

SECTION 00 91 10

ADDENDUM NUMBER 2

PARTICULARS

1.01 DATE: October 24, 2023

1.02 PROJECT: ELMORE GYM ELECTRICAL SERVICE REPLACEMENT

1.03 PROJECT NUMBER: 26239.0, DCM/BC NO. 2023098, PSCA NO. 2082

1.04 OWNER: ALABAMA A&M UNIVERSITY

1.05 ARCHITECT: HYDE ENGINEERING, INC.



TO PROSPECTIVE BIDDERS

2.01 THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES THE BIDDING DOCUMENTS DATED SEPTEMBER 29, 2023, WITH AMENDMENTS AND ADDITIONS NOTED BELOW.

2.02 ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED IN THE PROPOSAL FORM. FAILURE TO DO SO MAY DISQUALIFY THE BIDDER.

2.03 THIS ADDENDUM CONSISTS OF 4 - 8.5x11 PAGES and 5 full size sheets.

CHANGES TO THE PROJECT MANUAL:

3.01 Replace Construction Contract 9-A with the attached version in its entirety.

CHANGES TO THE DRAWINGS:

4.01 SHEET E0.1 – LEGEND, AND NOTES

A. Receptacle notes: wall outlet note updated.

4.02 SHEET E2.1 – PRIMARY RISER, NOTES, AND TRANSFORMER DETAILS

A. Feeder Schedule – Ground Wire size for feeders 2000YG and 3000YG updated.

4.03 SHEET E2.2 – RISER DIAGRAMS

A. Riser Diagram – 100A/3P breaker added to MBP for panel EXT (N).

B. Additive Alternate #1 Riser – 30DG feeder added to drawing and Note 4 added.

4.04 SHEET E2.3 – PANELSCHEDULES

A. Panel BH – Breakers for TX-BL and TX-CL updated to 30A from 20A.

B. Panel DH – Breaker for TX-DL changed from 20A to 50A.

4.05 SHEET E3.1 – GROUND FLOOR PLAN - ELECTRICAL

A. Panel BL beside TX-CL has been changed to CL.

ARCHITECTURAL CLARIFICATION:

5.01 SHEET A1.0: FOR ADDITIVE ALTERNATE #1 – CONTRACTOR SHALL PATCH EXISTING WALL AT ELECTRICAL PANELS TO BE REPLACED WITH LIKE CONSTRUCTION AND TO MEET EXISTING FIRE RATING. PAINT TO MATCH EXISTING WALL.

END OF ADDENDUM NUMBER 2

(1) **DCM (BC) Project #** _____ (required)

PSCA Project # 2082 (required)

Do not staple this form and/or attachments; use clips. Print single-sided; do not submit double-side printed documents.

CONSTRUCTION CONTRACT

Numbers in margin correspond to "Checklist", DCM Form B-7

(2) This Construction Contract is entered into this _____ day of _____ in the year of _____
 between the **OWNERS, the ALABAMA PUBLIC SCHOOL AND COLLEGE AUTHORITY**
 (3) and **LOCAL OWNER,**

Entity Name:
 Address:
 Email & Phone #:

(4) and the **CONTRACTOR,**
 Company Name:
 Address:
 Email & Phone #:

(5) State of AL Accounting & Resource System (STAARS) or AL Buys Vendor No.: _____
 for the **WORK** of the Project, identified as:

(6) The **CONTRACT DOCUMENTS** are dated _____ and have been amended by _____
 (7) **ADDENDA**

(8) The **ARCHITECT** is
 Firm Name:
 Address:
 Email & Phone #:

(9) The **CONTRACT SUM** is
 Dollars (\$) _____) and is the sum of the Contractor's Base Bid for the Work and the following
 (10) **BID ALTERNATE PRICES:**

(11) The **CONTRACT TIME** is _____ () calendar days.

THE OWNER AND THE CONTRACTOR AGREE AS FOLLOWS: The Contract Documents, as defined in the General Conditions of the Contract (DCM Form C-8), are incorporated herein by reference. The Contractor shall perform the Work in accordance with the Contract Documents. The Owner will pay and the Contractor will accept as full compensation for such performance of the Work, the Contract Sum subject to additions and deductions (including liquidated damages) as provided in the Contract Documents. The Work shall commence on a date to be specified in a Notice to Proceed issued by the Owner or the Director, Alabama Division of Construction Management, and shall then be substantially completed within the Contract Time.

(12) **LIQUIDATED DAMAGES** for which the Contractor and its Surety (if any) shall be liable and may be required to pay the Owner in accordance with the Contract Documents shall be equal to six percent interest per annum on the total Contract Sum unless a dollar amount is stipulated in the following space, in which case liquidated damages shall be determined at _____ dollars (\$) _____) per calendar day.

(13) **SPECIAL PROVISIONS** (such as acceptance or rejection of unit prices. Indicate continuation on an attachment if needed:

A. SEVERABLE PAYMENTS: The Alabama Public School and College Authority will first pay the Contractor _____ Dollars (\$ _____) from its available funds and the _____ will thereafter pay the Contractor the remaining _____ Dollars (\$ _____) from its available funds.

B.

By signing this contract, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment, or continue to employ an unauthorized alien within the state of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom.

Numbers in margin correspond to "Checklist", DCM Form B-7

(14) **STATE GENERAL CONTRACTOR'S LICENSE:** The Contractor does hereby certify that Contractor is currently licensed by the Alabama State Licensing Board for General Contractors and that the certificate for such license bears the following:

License No.:

Classification(s):

Bid Limit:

The Owner and Contractor have entered into this Construction Contract as of the date first written above and have executed this Construction Contract in sufficient counterparts to enable each contracting party to have an originally executed Construction Contract each of which shall, without proof or accounting for the other counterparts, be deemed an original thereof.

The Owner does hereby certify that this Construction Contract was let in accordance with the provisions of Title 39, Code of Alabama 1975, as amended, and all other applicable provisions of law, and that the terms and commitments of this Construction Contract do not constitute a debt of the State of Alabama in violation of Article 11, Section 213 of the Constitution of Alabama, 1901, as amended by Amendment Number 26.

Numbers in margin correspond to "Checklist"; DCM Form B-7

(15)

APPROVALS

**ALABAMA DEPARTMENT OF FINANCE,
REAL PROPERTY MANAGEMENT,
DIVISION OF CONSTRUCTION MANAGEMENT
(DCM)**

By _____
Director

REVIEWED BY AND FUNDS AVAILABLE:

PSCA funds are available in the amount stated in
(13) "Special Provisions", Paragraph A.

By _____
Contract Administrator

CONTRACTING PARTIES

Contractor Company
By _____
Signature

Name & Title _____

Local Owner Entity
By _____
Signature

Name & Title _____

**ALABAMA PUBLIC SCHOOL and COLLEGE
AUTHORITY**

By _____ Date: _____
Governor and President of Authority

Review/Signature flow: Architect/Engineer (prepare documents) > Contractor (review and sign) > Architect/Engineer (review) > Local Owner (review and sign) > DCM (review and sign) > Finance-Legal > Governor (review and sign) > DCM (distribute the fully executed Contract to all parties along with a Notice to Proceed).

RECEPTACLES

- ⊕ GFI WALL OUTLET: DUPLEX RECEPTACLE, NEMA 5-20R.
- ⊕ WP WALL OUTLET: SINGLE RECEPTACLE, NEMA 5-20R. COVER SHALL BE "EXTRA DUTY" PER NEC406.9(B).

POWER

- ⊙ CEILING EXHAUST FAN.
- ⊠ NON-FUSED DISCONNECT SWITCH.
- ⊡ FUSED DISCONNECT SWITCH.
- ⊣ CIRCUIT BREAKER.
- ⊢ AUTOMATIC TRANSFER SWITCH.
- ⊞ ELECTRICAL PANEL: SEE SCHEDULE AND SPECIFICATIONS.
- ⊟ TRANSFORMER
- ⊠ FUSED DISCONNECT SWITCH WITH CONNECTION TO EQUIPMENT.
- ⊡ MANUAL MOTOR STARTER THERMAL SWITCH. WALL MOUNT 5"-6"H. OR AT MOTOR AS SHOWN.

ABBREVIATIONS

| | | | |
|--------|-----------------------------|-----|--------------------------------|
| A | ABOVE COUNTER | IG | ISOLATED GROUND |
| AFG | ABOVE FINISH GRADE | NL | NIGHT LIGHT |
| AFF | ABOVE FINISH FLOOR | MCB | MAIN CIRCUIT BREAKER |
| AIC | AVAILABLE INTERRUPT CURRENT | MLO | MAIN LUGS ONLY |
| AL | ALUMINUM | RR | REMOVE AND REPLACE WITH NEW |
| AWG | AMERICAN WIRE GAUGE | TBB | TELEPHONE BACK BOARD |
| C | CONDUIT RACEWAY | TP | TAMPER PROOF |
| CB | CIRCUIT BREAKER | TV | TELEVISION |
| CU | COPPER | TYP | TYPICAL |
| DISC | DISCONNECT | UC | UNDER COUNTER |
| EM | EMERGENCY | UG | UNDER GROUND |
| EMT | ELECTRICAL METALLIC TUBING | WAP | WIRELESS ACCESS POINT |
| EP | EXPLOSION PROOF | WP | WEATHERPROOF, NEMA 3R. |
| EX | EXISTING | XR | EXISTING - REMOVE |
| F | FUSE | XRR | EXISTING - REMOVE AND RELOCATE |
| G, GRD | GROUND | XRL | EXISTING - RELOCATED |
| GFI | GROUND FAULT INTERRUPTING | | |

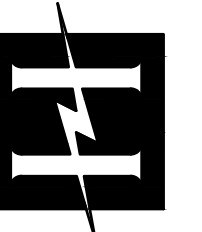
NOTES

1. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL ORDINANCES. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS.
2. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND ALL EXISTING FIELD CONDITIONS.
3. CONTRACTOR SHALL PROVIDE A COMPLETE ELECTRICAL INSTALLATION INCLUDING ALL WORK CUSTOMARILY INCLUDED EVEN IF NOT SPECIFICALLY CALLED OUT.
4. THE ELECTRICAL CONTRACTOR SHALL CAREFULLY COORDINATE HIS WORK WITH OTHER CONTRACTORS THROUGH THE GENERAL CONTRACTOR FOR SPACE REQUIREMENTS, ETC.
5. CONTRACTOR SHALL VERIFY ALL MECHANICAL EQUIPMENT NAMEPLATE DATA BEFORE ANY WORK IS DONE AND MAKE ANY ADJUSTMENTS IN BREAKER AND WIRE SIZE AS MAY BE REQUIRED.
6. SHOULD THE CONTRACTOR FIND DISCREPANCIES OR OMISSIONS IN THE CONTRACT DOCUMENTS OR BE IN DOUBT AS TO INTENT, HE SHALL IMMEDIATELY OBTAIN CLARIFICATION FROM THE ARCHITECT OR ENGINEER.
7. THE ELECTRICAL DRAWINGS ARE SCHEMATIC AND ARE NOT INTENDED TO SHOW THE EXACT LOCATION OF CONDUITS, OUTLETS, ETC. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS AND SHALL FIT HIS WORK TO CONFORM WITH THE BUILDING CONSTRUCTION AND WITH THE OTHER TRADES.
8. ATTENTION IS CALLED TO THE FACT THAT THIS IS A RENOVATION OF AN EXISTING BUILDING. WHEN THE WORK IS FINISHED, THE ELECTRICAL SHALL BE COMPLETE IN EVERY RESPECT, COMPLETELY INTEGRATED WITH ALL THE EXISTING ELECTRICAL SYSTEMS. ELECTRICAL SERVICE TO THE EXISTING BUILDING SHALL NOT BE INTERRUPTED AT ANY TIME. PROVIDE ALL THE NECESSARY TIES AND TEMPORARY SERVICE TO ACHIEVE THIS CONDITION.
9. RENOVATION/ADDITION SHALL BE MADE TO TIE INTO EXISTING IN A UNIFORM MANNER. SIMILAR ITEMS IN NEW BUILDING SHALL BE CHECKED AGAINST EXISTING BUILDING AS FOR TYPE MOUNTING, MOUNTING HEIGHTS, ETC. ANY ITEMS SHOWN IN NEW ADDITION AT VARIANCE FROM ABOVE SHALL BE REFERRED TO ARCHITECT FOR DECISION BEFORE ROUGHING IN.
10. SHOULD ANY ELECTRICAL POWER, LIGHT OR AUXILIARY, CIRCUITS, FEEDERS OR EQUIPMENT BE SEVERED, DISCONNECTED OR DELETED IN THE PROCESS OF CONSTRUCTION OR REMODELING WHICH IS NOTED A RESULT OF CONTRACT PLANS AND SPECIFICATIONS, AND UNLESS IT IS SPECIFICALLY DESIGNATED BY THE DRAWINGS TO BE DELETED, THEN SAID CIRCUIT OR FEEDER SHALL BE RESTORED TO FIRST CLASS WORKING CONDITION. THE RESTORATION SHALL INCLUDE ANY RE-ROUTING, RELOCATIONS OR REPLACEMENT AS MAY BE NECESSITATED BY THE ARCHITECTURAL AND STRUCTURAL CONSTRUCTION. ANY SUCH WORK REQUIRED SHALL BE INCLUDED IN THE ELECTRICAL CONTRACT AND NO EXTRA COMPENSATION WILL BE GRANTED.
11. THE ELECTRICAL CONTRACTOR SHALL DO ALL CUTTING, PATCHING AND REPAIRING REQUIRED TO DO THIS WORK. REPAIRING OF WORK SHALL BE COMPARABLE TO WORK CUT. PAINT TO MATCH ADJACENT SURFACES OR AS DIRECTED BY ARCHITECT. COORDINATE WITH GENERAL CONTRACTOR.
12. ALL CONDUITS CROSSING EXPANSION JOINTS SHALL HAVE EXPANSION TYPE FITTINGS.
13. THE ATTACHED DRAWINGS WERE DEVELOPED FROM RECORD DRAWINGS AND INFORMATION PROVIDED BY OTHERS WHICH MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD BEFORE PROCEEDING WITH SUBSEQUENT WORK. THE DESIGN TEAM SHALL BE NOTIFIED OF ANY DISCREPANCIES OR CONFLICTS WITH DRAWINGS FOR CLARIFICATION PRIOR TO PROCEEDING WITH WORK.
14. QUESTIONS REGARDING THESE DRAWINGS SHALL BE ADDRESSED TO ENGINEER PRIOR TO AWARDING OF CONTRACT. OTHERWISE THE ENGINEER'S INTERPRETATION OF THE MEANING AND INTENT OF DRAWINGS SHALL BE FINAL.
15. PROVIDE ARC FLASH WARNING LABELS ON EXISTING AND NEW PANELS THAT COMPLY WITH NEC110.16.
16. LABEL PANELS PER NEC110.24.

DO NOT SCALE DIMENSIONS FROM DRAWINGS. CONSULT OWNER/ARCHITECT FOR EXACT DIMENSIONAL DATA.

SPECIAL CONSTRUCTION NOTES

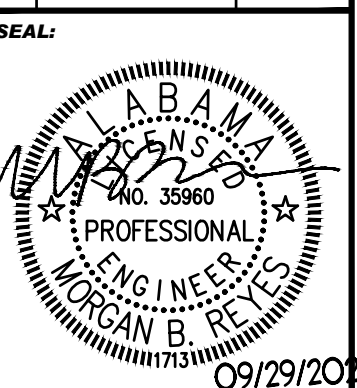
- A. THE SHUT DOWN TO THIS BUILDING SHALL BE KEPT TO A MINIMUM. THE PROPOSED SCHEDULE IS FOR THE BUILDING TO BE SHUT DOWN FROM MID MAY 2025: TO MID JUNE 2025, A MAXIMUM OF 30 DAYS OF SHUT DOWN. THIS SHOULD ALLOW TIME FOR ALL EQUIPMENT TO ARRIVE. ANY WORK POSSIBLE MAY BE COMPLETED DURING OTHER SCHOOL BREAKS IN 2024.
- B. ONCE THE NEW TRANSFORMER AND PRIMARY ARE INSTALLED THE OLD SHALL BE REMOVED.
- C. CONTRACTOR SHALL REUSE EXISTING POLE MOUNTED PRIMARY SWITCHES.
- D. ANY CEILING TILES BROKEN DURING CONSTRUCTION SHALL BE REPLACED WITH THE SAME TYPE CEILING TILE.
- E. PRIMARY POWER ON THIS PROJECT IS OWNED BY AMU. ALL SHUT OFFS AND RECONNECTIONS ARE BY CONTRACTOR WITH ENGINEER, OWNER, AND STATE OBSERVATIONS/INSPECTIONS.
- F. BUILDING SHUT DOWN SHALL BE COORDINATED 30 DAYS IN ADVANCE WITH OWNER.



Hyde Engineering, Inc.
 1525 Piedmont Parkway, Suite 2715 • Huntsville, AL 35801
 (256) 270-8013 • FAX (256) 962-9911 • info@hyde-eng.com

Alabama A&M University
 Elmore Gym Electrical Service Replacement
 Normal, Alabama

| NO. | REVISION | DATE |
|-----|-------------|------------|
| 1 | ADDENDUM #1 | 10/12/2023 |
| 2 | ADDENDUM #2 | 10/24/2023 |



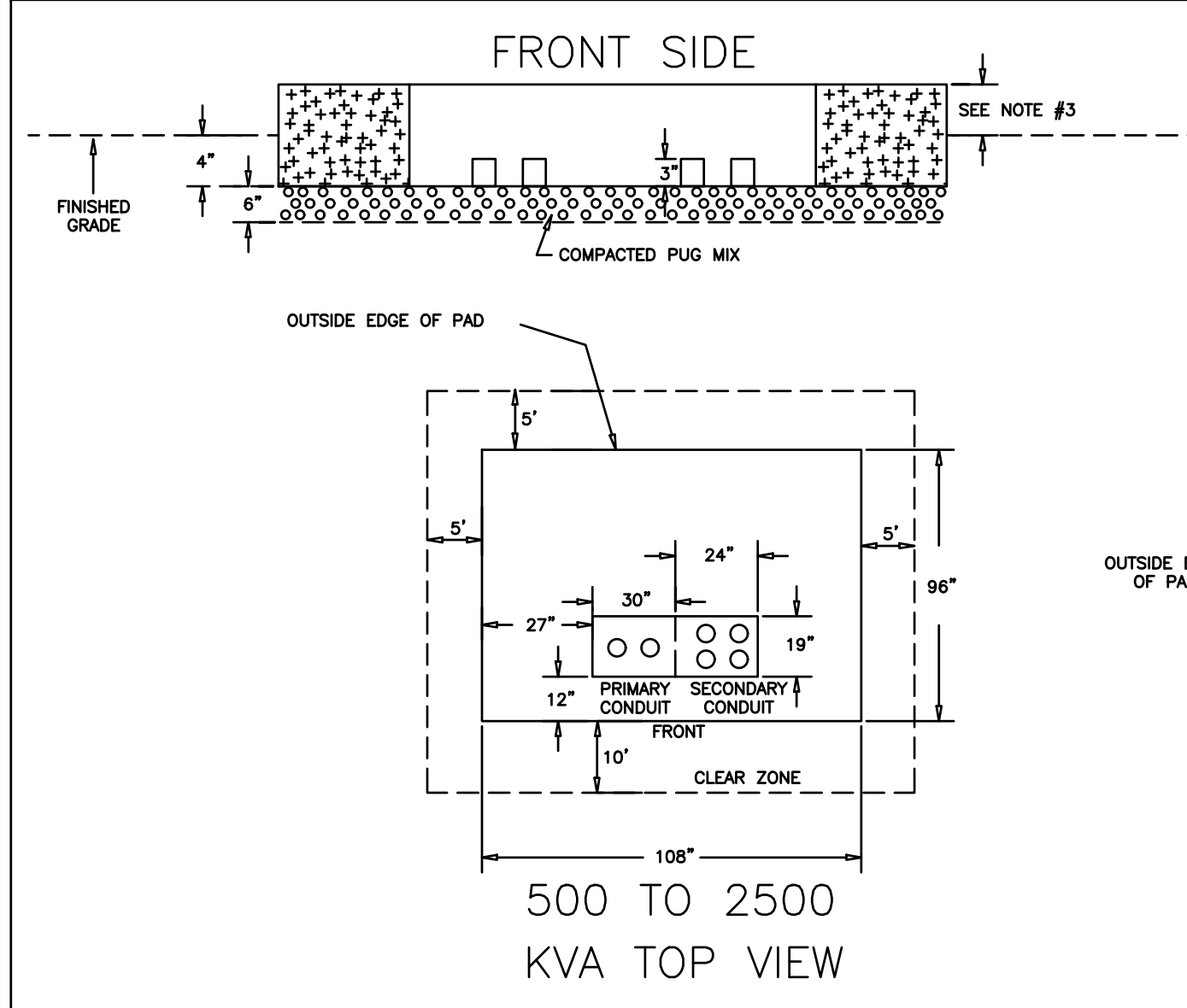
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 JOB NUMBER: 23238.0
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 CHECKED BY: MBR

DRAWING TITLE:
 LEGEND, AND NOTES

DRAWING NO.
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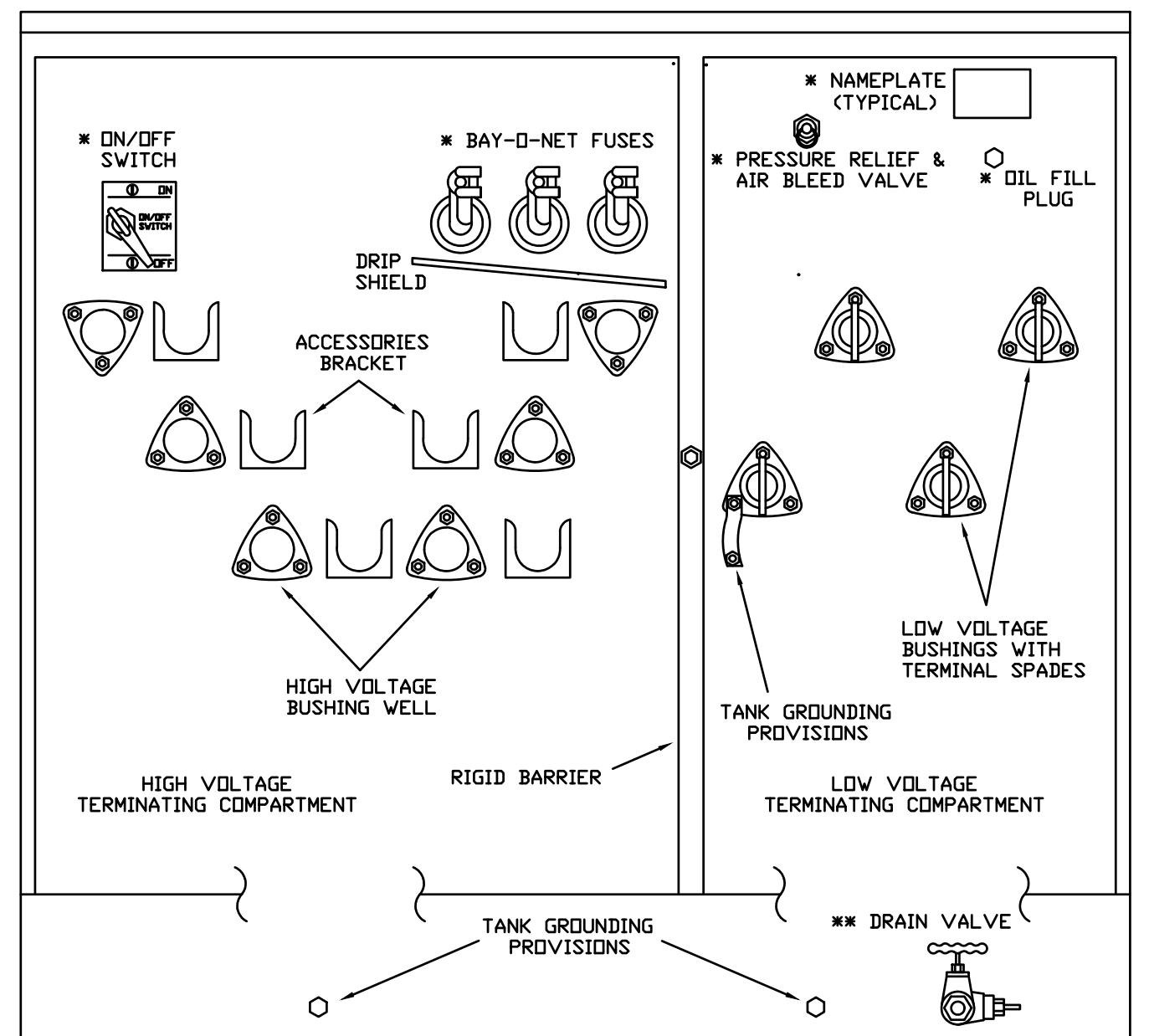


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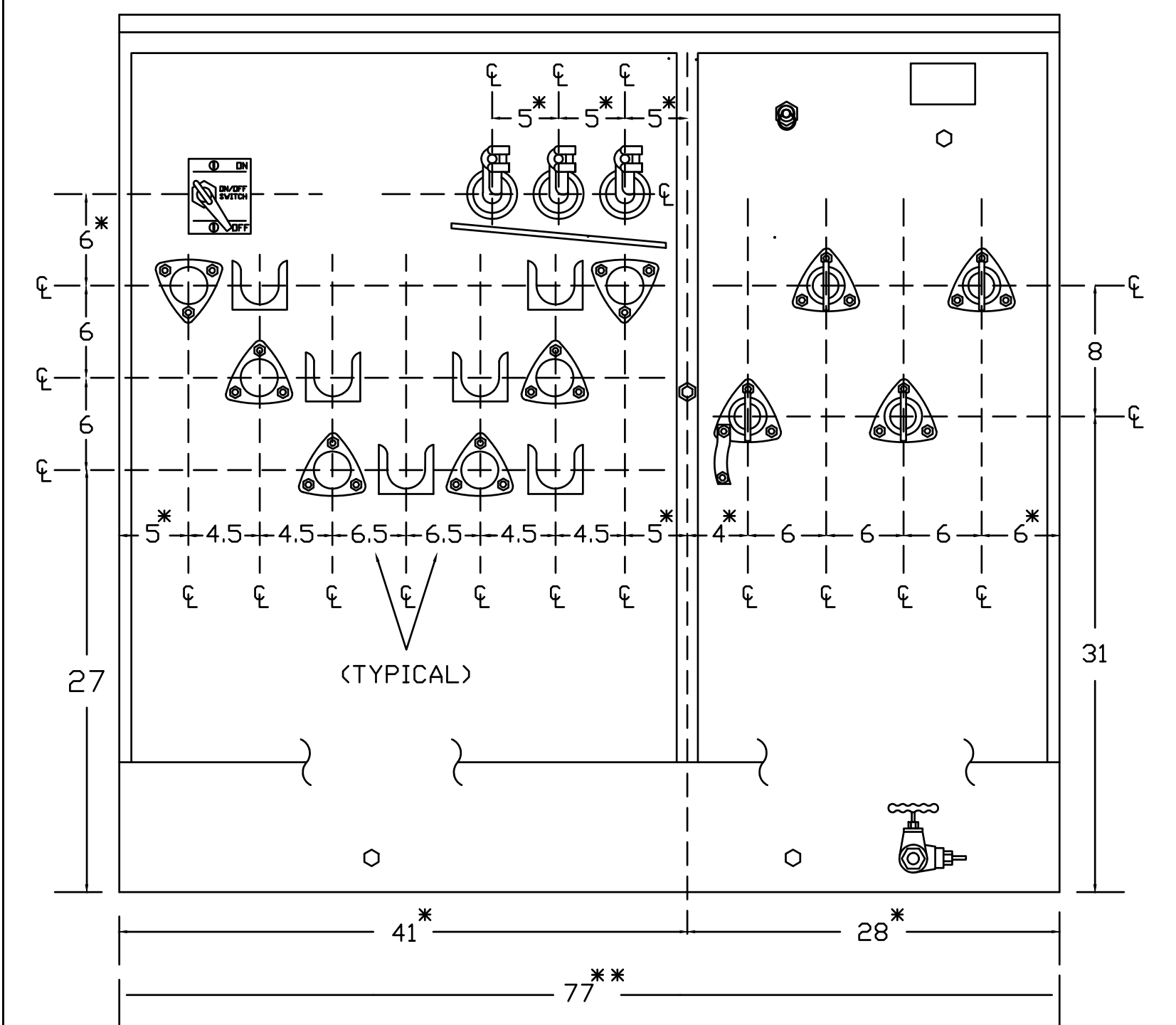


**TRANSFORMER DETAIL
CONCRETE TRANSFORMER PAD
NO SCALE**

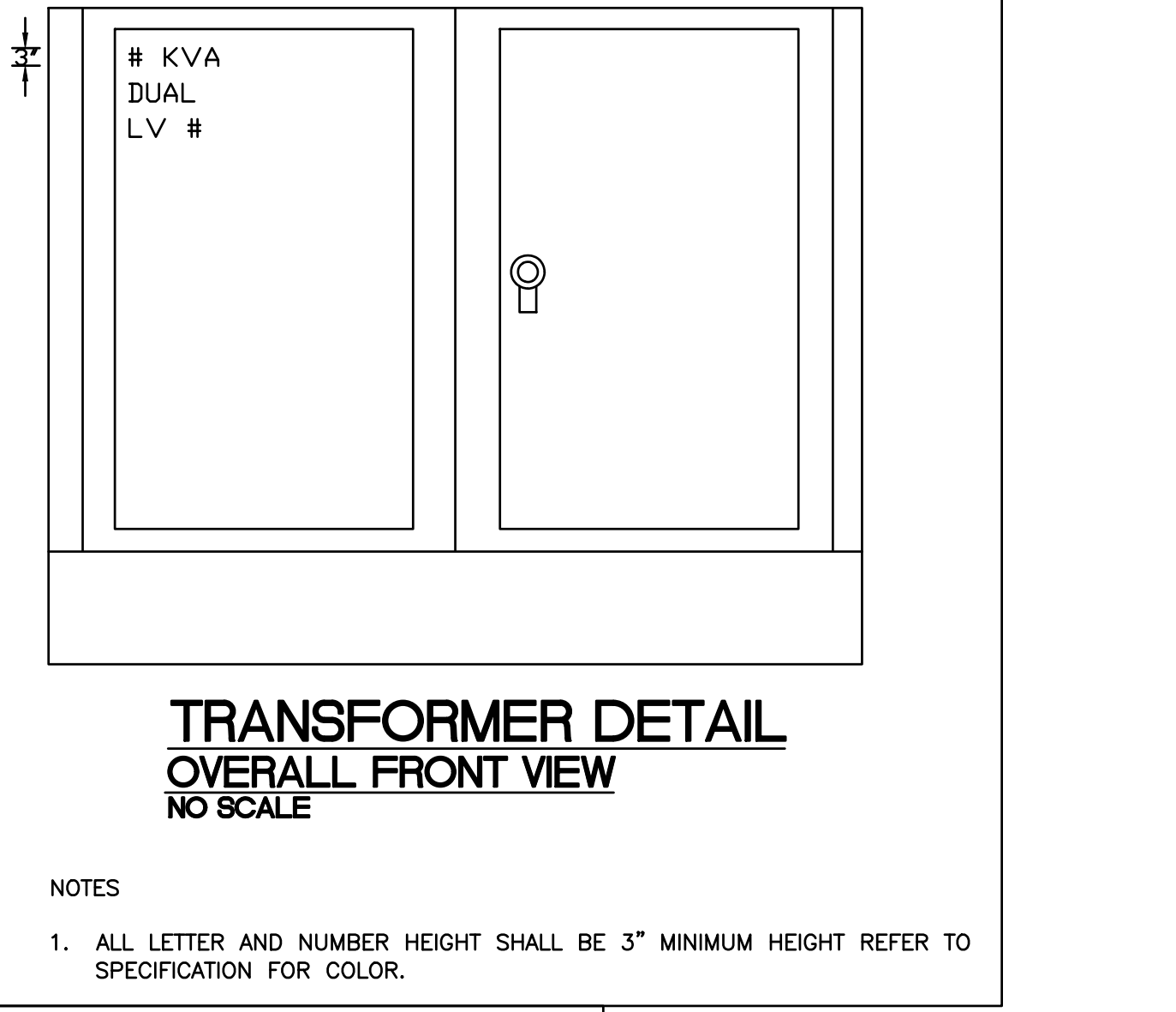
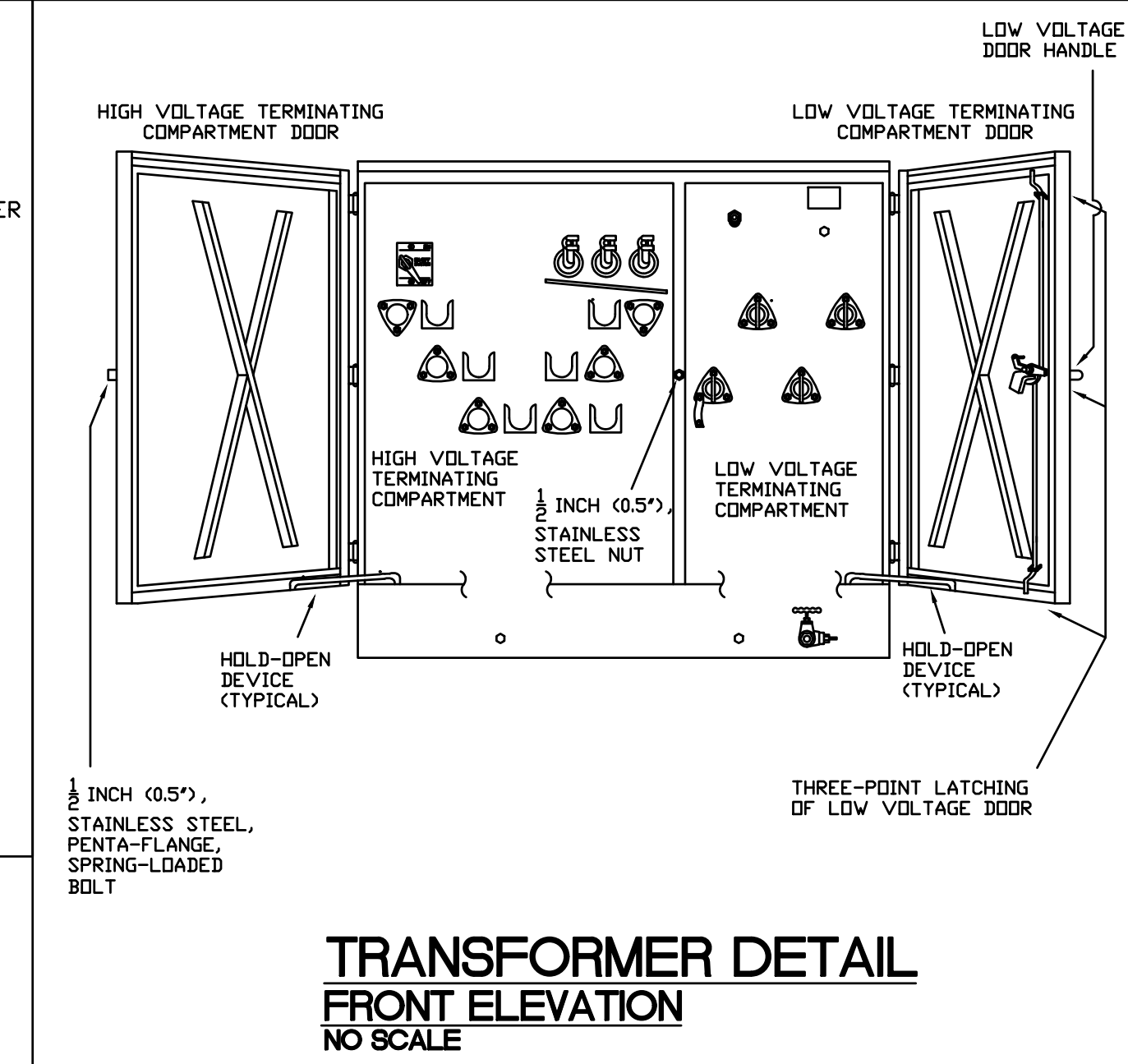
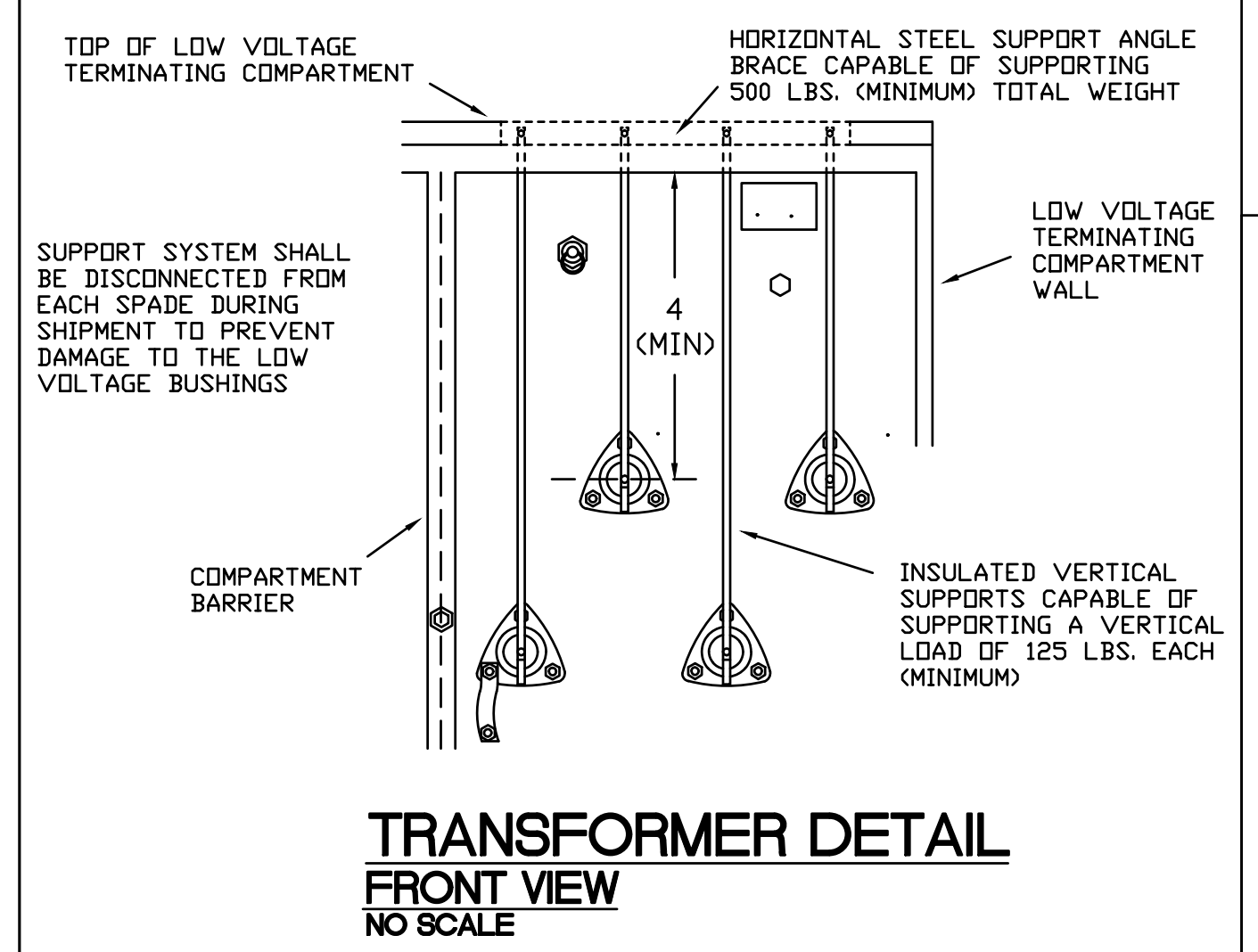
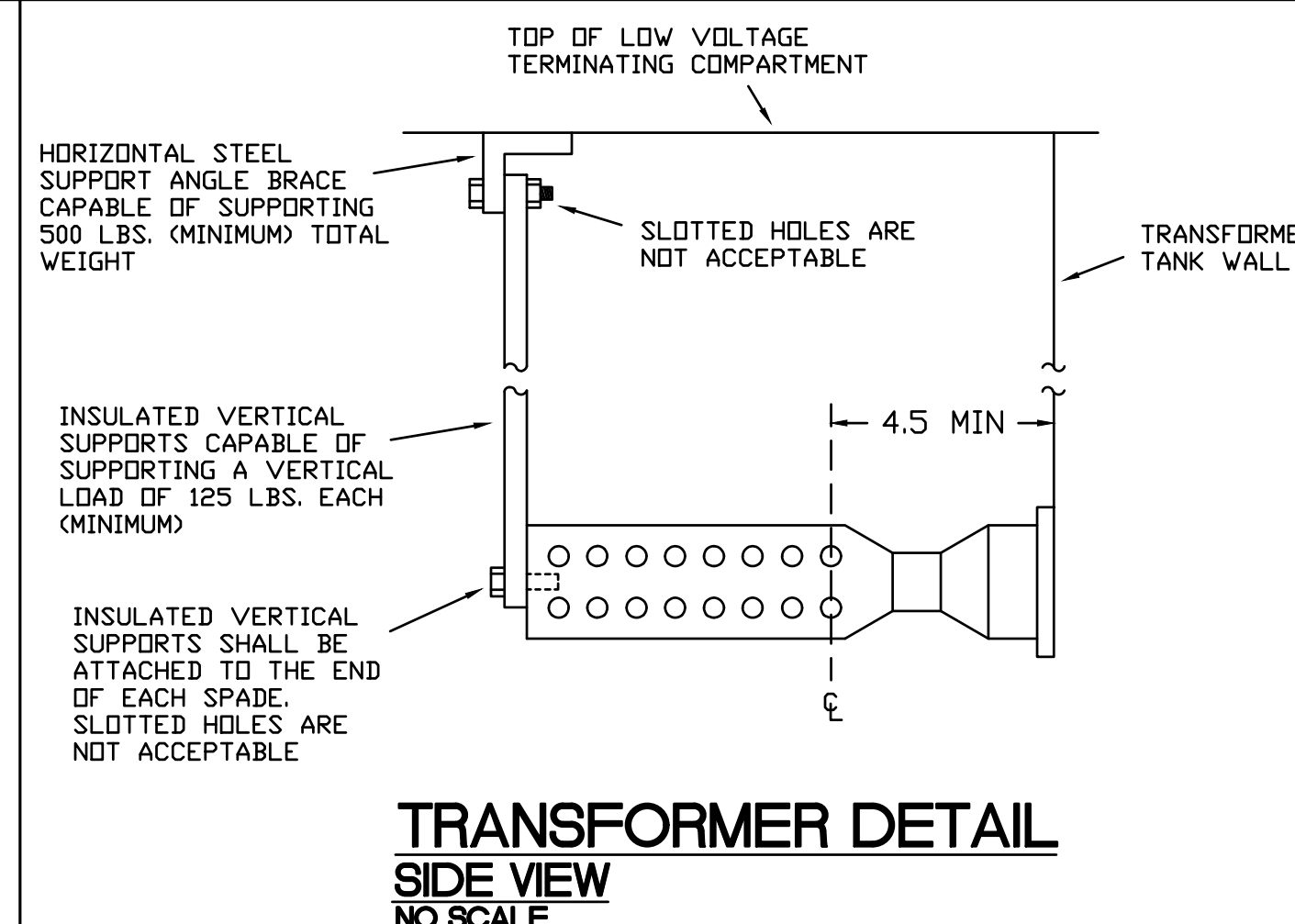
- NOTES
- FOR NUMBER AND SIZE OF PRIMARY CONDUITS, CONSULT JOB DRAWING. HUNTSVILLE UTILITIES.
 - PADS MUST HAVE A BRUSHED OUTSIDE FINISH.
 - HEIGHT OF PAD SHALL BE 12" ATG.
 - NO SECONDARY CABLES MAY BE PULLED UNTIL TRANSFORMER IS PLACED.
 - FROM OUTSIDE OF PRIM. TO OUTSIDE OF SEC. EQUALS 48".
 - MINIMUM THICKNESS OF CONCRETE PAD IS 24".
 - TWO LAYERS #4 (1/2") REBAR ARE REQUIRED.
 - IT IS NOT PERMISSIBLE TO FLOAT EITHER LAYER OF REBAR.
 - NO REBAR SHOULD BE WITHIN 6" OF ANY SURFACE OF THE PAD.
 - PAD FORM (WITH STEEL INSTALLED) MUST BE INSPECTED BEFORE POURING CONCRETE.



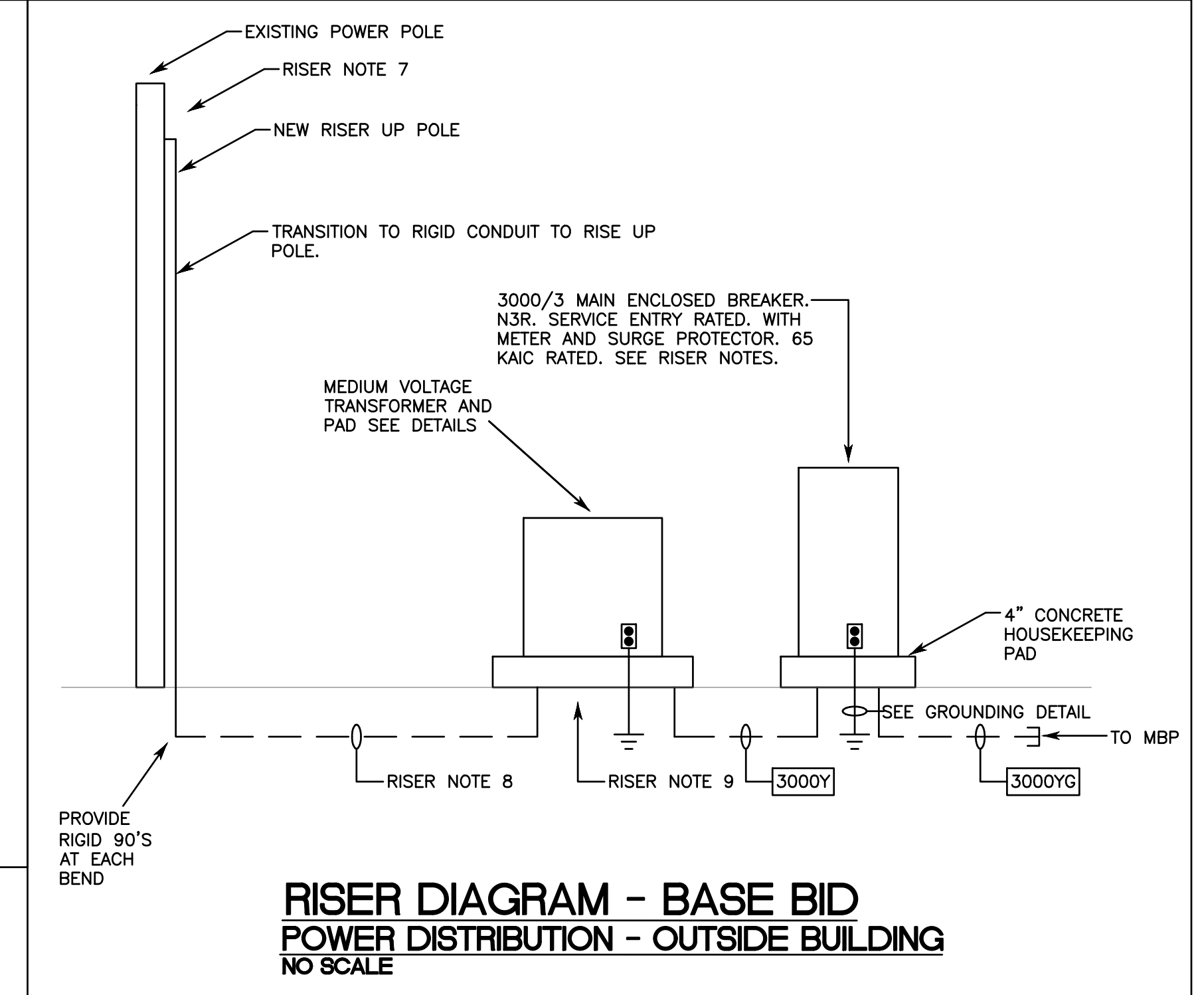
- NOTES
- ACCESSORIES DENOTED WITH A SINGLE ASTERISK (*) SHALL BE LOCATED PER THE MANUFACTURER'S DISCRETION (WITHIN THE DIMENSIONAL RESTRICTIONS SPECIFIED ON SHEET #3)
 - DOUBLE ASTERISKS (**): TRANSFORMERS RATED 750-2500KVA - ONE INCH (1") NPT DRAIN VALVE WITH BUILT-IN SAMPLING DEVICE (BUILT-IN SAMPLING DEVICE OPTIONAL).



- NOTES
- VALUES WITH AN ASTERISK (*) DENOTE MINIMUM DIMENSIONS. VALUES WITH AN ASTERISK (**) DENOTE MAXIMUM DIMENSIONS. ALL OTHER DIMENSIONS HAVE A TOLERANCE OF +/- 1/4 INCH (+/- 0.25").
 - ALL DIMENSIONS ARE IN INCHES.



- NOTES
- ALL LETTER AND NUMBER HEIGHT SHALL BE 3" MINIMUM HEIGHT REFER TO SPECIFICATION FOR COLOR.



FEEDER SCHEDULE

| | | | |
|--------|------------------------------------|--------|------------------------------------|
| 20SG | 2#12 & 1#12G.-1/2".C. | 25DG | 3#10 & 1#10G.-3/4".C. |
| 30DG | 3#10 & 1#10G.-3/4".C. | 40YG | 4#8 & 1#10G.-3/4".C. |
| 50DG | 3#8 & 1#10G.-3/4".C. | 50YG | 4#8 & 1#10G.-3/4".C. |
| 60DG | 3#6 & 1#10G.-1 1/4".C. | 60YG | 4#6 & 1#10G.-1".C. |
| 70YG | 4#4 & 1#8G.-1 1/2".C. | 80DG | 3#4 & 1#8G.-1 1/2".C. |
| 100YG | 4#3 & 1#8G.-1 1/2".C. | 125YG | 4#1 & 1#6G.-2".C. |
| 150DG | 3#1/0 & 1#6G.-2".C. | 150YG | 4#1/0 & 1#6G.-2 1/2".C. |
| 175DG | 3#2/0 & 1#6G.-2 1/2".C. | 200YG | 4#3/0 & 1#6G.-3".C. |
| 250YG | 4#250MCM & 1#4G.-3".C. | 300YG | 4#350MCM & 1#4G.-3 1/2".C. |
| 400YG | 4#500MCM & 1#2G.-4".C. | 420YG | 4#600MCM & 1#2G.-4".C. |
| 2000YG | 6 SETS OF 4#500MCM & 1#250G.-4".C. | 3000YG | 8 SETS OF 4#500MCM & 1#400G.-4".C. |
| 3000Y | 8 SETS OF 4#500MCM-4".C. | | |

- SERVICE NOTES:
- THE SECONDARY SERVICE: 277/480V, 3#, 4W., GROUNDING NEUTRAL, WYE CONNECTED AS SHOWN ON SINGLE LINE DIAGRAM.
- RISER NOTES:
- INDUSTRY AVERAGE EQUIPMENT SIZES WERE USED TO DETERMINE FIT AND WORKING CLEARANCES BASED ON ACTUAL EQUIPMENT CONSIDERED.
 - FOR 277/480 VOLT SYSTEMS 1000A. & OVER, PROVIDE GFI PROTECTION FOR EACH PROTECTIVE DEVICE RATED 1000A. OR MORE. FIELD TEST PER NEC 230.95(C).
 - PROTECTIVE DEVICES RATED 800A & GREATER SHALL BE STATIC TRIP TYPE WITH LSI SETTINGS.
 - PROTECTIVE DEVICES RATED 1200A & GREATER SHALL HAVE ENERGY REDUCING MAINTENANCE SWITCHING WITH LOCAL STATUS INDICATOR OR ARC-FLASH ENERGY REDUCTION SCHEME/METHOD APPROVED BY ENGINEER.
 - SEE FLOOR PLANS FOR PLACEMENT OF EQUIPMENT.
 - ALL EXTERIOR EQUIPMENT TO BE IN NEMA 3R ENCLOSURES.
 - FURNISH AND INSTALL A NEW TRIMOUNT BRACKET WITH 3 EACH OUTDOOR TERMINATORS FOR NEW PRIMARY CABLING. THIS CONTRACTOR IS RESPONSIBLE FOR TERMINATING THE PRIMARY CABLE ON THE AAMU OWNED PRIMARY. CONTRACTOR MAY REUSE EXISTING SWITCHES ON POWER POLE.
 - FURNISH AND INSTALL 3 EACH #4/0-1C-15KV TAPE SHIELD 133% INSULATION EPR CONDUCTORS IN A NEW 4" PVC CONDUIT. CONTRACTOR WILL NEED TO BORE UNDER EXISTING ROAD. TERMINATE CABLES AT EACH END.
 - FURNISH AND INSTALL EXTERIOR 1500 KVA 12470 DELTA-480Y/277 PAD MOUNTED TRANSFORMER. TRANSFORMER TO BE DEAD FRONT, +/- 2.5% TAPS, 95KV BIL. (HIGHSIDE), 30 KV BIL. (LOWSIDE), MINERAL OIL FILLED, 3 PHASE 60 HZ. SEE SPECIFICATIONS AND DETAILS.
 - CONTRACTOR SHALL FURNISH AND INSTALL REBAR ENFORCED CONCRETE PAD PER DETAILS PROVIDED.
 - PRIMARY AND TRANSFORMER PAD SHALL BE INSPECTED BY ENGINEER PRIOR TO COVER UP.

- SHORT CIRCUIT, COORDINATION, AND ARC FLASH:
- ACTUAL AVAILABLE FAULT CURRENT DATA WAS NOT OBTAINED FROM THE POWER COMPANY. E.C. IS TO OBTAIN FAULT CURRENT DATA FROM POWER COMPANY.
 - E.C. TO PROVIDE SHORT CIRCUIT, COORDINATION, AND ARC FLASH STUDIES FOR ALL NEW EQUIPMENT AS WELL AS EXISTING UPSTREAM EQUIPMENT.
 - STUDIES ARE TO START AT UTILITY SOURCE AND/OR GENERATOR AND INCLUDE ALL EXISTING UPSTREAM EQUIPMENT.
 - E.C. IS RESPONSIBLE FOR COLLECTING ALL DATA NECESSARY TO COMPLETE STUDY.
 - STUDIES ARE TO BE PERFORMED USING SKM POWERWARE, EASYPower, OR ETAP SOFTWARE UNDER THE SUPERVISION OF A REGISTERED ENGINEER. ARC FLASH STUDIES SHALL BE CONSISTENT WITH IEEE 1584.
 - PROVIDE PRELIMINARY STUDY REPORT AT TIME OF POWER EQUIPMENT SUBMITTALS. POWER EQUIPMENT SUBMITTALS WILL BE REJECTED WITHOUT PRELIMINARY STUDY.
 - USE RESULTS OF STUDY TO SELECT AIC RATINGS, BREAKER TYPES, ETC. FOR POWER EQUIPMENT PRIOR TO ORDERING EQUIPMENT.
 - MARK EQUIPMENT PER BOTH NFPA 70 AND 70E TO INCLUDE, BUT NOT LIMITED TO, ARC FLASH LABELS.
 - PROVIDE FINAL STUDY REPORT AS PART OF CLOSE-OUT DOCUMENTATION (BOTH HARD COPY AND ELECTRONIC PDF FORM).

| NO. | REVISION | DATE |
|-----|-------------|------------|
| 1 | ADDENDUM #1 | 10/12/2023 |
| 2 | ADDENDUM #2 | 10/24/2023 |

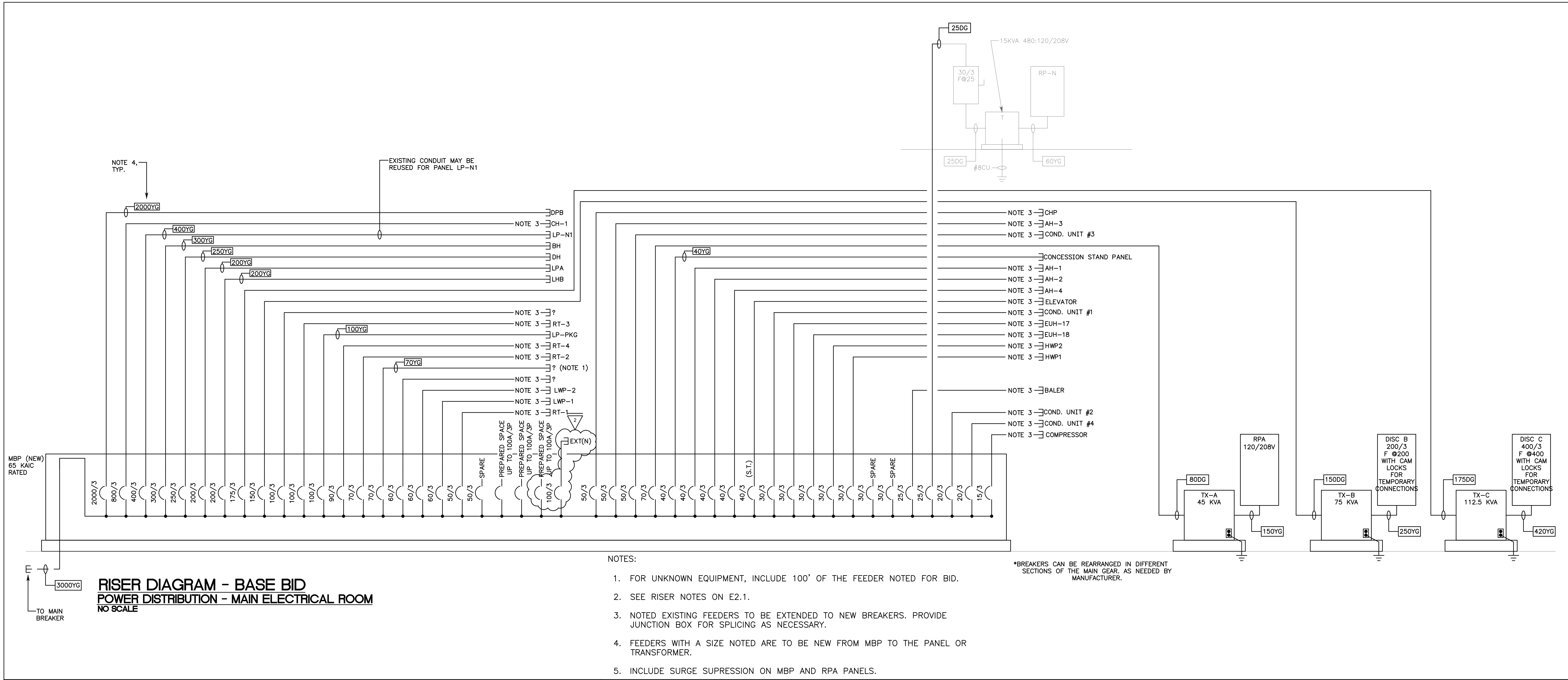
SEAL

DATE: 09/29/2023
JOB NUMBER: 23238.0
DRAWN BY: BR
CHECKED BY: MBR

DRAWING TITLE: **PRIMARY RISER, NOTES, AND TRANSFORMER DETAILS**

DRAWING NO. **E2.1**

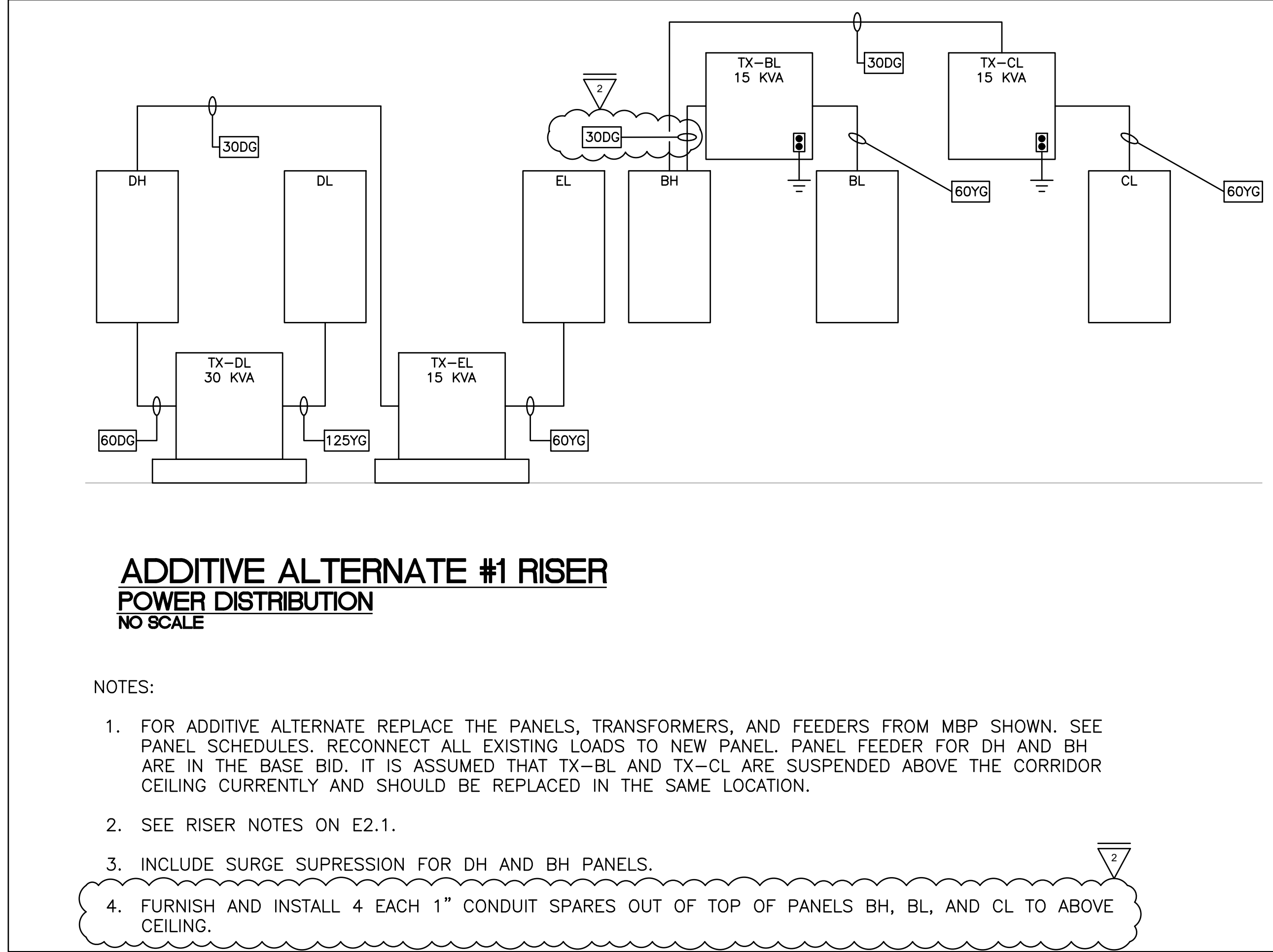
09/29/2023



RISER DIAGRAM - BASE BID
POWER DISTRIBUTION - MAIN ELECTRICAL ROOM
 NO SCALE

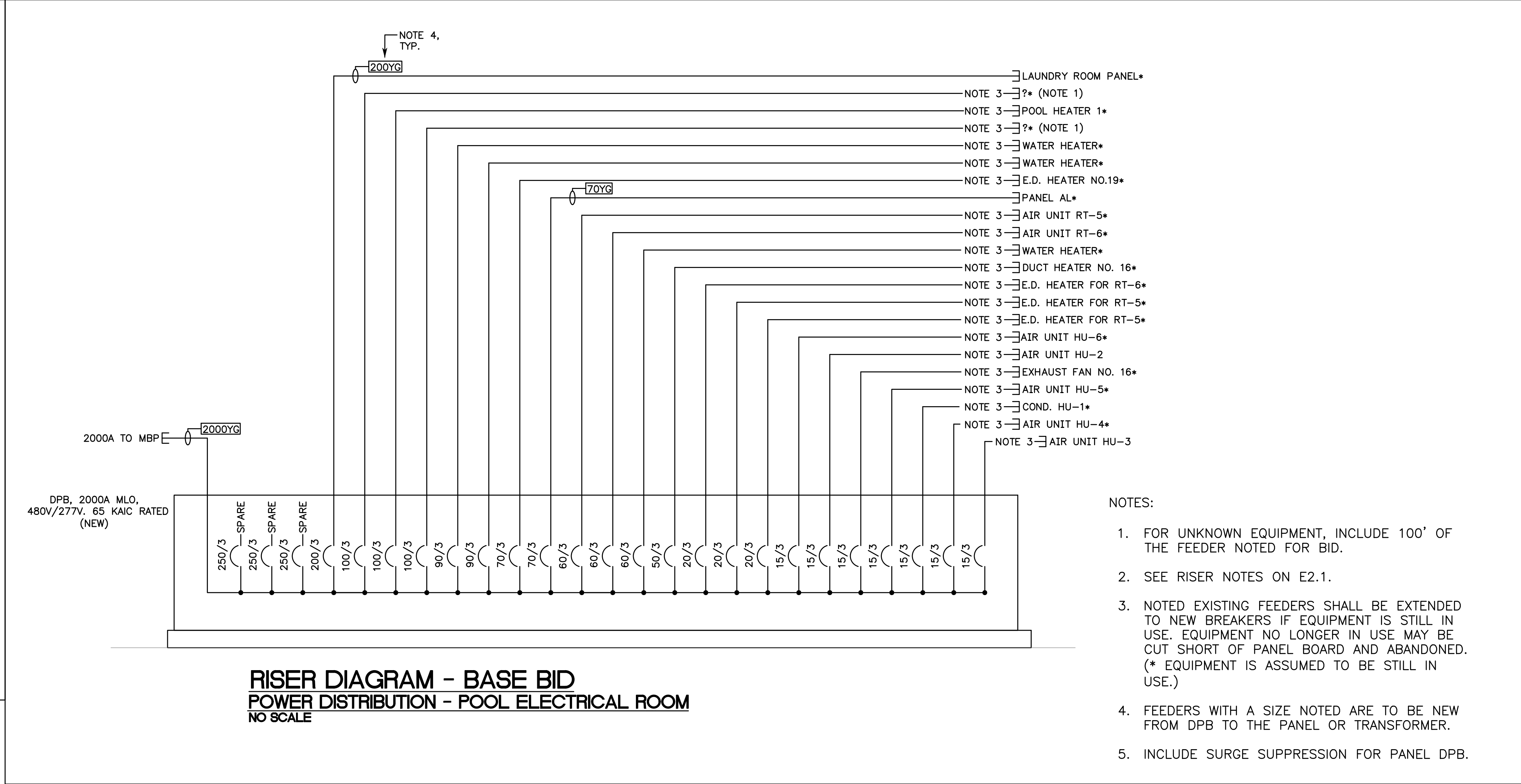
- NOTES:
1. FOR UNKNOWN EQUIPMENT, INCLUDE 100' OF THE FEEDER NOTED FOR BID.
 2. SEE RISER NOTES ON E2.1.
 3. NOTED EXISTING FEEDERS TO BE EXTENDED TO NEW BREAKERS. PROVIDE JUNCTION BOX FOR SPLICING AS NECESSARY.
 4. FEEDERS WITH A SIZE NOTED ARE TO BE NEW FROM MBP TO THE PANEL OR TRANSFORMER.
 5. INCLUDE SURGE SUPPRESSION ON MBP AND RPA PANELS.

*BREAKERS CAN BE REARRANGED IN DIFFERENT SECTIONS OF THE MAIN GEAR, AS NEEDED BY MANUFACTURER.



ADDITIVE ALTERNATE #1 RISER
POWER DISTRIBUTION
 NO SCALE

- NOTES:
1. FOR ADDITIVE ALTERNATE REPLACE THE PANELS, TRANSFORMERS, AND FEEDERS FROM MBP SHOWN. SEE PANEL SCHEDULES. RECONNECT ALL EXISTING LOADS TO NEW PANEL. PANEL FEEDER FOR DH AND BH ARE IN THE BASE BID. IT IS ASSUMED THAT TX-BL AND TX-CL ARE SUSPENDED ABOVE THE CORRIDOR CEILING CURRENTLY AND SHOULD BE REPLACED IN THE SAME LOCATION.
 2. SEE RISER NOTES ON E2.1.
 3. INCLUDE SURGE SUPPRESSION FOR DH AND BH PANELS.
 4. FURNISH AND INSTALL 4 EACH 1" CONDUIT SPARES OUT OF TOP OF PANELS BH, BL, AND CL TO ABOVE CEILING.



RISER DIAGRAM - BASE BID
POWER DISTRIBUTION - POOL ELECTRICAL ROOM
 NO SCALE

- NOTES:
1. FOR UNKNOWN EQUIPMENT, INCLUDE 100' OF THE FEEDER NOTED FOR BID.
 2. SEE RISER NOTES ON E2.1.
 3. NOTED EXISTING FEEDERS SHALL BE EXTENDED TO NEW BREAKERS IF EQUIPMENT IS STILL IN USE. EQUIPMENT NO LONGER IN USE MAY BE CUT SHORT OF PANEL BOARD AND ABANDONED. (* EQUIPMENT IS ASSUMED TO BE STILL IN USE.)
 4. FEEDERS WITH A SIZE NOTED ARE TO BE NEW FROM DPB TO THE PANEL OR TRANSFORMER.
 5. INCLUDE SURGE SUPPRESSION FOR PANEL DPB.



| NO. | REVISION | DATE |
|-----|-------------|------------|
| 1 | ADDENDUM #1 | 10/12/2023 |
| 2 | ADDENDUM #2 | 10/24/2023 |

DATE: 09/29/2023
 JOB NUMBER: 23235.0
 DRAWN BY: BR
 CHECKED BY: MBR
 DRAWING TITLE: RISER DIAGRAMS
 DRAWING NO.: E2.2

PANEL: BH (ADDITIVE ALTERNATE #1)
VOLTAGE: 277 /480V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 300A MAIN CB TRIP: MLO
MOUNTING: FLUSH MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 42 KAIC

PANEL: BL (ADDITIVE ALTERNATE #1)
VOLTAGE: 120 /208V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 50A MAIN CB TRIP: 50A MB
MOUNTING: FLUSH MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 22 KAIC

PANEL: CL (ADDITIVE ALTERNATE #1)
VOLTAGE: 120 /208V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 50A MAIN CB TRIP: 50A MB
MOUNTING: FLUSH MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 22 KAIC

PANEL: DH (ADDITIVE ALTERNATE #1)
VOLTAGE: 277 /480V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 400A MAIN CB TRIP: MLO
MOUNTING: SURFACE MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 42 KAIC

PANEL: DL (ADDITIVE ALTERNATE #1)
VOLTAGE: 120 /208V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 100A MAIN CB TRIP: 100A MB
MOUNTING: SURFACE MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 22 KAIC

PANEL: EL (ADDITIVE ALTERNATE #1)
VOLTAGE: 120 /208V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 50A MAIN CB TRIP: 50A MB
MOUNTING: FLUSH MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 22 KAIC

PANEL: EXT (N)
VOLTAGE: 277 /480V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 100A MAIN CB TRIP: MLO
MOUNTING: SURFACE MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 42 KAIC

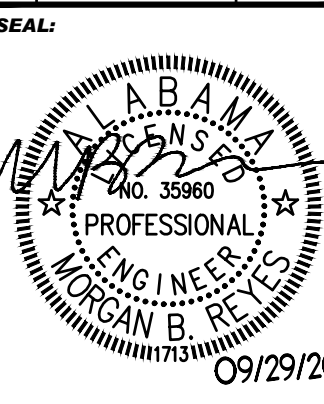
PANEL: LPA (NEW REPLACES LHA AND EHA)
VOLTAGE: 277 /480V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 200A MAIN CB TRIP: MLO
MOUNTING: SURFACE MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 42 KAIC

PANEL: RPA (NEW REPLACES PD1 AND C)
VOLTAGE: 120 /208V PHASE/WIRE: 3P, 4W MAIN BUS RATING: 150A MAIN CB TRIP: 150A MB
MOUNTING: SURFACE MINIMUM BREAKER INTERRUPTING CAPACITY (RMS SYM AMPS): 22 KAIC

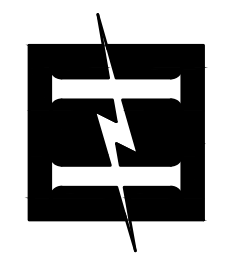
TRANSFORMER TABLE - 480V PRIMARY - 208/120V SECONDARY
KVA FL AMPS BKR SIZE FDR TRANSFORMER GROUNDING ELECTRODE (3) FL AMPS BKR SIZE FDR

NOTES:
1 - USE DEVICE TYPES INDICATED ON SINGLE LINE DIAGRAM.
2 - REFERENCE FEEDER TABLE FOR FEEDER SIZE
3 - PROVIDE COPPER GROUNDING ELECTRODE
DRY-TYPE TRANSFORMER WITH COPPER WINDINGS. PROVIDE NEMA 3R ENCLOSURE FOR ALL EXTERIOR TRANSFORMERS.

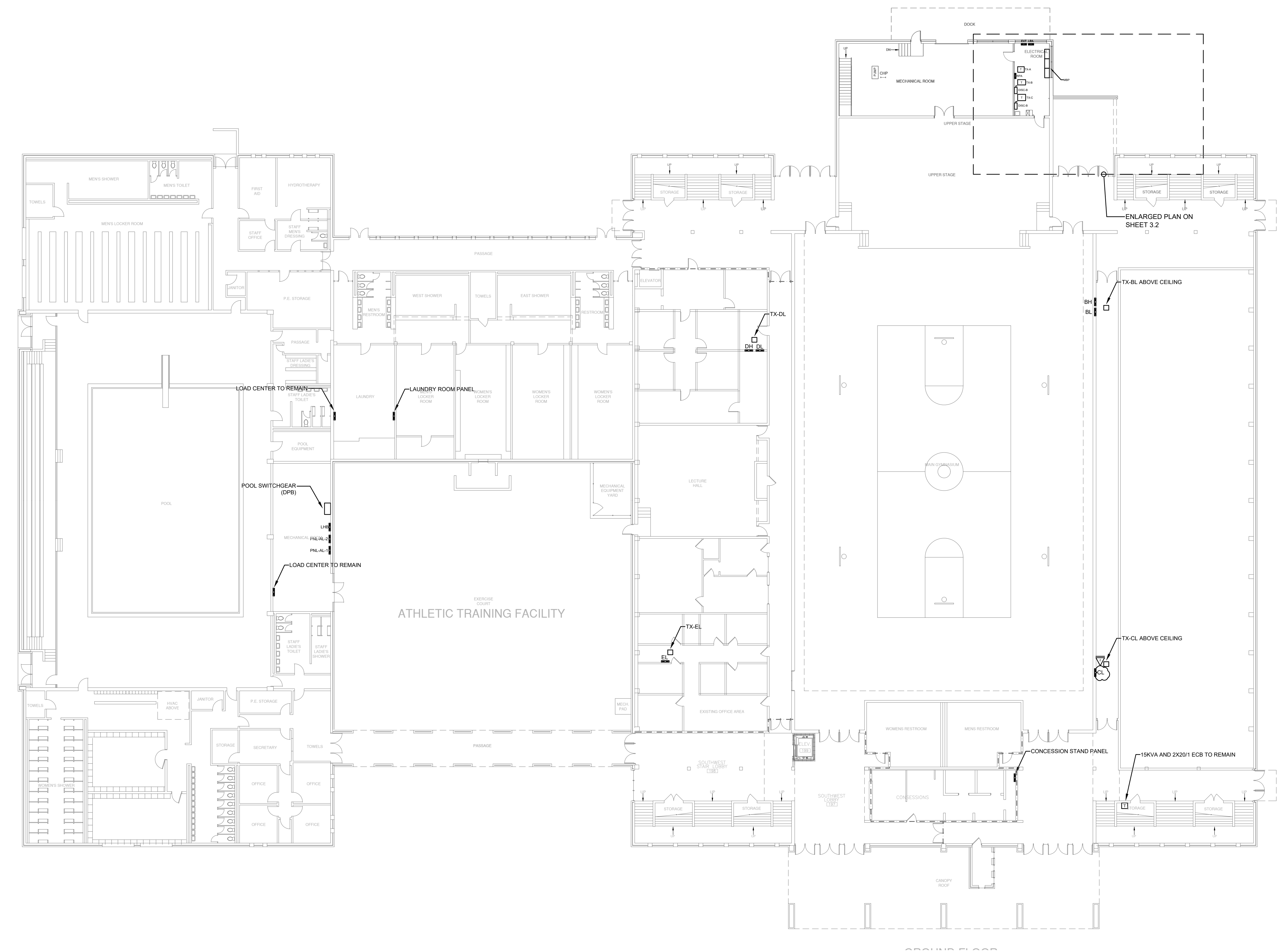
NO. REVISION DATE
1 ADDENDUM #2 10/24/2023



DATE: 09/29/2023
JOB NUMBER: 23233.0
DRAWN BY: BR
CHECKED BY: MBR
DRAWING TITLE: PANEL SCHEDULES



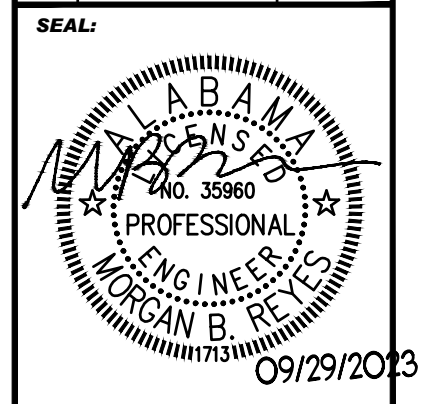
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 (256) 270-8013 • FAX (256) 962-9911 • info@hyde-eng.com



GROUND FLOOR PLAN
ELECTRICAL
 SCALE 1/16"=1'0"

Alabama A&M University
Elmore Gym Electrical Service Replacement
 Normal, Alabama

| NO. | REVISION | DATE |
|-----|-------------|------------|
| 1 | ADDENDUM #1 | 10/12/2023 |
| 2 | ADDENDUM #2 | 10/24/2023 |



| | |
|----------------|--------------------------------|
| DATE: | 09/29/2023 |
| JOB NUMBER: | 23239.0 |
| DRAWN BY: | BR |
| CHECKED BY: | MBR |
| DRAWING TITLE: | GROUND FLOOR PLAN - ELECTRICAL |
| DRAWING NO. | E3.1 |

