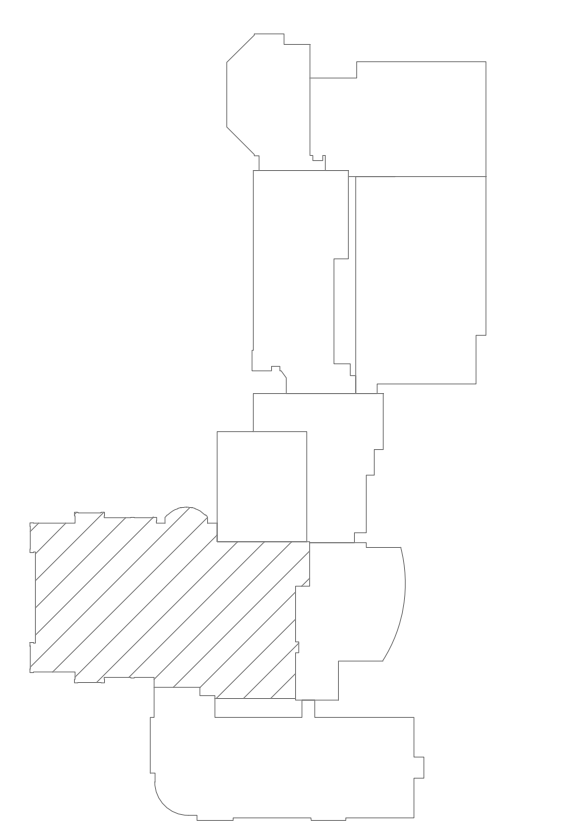


**1 PARTIAL SECOND LEVEL - SYSTEMS**  
SCALE: 1/8"=1'-0"



△ ESI-014	12.12.2023
△ ESI-003R1	11.11.2022
△ ADDENDUM #2	03.15.2022
△ ADDENDUM #1	03.08.2022

**KEYPLAN**



03/15/2022

**Phase 6b - Building Replacement & Renovations**  
**Beechwood Elementary School**  
Beechwood Independent Schools Board of Education  
Dr. Michael Stacy - Superintendent

SHEET TITLE

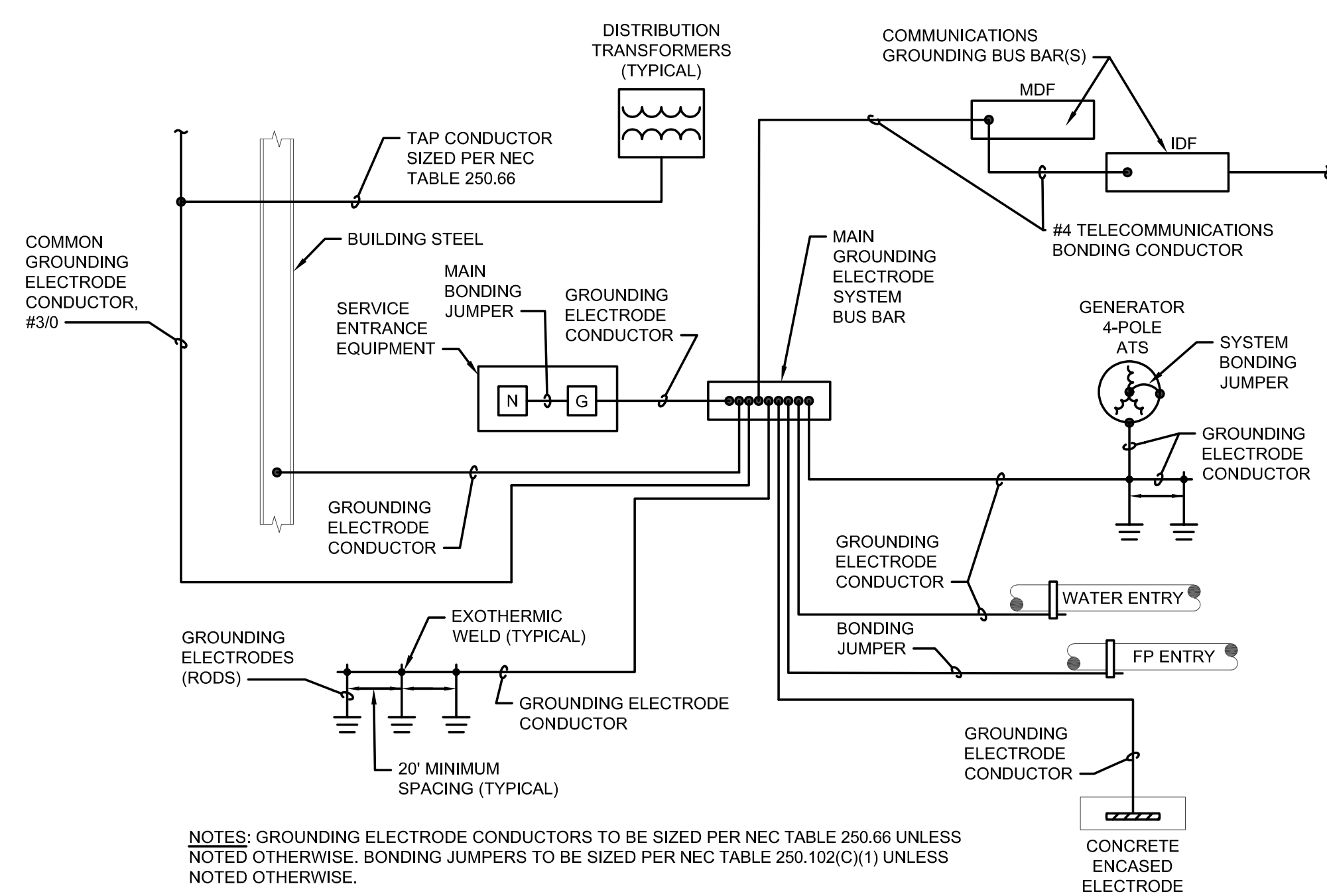
PARTIAL SECOND LEVEL - SYSTEMS

BID SUBMITTAL

BG # 19-078

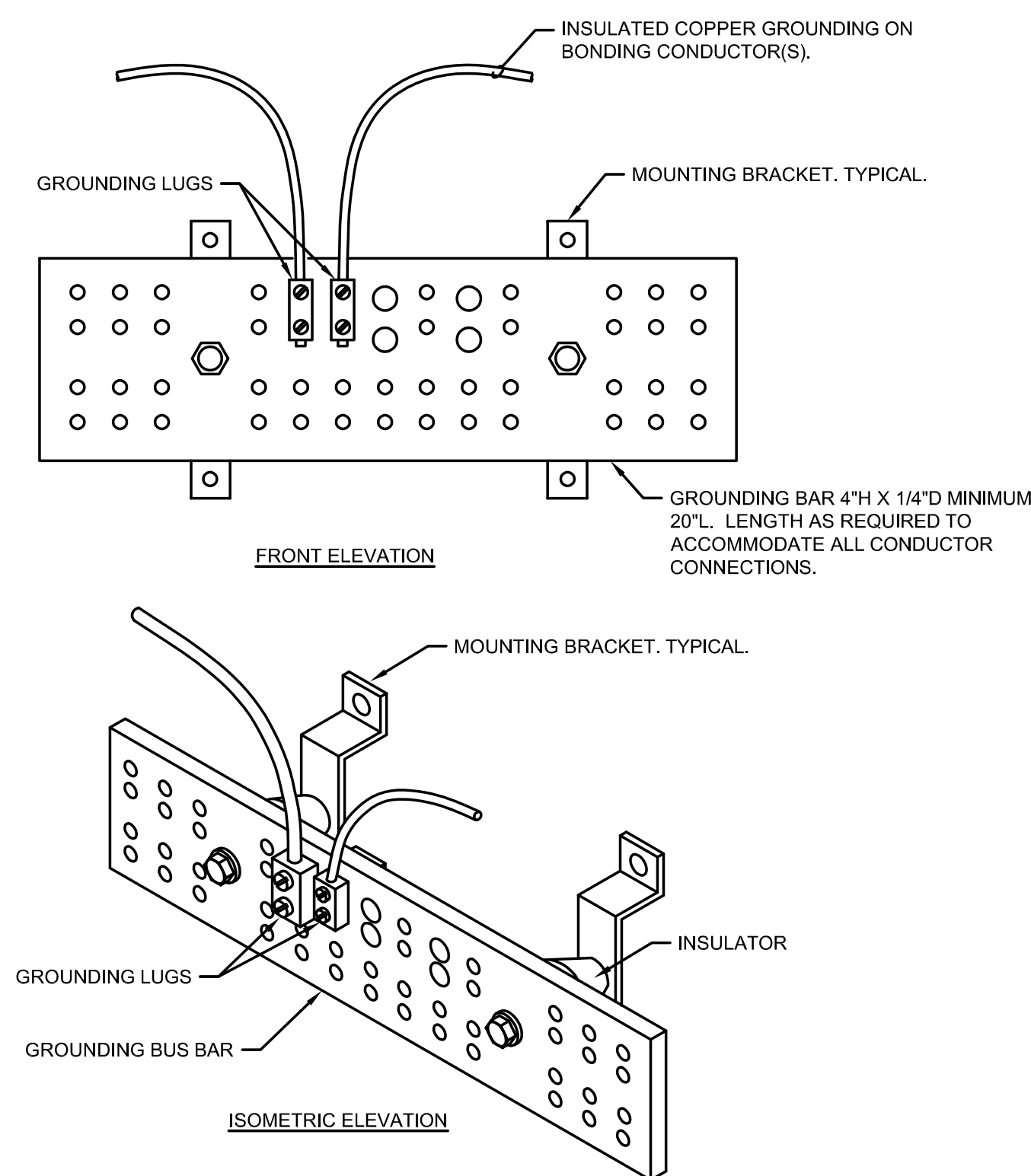
DATE 12/13/2021

**E304**



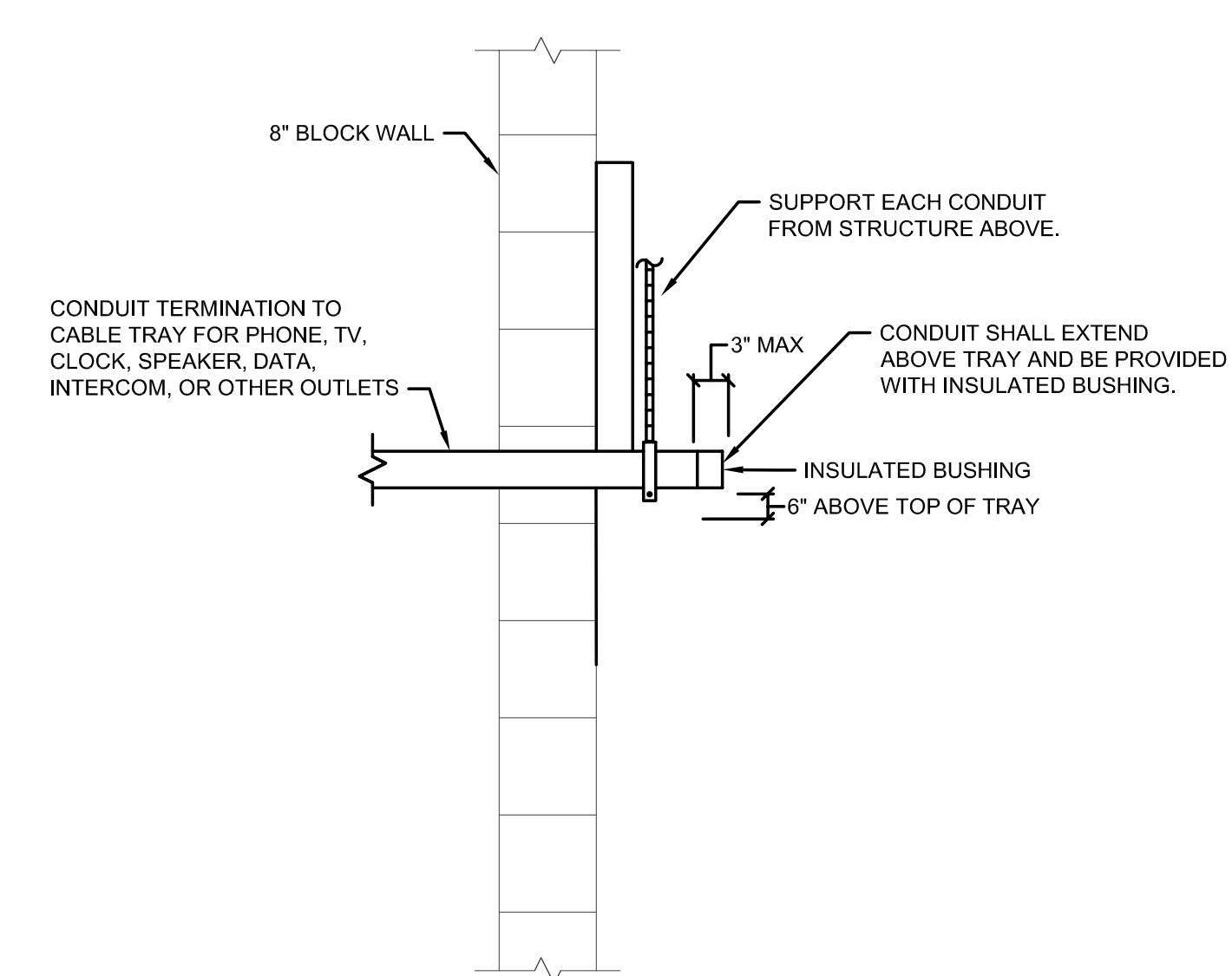
**ELECTRICAL SYSTEM GROUNDING DETAIL**

NOT TO SCALE



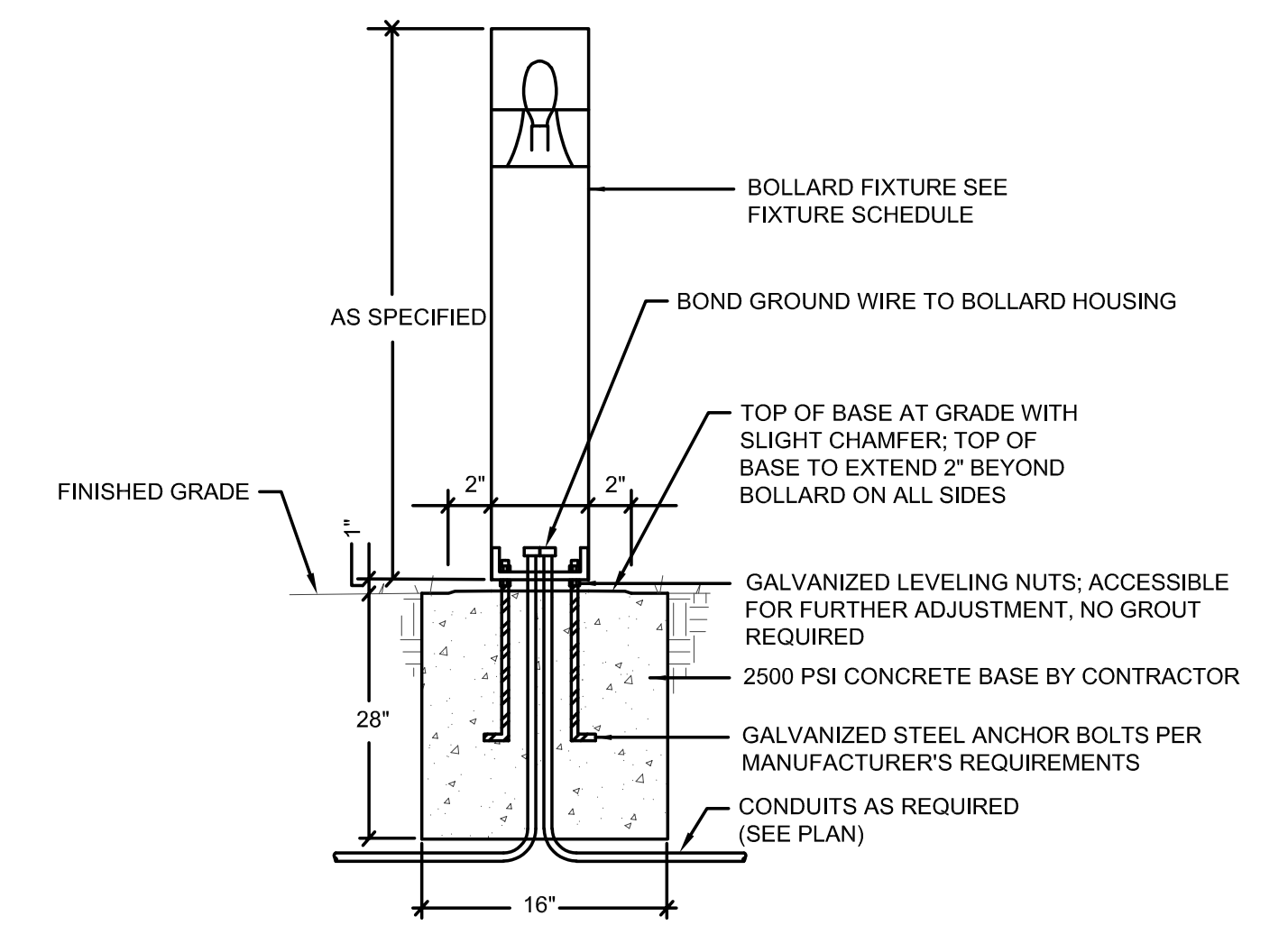
**GROUNDING BUS BAR DETAIL**

NOT TO SCALE



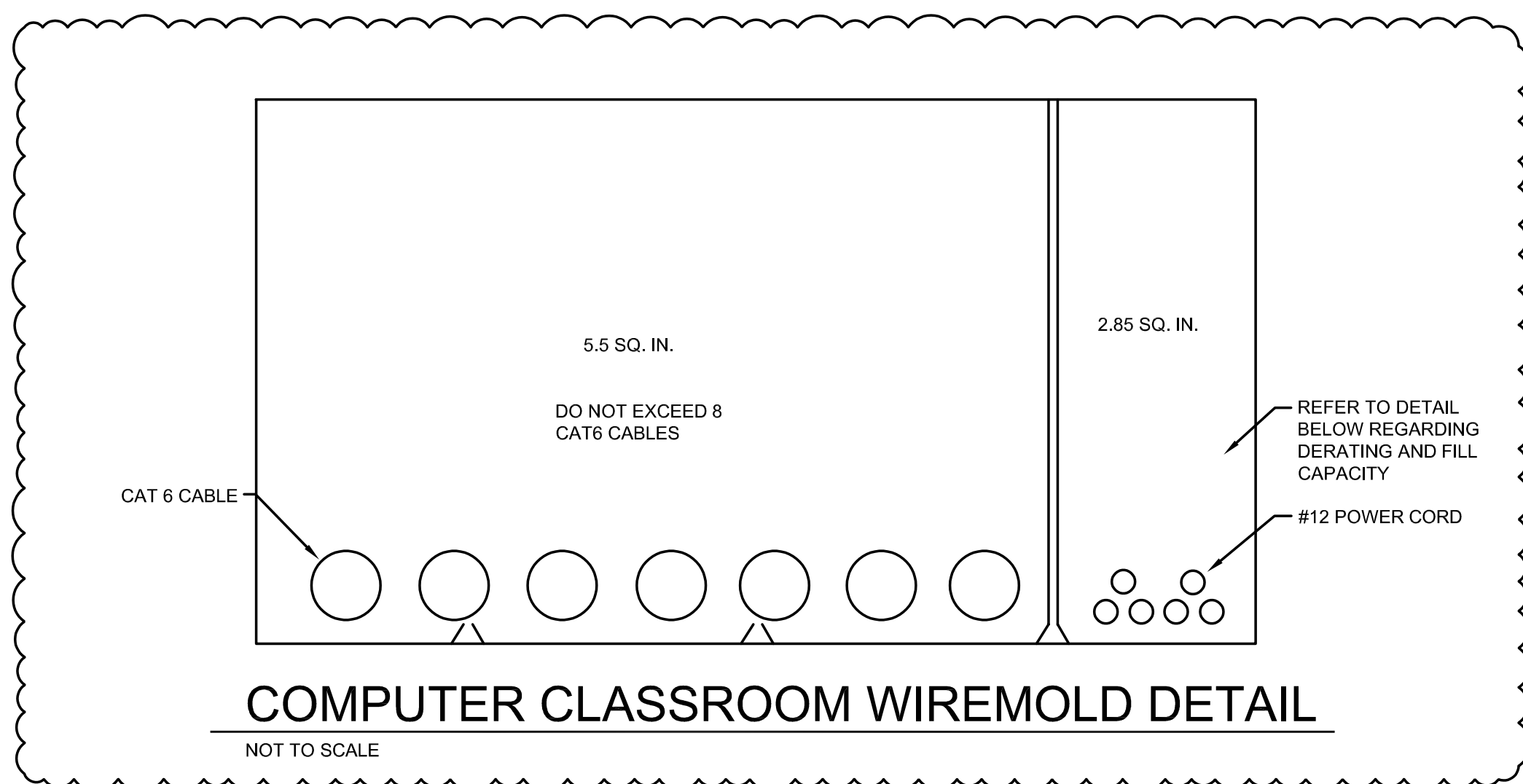
**CONDUIT J-HOOK DETAIL**

NOT TO SCALE



**BOLLARD DETAIL**

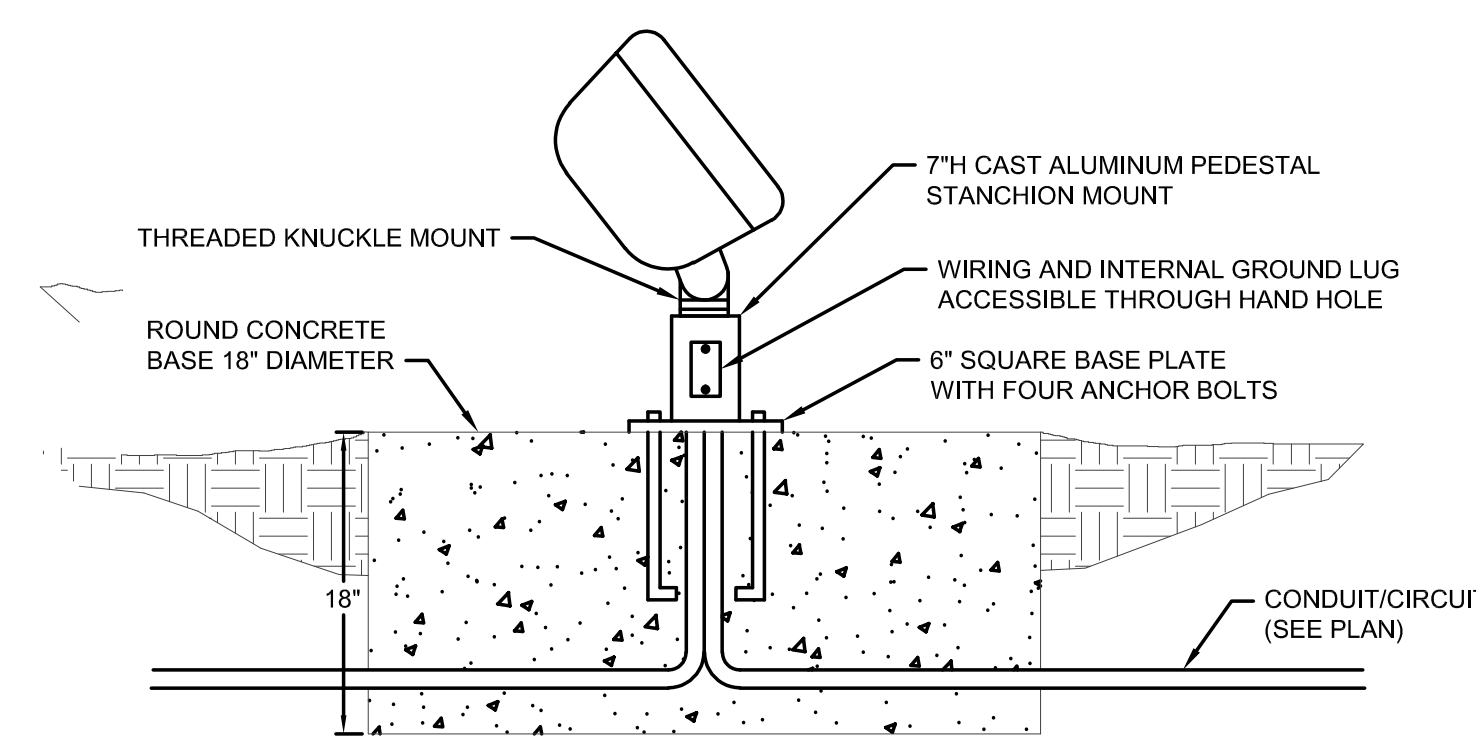
NOT TO SCALE



**COMPUTER CLASSROOM WIREMOLD DETAIL**

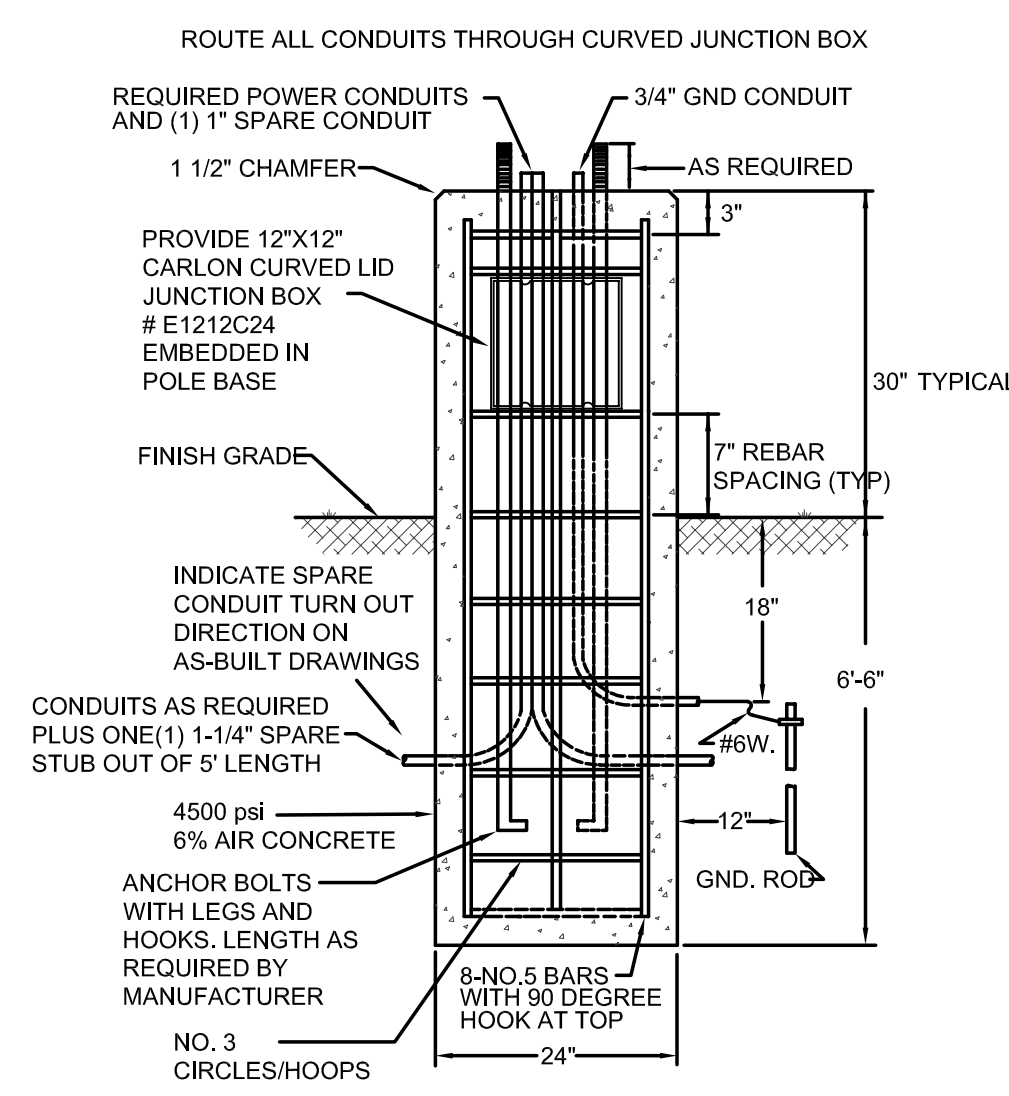
NOT TO SCALE

ESI-014



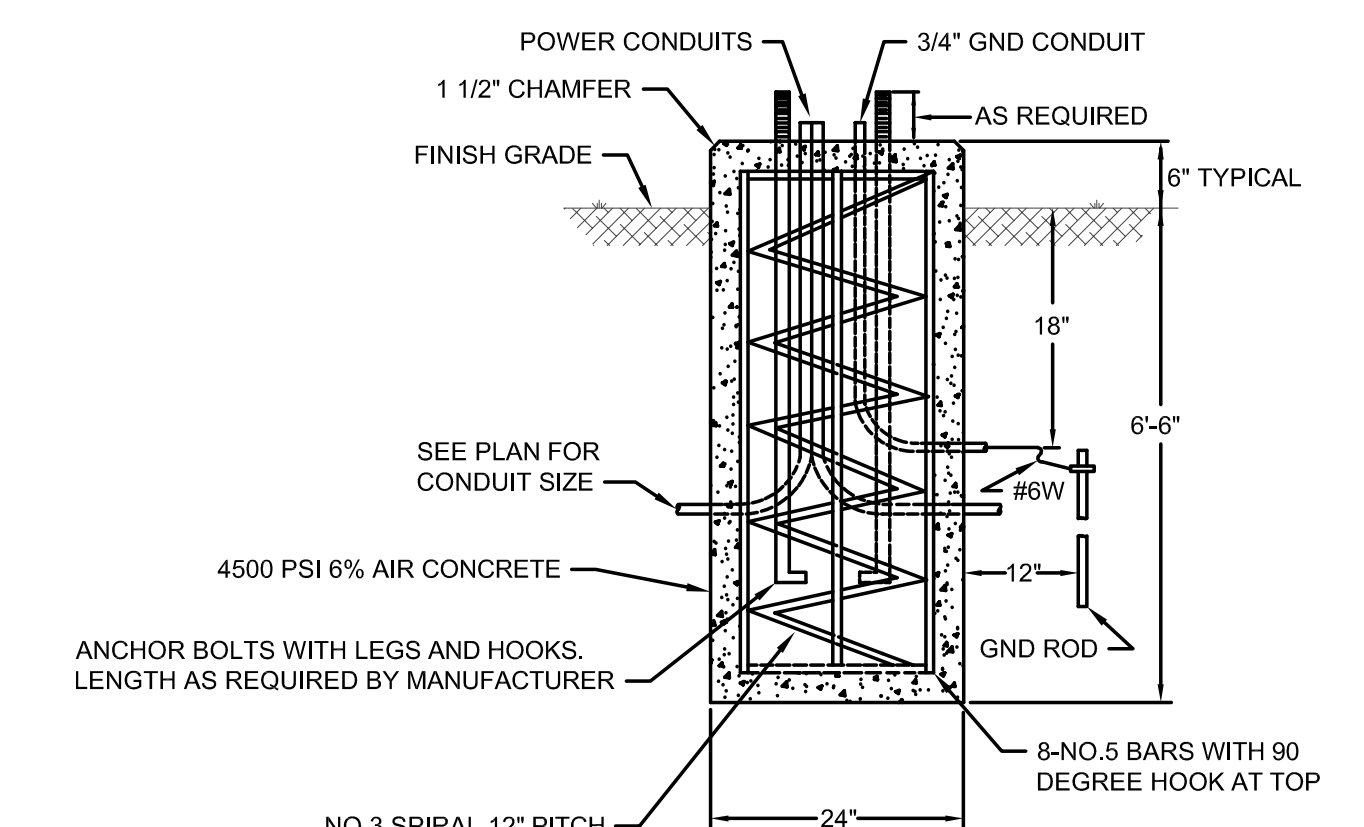
**FLOODLIGHT MOUNTING DETAIL**

NOT TO SCALE



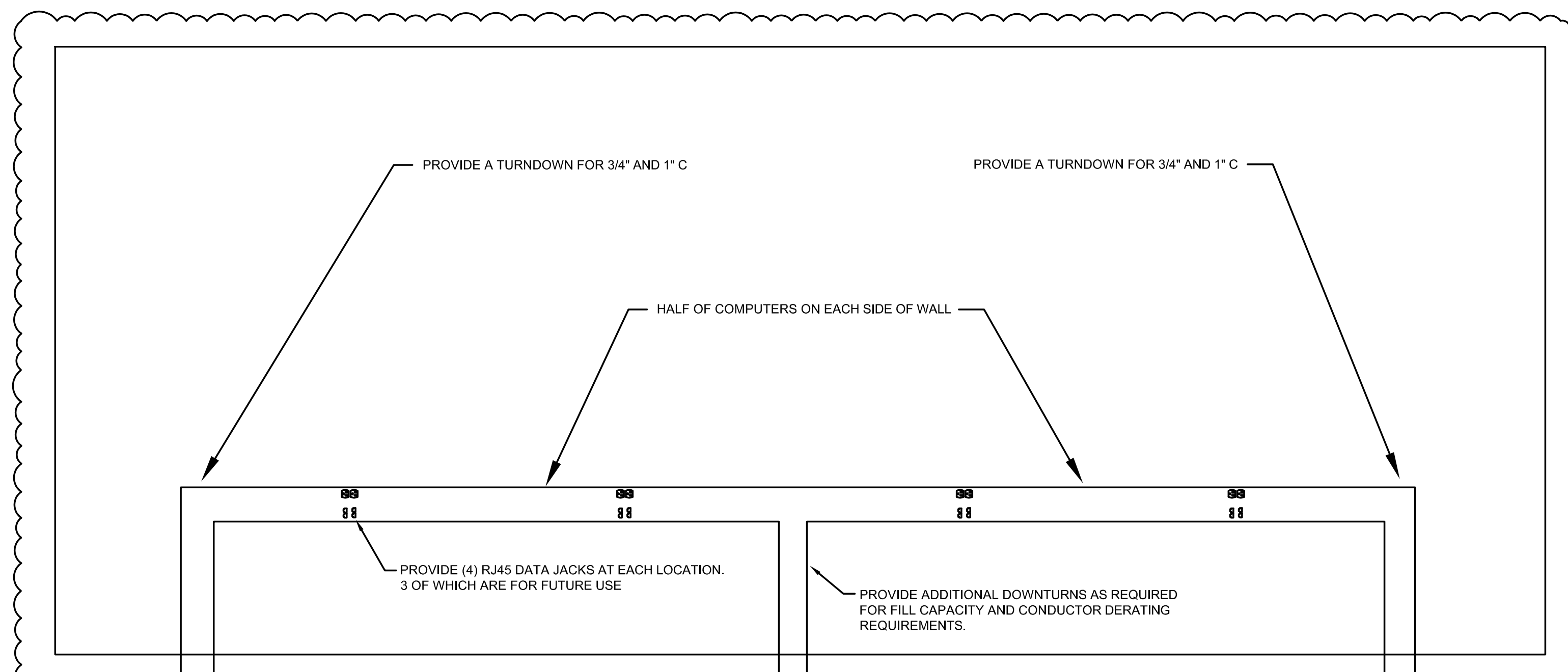
**TALL POLE BASE DETAIL**

NOT TO SCALE



**SHORT POLE BASE DETAIL**

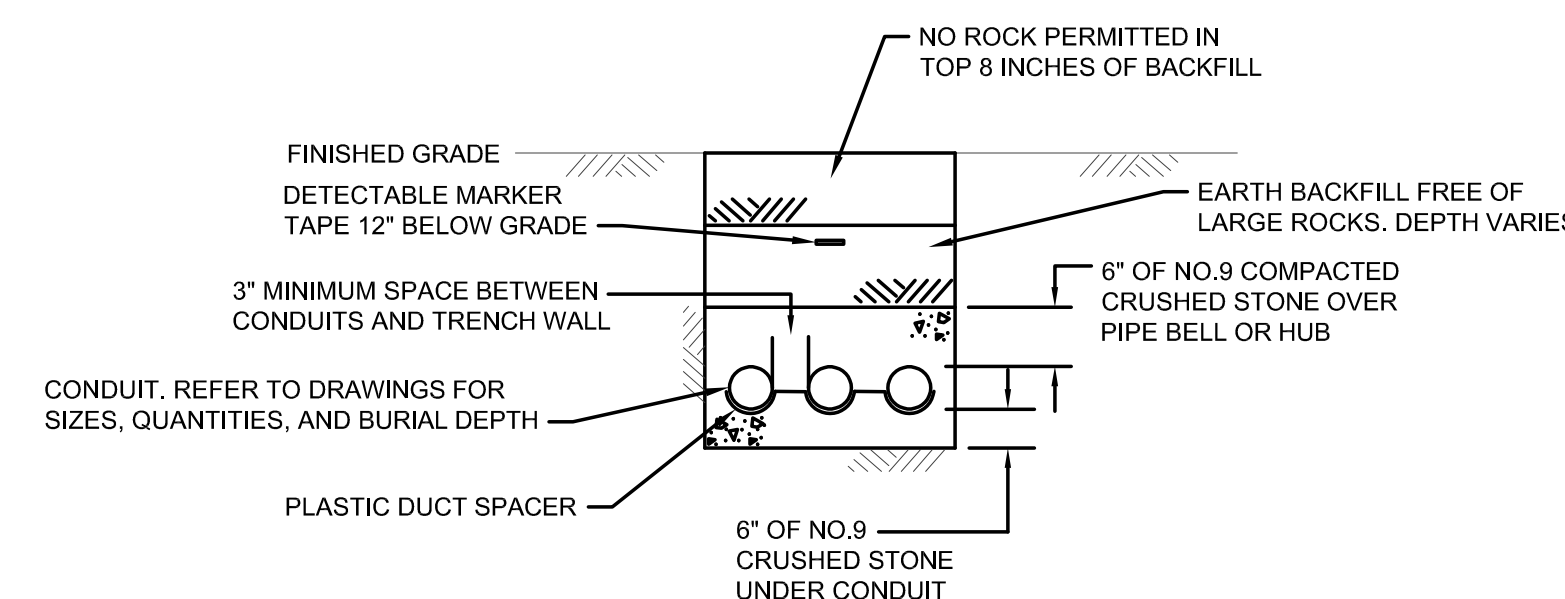
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**COMPUTER CLASSROOM WIREMOLD DETAIL**

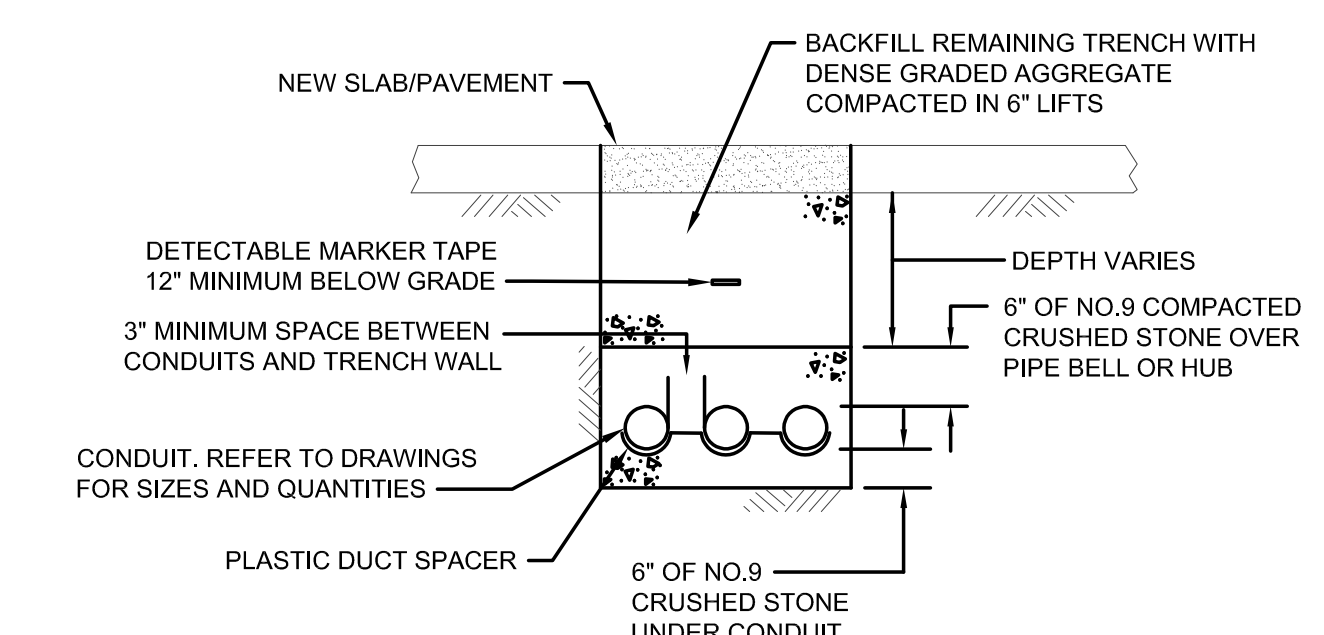
NOT TO SCALE

ESI-014



**TRENCH DETAIL FOR EARTH COVER**

NOT TO SCALE



**TRENCH DETAIL FOR NEW SLAB/PAVEMENT**

NOT TO SCALE

- ESI-014 12.12.2023
- ADDENDUM #2 03.15.2022
- ADDENDUM #1 03.08.2022

**GENERAL NOTES:**

1. REFER TO SHEET E002 FOR ADDITIONAL GENERAL NOTES.

**SHEET KEYNOTES:**

1. ROUTE FEEDER BELOW FLOOR OF MECHANICAL ROOM 216. FIELD COORDINATE EXACT ROUTING.
2. PROVIDE FEED-THROUGH CONNECTIONS BETWEEN PANEL SECTIONS WITH SAME SIZE CONDUCTORS AS PANEL FEEDER.
3. CONTRACTOR MAY, AT THEIR OPTION AND COST SAVINGS, PROVIDE FEEDER BUSH IN LIEU OF RACEWAYS AND CONDUCTORS FOR THIS FEEDER. REFER TO NEW WORK POWER FLOOR PLANS FOR ROUTING AND ADDITIONAL REQUIREMENTS.
4. INSTALL COMBINATION VFD MOTOR CONTROLLER FURNISHED WITH MECHANICAL EQUIPMENT AND PROVIDE CONNECTION TO ASSOCIATED PUMP. COORDINATE WIRING REQUIREMENTS WITH SUPPLIER.
5. PROVIDE NON-FUSED DISCONNECT SWITCH ON UNISTRUT STAND TO SERVE MECHANICAL EQUIPMENT. PROVIDE (1) NORMALLY-CLOSED AND (1) NORMALLY OPEN AUXILIARY CONTACT SWITCH TO SIGNAL ASSOCIATED VFD OF LOCAL SHUT DOWN. PROVIDE INTERLOCK WIRING BETWEEN DISCONNECT SWITCH AND ASSOCIATED VFD AS REQUIRED. FIELD COORDINATE EXACT WIRING REQUIREMENTS WITH MECHANICAL CONTRACTOR. MAKE ALL FINAL CONNECTIONS.



Langston - Louisville - Charleston  
www.steeeg.com

03/15/2022

Phase 6b - Building Replacement & Renovations  
**Beechwood Elementary School**  
Beechwood Independent Schools Board of Education  
Dr. Michael Stacy - Superintendent

SHEET TITLE  
ELECTRICAL  
ONE-LINE  
DIAGRAM  
BID SUBMITTAL

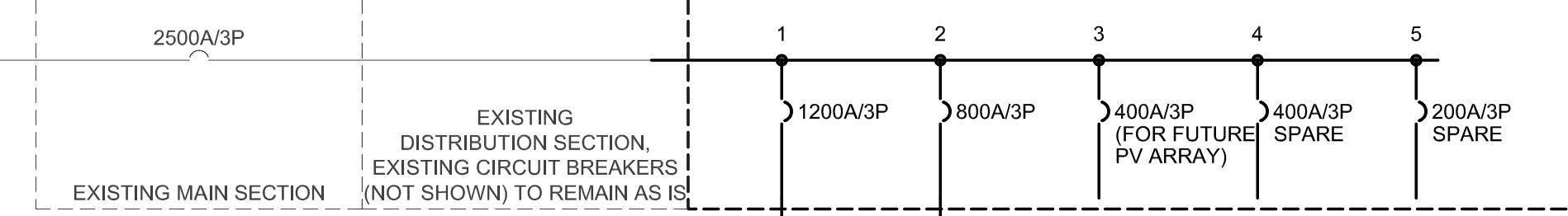
BG #  
19-078

DATE  
12/13/2021

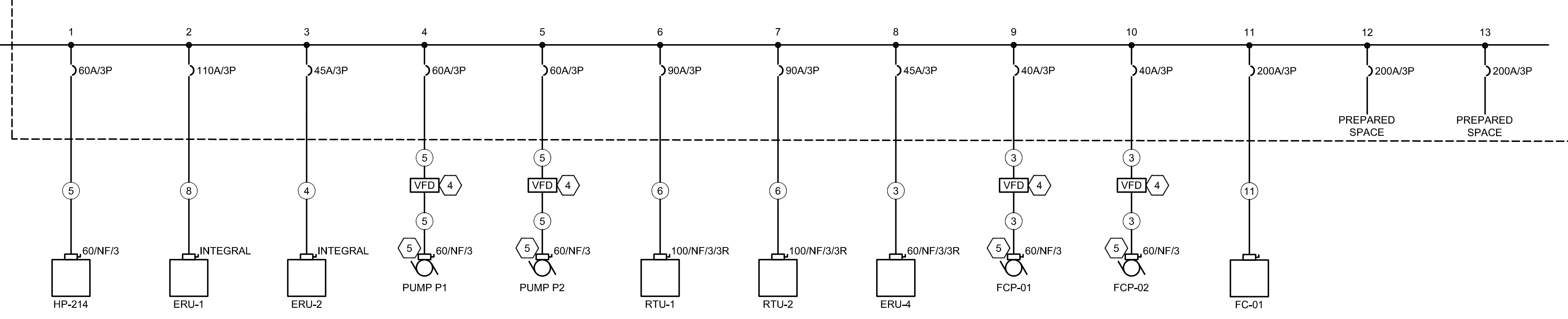
**E601**

EXISTING MAIN SWITCHBOARD MSB  
GE SPECTRA SERIES  
REQ. # 37498803-N\_JOB # 17803334E-1  
2500A, 277/480V, 3Ø, 4W, 65K AIC

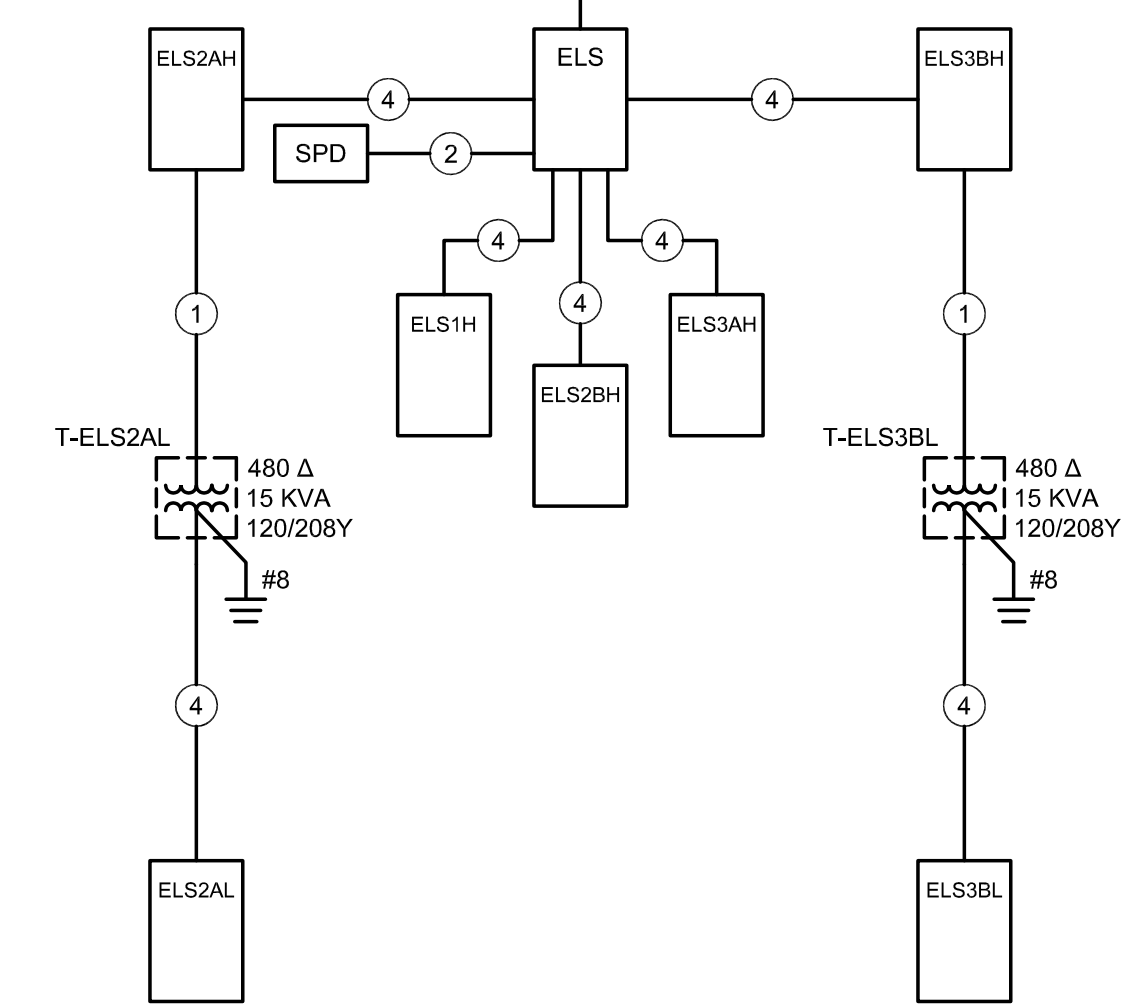
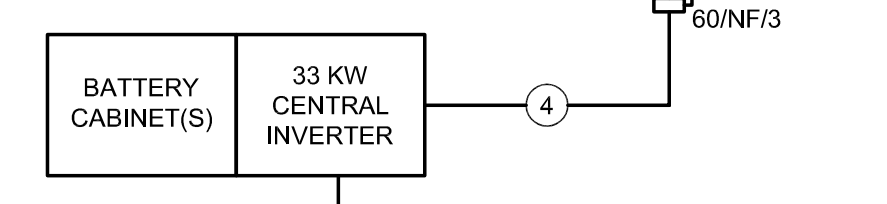
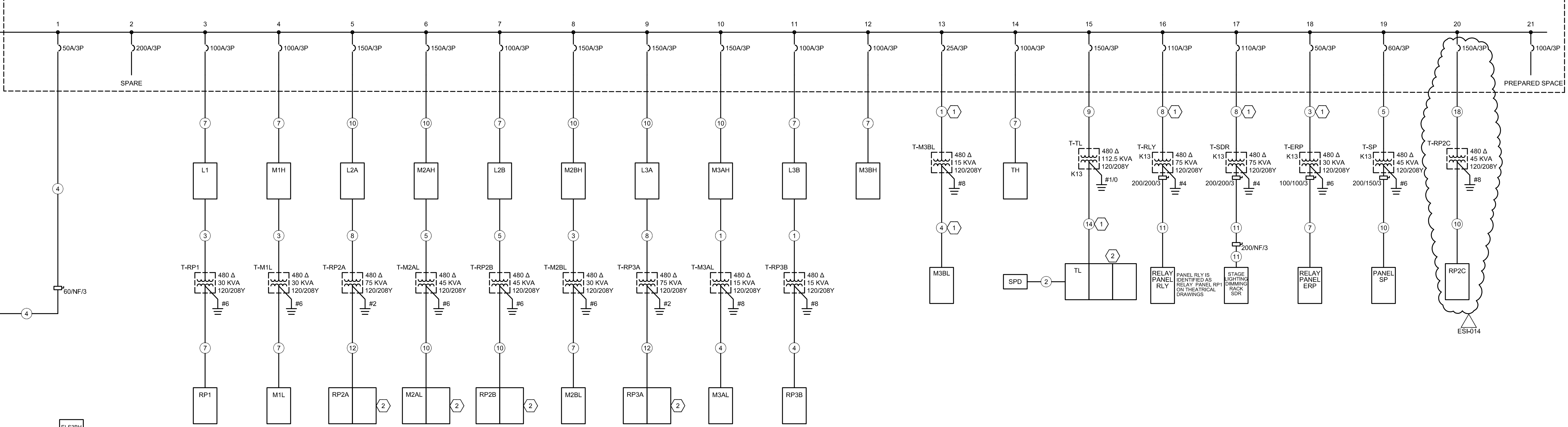
PROVIDE 2500 AMP  
DISTRIBUTION SECTION ADDED  
TO EXISTING SWITCHBOARD  
WITH CIRCUIT BREAKERS SHOWN



**DISTRIBUTION PANEL DP1** 277/480V 800A 3 PHASE 4 WIRE 35K AIC



**DISTRIBUTION PANEL DP2** 277/480V 1200A 3 PHASE 4 WIRE 35K AIC



ONE LINE SCHEDULE	
1	30 AMP 3-WIRE CIRCUIT (3#10, 1#10G, 3/4" C)
2	30 AMP 4-WIRE CIRCUIT (4#10, 1#10G, 3/4" C)
3	40 OR 50 AMP 3-WIRE CIRCUIT (3#8, 1#10G, 3/4" C)
4	40 OR 50 AMP 4-WIRE CIRCUIT (4#8, 1#10G, 1" C)
5	60 AMP 3-WIRE CIRCUIT (3#6, 1#10G, 1" C)
6	90 OR 100 AMP 3-WIRE CIRCUIT (3#3, 1#6G, 1-1/4" C)
7	90 OR 100 AMP 4-WIRE CIRCUIT (4#3, 1#6G, 1-1/4" C)
8	110 AMP 3-WIRE CIRCUIT (3#2, 1#6G, 1-1/4" C)
9	150 AMP 3-WIRE CIRCUIT (3#1/0, 1#6G, 1-1/2" C)
10	150 AMP 4-WIRE CIRCUIT (4#1/0, 1#6G, 2" C)
11	200 AMP 4-WIRE CIRCUIT (4#3/0, 1#6G, 2" C)
12	250 AMP 4-WIRE CIRCUIT (4#250, 1#4G, 2-1/2" C)
13	400 AMP 4-WIRE CIRCUIT (4#500, 1#3G, 3-1/2" C)
14	400 AMP 4-WIRE, 200%N, IG CIRCUIT (5#500, 1#3G, 1#3IG, 3-1/2" C)
15	600 AMP 4-WIRE CIRCUIT (2 SETS(4#350, 1#1G, 3" C))
16	800 AMP 4-WIRE CIRCUIT (2 SETS(4#500, 1#1/0G, 3-1/2" C))
17	1200 AMP 4-WIRE CIRCUIT (4 SETS(4#350, 1#3/0G, 3-1/2" C))
18	70 OR 80 AMP 3-WIRE CIRCUIT (3#4, 1#6G, 1-1/4" C)

- △ ESI-014 12.12.2023
- △ ESI-014
- △ ADDENDUM #2 03.15.2022
- △ ADDENDUM #1 03.08.2022



DISTRIBUTION PANELBOARD DP1											
DISTRIBUTION PANELBOARD											
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING	
277/480		4 WIRE		30		100		MLO		35000	
CKT. NO.	AMP FRAME	AMP TRIP	NO. POLES	LOAD SERVED			KVA			NOTES	
1	60	60	3	HP-214					33.3		
2	200	110	3	ERU-01					72.0		
3	60	45	3	ERU-02					28.0		
4	60	60	3	PUMP P1					28.2		
5	60	60	3	PUMP P2					28.2		
6	100	90	3	RTU-1					62.3		
7	100	90	3	RTU-2					62.3		
8	60	45	3	ERU-4					28.0		
9	40	40	3	FCP-01					21.6		
10	40	40	3	FCP-02					21.6		
11	200	200	3	FC-01					130.0		
12	200		3	PREPARED SPACE					0.0		
13	200		3	PREPARED SPACE					0.0		
TOTAL:				17.5		15.1		516.5		KVA	

NOTES:  
 ABBREVIATIONS:  
 G - GFCI BREAKER  
 A - AFCI  
 L - LOCKOUT BREAKER  
 S - SHUNT TRIP BREAKER  
 C - COMBINATION GFCI/AFCI BREAKER  
 E - ELECTRONIC ADJUSTABLE TRIP BREAKER  
 MCB - MAIN CIRCUIT BREAKER  
 MLO - MAIN LUG ONLY

DISTRIBUTION PANELBOARD DP2											
DISTRIBUTION PANELBOARD											
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING	
277/480		4 WIRE		30		100		MLO		35000	
CKT. NO.	AMP FRAME	AMP TRIP	NO. POLES	LOAD SERVED			KVA			NOTES	
2	200	200	3	CENTRAL INVERTER					30.0		SERVES PANEL ELTS
3	100	100	3	PANEL L1					34.5		
4	100	100	3	PANEL M1H					42.1		
5	200	200	3	PANEL L2A					74.5		
6	200	150	3	PANEL M2AH					72.0		
7	100	100	3	PANEL L2B					51.2		
8	200	150	3	PANEL M2BH					71.5		
9	200	150	3	PANEL L3A					65.3		
10	200	150	3	PANEL M3AH					71.4		
11	100	100	3	PANEL L3B					28.5		
12	100	100	3	PANEL M3BH					46.5		
13	30	25	3	TRANSFORMER T-M3BL					20.4		
14	100	100	3	PANEL TH					10.7		
15	200	150	3	TRANSFORMER T-IL					94.7		SERVES PANEL TL
16	200	110	3	TRANSFORMER T-FLY					57.6		SERVES THEATRICAL RELAY PANEL RPT1
17	200	110	3	TRANSFORMER T-SDR					57.6		SERVES THEATRICAL LIGHTING DIMMING RACK
18	60	50	3	TRANSFORMER T-ERP					28.8		SERVES THEATRICAL RELAY PANEL ERP
19	60	60	3	TRANSFORMER T-SP					44.8		SERVES e-SPORTS AREA
20	200	200	3	PREPARED SPACE					0.0		
21	100	100	3	PREPARED SPACE					0.0		
TOTAL:				17.5		15.1		932.5		KVA	

NOTES:  
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PANEL L1													
BRANCH CIRCUIT PANELBOARD													
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING			
277/480		4 WIRE		30		100		MLO		28,000			
POLE NO.	TRIP	P	LOAD SERVED	PHASE LOADS			LOAD SERVED			SURFACE BREAKER POLE NO.			
1	20	1	NORTHWEST PARKING LOT	0.3	0.5	0.2	0.2	0.2	SPARE	20	1	2	
3	20	1	SOUTHWEST WALK WAY	1.0	0.3	0.2	0.2	0.2	SPARE	20	1	4	
5	20	1	FACADE LIGHTING	1.0	0.1	1.2	0.2	0.2	SPARE	20	1	6	
7	20	1	NORTHWEST STEPLIGHTS	0.1	0.3	0.2	0.2	0.2	SPARE	20	1	8	
9	20	1	SOUTHWEST STEPLIGHTS	0.1	0.3	0.2	0.2	0.2	SPARE	20	1	10	
11	20	1	LOWER LEVEL LIGHTING	1.4	0.1	1.6	0.2	0.2	SPARE	20	1	12	
13	20	1	CORRIDOR LC	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	14	
15	20	1	LOWER LEVEL MECH RM	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	16	
17	20	1	LOWER LEVEL STAIRS	0.1	0.3	0.2	0.2	0.2	SPARE	20	1	18	
19	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	20	
21	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	22	
23	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	24	
25	20	1	SPARE	0.2	10.0	9.8	0.2	0.2	SPARE	50	3	28	
27	20	1	SPARE	0.2	9.1	8.9	0.2	0.2	SPARE	50	3	28	
29	20	1	SPARE	0.2	8.9	8.7	0.2	0.2	SPARE	50	3	28	
PHASE TOTALS:				11.6		10.5		12.4		TOTAL: 34.5		KVA	

NOTES:  
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PANEL L2A													
BRANCH CIRCUIT PANELBOARD													
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING			
277/480		4 WIRE		30		150		MLO		28,000			
POLE NO.	TRIP	P	LOAD SERVED	PHASE LOADS			LOAD SERVED			SURFACE BREAKER POLE NO.			
1	20	1	SOUTH CORNER LIGHTING	1.6	1.8	0.2	0.2	0.2	SPARE	20	1	2	
3	20	1	FMD AND RESTROOM	1.0	1.2	1.3	0.2	0.2	SPARE	20	1	4	
5	20	1	CORRIDOR 104/105 LTG	1.1	1.1	1.3	0.2	0.2	SPARE	20	1	6	
7	20	1	WEST CORNER LIGHTING	1.4	1.6	0.2	0.2	0.2	SPARE	20	1	8	
9	20	1	MECH 103 LTG	0.1	0.3	0.2	0.2	0.2	SPARE	20	1	10	
11	20	1	MECH 107 LTG	0.2	0.2	0.4	0.2	0.2	SPARE	20	1	12	
13	20	1	MECH/DATA 121/122	0.1	0.3	0.2	0.2	0.2	SPARE	20	1	14	
15	20	1	BIO LAB 100	0.2	1.0	1.2	0.2	0.2	SPARE	20	1	16	
17	20	1	EXT. LYS COURTYARD	0.8	1.0	1.0	0.2	0.2	SPARE	20	1	18	
19	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	20	
21	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	22	
23	20	1	SPARE	0.2	0.2	0.4	0.2	0.2	SPARE	20	1	24	
25	20	1	SPARE	0.2	23.5	23.3	0.2	0.2	SPARE	110	3	28	
27	20	1	SPARE	0.2	19.5	19.3	0.2	0.2	SPARE	110	3	28	
29	20	1	SPARE	0.2	21.1	20.9	0.2	0.2	SPARE	110	3	28	
PHASE TOTALS:				27.6		22.6		24.2		TOTAL: 74.5		KVA	

NOTES:  
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PANEL L2B													
BRANCH CIRCUIT PANELBOARD													
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING			
277/480		4 WIRE		30		100		MLO		28,000			
POLE NO.	TRIP	P	LOAD SERVED	PHASE LOADS			LOAD SERVED			SURFACE BREAKER POLE NO.			
1	20	1	LOBBY/CORRIDOR LTG	1.0	1.2	0.2	0.2	0.2	SPARE	20	1	2	
3	20	1	VIDEO EDITING 129 LTG	1.0	1.2	1.2	0.2	0.2	SPARE	20	1	4	
5	20	1	VIDEO EDITING 129 LTG	1.0	0.2	1.2	0.2	0.2	SPARE	20	1	6	
7	20	1	MECH 135 LTG	0.1	0.3	0.2	0.2	0.2	SPARE	20	1	8	
9	20	1	MAINTENANCE G104	0.5	0.7	0.2	0.2	0.2	SPARE	20	1	10	
11	20	1	LOCKER CORRIDOR LTG	0.3	0.3	0.5	0.2	0.2	SPARE	20	1	12	
13	20	1	LOCKER RM GIRLS LTG	0.8	1.0	0.2	0.2	0.2	SPARE	20	1	14	
15	20	1	LOCKER RM BOYS LTG	0.7	0.9	0.2	0.2	0.2	SPARE	20	1	16	
17	20	1	NEW MEDIA CENTER 134	1.1	1.1	1.3	0.2	0.2	SPARE	20	1	18	
19	20	1	NEW MEDIA CENTER 134	1.9	2.1	0.2	0.2	0.2	SPARE	20	1	20	
21	20	1	VESTIBULE ENTRY	1.0	1.2	0.2	0.2	0.2	SPARE	20	1	22	
23	20	1	SPARE	0.2	14.0	0.4	0.2	0.2	SPARE	60	3	26	
25	20	1	SPARE	0.2	14.0	13.8	0.2	0.2	SPARE	60	3	26	
27	20	1	SPARE	0.2	13.5	13.3	0.2	0.2	SPARE	60	3	26	
29	20	1	SPARE	0.2	11.7	11.5	0.2	0.2	SPARE	60	3	26	
PHASE TOTALS:				18.6		17.5		15.1		TOTAL: 51.2		KVA	

NOTES:  
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PANEL L3A												
BRANCH CIRCUIT PANELBOARD												
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING		
277/480		4 WIRE		30		150		MLO		28,000		
POLE NO.	TRIP	P	LOAD SERVED	PHASE LOADS			LOAD SERVED			SURFACE BREAKER POLE NO.		
1	20	1	SOUTHWEST CORNER	2.2	2.4	0.2	0.2	0.2	SPARE	20	1	2
3	20	1	NORTHWEST CORNER	2.0	2.2	0.2	0.2	0.2	SPARE	20	1	4
5	20	1	WEST CENTRAL	0.9	1.1	0.2	0.2	0.2	SPARE	20	1	6
7	20	1	MECH 202 LTG	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	8
9	20	1	WEST CORRIDORS LTG	0.5	0.7	0.2	0.2	0.2	SPARE	20	1	10
11	20	1	MECH 207 LTG	0.1	0.1	0.3	0.2	0.2	SPARE	20	1	12
13	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	14
15	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	16
17	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	18
19	20	1	SPARE	0.2	0.4	0.2	0.2	0.2	SPARE	20	1	



PANEL TH													
BRANCH CIRCUIT PANELBOARD													
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING	
277/480		4 WIRE		42		100		MLO		28,000		SURFACE	
POLE NO.	TRIP	P	LOAD SERVED	KVA	A	B	C	KVA	LOAD SERVED	TRIP	P	NO.	NO.
1	20	1	STAGE HOUSE LIGHTING	0.7	0.7			0.0	SPACE			1	2
3	20	1	SPARE	0.5				0.0	SPACE			1	4
5	20	1	SPARE	0.5			0.5	0.0	SPACE			1	6
7	20	1	SPARE	0.5	0.5			0.0	SPACE			1	8
9	20	1	SPARE	0.5			0.5	0.0	SPACE			1	10
11	20	1	SPARE	0.5			0.5	0.0	SPACE			1	12
13	20	1	SPARE	0.5	0.5			0.0	SPACE			1	14
15	20	1	SPARE	0.5			0.5	0.0	SPACE			1	16
17	20	1	SPARE	0.5			0.5	0.0	SPACE			1	18
19	20	1	SPARE	0.5	0.5			0.0	SPACE			1	20
21	20	1	SPARE	0.5			0.5	0.0	SPACE			1	22
23	20	1	SPARE	0.5			0.5	0.0	SPACE			1	24
25	20	1	SPARE	0.5	0.5			0.0	SPACE			1	26
27	20	1	SPARE	0.5			0.5	0.0	SPACE			1	28
29	20	1	SPARE	0.5			0.5	0.0	SPACE			1	30
31	20	1	SPARE	0.5	0.5			0.0	SPACE			1	32
33	20	1	SPARE	0.5			0.5	0.0	SPACE			1	34
35	20	1	SPARE	0.5			0.5	0.0	SPACE			1	36
37	20	1	SPARE	0.5	0.5			0.0	SPACE			1	38
39	20	1	SPARE	0.5			0.5	0.0	SPACE			1	40
41	20	1	SPARE	0.5			0.5	0.0	SPACE			1	42
PHASE TOTALS:				3.7	3.5			10.7	KVA				

NOTES:  
1. PROVIDE PANEL WITH FEED-THROUGH LUGS  
2. PROVIDE PANEL WITH ISOLATED GROUND BUSS  
3. PROVIDE PANEL WITH 200% NEUTRAL BUSS

ABBREVIATIONS:  
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

PANEL TL (SECTION 1 OF 3)														
BRANCH CIRCUIT PANELBOARD														
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING		
120/208		4 WIRE		126		400		MCB		22,000		SURFACE		
POLE NO.	TRIP	P	LOAD SERVED	KVA	A	B	C	KVA	LOAD SERVED	TRIP	P	NO.	NO.	
1	30	3	SURGE PROTECTION	0.0	0.8			0.8	AUDIO 129B			20	1	2
3	30	3	SPARE	0.0			0.4	0.4	AUDIO 129B			20	1	4
5	30	3	SPARE	0.0			0.4	0.4	CONTROL 130			20	1	6
7	20	1	SCENE SHOP L107 REC	0.8	1.4			0.6	CONTROL 130			20	1	8
9	20	1	SCENE SHOP L107 REC	0.4			0.8	0.4	CONTROL 130			20	1	10
11	20	1	SCENE SHOP L107 REC	0.8			1.2	0.4	CONTROL 130			20	1	12
13	30	2	SCENE SHOP L107 REC	2.0	2.2			0.2	CONTROL 130			20	1	14
15	-	-	SCENE SHOP L107 REC	2.0			3.0	1.0	CONTROL 130 PLUG STRIP			20	1	16
17	50	2	SCENE SHOP L107 REC	3.5	4.0			4.0	0.5	SPARE		20	1	18
19	-	-	SPARE	3.5	4.0			0.5	SPARE			20	1	20
21	20	1	CORD REEL	0.4			0.8	0.4	BROADCAST 131			20	1	22
23	20	1	CORD REEL	0.4			0.8	0.4	BROADCAST 132			20	1	24
25	20	1	OVERHEAD DOOR	1.0	1.4			0.4	BROADCAST 133			20	1	26
27	20	1	SPARE	0.5			0.9	0.4	BROADCAST 134			20	1	28
29	20	1	SPARE	0.5			0.9	0.4	BROADCAST 135			20	1	30
31	20	1	VIDEO 129	1.6	2.0			0.4	BROADCAST 136			20	1	32
33	20	1	VIDEO 129	0.9			1.3	0.4	BROADCAST 137			20	1	34
35	20	1	VIDEO 129	1.7			2.1	0.4	VOCAL 133A			20	1	36
37	20	1	AUDIO 129A	0.8	1.2			0.4	VOCAL 133A			20	1	38
39	20	1	AUDIO 129A	0.4			0.8	0.4	VOCAL 133B			20	1	40
41	20	1	SPARE	0.5			0.9	0.4	VOCAL 133B			20	1	42
SECTION 2 LOADS:				9.7	11.0		10.0							
SECTION 3 LOADS:				11.3	10.5		10.9							
PHASE TOTALS:				34.0	29.5		31.2			94.7	KVA			

NOTES:  
1. PROVIDE PANEL WITH FEED-THROUGH LUGS  
2. PROVIDE PANEL WITH ISOLATED GROUND BUSS  
3. PROVIDE PANEL WITH EXTERNAL SURGE PROTECTION  
4. PROVIDE PANEL WITH 200% NEUTRAL BUSS

ABBREVIATIONS:  
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER  
S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER  
E - ELECTRONIC ADJUSTABLE TRIP BREAKER  
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

PANEL TL (SECTION 2 OF 3)														
BRANCH CIRCUIT PANELBOARD														
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING		
120/208		4 WIRE		126		400		MLO		22,000		SURFACE		
POLE NO.	TRIP	P	LOAD SERVED	KVA	A	B	C	KVA	LOAD SERVED	TRIP	P	NO.	NO.	
43	20	1	RECORDING 133 REC	0.8	1.6			0.8	CONTROL BOOTH 100A REC			20	1	44
45	20	1	RECORDING 133 REC	0.8		1.2		0.4	CONTROL BOOTH 100A REC			20	1	46
47	20	1	CONTROL 132 PLUG STRIP	1.0			1.4	0.4	CONTROL BOOTH 100A REC			20	1	48
49	20	1	SPARE	0.5	0.9			0.4	CONTROL BOOTH 100A REC			20	1	50
51	20	1	SPARE	0.5			0.9	0.4	CONTROL BOOTH 100A REC			20	1	52
53	20	1	CONTROL 132 REC	0.4			0.8	0.4	CONTROL BOOTH 100A REC			20	1	54
55	20	1	CONTROL 132 REC	0.4	0.8			0.4	ORCHESTRA PIT REC			20	1	56
57	20	1	CONTROL 132 REC	0.4	1.2			0.8	ORCHESTRA PIT REC			20	1	58
59	20	1	CONTROL 132 REC	0.8			1.6	0.8	ORCHESTRA PIT REC			20	1	60
61	20	1	STAIR L105/L106 REC	0.6	1.0			0.4	ORCHESTRA PIT REC			20	1	62
63	20	1	STAIR L104/L103 REC	0.6		1.2		0.6	STAGE FLOORBOX			20	1	64
65	20	1	AUDIO DISTRIBUTION EQUIP	1.8			2.2	0.4	STAGE RECEPTACLE			20	1	66
67	20	1	AUDIO DISTRIBUTION EQUIP	1.8	2.2			0.4	STAGE RECEPTACLE			20	1	68
69	20	1	AUDIO DISTRIBUTION EQUIP	1.8		2.6		0.8	STAGE RECEPTACLE			20	1	70
71	20	1	AUDIO DISTRIBUTION EQUIP	1.8			2.2	0.4	STAGE RECEPTACLE			20	1	72
73	20	1	AUDIO DISTRIBUTION EQUIP	1.8	2.2			0.4	STAGE RECEPTACLE			20	1	74
75	20	1	AUDIO DISTRIBUTION EQUIP	1.8			2.6	0.8	STAGE RECEPTACLE			20	1	76
77	20	1	AUDIO EQUIP REC	0.4			0.8	0.4	STAGE RECEPTACLE			20	1	78
79	20	1	THEATER 100 BACK	0.6	1.0			0.4	STAGE RECEPTACLE			20	1	80
81	20	1	SPARE	0.5			1.3	1.0	0.5	SPARE		20	1	82
83	20	1	SPARE	0.5			1.3	1.0	0.5	SPARE		20	1	84
THIS SECTION PHASE TOTALS:				9.7	11.0		10.0			(REFER TO SECTION 1 FOR TOTAL KVA)				

NOTES:  
1. PROVIDE PANEL WITH FEED-THROUGH LUGS  
2. PROVIDE PANEL WITH ISOLATED GROUND BUSS  
3. PROVIDE PANEL WITH 200% NEUTRAL BUSS

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PANEL TL (SECTION 3 OF 3)														
BRANCH CIRCUIT PANELBOARD														
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING		
120/208		4 WIRE		126		400		MLO		22,000		SURFACE		
POLE NO.	TRIP	P	LOAD SERVED	KVA	A	B	C	KVA	LOAD SERVED	TRIP	P	NO.	NO.	
85	20	1	BALCONY REC NW	0.4	1.6			1.2	RIGGING CONTROL PANEL			20	1	86
87	20	1	BALCONY REC SW	0.4		0.9		0.5	BROADCAST AREA LTG			20	1	88
89	20	1	FOLLOW SPOT REC N	1.0			1.2	0.2	CONTROL BOOTH LTG			20	1	90
91	20	1	FOLLOW SPOT REC S	1.0	1.5			0.4	SPARE			20	1	92
93	20	1	PROJECTOR REC	1.2			1.7	0.5	SPARE			20	1	94
95	20	1	PROJECTOR REC	1.2			1.7	0.5	SPARE			20	1	96
97	20	1	CATWALK REC	1.4	1.9			0.5	SPARE			20	1	98
99	20	1	CATWALK REC	1.0			1.5	0.5	SPARE			20	1	100
101	20	1	PROJECTION SCREEN	1.2			1.7	0.5	SPARE			20	1	102
103	20	1	LTG NETWORK CTRL	0.4	0.9			0.5	SPARE			20	1	104
105	20	1	OPTO SPLITTER	0.5			1.0	0.5	SPARE			20	1	106
107	20	1	STAGE REC	0.4			0.9	0.5	SPARE			15	2	108
109	20	3	RIGGING MOTOR FRONT	1.3	1.8			0.5	SPARE			15	2	110
111	-	-	-				1.3	1.8	0.5	SPARE		15	2	112
113	-	-	-				1.3	1.8	0.5	SPARE		15	2	114
115	20	3	RIGGING MOTOR CENTER	1.3	1.8			0.5	SPARE			15	3	116
117	-	-	-				1.3	1.8	0.5	SPARE		15	3	118
119	-	-	-				1.3	1.8	0.5	SPARE		15	3	120
121	20	3	RIGGING MOTOR BACK	1.3	1.8			0.5	SPARE			30	3	122
123	-	-	-				1.3	1.8	0.5	SPARE		30	3	124
125	-	-	-				1.3	1.8	0.5	SPARE		30	3	126
THIS SECTION PHASE TOTALS:				11.3	10.8		10.9			(REFER TO SECTION 1 FOR TOTAL KVA)				

NOTES:  
1. PROVIDE PANEL WITH ISOLATED GROUND BUSS  
2. PROVIDE PANEL WITH 200% NEUTRAL BUSS

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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

PANEL RP2C														
BRANCH CIRCUIT PANELBOARD														
VOLTAGE		3 PHASE		POLES		MAIN AMPS		MAIN TYPE		A. I. RATING		MOUNTING		
120/208		4 WIRE		42		150		MCB		22,000		FLUSH		
POLE NO.	TRIP	P	LOAD SERVED	KVA	A	B	C	KVA	LOAD SERVED	TRIP	P	NO.	NO.	
1	20	1	COMPUTER STATION	1.2	2.4			1.2	COMPUTER STATION			20	1	2
3	20	1	COMPUTER STATION	1.2			2.4	1.2	COMPUTER STATION			20	1	4
5	20	1	COMPUTER STATION	1.2			2.4	1.2	COMPUTER STATION			20	1	6
7	20	1	COMPUTER STATION	1.2	2.4			1.2	COMPUTER STATION			20	1	8
9	20	1	COMPUTER STATION	1.2			2.4	1.2	COMPUTER STATION			20	1	10
11	20	1	COMPUTER STATION	1.2			2.4	1.2	COMPUTER STATION					



Contractor: DELTA Electric  
 Submitted By: Eric Scheidt  
 Date: 7/26/24  
 Project Number: C762



**Beechwood Schools**

**Note: INCLUDE ALL APPROPRIATE BACKUP INVOICES FOR SUBCONTRACTORS AND MATERIALS**

CHANGE PROPOSAL #						
Scope Description: PR #49						
	QTY.	UNIT	RATE		SUBTOTAL	TOTAL
<b>MATERIAL:</b>						
1. SEE ATTACHED	1	E	\$ 25,185.24	\$	25,185.24	25,185.24
2.				\$	-	0.00
3.				\$	-	0.00
4.				\$	-	0.00
5.				\$	-	0.00
6.				\$	-	0.00
SUBTOTAL:				\$	<b>25,185.24</b>	25,185.24
<b>TOOLS/ EQUIPMENT:</b>						
1. Technology	1		\$ 75.00	\$	75.00	75.00
2.				\$	-	-
3.				\$	-	-
4.				\$	-	-
5.				\$	-	-
6.				\$	-	-
SUBTOTAL:				\$	<b>75.00</b>	75.00
<b>LABOR:</b>						
1. Straight Time	313.03	HRS @	\$65.00	\$	20,346.95	20,346.95
2. Third Shift	0.00	HRS @	\$82.00	\$	-	0.00
3. Overtime	0.00	HRS @	\$98.00	\$	-	0.00
4. On-Site Supervision	31.30	HRS @	\$75.00	\$	2,347.73	2,347.73
5. Project Manager	15.65	HRS @	\$105.00	\$	1,643.41	1,643.41
6. Safety	6.26	HRS @	\$65.00	\$	406.94	406.94
7. Material Handling	6.26	HRS @	\$48.00	\$	300.51	300.51
8. Clean-Up	3.13	HRS @	\$48.00	\$	150.25	150.25
SUBTOTAL:				\$	<b>25,195.78</b>	25,195.78
<b>SUB-CONTRACTORS</b>						
1.	1 LS		0	\$	-	0.00
2.	1 LS			\$	-	-
3.	1 LS			\$	-	-
4.	1 LS			\$	-	-
5.	1 LS			\$	-	-
6.	1 LS			\$	-	-
SUBTOTAL:				\$	-	0.00
<b>SUBTOTALS</b>						
MATERIAL/ TOOLS/ EQUIPMENT SUBTOTAL				\$	25,260.24	
LABOR SUBTOTAL				\$	25,195.78	
SUBCONTRACTOR SUBTOTAL				\$	-	
SUBTOTAL:				\$	<b>50,456.02</b>	\$ 50,456.02
<b>OVERHEAD AND PROFIT</b>						
				<i>Percentage</i>		
OVERHEAD AND PROFIT MARKUP				15%	\$ 7,568.40	
SUBTOTAL:				\$	<b>7,568.40</b>	\$ 7,568.40
<b>TAXES:</b>						
				<i>Percentage</i>		
COMMERCIAL ACTIVITY TAX				6.00%	\$ 1,511.11	
BOND:				0.00%	\$ -	
				2.00%	\$ 1,190.71	
SUBTOTAL:				\$	2,701.83	\$ 2,701.83
<b>TOTAL COST:</b>		<b>\$60,726</b>				

**DELTA Electrical Contractors, LTD**  
**Beechwood Schools Phase 6B : Beechwood 6B - PR #52**

**Job Number: CO105-10**  
**Bid Summary: PR52RR**  
**Extension By Section**

Item #	Description	Quantity	Price	U	Ext Price	Labor Hr	U	Ext Lab Hr
--- Section #1 ---								
1000	1/2" EMT	120	68.98	C	82.78	4.50	C	5.40
1001	3/4" EMT	760	84.99	C	645.92	5.00	C	38.00
1002	1" EMT	180	150.00	C	270.00	5.50	C	9.90
1444	1/2" Set Screw Steel Conn	16	60.16	C	9.63	0.08	E	1.28
1465	3/4" Set Screw Steel Insul Throat Conn	54	72.75	C	39.29	0.10	E	5.40
1466	1" Set Screw Steel Insul Throat Conn	10	106.63	C	10.66	0.12	E	1.20
1544	1/2" Set Screw Steel Cplg	12	44.00	C	5.28	0.10	E	1.20
1545	3/4" Set Screw Steel Cplg	76	38.01	C	28.89	0.12	E	9.12
1546	1" Set Screw Steel Cplg	18	56.02	C	10.08	0.14	E	2.52
2338	1/2" 1-Hole Strap	16	13.98	C	2.24	4.00	C	0.64
2340	1" 1-Hole Strap	16	26.53	C	4.31	4.00	C	0.65
2360	3/4" Conduit Hanger w/Bolt	95	75.00	C	71.25	25.00	C	23.75
2361	1" Conduit Hanger w/Bolt	6	90.00	C	5.63	25.00	C	1.56
2469	4" Square Box (1/2 & 3/4 KO's)	10	224.96	C	22.50	0.30	E	3.00
2470	4" Square x 1-1/2" Deep Box w/bkt (1/2&3/4 KO's)	8	235.88	C	18.87	0.30	E	2.40
2471	4" Square x 2-1/8" Deep Box (1/2 & 3/4 KO's)	4	163.78	C	6.55	0.30	E	1.20
2472	4" Square x 2-1/8" Deep Box w/brkt (1/2&3/4 KO's)	12	199.14	C	23.90	0.30	E	3.60
2660	#12 THHN CU Stranded Wire	3,466	170.03	M	589.32	6.00	M	20.80
2661	#10 THHN CU Stranded Wire	4,704	254.99	M	1,199.47	7.50	M	35.28
4054	100A 3P 277V Bolt-On Circuit Breaker	1	698.95	E	698.95	2.00	E	2.00
4409	#14-12-10 Wire Termination Labor	18	0.00	E	0.00	0.18	E	3.24
4649	20A Prem Spec Grade SP Switch	4	277.83	C	11.11	0.25	E	1.00
4703	20A/125V Spec Grade Dup Rcpt (5-20R)	76	1.83	E	139.08	0.30	E	22.80
4897	4" Square-1G Plaster Ring-5/8"D	8	103.20	C	8.26	0.15	E	1.20
4900	4" Square-1 Gang Plaster Ring-1-1/4"D	12	179.74	C	21.57	0.15	E	1.80
4950	1G Plastic Duplex Receptacle Plate	8	0.42	E	3.36	0.10	E	0.80
4973	1G SS Decora/GFI Plate	12	0.97	E	11.64	0.20	E	2.40
5003	4" Square 1G RS Switch Cover	4	221.88	C	8.88	0.15	E	0.60
5079	4" Square Flat Blank Cover	10	200.43	C	20.04	0.12	E	1.20
5891	Wiremold #4000B Raceway Base	80	6.25	E	500.00	15.00	C	12.00
5892	Wiremold #4000C Raceway Cover	80	3.75	E	300.00	6.00	C	4.80
5893	Wiremold #4000D Raceway Divider	80	1.50	E	120.00	3.50	C	2.80
5894	Wiremold #4001 Coupling	8	7.50	E	60.00	18.00	C	1.44
5895	Wiremold #4001D Divider Clip & Coup	16	1.75	E	28.00	21.00	C	3.36
5897	Wiremold #4010B Blank End Fitting	4	9.75	E	39.00	44.00	C	1.76
5898	Wiremold #4017 Internal Elbow	1	32.25	E	32.25	1.00	E	1.00
6133	Red Wirenuts	134	209.94	M	28.13	3.50	C	4.69
7114	Ground Screw with Bare Pigtail	20	97.65	C	19.53	2.00	C	0.40
7123	6X1/4" Pan Head Tapping Screw	64	2.36	C	1.51	0.01	E	0.64
47062	20A/125V Tamper Resistant USB Charge Dup Rcpt (5-2	12	25.07	E	300.84	0.25	E	3.00
62108	V/D R/I	2	15.00	E	30.00	1.00	E	2.00
62121	1.25" Flex Assembly	1	36.00	E	36.00	1.88	E	1.88
62151	1/2" Flex Assembly	4	7.00	E	28.00	1.00	E	4.00
62853	FIRE-RATED POKE-THROUGH 1-PIECE 4X4 SYS 1	4	334.88	E	1,339.52	1.50	E	6.00
82062	Core Drill Floor for 2"	1	150.00	E	150.00	1.15	E	1.15
82065	Core Drill Floor for 4"	4	200.00	E	800.00	2.00	E	8.00
82283	Overhead Door R/I	1	100.00	E	100.00	4.00	E	4.00
82289	Wiremold G4047C-1 One-Gang Overlapping Device Plat	30	11.00	E	330.00	22.00	C	6.60
82290	Wiremold G4047C-2 Two-Gang Overlapping Device Plat	30	19.00	E	570.00	22.00	C	6.60
82291	Wiremold G4000WC Wire Clip	22	3.50	E	77.00	5.00	C	1.10
82292	Wiremold #4000 Supports (Every 2.5 ft.)	32	3.00	E	96.00	9.00	C	2.88

Job Number: CO105-10

Bid Summary: PR52RR

Extension By Section

Item #	Description	Quantity	Price U	Ext Price	Labor Hr U	Ext Lab Hr
RP2C	150 Amp Surf Panel-Nema 1	1	QUOTE 2	0.00	12.74 E	12.74
T-RP2C	45 KVA 3PH Transformer 480/277V	1	QUOTE 2	0.00	16.25 E	16.25
T0001	ABB Quote for Added Breaker, Transformer & Panel	1	8,083.33 E	8,083.33	0.00 E	0.00
T0002	American Sound Data Cabling Quote	1	8,146.67 E	8,146.67	0.00 E	0.00
--- Section #1 Total ---				25,185.24		313.03
Job Total				25,185.24		313.03