

---

**ADDENDUM NO. 2**

Date of Addendum: February 7, 2023

Project Name: Gaston County Schools – Grier Middle School

---

**PROJECT INFORMATION**

---

- A. Owner: Gaston County Schools
- B. Architect: LS3P
- C. Architect Project Number: 9201-218240

---

**NOTICE TO BIDDERS**

---

- A. This Addendum is issued to all registered plan holders pursuant to the Instructions to Bidders and Conditions of the Contract. This Addendum serves to clarify, revise, and supersede information in the Project Manual, Drawings, and previously issued Addenda. Portions of the Addendum affecting the Contract Documents will be incorporated into the Contract by enumeration of the Addendum in the Owner/Contractor Agreement.
- B. The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form.
- C. The date for receipt of bids is unchanged by this Addendum, at same time and location.

---

**ATTACHMENTS**

---

- A. This Addendum includes the following attached Documents and Specification Sections:
  - 1. Document 004113 – BID FORM, dated February 7, 2023, (reissued)
  - 2. Section 012100 - ALLOWANCES, dated February 7, 2023, (reissued).
  - 3. Section 072129 – SPRAYED ACOUSTICAL INSULATION, dated February 7, 2023, (new).
  - 4. Section 114000 – FOOD SERVICE EQUIPMENT, dated February 7, 2023, (reissued).
  - 5. RFI Questions and Answers (For Information Only).
- B. This Addendum includes the following attached Sheets:
  - 1. Civil Sheet C1.1 – LEGEND & REVISION NOTES, dated February 7, 2023, (reissued).
  - 2. Civil Sheet C3.0 – E&SC PHASE 1, dated February 7, 2023, (reissued).
  - 3. Civil Sheet C3.1 – E&SC PHASE 2, dated February 7, 2023, (reissued).
  - 4. Civil Sheet C3.2 – E&SC PHASE 3, dated February 7, 2023, (reissued).
  - 5. Civil Sheet C3.3 – E&SC PHASE 4, dated February 7, 2023, (reissued).
  - 6. Civil Sheet C4.0 – SITE PLAN, dated February 7, 2023, (reissued).

7. Civil Sheet C6.0 – OVERALL GRADING PLAN, dated February 7, 2023, (reissued).
8. Civil Sheet C6.1 – ENLARGED GRADING PLAN, dated February 7, 2023, (reissued).
9. Civil Sheet C6.2 – ENLARGED GRADING PLAN, dated February 7, 2023, (reissued).
10. Civil Sheet C6.4 – ENLARGED GRADING PLAN, dated February 7, 2023, (reissued).
11. Civil Sheet C7.4 – SITE DETAILS, dated February 7, 2023, (reissued).
12. Civil Sheet C7.5 – SITE DETAILS, dated February 7, 2023, (new).
13. Civil Sheet C8.0 – WATER & SEWER PLAN, dated February 7, 2023, (reissued).
14. Structural Sheet S-200 – GYM BASEMENT FOUNDATION PLAN, dated February 7, 2023, (reissued).
15. Structural Sheet S-201 – FOUNDATION PLAN – AREA A, dated February 7, 2023, (reissued)
16. Structural Sheet S-202 – FOUNDATION PLAN – AREA B, dated February 7, 2023, (reissued)
17. Structural Sheet S-203 – FOUNDATION & GYM FLOOR PLAN – AREA C dated February 7, 2023, (reissued),
18. Structural Sheet S-211 – 2<sup>ND</sup> FLOOR FRAMING PLAN – AREA A, dated February 7, 2023, (reissued)
19. Structural Sheet S-212 – 2<sup>ND</sup> FLOOR FRAMING PLAN – AREA B, dated February 7, 2023, (reissued)
20. Structural Sheet S-221 – ROOF FRAMING PLAN – AREA A, dated February 7, 2023, (reissued)
21. Architectural Sheet A-715 – CASEWORK LEGEND & SCHEDULE, dated February 7, 2023, (reissued).
22. Architectural Sheet A-721 – MISC. DETAILS, dated February 7, 2023, (reissued).
23. Electrical Sheet E-301B – FIRST FLOOR SPECIAL SYSTEMS PLAN AREA B, dated February 7, 2023, (reissued).
24. Telecommunications Sheet T-002 – TECHNOLOGY SYMBOLS, dated February 7, 2023, (reissued).
25. Telecommunications Sheet T-401 – ENLARGED TECHNOLOGY PLANS, dated February 7, 2023, (reissued).
26. Telecommunications Sheet T-402 – ENLARGED TECHNOLOGY PLANS, dated February 7, 2023, (reissued).
27. Telecommunications Sheet T-403 – ENLARGED TECHNOLOGY PLANS, dated February 7, 2023, (reissued).
28. Telecommunications Sheet T-501 – TECHNOLOGY DETAILS, dated February 7, 2023, (reissued).
29. Telecommunications Sheet T-502 – TECHNOLOGY DETAILS, dated February 7, 2023, (reissued).
30. Telecommunications Sheet T-701 – TECHNOLOGY RISER DIAGRAMS, dated February 7, 2023, (reissued).
31. Telecommunications Sheet T-702 – TECHNOLOGY RISER DIAGRAMS, dated February 7, 2023, (reissued).
32. Telecommunications Sheet TN-101A – FIRST FLOOR DATA NETWORK PLAN AREA A, dated February 7, 2023, (reissued).
33. Telecommunications Sheet TN-101B – FIRST FLOOR DATA NETWORK PLAN AREA B, dated February 7, 2023, (reissued).
34. Telecommunications Sheet TN-101C – FIRST FLOOR DATA NETWORK PLAN AREA C, dated February 7, 2023, (reissued).

- 
35. Telecommunications Sheet TN-102A – SECOND FLOOR DATA NETWORK PLAN AREA A, dated February 7, 2023, (reissued).

---

### **REVISIONS TO DIVISION 00 PROCUREMENT REQUIREMENTS AND CONTRACTING REQUIREMENTS**

---

- A. Replace DOCUMENT 004113 – BID FORM with revised Document 004113, included in the Attachments.

---

### **REVISIONS TO DIVISION 01 GENERAL REQUIREMENTS**

---

- A. Replace SECTION 012100 – ALLOWANCES with revise Section 012100, included in the Attachments

---

### **REVISIONS TO DIVISIONS 02 - 49 SPECIFICATION SECTIONS**

---

- A. Add SECTION 072129 – SPRAYED ACOUSTICAL INSULATION, included in the Attachments.
- B. SECTION 081113 – HOLLOW METAL DOORS AND FRAMES (not reissued); Make the following revisions:
1. Paragraph 2.6.B: Delete this paragraph in its entirety.
- C. SECTION 081416 – FLUSH WOOD DOORS (not reissued); Make the following revisions:
1. Paragraph 1.3.B.: Revise to read as follows:  
“B. Package doors individually in plastic bags.”
- D. Replace SECTION 114000 – FOOD SERVICE EQUIPMENT with revised Section 114000 (previously reissued via Addendum No.1), included in the Attachments.

---

### **CLARIFICATIONS**

---

- A. A listing of responses to questions from Contractors and Suppliers is included with this Addendum. (See Attachments).
1. Note: The attached Question and Answer Summary is not a part of the Addendum itself. Items that require changes in the Contract Documents must be submitted in writing to the Architect to be addressed formally by Addendum. The responsibility is to the bidders to seek formal resolution to its questions, from the designer, and failure to do so will not by default permit the bidder to rely upon the question and answer summary mentioned above.

---

**ADDITIONAL ACCEPTABLE MANUFACTURERS**

---

- A. The following is a list of manufacturers that have been approved for this Project, providing they can comply with the Specifications and are of equal or greater quality, and function and perform like the specified products. Inclusion to the list of acceptable manufacturers does not eliminate the necessity to comply with specifications. Non-compliant manufacturers and products will be rejected regardless of manufacturer being listed.

**SECTION 102800 – TOILET AND BATH ACCESSORIES:**

Electric Hand Dryer: World Dryer; SLIMDri #L-973A.

---

**REVISIONS TO DRAWING SHEETS**

---

- A. Replace SHEET C1.1 – LEGEND & REVISION NOTES with revised Sheet C1.1, included in the attachments.
- B. Replace SHEET C3.0 – E&SC PHASE 1 with revised Sheet C3.0, included in the attachments.
1. Remove temporary fill over sewer.
- C. Replace SHEET C3.1 – E&SC PHASE 2 with revised Sheet C3.1, included in the attachments.
1. Adjust surface grade at sewer manholes as indicated.
- D. Replace SHEET C3.2 – E&SC PHASE 3 with revised Sheet C3.2, included in the attachments.
1. Update label to reflect new survey information (2 water meters found in same vault).
  2. Adjust surface grade at sewer manholes as indicated.
- E. Replace SHEET C3.3 – E&SC PHASE 4 with revised Sheet C3.3, included in the attachments.
1. Update label to reflect new survey information (2 water meters found in same vault).
- F. Replace SHEET C4.0 – SITE PLAN with revised Sheet C4.0, included in the attachments.
1. Service Yard updated to be heavy duty concrete.
  2. Stair west of the basement updated to extend retaining wall.
  3. Stair at NW of basement removed stairs and reduced retaining wall.
  4. Removed 2 flag poles. Only 1 flag pole remaining.
- G. Replace SHEET C6.0 – OVERALL GRADING PLAN with revised Sheet C6.0, included in the attachments.
1. Specify types of retaining walls.
- H. Replace SHEET C6.1 – ENLARGED GRADING PLAN with revised Sheet C6.1, included in the attachments.
1. Specify types of retaining walls.

- 
2. Add top of wall and bottom of wall spot elevations to 2 sets of stairs at gymnasium.
  - I. Replace SHEET C6.2 – ENLARGED GRADING PLAN with revised Sheet C6.2, included in the attachments.
    1. Specify types of retaining walls.
    2. Revise bottom of wall spot elevation.
  - J. Replace SHEET C6.4 – ENLARGED GRADING PLAN with revised Sheet C6.4, included in the attachments.
    1. Specify types of retaining walls.
  - K. Replace SHEET C7.4 – SITE DETAILS with revised Sheet C7.4, included in the attachments.
    1. Add Detail #8, 18" Ribbon Curb.
    2. Add Detail #9, 35' Flag Pole.
  - L. Add SHEET C7.5 – SITE DETAILS, included in the attachments.
    1. Typical retaining wall details for reference only.
  - M. Replace SHEET C8.0 – WATER & SEWER PLAN with revise Sheet C8.0, included in the attachments.
    1. Update label to reflect new survey information (2 water meters found in same vault).
  - N. Replace SHEET S-200 – GYM BASEMENT FOUNDATION PLAN with revised Sheet S-200, included in the attachments.
    1. Added concrete wall control joint locations. Clarified finished floor elevation.
  - O. Replace SHEET S-201 – FOUNDATION PLAN – AREA A with revised Sheet S-201, included in the attachments.
    1. Added masonry wall control joint locations. Clarified finished floor elevation. Added thickened slab under wall between rooms 125 & 225H.
  - P. Replace SHEET S-202 – FOUNDATION PLAN – AREA B with revised Sheet S-202, included in the attachments.
    1. Added masonry wall control joint locations. Clarified finished floor elevation.
  - Q. Replace SHEET S-203 – FOUNDATION & GYM FLOOR PLAN – AREA C with revised Sheet S-203, included in the attachments.
    1. Added masonry wall control joint locations. Clarified finished floor elevation.
  - R. Replace SHEET S-211 – 2ND FLOOR FRAMING PLAN – AREA A with revised Sheet S-211, included in the attachments.

- 
1. Added lintel callouts at CMU wall along grid line K.
- S. Replace SHEET S-212 – 2ND FLOOR FRAMING PLAN – AREA B with revised Sheet S-212, included in the attachments.
1. Added lintel callouts at CMU walls along grid lines V and W.
- T. Replace SHEET S-221 – ROOF FRAMING PLAN – AREA A with revised Sheet S-221, included in the attachments.
1. Added lintel callouts at CMU wall along grid line K.
- U. Replace SHEET A-715 – CASEWORK LEGEND & SCHEDULE with revised Sheet A-715, included in the attachments.
- V. Replace SHEET A-721 – MISC. DETAILS with revised Sheet A-721, included in the Attachments.
1. Revised note to indicate that screen is not Owner-Furnished.
- W. Replace SHEET E-301B – FIRST FLOOR SPECIAL SYSTEMS PLAN AREA B with revised Sheet E-301B, included in the attachments.
1. Note added for Aux FA module.
- X. Replace SHEET T-002 – TECHNOLOGY SYMBOLS with revised Sheet T-002, included in the attachments.
1. Symbol legend updated.
- Y. Replace SHEET T-401 – ENLARGED TECHNOLOGY PLANS with revised Sheet T-401, included in the attachments.
1. Updated rack elevations, patch panels incorrectly labeled. 70-volt intercom speaker added to each IDF/MDF.
- Z. Replace SHEET T-402 – ENLARGED TECHNOLOGY PLANS with revised Sheet T-402, included in the attachments.
1. Updated rack elevations, patch panels incorrectly labeled. 70-volt intercom speaker added to each IDF/MDF.
- AA. Replace SHEET T-403 – ENLARGED TECHNOLOGY PLANS with revised Sheet T-403, included in the attachments.
1. Updated rack elevations, patch panels incorrectly labeled. 70-volt intercom speaker added to each IDF/MDF.
- BB. Replace SHEET T-501 – TECHNOLOGY DETAILS with revised Sheet T-501, included in the attachments.

- 
1. Detail references revised; verbiage updated (AV contractor references removed).
- CC. Replace SHEET T-502 – TECHNOLOGY DETAILS with revised Sheet T-502, included in the attachments.
1. Detail references revised; verbiage updated (AV contractor references removed).
- DD. Replace SHEET T-701 – TECHNOLOGY RISER DIAGRAMS with revised Sheet T-701, included in the attachments.
1. Fiber serving Basement IDF revised to I/O Fiber, Outdoor fiber now armored.
- EE. Replace SHEET T-702 – TECHNOLOGY RISER DIAGRAMS with revised Sheet T-702, included in the attachments.
1. Intercom Riser updated.
- FF. Replace SHEET TN-101A – FIRST FLOOR DATA NETWORK PLAN AREA A with revised Sheet TN-101A, included in the attachments.
1. 2 additional drops added to reception desk, Speaker type revised in stem lab, speakers removed from single stall bathrooms.
- GG. Replace SHEET TN-101B – FIRST FLOOR DATA NETWORK PLAN AREA B with revised Sheet TN-101B, included in the attachments.
1. Drop added for aux module.
- HH. Replace SHEET TN-101C – FIRST FLOOR DATA NETWORK PLAN AREA C with revised Sheet TN-101C, included in the attachments.
1. Drop added for aux module.
- II. Replace SHEET TN-102A – SECOND FLOOR DATA NETWORK PLAN AREA A with revised Sheet TN-102A, included in the attachments.
1. Speakers removed from single stall bathrooms.

END OF ADDENDUM NO. 2

DOCUMENT 004113 – BID FORM - STIPULATED SUM

1.1 BID INFORMATION

- A. Date: \_\_\_\_\_
- B. Bidder: \_\_\_\_\_.
- C. Bidder’s Contractor License Number: \_\_\_\_\_
- D. Bidder: \_\_\_\_\_  
 (Name of firm or company submitting Bid)  
 \_\_\_\_\_  
 (Address of firm or company submitting Bid)  
 \_\_\_\_\_  
 (City, State, Zip Code)  
 \_\_\_\_\_  
 (Contact Person, Telephone Number, Fax Number)
- E. Project Name: Gaston County Schools - Grier Middle School.
  - 1. Project Location: 1622 Garrison Boulevard, Gastonia, NC 28054.
- F. Owner: Gaston County Schools, 943 Osceola Street, Gastonia, NC 28053.
  - 1. Owner Contact: Paul Nault.
- G. Architect: LS3P ASSOCIATES LTD, 227 West Trade Street, Suite 700, Charlotte, NC 28202.
- H. Architect’s Project Number: 9201-218240.

1.2 CERTIFICATIONS AND BASE BID

- A. Base Bid, Single-Prime (All Trades) Contract: The undersigned Bidder, having carefully examined Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and subsequent Addenda, as prepared by LS3P and LS3P's consultants, and being familiar with all conditions and requirements of Work, hereby agrees to furnish all material, labor, equipment, and services necessary to complete construction of above-named Project, per requirements of Procurement and Contracting Documents, for stipulated Sum of:  
 \_\_\_\_\_ Dollars (\$ \_\_\_\_\_).
- 1. The above amount may be modified by amounts indicated by the Bidder on the attached Document 004322 – Unit Prices Form and Document 004323 – Alternates Form.



- B. Bidder, in submitting this Bid, understands that Owner reserves the right to reject any or all Bids, to waive any informality or irregularity in any Bid received.

1.3 BID GUARANTEE

- A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10 days after a written Notice of Award, if offered within 90 days after receipt of Bids, and on failure to do so agrees to forfeit to Owner the attached cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:

\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

- B. In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cashier's check, certified check, U.S. money order, or bid bond.

1.4 SUBCONTRACTORS AND SUPPLIERS

- A. The following companies shall execute subcontracts for the portions of the Work indicated:

	<u>Name of Company</u>	<u>License No.</u>
Masonry Subcontractor:	_____	_____
Roofing Subcontractor:	_____	_____
Plumbing Subcontractor:	_____	_____
HVAC Subcontractor:	_____	_____
Electrical Subcontractor:	_____	_____

- B. The Contractor shall act as Project Expediter.

1.5 TIME OF COMPLETION

- A. Work of this Contract will commence upon execution of Contract, and will be Substantially Complete no later than the following dates:
- B. The undersigned Bidder proposes and agrees hereby to commence Work of Contract Documents on the date specified in a written Notice to Proceed to be issued by Architect, and shall fully complete Work by end of June 2025 for Phase 1 – construction of the new school building, and end of ~~November~~ **July** 2026 for Phase 2 – demolition of existing buildings and Phase 3 – new athletic fields

1.6 ACKNOWLEDGEMENT OF ADDENDA

A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

- 1. Addendum No. 1, dated \_\_\_\_\_.
- 2. Addendum No. 2, dated \_\_\_\_\_.
- 3. Addendum No. 3, dated \_\_\_\_\_.
- 4. Addendum No. 4, dated \_\_\_\_\_.

1.7 BID FORM SUPPLEMENTS

A. The following supplements are a part of this Bid Form and are attached hereto.

- 1. Document 004321 – Unit Prices Form.
- 2. Document 004322 – Allowances Form.
- 3. Document 004323 - Alternates Form.

1.8 CONTRACTOR'S LICENSE

A. The undersigned further states that it is a duly licensed contractor, for type of work proposed, in the State of North Carolina, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.9 SUBMISSION OF BID

Respectfully submitted this \_\_\_\_ day of \_\_\_\_\_, 2023.

Submitted By: \_\_\_\_\_  
(Name of bidding firm or corporation)

Authorized Signature: \_\_\_\_\_  
(Handwritten signature)

Signed By: \_\_\_\_\_  
(Type or print name)

Title: \_\_\_\_\_  
(Owner/Partner/President/Vice President)

Witness By: \_\_\_\_\_  
(Handwritten signature)

Attest: \_\_\_\_\_  
(Handwritten signature)

By: \_\_\_\_\_  
(Type or print name)

Title: \_\_\_\_\_  
(Corporate Secretary or Assistant Secretary)

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

License No.: \_\_\_\_\_

Federal ID No.: \_\_\_\_\_ (Affix Corporate Seal Here)

END OF DOCUMENT 004113

---

**SECTION 012100 - ALLOWANCES****PART 1 - GENERAL****1.1 SUMMARY**

- A. Section includes administrative and procedural requirements governing allowances.
  - 1. Certain items are specified in Contract Documents as allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order. Include defined costs associated with allowances in base Bid.
- B. Types of allowances include the following:
  - 1. Quantity allowances.
  - 2. Contingency allowances.
  - 3. Unforeseen allowances.

**1.2 SELECTION AND PURCHASE**

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

**1.3 ACTION SUBMITTALS**

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

**1.4 INFORMATIONAL SUBMITTALS**

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

**1.5 QUANTITY ALLOWANCES**

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.

- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
  - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to Owner's storage space as directed.

#### 1.6 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

#### 1.7 UNFORESEENS ALLOWANCES

- A. Unforeseens Allowance is limited to those items and Work hidden, undetectable, or unforeseen and not visible from pre-bid, on-site observation, or not shown, called-for, or reasonably implied in the Contract Documents.
- B. Use unforeseens allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- C. Contractor's related costs for products and equipment ordered by Owner under the unforeseens allowance are included in the allowance and are not part of the Contract Sum. The costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- D. Change Orders authorizing use of funds from the unforeseens allowance will include Contractor's related costs and reasonable overhead and profit margins.
- E. At Project closeout, credit unused amounts of remaining in the unforeseens allowances to Owner by Change Order.

#### 1.8 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, required maintenance materials, and similar margins.
  - 1. Include installation costs in purchase amount only where indicated as part of the allowance.

2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
  3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
  4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs due to a change in the scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
  2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

### 3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

### 3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Quantity Allowance: Include 500 cu. yd. of mass rock excavation and disposal off-site, as specified in Division 31 Section "Earth Moving."
1. Coordinate quantity allowance adjustment with unit-price requirements in Section 012200 "Unit Prices."
- B. Allowance No. 2: Quantity Allowance: Include 100 cu. yd. of utility trench rock excavation and disposal off-site as specified in Division 31 Section "Earth Moving."
1. Coordinate quantity allowance adjustment with unit-price requirements in Section 012200 "Unit Prices."
- C. Allowance No. 3: Quantity Allowance: Include 500 cu. yd. of structural fill/backfill (imported) in-place on-site as specified in Division 31 Section "Earth Moving."
1. Coordinate quantity allowance adjustment with unit-price requirements in Section 012200 "Unit Prices."
- D. Allowance No. 4: Quantity Allowance: Include 5,000 cu yd. of unsuitable soil removal and disposal off-site as specified in Division 31 Section "Earth Moving."

- 
1. Coordinate quantity allowance adjustment with unit-price requirements in Section 012200 “Unit Prices.”
- E. Allowance No. 5: Quantity Allowance: Include 2,700 tons of No. 57 washed crushed stone for foundation bridging of alluvial soils as specified in Division 31 Section “Earth Moving.”
1. Coordinate quantity allowance adjustment with unit-price requirements in Section 012200 “Unit Prices.”
- F. Allowance No. 6: Contingency Allowance: Include a contingency allowance of \$450,000.00 for use according to Owner's written instructions.
- G. Allowance No. 7: Unforeseens Allowance: Include an allowance of \$75,000.00 for additional unforeseen abatement.
- H. Allowance No. 8: Lump-Sum Allowance: Include \$100,000.00 for Emergency Responder Radio System (ERRS) as indicated on Electrical Drawings.**

END OF SECTION 012100

## SECTION 072129 - SPRAYED ACOUSTICAL INSULATION

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Spray-applied cellulosic thermal and acoustical insulation.

## 1.2 DEFINITIONS

- A. R-value: Long-term thermal resistance: Determined in accordance with CAN/ULC-S770 and ASTM C1289, Annex A1.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: For each product, for tests performed by a qualified testing agency.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: For Spray-applied cellulosic insulation, an employer of workers trained and approved by manufacturer.
- B. Mockups: For Spray-applied cellulosic insulation, apply mockups to demonstrate aesthetic effects and set quality standards for materials and execution, including adhesion to substrate.
  1. Extent of Mockups: Approximately 100 sq. ft. of surface for each product indicated.
  2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Protect insulation materials from physical damage and from deterioration due to moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.



---

**PART 2 - PRODUCTS****2.1 SPRAY-APPLIED CELLULOSIC INSULATION**

- A. Self-Supported, Spray-Applied Cellulosic Insulation: ASTM C 1149, Type I (materials applied with liquid adhesive; suitable for either exposed or enclosed applications), chemically treated for flame-resistance, processing, and handling characteristics.
  - 1. Color: White.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide the Basis-of-Design indicated or comparable products by one of the following:
  - 1. International Cellulose Corp. (Basis-of-Design).
    - a. Product: K-13.
  - 2. Fiberlite Technologies; Satac System.
  - 3. Tascon Industries, Inc.
- C. Primer: As recommended by manufacturer for substrate.
- D. Thickness: Install spray-applied acoustical insulation to achieve thickness of 2-inches.

**PART 3 - EXECUTION****3.1 PREPARATION**

- A. Clean substrates of substances that are harmful to insulation, including removing projections capable of puncturing insulation or vapor retarders, or that interfere with insulation attachment.

**3.2 INSTALLATION, GENERAL**

- A. Comply with insulation manufacturer's written instructions applicable to products and applications.
- B. Extend insulation to envelop entire area to be insulated. Fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.

**3.3 INSTALLATION**

- A. Prime substrate where recommended by manufacturer to achieve adhesion. Commencement of application constitutes Contractor's acceptance of substrates and conditions.
- B. Spray-Applied Cellulosic Insulation: Apply spray-applied insulation according to manufacturer's written instructions. Do not apply insulation until installation of pipes, ducts, conduits, wiring, and electrical outlets in walls is completed and windows, electrical boxes, and other items not indicated to receive insulation are masked. After insulation is applied, make flush with face of studs by using method recommended by insulation manufacturer.

- C. Provide spray-applied cellulosic insulation in thickness required to obtain R-value indicated per ASTM E-605 field test procedure.

#### 3.4 PROTECTION

- A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings or enclosures where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

END OF SECTION 072129

## SECTION 114000 - FOOD SERVICE EQUIPMENT

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. The general provisions of the contract including general and supplementary conditions and general requirements apply to the work specified in this section.

#### 1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Plumbing: Refer to Division 22, including:
  - 1. Rough-in piping for gas and water supply and waste lines.
  - 2. Piping for supply and waste lines.
  - 3. Traps, grease traps, line strainers, tail pieces, valves, stops, shut-offs and miscellaneous fittings required for complete installation.
  - 4. Final connections.
  - 5. Indirect drains for sink compartments.
- B. Mechanical: Refer to Division 23.
  - 1. Roof mounted fans and connecting ductwork not shown as part of the kitchen equipment.
  - 2. Final connections, including approved welded duct connections to hoods.
- C. Electrical: Refer to Division 26, including:
  - 1. Rough-in conduit, wiring, line and disconnect switches, safety cut-offs and fittings, control panels, fuses, boxes and fittings required for complete installation.
  - 2. Final connections, including mounting and wiring of switches furnished as part of the food service equipment (unless otherwise indicated on the drawings).

#### 1.3 WORK INCLUDED THIS SECTION:

- A. Furnish and install all food service equipment as specified herein, including that which is reasonably inferred, with all related items necessary to complete work shown on contract drawings and/or required by these specifications.
- B. Electrical Work:
  - 1. Interwiring of food service equipment between components within equipment, such as heating elements, switches, thermostats, motors, etc., complete with junction box as is applicable, ready for final connection.
  - 2. Voltages shall be as indicated on contract drawings. Any differences in electrical characteristics at job site from those shown on contract documents must be submitted to Architect for consideration prior to ordering equipment.
- C. Plumbing Work:
  - 1. Furnish all equipment with faucets, sink waste assemblies, and trim as specified in this section.

- 
2. Other than sink compartments, extend all indirect waste lines to nearest floor receptor. All such drain lines to be properly sized. Drain shall terminate with proper air gap above flood rim of floor receptor. Drain lines to be copper with silver paint unless specified otherwise. Drain lines in public areas to be chrome plated where exposed to view.

#### 1.4 QUALITY ASSURANCE

- A. It is required that all custom fabricated equipment such as food serving units, tables, sinks, counter tops, etc., be manufactured by a food service equipment fabricator who has the plant, personnel and engineering equipment required. Such manufacturer shall be subject to approval of Architect.

All work in above category shall be manufactured by one manufacturer and shall be of uniform design and finish.

- B. Manufacturer of this equipment must be able to show that he is now and for the past five years has been engaged in manufacture or distribution of equipment, as required under this contract, as his principal product.
- C. Manufacturer of equipment herein specified shall be a recognized distributor for items of equipment specified herein which are of other manufacture than his own.
- D. Only manufacturers who can meet the foregoing qualifications will be acceptable.
- E. All work shall be done in an approved workmanlike manner, to the complete satisfaction of the Owner.

#### 1.5 SUBMITTALS

- A. Submit shop drawings as required by General Conditions. All shop drawings and rough-in drawings shall be CAD drafted, and must be submitted in .DWF or .PDF electronic format. Multiple hard copies are not acceptable.
- B. Shop drawings and bound brochures covering manufactured or "buy-out" items covering all work and equipment included in this contract shall be submitted to Architect as soon as possible after award of contract. After approval, Food Service Equipment Contractor shall furnish to Architect electronic files of shop drawings and brochures, corrected as required by virtue of review comments, for distribution to various interested trades on project. All costs of reproduction and submission shall be part of contract.

Bound brochure and cut sheet submittals must be copied to Owner for review and comment.

- C. Provide fully dimensioned rough-in plans at 1/4" scale, consisting of a separate drawing for each discipline. Each drawing shall show equipment shaded down 50%. Rough-in set shall include all required mechanical, electrical, plumbing, services for equipment and dimensioned rough-in location for same. Rough-in locations shown shall make allowances for required traps, switches, etc., thereby not requiring interpretation or adjustment on the part of other Contractors.

Drawings shall indicate dimensions for floor depressions, wall openings, etc., for equipment.

---

Food Service Equipment Contractor shall visit site to verify all rough-in and sleeve locations prior to installation of finished floors and shall cooperate with other Contractors involved in proper location of same. Food Service Equipment Contractor shall be responsible for any required relocations of rough-in due to errors or inaccuracies on those rough-in plans which he prepares.

- D. Rough-in plans shall include all required services which relate to equipment but which may not directly connect thereto, such as convenience outlets at walls, hose stations, floor drains, etc.
- E. Rough-in plans shall also include all required outlet services for equipment which is designated on drawing schedule, even though such equipment may not be included in this contract.
- F. Fully dimensioned and detailed shop drawings of custom fabricated equipment items shall be submitted, drawn at 3/4" and 1 - 1/2" scale for plans, elevations and sections respectively.

Drawings shall show all details of construction, installation, and relation to adjoining and related work where cutting or close fitting is required. Drawings shall show all reinforcements, anchorage, and other work required for complete installation of all fixtures.

- G. Do not begin fabrication of custom manufactured equipment until approvals of shop drawings have been received and until field measurements have been taken by Food Service Equipment Contractor, where such measurements are necessary to assure proper conformance with intent of contract drawings and specifications.
- H. Make field measurements, giving due consideration to any architectural, mechanical, or structural discrepancies which may occur during construction of building. No extra compensation will be allowed for any difference between actual measurements secured at job site and dimensions indicated on contract drawings. Any differences which may be found at job site during field measurements shall be submitted to Architect for consideration before proceeding with fabrication of equipment.
- I. Submit illustrative brochures for manufactured or "buy-out" equipment items, complete with illustrations, specifications, line drawings, rough-in requirements, and list of accessories or other specified additional requirements. Brochures shall be bound and shall include data on all equipment which is to be provided, arranged in numerical sequence which conforms to item numbers of specifications. Omission of data does not reduce obligation to provide items as specified.
- J. Approval of shop schedules and brochures will be in general and shall be understood to mean that Architect has no objection to use of materials or processes shown. Approval does not relieve Food Service Equipment Contractor from responsibility for errors, omissions, or deviations from contract requirements.

#### 1.6 SUBSTITUTIONS - STANDARDS

- A. Refer to Instructions to Bidders and Division 01 for requirements.
- B. All unspecified substitutions after bid must be submitted to Owner for written approval prior to acceptance.

---

1.7 DRAWINGS

- A. Drawings which constitute part of contract documents indicate general arrangement of piping and location of equipment. Should it be necessary to deviate from arrangement indicated in order to meet structural conditions, make such deviations without expense to Owner.
- B. Specifications and drawings are reasonably exact, but their extreme accuracy is not guaranteed. Drawings and specifications are for assistance and guidance of Contractor, and exact locations, distances and levels shall be governed by the building.

1.8 MANUFACTURER'S DIRECTIONS

- A. Follow manufacturer's directions in all cases where manufacturers of articles used in this contract furnish directions or prints covering points not shown on drawings or specifications.

1.9 INDUSTRY STANDARDS

- A. Electric operated and/or heated equipment, fabricated or otherwise, shall conform to latest standards of National Electric Manufacturers Association and of Underwriters Laboratories, Inc., and shall bear the U.L. label.
- B. Cooking and hot food holding equipment shall meet minimum construction standards as noted by NSF #4.
- C. Refrigeration equipment shall meet minimum construction standards as noted by NSF #7.
- D. Items of food service equipment furnished shall bear the N.S.F. seal.
- E. Food service equipment shall be installed in accord with N.S.F. standards.
- F. Work and materials shall be in compliance with requirements of applicable codes, ordinances and regulations, including but not limited to those of Occupational Safety and Health Act (OSHA), National Fire Protection Association, State Fire Marshal, State Accident Commission, U.S. Public Health Service, State Board of Health, local health codes, etc.
- G. No extra charge will be paid for furnishing items required by regulations, even though such may not be shown on drawings or called for in these specifications.
- H. Rulings and interpretations of enforcing agencies shall be considered part of regulations.

PART 2 - PRODUCTS

2.1 MANUFACTURED EQUIPMENT

- A. All like types of equipment such as all refrigerated and heated cabinets, all ovens, and all mixers shall be by the same manufacturer.

Addendum 02

- B. Except as may be specified otherwise under individual item specifications in "Equipment Schedule", all items of standard manufactured equipment shall be complete in accord with manufacturer's standard specification for specific unit or model called for, including finishes, components, attachments, appurtenances, etc., except as follows:
- C. All items of standard equipment shall be that manufacturer's latest model at time of delivery.
- D. Substitutions for manufactured equipment specified will be accorded consideration under terms set forth in "Substitutions - Standards".

## 2.2 FABRICATED EQUIPMENT

- A. Stainless steel shall be U.S. standard gauges as called for, 18-8, Type 302, or Type 304, No. 4 finish.
- B. Galvanized iron shall be Armco or equal. Framework of galvanized iron shall be welded construction, having welds smooth, and where galvanizing has been burned off, touched up with high grade aluminum bronze.
- C. Legs and crossrails shall be continuously welded, unless otherwise noted, and ground smooth.
- D. Bottom of legs at floor shall be fitted with sanitary stainless-steel bullet type foot, with not less than 2" adjustment.
- E. Legs shall be fastened to equipment as follows:
  - 1. To sinks by means of closed gussets. Gussets shall be stainless steel, reinforced with bushing, having set screws for securing legs.
  - 2. To tables and drainboards with closed gussets which shall be welded to stainless steel hat sections or channels, 14 gauge or heavier, exposed hat sections having closed ends. Bracing shall be welded to underside of tops.
- F. Closed gussets shall be a 3" minimum diameter at top, continuously welded to frame members or to sink bottom.
- G. Sinks, unless otherwise specified, shall be furnished with rotary type waste outlets, without connected overflows: Atlantic Brass Works Model 772-RB; Fisher Brass Foundry Model 250A; T&S; or approved equal. Where exposed, furnish wastes chromium plated.
- H. Rolls shall be 1 1/2" diameter, except as detailed contrary, with corners bullnosed, ground and polished.
- I. Seams and joints shall be shop welded. Welds to be ground smooth and polished to match original finish. Materials 18 gauge or heavier shall be welded.
- J. Metal tops shall be one-piece welded construction, unless specified otherwise, reinforced on underside with stainless steel hat sections or channels welded in place. Crossbracing to be not more than 30" on centers.

Addendum 02

- 
- K. Drawers to be 18-gauge stainless steel channel type housing and drawer cradle, both housing and cradle being reinforced and welded at corners, housing being secured to underside of table top, and both housing and cradle being sized for and fitted with 18-gauge 20" x 20" x 5" deep stainless-steel drawer insert having coved corners. Drawer insert shall be easily removable from cradle without tools or having to remove entire drawer. Drawers to have stainless steel fronts. Provide with recessed flush type stainless steel pulls.
- L. Support drawer on fabricated 14-gauge stainless steel interlocking channel solid delrin ball bearing wheels. Support slides shall be load rated at 200 lb. per pair. Slides to be Component Hardware S52 Series.
- M. Enclosed cabinet type bases shall be made of formed steel sheets reinforced with formed steel sections to create a rigid structure. Steel shall be 18-gauge or heavier. Base shall be welded construction throughout with front rails, mullions, etc., welded to appear as one-piece construction. All exposed sections of interior and exterior shall be stainless steel, and unexposed sections shall be galvanized steel, unless specified contrary.
- N. Doors shall be double cased, unless otherwise noted. Outer pans shall be 18-gauge with corners welded, ground smooth, and polished. Inner pans shall be 20 gauge, fitted tightly into outer pan with sound-deadening material such as Celotex used as core. Two pans shall be tack-welded together with seam solder filled.
- Door shall finish approximately 3/4" thick and shall be fitted with flush recessed type stainless steel door pulls. Single pan type doors shall be reinforced and stiffened with closed hat sections.
- O. Hinged doors shall be flush type mounted on heavy duty stainless steel piano or concealed hinges.
- P. Hardware shall be solid materials and except where unexposed or specified contrary, of cast brass, chrome plated. Stampings are not acceptable. Identify all hardware with manufacturer's name and number so that broken or worn parts may be ordered and replaced.
- Q. Fabricate sink compartments with fully coved vertical and horizontal corners. Multiple compartment partition to be double thickness, continuously welded where sheets join at top. Front of multiple compartment sinks to be continuous on exterior. Bottoms shall be creased to drain.
- R. Ends of all fixtures, splashbacks, shelves, etc., shall be finished flush to walls or adjoining fixtures.
- S. Dishtables, draintables, splashbacks and turned-up edges shall have radius bends in all horizontal and vertical corners, coved at intersections.
- T. Rounded and coved corners or radius bends shall be 1/2" radius or longer.
- U. Shelves in fixtures with enclosed bases shall be turned up on back and sides and feathered slightly to insure tight fit to enclosure panels. Bottom shelves shall be made for easy removal unless otherwise noted.
- V. Undersides of tops to be coated with heavy-bodied resinous material compounded for permanent, non-flaking adhesion to metal, 1/8" thick, applied after reinforcing members have been installed, drying without dirt-catching crevices.



Addendum 02

---

W. Metal components, unless specified or noted otherwise, to be the following gauges:

Counter and table tops	14 ga.	Stainless Steel
Wall shelves	16 ga.	Stainless Steel
Pipe leg undershelves	16 ga.	Stainless Steel
Drawer fronts	16 ga.	Stainless Steel
Enclosed cabinet bases	18 ga.	Stainless Steel
Sinks and drainboards	14 ga.	Stainless Steel
Legs 1 - 5/8" diameter	16 ga.	Stainless Steel
Doors (outer pan)	18 ga.	Stainless Steel
Doors (inner pan)	20 ga.	Stainless Steel

### 2.3 HEATING EQUIPMENT

- A. Wherever electric heating equipment or thermostat control for such equipment is specified, it shall be complete, and of the materials, size and rating specified within equipment item or details. All such equipment shall be designed and installed to be easily cleaned or to be easily removed for cleaning.
- B. Electrical appliances or heating element circuits of 120 volts shall not exceed 1650 watts, unless specifically shown contrary.

### 2.4 SWITCHES AND CONTROLS

- A. Food Service Equipment Contractor shall supply on each motor driven appliance or electrical heating unit suitable control switch of proper type in accord with Underwriter's Code.
- B. All internal wiring for fabricated equipment items included, all electrical devices, wiring, controls, switches, etc., built into or forming an integral part of these items shall be furnished and installed by Food Service Equipment Contractor in his factory or building site with all items complete to junction box for final connection to building lines by Electrical Contractor.
- C. Provide standard 3-prong plugs to fit "U" slot grounding type receptacles, similar to No. 5262, for all equipment items powered by plugging into 110-120 volts, single phase AC. Also, provide suitable length 3-wire cord for equipment.

### 2.5 CONNECTION TERMINALS

- A. All equipment shall be complete with connection terminals as standardized by equipment manufacturers, except where specified otherwise.

### 2.6 LOCKS

- A. Fit all doors for reach-in refrigerated compartments with locking type latches. Provide master keys.

---

2.7 GAS EQUIPMENT

- A. Equipment to be suitable for use with gas available at site, and to be furnished by F.S.E.C. with pressure regulators designed to work with incoming pressure.

2.8 GAS QUICK DISCONNECTS

- A. Where specified, gas quick disconnects shall be furnished complete with gas valve, gas connector hose, quick disconnect fitting elbows, and restraining cable, all AGA approved. Gas hose shall be flexible, braided or corrugated stainless steel with smooth plastic exterior coating or sleeve of heat shrink tubing (provide on all caster mounted gas equipment).
- B. All mobile cooking equipment requiring surface protection by fire suppression nozzles shall be secured in place by stainless steel cradle type wheel stops as manufactured by the Eagle Group or Select Stainless products. Plastic wheel stops are not acceptable.

PART 3 - EXECUTION

3.1 GENERAL

- A. Work under this contract and covered under this section of specifications includes but is not limited to:
  - 1. Cutting of holes and/or ferrules on equipment for piping, drains, electrical outlets, conduits, etc. as required to coordinate installation of food service equipment with work of other Contractors on project.
  - 2. Field checking of building and rough-in requirements, and submission of brochures and shop drawings, all as required hereinbefore under "Submittals".
  - 3. Repair of all damage to premises as result of this installation, and removal of all debris left by those engaged in this installation.
  - 4. Having all food service equipment fixtures completely cleaned and ready for operation when building is turned over to Owner.

3.2 INSTALLATION PROCEDURES

- A. Food Service Equipment Contractor shall make arrangements for receiving his custom fabricated and "buy out" equipment and shall make delivery into building as requisitioned by his installation superintendent. He shall not consign any of his equipment to Owner or to any other Contractor unless he has written acceptance from them and has made satisfactory arrangements for the payment of all freight and handling charges.
- B. Food Service Equipment Contractor shall deliver all of his custom fabricated and "buy out" equipment temporarily in its final location, permitting Trades to make necessary arrangements for connection of service lines; he shall then move equipment sufficiently to permit installation of service lines, after which he shall realign his equipment level and plumb, making final erection as shown on contract drawings.
- C. All portable or counter mounted equipment weighing in excess of 25 pounds shall be mounted on 4" stainless steel adjustable legs.

- D. This Contractor shall coordinate his work and cooperate with other trades working at site toward the orderly progress of the project.
- E. Architect or Owner's Agent shall have access at all times to plant or shop in which custom fabricated equipment is being manufactured, from time contract is let until equipment is shipped, in order that progress of work can be checked, as well as any technical problem which may arise in coordination of equipment with building. Any approval given at this point of manufacture shall be tentative, subject to final inspection and test after complete installation.
- F. Food Service Equipment Contractor shall assist Architect, Owner, and/or Owner's Agent in making any desired tests during or prior to final inspection of equipment; he shall remove immediately any work or equipment rejected by Architect, Owner, and/or Owner's Agent, replacing same with work conforming with contract requirements, and shall reimburse mechanical and/or other contractors involved for extra work made necessary by such replacement.
- G. This Contractor shall keep premises free from accumulation of his waste material and rubbish, and at completion of his work shall remove his rubbish and implements, leaving areas of his work broom clean.
- H. This Contractor shall provide and maintain coverings or other approved protection for finished surfaces and other parts of his equipment subject to damage during and after erection. After removal of protective coverings, all field joints shall be grounded, polished and entire work shall be thoroughly cleaned and polished.

### 3.3 TRIMMING AND SEALING EQUIPMENT

- A. Seal completely spaces between all units to walls, ceilings, floors, and adjoining (not portable) units with enclosed bodies against entrance of food particles or vermin by means of trim strips, welding, soldering, or commercial joint material best suited to nature of equipment and adjoining surface material.
- B. Close ends of all hollow sections.
- C. Equipment butting against walls, ceilings, floor surfaces and corners to fit tightly against same; backsplashes or risers which fit against wall to be neatly scribed and sealed to wall with DowCorning # 732 RTV or General Electric clear silicone sealant, wiping excess sealant out of joint to fillet radius. Where required to prevent shifting of equipment and breaking wall seal, anchor item to floor or wall.
- D. Treat enclosed spaces (inaccessible after equipment installation) for vermin prevention in accord with industry practice.

### 3.4 TESTING AND DEMONSTRATION OF EQUIPMENT

- A. After completion of installation, all equipment using water, gas, and electricity shall be performance inspected and tested by factory certified service agent, including wet test of hood fire suppression systems, if so required. Food Service Equipment Contractor shall document that these

---

inspections have been performed prior to scheduling demonstrations and Owner acceptance of equipment.

- B. Food Service Equipment Contractor shall arrange to have all manufactured, mechanically operated equipment furnished under this contract demonstrated by authorized representatives of equipment manufacturers, these representatives to instruct Owner's designated personnel in use, care and maintenance of all items of equipment after same are in working order. Demonstration and instruction shall be held on dates designated by Owner.
- C. Food Service Equipment Contractor shall provide a competent service representative to be present when installation is put into operation.

### 3.5 EQUIPMENT HANDLING AND STORAGE

- A. Deliver equipment to site, properly crated and protected, and store in safe place, protected from damage until time for installation.

### 3.6 GUARANTEE

- A. Special Project Warranty: Provide written warranty, signed by manufacturer, agreeing to replace/repair, within warranty period, with inadequate and defective materials and workmanship, including leakage, breakage, improper assembly, or failure to perform as required, provided manufacturer's instructions for handling, installing, protecting, and maintaining units have been adhered to during warranty period. This warranty shall be in addition to, and not limitation of, the rights the Owner may have against the Contractor under the Contract Documents.

- B. Warranty Period:

1 year from date of Substantial Completion, all new equipment furnished. However, manufacturer's warranty shall prevail when the period is longer than one year.

5-year warranty period on refrigeration compressors.

10-year warranty period on walk-in panels.

### 3.7 OPERATING AND MAINTENANCE MANUALS

- A. After completion of installation, Food Service Equipment Contractor shall present to Owner three sets of all operating and maintenance manuals, covering all mechanically operated equipment furnished under this contract, each set being neatly bound in looseleaf binder having durable cover.
- B. Include in each binder a list of names, addresses and telephone numbers of local servicing agencies authorized to make necessary repairs and/or adjustments of equipment furnished under this contract.

## PART 4 – EQUIPMENT SCHEDULE

Addendum 02

---

ITEM 01      COLD STORAGE ASSEMBLY      QUANTITY AS SCHEDULED

Provide pre-fabricated cold storage room assembly of size and shape shown on plan and detail drawings. Exact overall size to be field verified prior to fabrication.

A.      Insulation:

Panels shall be insulated with 4" thick urethane, foamed or poured in place using HCPC (no CFC) blowing agent. Foam shall be 2.25 lb. density, 95% closed cell. Panels shall meet ASTM E-84 (UL-723) and be listed by Underwriters laboratories. Panels shall have a maximum flame spread of 25, maximum smoke developed of 450 minimum. Flash ignition of 600 degrees and minimum self-ignition of 800 degrees F.

B.      Coved corners:

Assembly shall be constructed so that all interior wall, floor and ceiling intersections shall comply with N.S.F. requirements.

C.      Cam lock fasteners:

All panel intersections and wall, floor and ceiling intersections shall be secured by cam lock fasteners.

D.      Finishes:

Exterior and interior finishes shall be as shown on drawings.

E.      Doors:

Door size and finish shall be as shown on drawings, and shall be furnished complete with sill wiper gasket, lift type hinges.

Exterior door to be equipped with automatic door closer.

Freezer door to be equipped with perimeter heat.

All doors to be equipped with heavy duty padlocking pull-handle lever, with inside safety release.

F.      Thermometers:

Each compartment to be provided with exterior flush mounted thermometer mounted at eye level to each door. Provide remote read-out for freezer compartment at exterior cooler door.

G.      Lights:

Each compartment to be furnished complete with manufacturer's standard light fixtures, with LED bulb, having protective cover, mounted and pre-wired to switch with pilot light in door section. Extra LED light fixtures as needed to provide 30-foot candles 30" above floor. Lights to be furnished and installed by this section.

H.      Ceiling panels to be one piece, self-supporting and span full width of assembly.

I. Floor:

**\*ADD 01 - Recessed structural FRP combined with exterior grade reinforced wood and .100 Diamond Aluminum Treadplate floor by Food Service Equipment Contractor, with quarry tile by G.C.**

**Structural Reinforced floor panels** to support minimum ~~±200~~ **2000** pounds per square foot.

The floor and ceiling shall have maximum length panels to span full length of box if possible, otherwise stagger joints so there are no common "four corner" intersections and no joints occurring in doorways.

J. Refrigeration System:

Shall be furnished by manufacturer as part of cold storage room assembly, provide each compartment with complete refrigeration system sized to maintain appropriate temperature.

Provide temperature alarm system with remote read-out and recording capability.

Condensing units to be air-cooled, remote. Units to have performance and wiring characteristics as scheduled on drawings. Refrigeration systems to be designed for use with R404A or R-507 refrigerant only.

Condensing units to be provided with painted galvanized steel all-weather housing, controls, and crankcase heaters, all suitable for outdoor conditions, and located as shown on drawings.

Unit coolers to be low-silhouette type, mounted at locations shown on drawings.

Performance and wiring characteristics to be as scheduled on drawings. Freezer system to be provided with timed electric defrost.

Evaporator drain lines to be provided by this section and extended to floor receptors outside assembly.

Freezer drain lines to be wrapped with heater cable and insulated with pre-molded foamed plastic insulation suitable for the application. Thickness as recommended by manufacturer.

Refrigerant piping to be ACR copper tubing, hard temper, with wrought fittings and silver solder joints. Insulate suction lines with pre-molded foamed plastic insulation, thickness as recommended by manufacturer for temperature and application.

Refrigeration systems to be provided with all required refrigerant piping, insulation, sight glass vibration eliminator, solenoid(s), dryer, suction line filter, expansion valve(s), thermostat(s), heat exchangers, and defrost timers, etc. as necessary for complete installation. Provide pump down control circuit consisting of thermostat and solenoid valve. All components including piping and insulation to be installed using accepted industry standards, manufacturer's instructions and first-class workmanship.

K. Miscellaneous:

---

Assembly to be installed on depressed building slab. See detail drawing.

Provide 1/8" diamond tread wainscott along exposed front exterior of assembly mounted from floor to 48" A.F.F.

Provide trim strips, closure panels, etc., as necessary to trim assembly to adjacent building surfaces.

Provide removable top closure panels with "C" channel rails. Lift-out panel sections to have turn-down edges for strength and are not to exceed 4'-0" in length.

Provide plastic strip curtains at door locations, transparent vinyl overlapping strips, aluminum bar hanging rod and bracket, suitable for low temperature application, as manufactured by Curtron, Flexstrip Products, Inc., or equal. Size to suit openings.

Provide heated pressure relief port in freezer.

Provide sleeves properly located for utility entrance, drain lines, and refrigeration lines, and after lines are installed, fill sleeves with spray foam compound, suitable for use in refrigerated spaces. Trim excess foam away and cover with stainless steel escutcheon.

Cold storage room shall be erected by factory trained, or factory approved installers or shall be supervised by factory personnel. Refrigeration systems shall be furnished by cold storage room manufacturer and installed by factory approved personnel. Shop drawing submittal shall indicate who the installer is, and a letter of approval shall accompany the submittal indicating the manufacturer's acceptance of the installers.

This specification does not constitute a complete description of cold storage assembly, also see plan and detail drawings.

Cold storage room assembly to be as manufactured by Bally, Imperial/Brown, or Thermokool complying with specifications and drawings.

ITEM 02A PLASTIC W/METAL FRAME SHELVING QUANTITY AS SCHEDULED

Provide four-tier polymer shelving unit complete with tubular uprights and having the following features:

- A. Arrange using quantity and size as shown on plan drawings.
- B. Open grid polymer with antimicrobial protection.
- C. Epoxy coat steel frame.
- D. (4) wedge connectors.
- E. Post, 74" high, for use with stem casters, epoxy coated steel with built in antimicrobial product protection.
- F. (4) Polymer Stem Caster:
  - Brake
  - 5" diameter

- 
- 1-1/4" wide face
  - -20° F to 120°F temperature range
  - Polyurethane wheel tread
  - 300 lb. capacity
  - Donut bumpers

Shelving to be as manufactured by Metro, Model MQ1848G, Eagle Group, Cambro, or SPG.

ITEM 02B PLASTIC W/METAL FRAME SHELVING QUANTITY AS SCHEDULED

Provide four-tier polymer shelving unit complete with tubular uprights and having the following features:

- A. Arrange using quantity and size as shown on plan drawings.
- B. Open grid polymer with antimicrobial protection.
- C. Epoxy coat steel frame.
- D. (4) wedge connectors.
- E. Post, 74" high, for use with stem casters, epoxy coated steel with built in antimicrobial product protection.
- F. (4) Polymer Stem Caster:
  - Brake
  - 5" diameter
  - 1-1/4" wide face
  - -20° F to 120°F temperature range
  - Polyurethane wheel tread
  - 300 lb. capacity
  - Donut bumpers

Shelving to be as manufactured by Metro, Model MQ1860G, Eagle Group, Cambro, or SPG.

ITEM 02C PLASTIC W/METAL FRAME SHELVING QUANTITY AS SCHEDULED

Provide four-tier polymer shelving unit complete with tubular uprights and having the following features:

- A. Arrange using quantity and size as shown on plan drawings.
- B. Open grid polymer with antimicrobial protection.
- C. (4) wedge connectors.
- D. Polymer Trilobal Post:
  - 74" high,
  - For use with stem casters,
  - Adjusts at 1" increments,



- Corrosion proof all polymer construction
- Built-in antimicrobial product protection.

- E. (4) Stem Caster:
- Brake
  - 5" diameter
  - 1-1/4" wide face
  - High modulus donut wheel tread
  - 300 lb. capacity
  - Donut bumpers

Shelving to be as manufactured by Metro, Model MQ1836G, Eagle Group, Cambro, or SPG.

ITEM 03A      DUNNAGE RACK                      QUANTITY AS SCHEDULED

Provide single deck dunnage platform unit with the following features:

- A.      Arrange using quantities and sizes as shown on plan drawings.
- B.      Slotted deck.
- C.      Separate polymer bow tie for joining racks.
- D.      Corrosion proof polymer construction.

Platform unit to be as manufactured by Metro, Model HP2248PD, Cambro, or Eagle Group.

ITEM 03B      DUNNAGE RACK                      QUANTITY AS SCHEDULED

Provide single deck dunnage platform unit with the following features:

- A.      Arrange using quantities and sizes as shown on plan drawings.
- B.      Slotted deck.
- C.      Separate polymer bow tie for joining racks.
- D.      Corrosion proof polymer construction.

Platform unit to be as manufactured by Metro, Model HP2260PD, Cambro, or Eagle Group.

ITEMS 04-05                                      NOT USED

ITEM 06      WALL MOUNTED SHELF                      QUANTITY AS SCHEDULED

Provide wall shelf with the following features:

- A.      Wall mount.
- B.      Arrange using quantity and size as shown on plan drawings.

- 
- C. Ends turned down, back turned up 2”.
  - D. 16/300 stainless-steel.
  - E. Mount 4’-6” A.F.F.

Wall shelf to be as manufactured by Eagle Group, Model WS1296-16/3, Titan, or fabricated equal.

ITEM 07      CART, UTILITY      QUANTITY AS SCHEDULED

Provide stainless steel welded cart having the following features:

- A. (3) shelf, 36"W x 24"D x 40"H.
- B. Open base.
- C. Wire shelves.
- D. (2) handles.
- E. 500 lbs. capacity.
- F. Stainless-steel finish.
- G. (4) 5" swivel casters with resilient tread.

Cart to be as manufactured by Eagle Group, Model EU3-2436S, Lakeside, or Cambro.

ITEM 08      AIR CURTAIN INSECT FAN      QUANTITY AS SCHEDULED

Provide air curtain fan having the following features:

- A. Air curtain for 48” wide door.
- B. Unheated.
- C. One (1) 1/2 HP motor.
- D. Voltage as scheduled, direct connection.
- E. Stainless steel cabinet.
- F. Micro switch at door.
- G. Obsidian Black powder coated cabinet.

Fan to be as manufactured by Mars Air Systems, Model STD248-1UA-OB, Universal Jet Industries, or Leading Edge.

ITEM 09      ONE-COMPARTMENT SINK      QUANTITY AS SCHEDULED

Provide one-compartment sink as follows:

- A. One-compartment, 72"W x 30"D.
- B. 14/300 stainless steel construction.
- C. 24" wide x 24" front-to-back x 14" deep compartment.
- D. 24" drainboards on left and right.
- E. 9"H backsplash.
- F. One (1) set of 1-1/8" splash mount faucet holes, 8" O.C.
- G. 1-1/2" raised rolled edge on front and sides.
- H. 1-1/2" NPS basket strainer.
- I. Stainless steel H-frame legs with adjustable stainless-steel bullet feet.
- J. Installation Kit:
  - Two (2) 1/2" NPT nipples, lock nuts and washers
  - Two (2) short "Ell" 1/2" NPT female x male
- K. End splash, to 14".
- L. Twist handle lever drain, 1-1/2" drain outlet.

Sink to be as manufactured by Eagle Group, Model FN2424-1-24-14/3, Titan, or fabricated equal.  
ON EQUIP SCH REMARKS – FAUCET INFO MOVE TO LINE 09.1  
ITEM 09.1 FAUCET

- M. 12" swing nozzle.
- N. Wall mounted.
- O. 8" centers on sink faucet with 1/2" IPS eccentric flanged female inlets.
- P. Lever handles.

Faucet to be as manufactured by T&S Brass, Model B-0231, Chicago Faucet, or Fisher.

ITEM 10      WORKTABLE      QUANTITY AS SCHEDULED

Provide worktable with the following features:

- A. 60"W x 30"D, see direction of operation on Plan.
- B. 14/300 stainless steel top with turned down edges, 5" backsplash.
- C. 18-gauge stainless steel undershelf.

- D. 16-gauge stainless steel legs, (4) 5" casters (2 with brakes).
- E. All-welded construction.
- F. (2) Stainless steel 20" x 20" x 5" drawer, stainless steel pan.

Worktable to be as manufactured by Eagle Group, Model T3060SEM, Titan, or fabricated equal.

ITEM 11      WORKTABLE      QUANTITY AS SCHEDULED

Provide worktable with the following features:

- A. 60"W x 30"D, see direction of operation on Plan.
- B. 14/300 stainless steel top with turned down edges, 5" backsplash.
- C. 18-gauge stainless steel undershelf.
- D. 16-gauge stainless steel legs, (4) 5" casters (2 with brakes).
- E. All-welded construction.
- F. (2) Stainless steel 20" x 20" x 5" drawer, stainless steel pan.

Worktable to be as manufactured by Eagle Group, Model T3060SE-BS, Titan, or fabricated equal.

ITEM 12      TWO-COMPARTMENT SINK      QUANTITY AS SCHEDULED

Provide two-compartment sink with drainboards as follows:

- A. 98"W x 30"D.
- B. 14/300 stainless steel construction.
- C. 24" wide x 24" front-to-back x 14" deep compartments.
- D. 24" drainboards on left and right.
- E. 9"H backsplash.
- F. 8" O.C. splash mount faucet holes.
- G. 1-1/2" raised-rolled edge on front and sides.
- H. 1-1/2" NPS basket strainers.
- I. Stainless steel H-frame legs with adjustable stainless steel flanged feet.
- J. Sink Mixing Faucet: T&S B-0231 (or Chicago Faucet, Fisher)

- 
- 12" swing nozzle
  - Wall mounted
  - 8" centers on sink faucet with 1/2" IPS eccentric flanged female inlets
  - Lever handles

K. Installation Kit:

- Two (2) 1/2" NPT nipples, lock nuts and washers
- Two (2) short "EII" 1/2" NPT female x male

L. End splash, standard height, 9 1/2".

M. (2) Twist handle lever drain, 2" drain outlet.

Sink to be as manufactured by Eagle Group, Model FN2448-2-24-14/3, Titan, or fabricated equal.

ITEM 13 ICE MAKER, CUBE STYLE QUANTITY AS SCHEDULED

Provide ice maker and bin having the following features:

- A. Air-cooled, self-contained condenser.
- B. Approximately 316 lb. production/24 hours.
- C. Durable stainless finish.
- D. Water Filter Manifold:
  - Single filter
  - 1.5 gpm maximum flow
  - Scale inhibitor
  - .5-micron particle reduction
  - Quick connect fittings
  - Water filters must be changed every 180 days (6 months), minimum
- E. Voltage as scheduled, direct connection.

Unit to be as manufactured by Ice-O-Matic, Model CIM0330FA, Scotsman, or Follett.

ITEM 13.1 ICE BIN

- G. 344 lb. storage capacity.
- H. 30"W x 31"D x 37-1/2"H.
- I. Slope front door for top mounted ice maker.
- J. Polyethylene interior.
- K. Durable stainless-steel finish exterior.
- L. 6" legs.

Addendum 02

---

EQUIP SCH REMARKS – NEED ICE BIN & TOP MODELS ON LINE 13.1

Ice bin to be as manufactured by Ice-O-Matic, Model B40PS, Scotsman, or Follet.

ITEM 14      WORK TABLE      QUANTITY AS SCHEDULED

Provide work table with the following features:

- A. 48"W x 30"D.
- B. 14/300 stainless steel top with 5" backsplash.
- C. 18-gauge stainless steel undershelf.  
CUTS OR SCHED DO NOT HAVE CASTERS/ ADAPTED
- D. 16-gauge stainless steel legs and casters.
- E. All-welded construction.
- F. (5) Drawer, 20" x 20" x 5", stainless-steel pan.

Work table to be as manufactured by Eagle Group, Model T3048SE-BS, Titan, or fabricated equal.

ITEM 15      WALL MOUNTED SHELF      QUANTITY AS SCHEDULED

Provide wall shelf with the following features:

- A. Wall mount.
- B. Arrange using quantity and size as shown on plan drawings.
- C. Ends turned down, back turned up 2".
- D. 16/300 stainless steel.
- E. Mount 4'-6" A.F.F.

Wall shelf to be as manufactured by Eagle Group, Model SWS1260-16/3, Titan, or fabricated equal.

ITEM 16      TEA BREWER      N.I.K.C.

This item is to be furnished and installed by Vendor.

ITEM 17      MICROWAVE OVEN      QUANTITY AS SCHEDULED

Provide microwave convection oven having the following features:

- A. 0.6 cu. ft. capacity, 1200 watts, heavy volume.
- B. Capacity to program 100 menus.
- C. Eleven (11) power levels, four (4) cooking stages, 60-minute max cooking time.

- D. LED display, touch control.
- E. Interlock safety switch.
- F. ADA compliant Braille touch pads.
- G. Audible end of cycle signal.
- H. Side hinged door with tempered glass.
- I. Sealed ceramic interior shelf.
- J. Lighted interior, stainless steel exterior and interior.
- K. Voltage as scheduled.

Microwave oven to be as manufactured by ACP, Model HDC12A2, Merrychef, or Turbo-Chef.

ITEM 18 NOT USED

ITEM 19 PAN RACK, BUN QUANTITY AS SCHEDULED

Provide aluminum pan rack having the following features:

- A. 21-1/2" x 26" x 73"H.
- B. 2" wide angle slides for thirty (30) 18" x 26" pans, slides on 2" centers.
- C. Heavy duty.
- D. Fully welded frame.
- E. Aluminum construction.
- F. (4) 6" x 2" non-marking swivel plate casters with upgrade.

Pan rack to be as manufactured by Eagle Group, Model 4330, Metro, or Cres-Cor.

ITEM 20 REACH-IN HEATED CABINET QUANTITY AS SCHEDULED

Provide mobile hot cabinet, having the following features:

- A. Reach-in, single-section, 21.0 cubic feet.
- B. Stainless steel exterior front, sides and interior.
- C. Digital exterior temperature display.
- D. ~~(3) chrome plated wire shelves.~~ \*ADD 02 (6) chrome plated wire shelves.

- 
- E. Solid full height door with handle and lock, hinged on right.
  - F. (4) 5" locking casters.
  - G. Voltage as scheduled, cord and plug.

Cabinet to be as manufactured by Delfield, Model CSH1-S, Victory, or Traulsen.

ITEM 21 NOT USED

ITEM 22 EXHAUST HOOD N.I.K.C.

This item is to be furnished and installed by Mechanical.

ITEM 23 UTILITY DISTRIBUTION SYSTEM N.I.K.C.

This item is to be furnished and installed by Mechanical.

ITEM 24 FIRE SUPPRESSION SYSTEM N.I.K.C.

This item is to be furnished and installed by Mechanical.

ITEM 25 COMBI OVEN, ELECTRIC QUANTITY AS SCHEDULED

Provide electric combi oven with the following features:

- A. Electric
- B. Boilerless
- C. (6) 18" x 26" full size sheet pan or (12) 12" x 20" x 1" hotel pan capacity ovens
- D. Stacking Kit on 12" base, for double stack 6.20 & 10.20 (3456267), feet
- E. Optipure Multi-Stage Water Filtration System
- F. Backflow prevention device
- G. Pull-out spay hose
- H. Multi-point core temperature probe
- I. Voltages as scheduled, direct connection

Combi oven steamer to be as manufactured by Convotherm Model C4 ET 6.20ES, Cleveland, or Rational.

ITEM 26 CONVECTION STEAMER, GAS QUANTITY AS SCHEDULED

Provide gas fired, two-compartment pressureless steamer having the following features:

- A. Gas:



- 
- Field verify type
  - 3/4" x 4' flex hose
  - Quick disconnect
  - Restraining device
- B. (2) compartments on 24" cabinet base.
- C. (10) 12" x 20" x 2-1/2" deep pan total capacity.
- D. High output stainless steel steam generator with timed drainage and flush, staged water fill.
- E. Manual controls with 60-minute timer with buzzer for each compartment,
- F. Constant steam feature.
- G. Split water line.
- H. Stainless steel interior, exterior, frame and flanged feet.
- I. Electric ignition.
- J. Voltage as scheduled, 6' cord and 3-prong plug.
- K. Water filter treatment system.
- L. Backflow prevention device.

Steamer to be as manufactured by Vulcan, Model C24GA10, Cleveland, or Groen.

ITEM 27      CONVECTION OVEN, GAS      QUANTITY AS SCHEDULED

Provide gas-fired convection double oven having the following features:

- A. Gas:
- Field verify type
  - 3/4" x 4' flex hose
  - Quick disconnect
  - Restraining device
  - Manifold piping included with stacking kit to provide single point gas connection
- B. Double-deck, standard depth.
- C. Computer controls.
- D. Electronic spark ignition.
- E. 99-hour timer.
- F. Roast and hold cycle.

- 
- G. Programmable menu.
  - H. Five (5) oven racks per section.
  - I. Independently operated doors with windows.
  - J. Porcelain interior.
  - K. Stainless steel doors with windows, front, top, and sides.
  - L. Two (2) 1/2 HP.
  - M. Voltage as scheduled, (2) cords and plugs.
  - N. (4) casters in lieu of standard legs.

Convection oven to be as manufactured by Vulcan, Model VC44GC, Southbend, or Blodgett.

ITEM 28 — COMBIOVEN, GAS — QUANTITY AS SCHEDULED

~~Provide combi-duo mobile self-cooking center with the following features:~~

- ~~A. Combi oven/steamer, boilerless, countertop.~~
- ~~B. Gas:
  - Field verify type
  - Quick disconnect kit~~
- ~~C. (8) 18" x 26" full size sheet or (16) 12" x 20" full size hotel pan capacity.~~
- ~~D. Classic control with steam/convection/combi cooking modes.~~
- ~~E. Safe steam venting.~~
- ~~F. Auto cleaning with (1) cleaning level.~~
- ~~G. (2) side racks with (8) non-tilt support rails.~~
- ~~H. Cool to touch glass window in door, door hinged right, see hinging as shown on Plan.~~
- ~~I. High efficiency LED lighting.~~
- ~~J. Stainless steel construction.~~
- ~~K. Adjustable stainless steel legs.~~
- ~~L. Technology for reduced energy usage.~~
- ~~M. Voltage as scheduled, direct connection.~~
- ~~N. Verify water test required for incoming supply for water filter system if needed.~~

~~O. Combi Oven Stand:~~

- ~~• Mobile~~
- ~~• 28-15/16" x 38-3/4" x 38-5/16"~~
- ~~• Pan slides and shelf~~
- ~~• Spacing 2-11/16"~~
- ~~• Stainless steel~~

~~P. Back flow preventer.~~

~~Combination oven steamer to be as manufactured by Alto-Shaam, Model CTC7-20G, Cleveland, or Rational.~~

**ITEM 28**

**NOT USED \*ADD01**

ITEM 29 18" RANGE - 2 BURNER

QUANTITY AS SCHEDULED

Provide gas-fired range, having the following features:

A. Gas:

- Field verify type
- 1-1/4" rear gas connection; cap and cover, both ends
- 3/4" x 4' flex hose
- Quick disconnect
- Restraining device

B. Heavy duty, 18".

C. (2) 35,000 BTU open burners.

D. Cast iron grates.

E. Cabinet storage base with doors.

F. Stainless steel front, front top ledge, sides, base, burner box and stub back.

G. (4) casters in lieu of standard legs.

Range to be as manufactured by Vulcan, Model V2B18B, Garland, or South Bend.

ITEM 30 PASS-THRU HEATED CABINET

QUANTITY AS SCHEDULED

Provide two-section pass-thru hot cabinet, having the following features:

A. Pass-thru, two-section, 50.0 cubic feet.

B. Stainless steel exterior front, sides & interior.

C. Digital exterior temperature display.

~~D. (6) chrome wire shelves.~~ \*ADD 02 (8) chrome wire shelves

- E. Solid hinged full height doors front and back, with locks and handles, see hinging as shown on Plan.
- F. (4) 5" locking casters.
- G. Voltage as scheduled, cord and plug.

Cabinet to be as manufactured by Delfield, Model CSHPT2-S, Traulsen, or Victory.

ITEM 31          PASS-THRU REFRIGERATOR          QUANTITY AS SCHEDULED

Provide two-section pass-thru refrigerator with top mounted air-cooled condensing unit, exterior digital thermometer, cylinder door locks and top mounted condensate evaporator, having the following features:

- A. Pass-thru, two-section, 50.0 cubic feet, self-contained refrigeration, R290 Hydrocarbon refrigerant.
- B. Digital exterior temperature display.
- ~~C. (6) chrome wire shelves.~~ \*ADD 02 (8) chrome wire shelves
- D. Solid hinged full height doors front and back, with door locks and handles, see hinging as shown on Plan.
- E. LED interior light.
- F. Stainless steel exterior front, sides and interior.
- G. (4) 5" locking casters.
- H. Voltage as scheduled, cord and plug.

Refrigerator to be as manufactured by Delfield, Model CSRPT2P-S, Traulsen, or Victory.

ITEM 32          NOT USED

ITEM 33          WORKTABLE          QUANTITY AS SCHEDULED

Provide worktable with the following features:

- A. 48"W x 30"D, see direction of operation as shown on Plan.
- B. 14/300 stainless steel top with turned down edges.
- C. 18-gauge stainless steel undershelf.
- D. 16-gauge stainless steel legs and set of four (4) 5" casters (2 with brakes).
- E. All-welded construction.

Addendum 02

Worktable to be as manufactured by Eagle Group, Model T3048SE, Titan, or fabricated equal.

ITEM 34 PLASTIC W/METAL FRAME SHELVING QUANTITY AS SCHEDULED

Provide five-tier polymer shelving unit complete with tubular uprights and having the following features:

- A. Arrange using quantity and size as shown on plan drawings.
- B. (5) open grid polymer shelves with epoxy antimicrobial protection.
- C. (4) epoxy coated steel 74" posts and frame.
- D. (4) casters.

Shelving to be as manufactured by Metro, Model 5Q557G3, SPG, Eagle Group, or Cambro Cam-Shelving.

ITEMS 35-36 NOT USED

ITEM 37 THREE-COMPARTMENT SINK QUANTITY AS SCHEDULED

Provide three-compartment sink with drainboards as follows:

- A. 124"W x 34"D.
- B. 14/300 stainless-steel construction.
- C. 20" wide x 28" front-to-back x 14" deep compartments.
- D. 30" drainboards, see direction of operation on Plan.
- E. 9"H backsplash.
- F. (2) sets of 8" O.C. splash mount faucet holes.
- G. 1-1/2" raised-rolled edge on front and sides.
- H. 1-1/2" NPS basket strainers.
- I. Stainless steel H-frame legs with adjustable stainless-steel bullet feet, extra support legs.
- J. ~~Sink Mixing Faucet (2): T&S B-0231~~ \*ADD 02 Pre-rinse faucet assembly w/add on faucet (2)  
**T&S Brass 5PR-8W12-C**
  - 12" swing nozzle
  - Wall mounted
  - 8" centers on sink faucet with 1/2" IPS eccentric flanged female inlets
  - Lever handles
- K. Installation Kit:
  - Two (2) 1/2" NPT nipples, lock nuts and washers
  - Two (2) short "El" 1/2" NPT female x male

---

L. (3) Twist handle lever drain, 1-1/2" drain outlet.

Sink to be as manufactured by Eagle Group, Model FN2860-3-30-14/3, Titan, or fabricated equal.

ITEM 38 WALL SHELF W/POT RACK QUANTITY AS SCHEDULED

Provide wall shelf with the following features:

- A. Wall mount.
- B. Arrange using quantity and size as shown on plan drawings.
- C. Ends turned down, back turned up 2".
- D. 16/300-gauge stainless steel.
- E. Mount 4'-6" A.F.F.
- F. Single flat bar with one (1) stainless steel pot hook per foot.

Wall shelf to be as manufactured by Eagle Group, Model ~~WSP12144~~ \*ADD 02 WSP1248, Titan, or fabricated equal.

ITEM 39 SOILED DISHTABLE QUANTITY AS SCHEDULED

This item to be custom fabricated in accord with General Requirements of specifications and with plan and detail drawings.

ITEM 40 DISHMACHINE, CONVEYOR TYPE QUANTITY AS SCHEDULED

Provide single-tank rack conveyor type dishmachine, having the following features:

- A. (202) racks/hour, .62 gallon/rack.
- B Insulated hinged doors, see hinging as shown on Plan.
- C. Stainless-steel enclosure panels.
- D. Microprocessor controls with low temperature & dirty water indicators.
- E. NSF pot & pan mode.
- F. Energy efficient.
- G. Drain water tempering kit.
- H. Operational direction as shown on Plan.
- I. Back flow preventer.
- J. Voltage as scheduled, direct connections.

- K. Electric 30.0 KW booster and tank heat.
- L. Vent ducts by Mechanical.
- M. Standard height and feet.
- N. For water over 3-grains of hardness, add water softener.

Dishmachine to be as manufactured by Hobart, Model CL44EN, Champion, or Meiko.

ITEM 41 CLEAN DISTABLE QUANTITY AS SCHEDULED

This item to be custom fabricated in accord with General Requirements of specifications and with plan and detail drawings.

ITEM 42 DISHWASHER VENT DUCTS N.I.K.C.

This item is to be furnished and installed by Mechanical.

~~ITEMS 43 NOT USED~~

**ITEM 43 TRAY DRYER \*ADD 02 QUANTITY AS SCHEDULED**

**Provide tray dryer having the following features:**

- A. Electric**
- B. Lighted on/off rocker switch**
- C. (2) 20" x 6" x 3/8" removable aluminum filter**
- D. 826 CFM blower**
- E. adjustable air distribution louver**
- F. stainless steel housing**
- G. Voltages as scheduled**
- H. Wall mounted brackets**

**Tray dryer to be as manufactured by San-Aire, Model PD-100-M, or fabricated equal.**

ITEM 44 TRAY STAND QUANTITY AS SCHEDULED

Provide tray cart with the following features:

- A. 28" deep x 30" long.
- B. 14-gauge stainless-steel top with tray step-down.

- C. Fiberglass body.
- D. (4) 5" swivel casters.
- E. Color to be selected by Architect/Owner.

Cart to be as manufactured by Delfield, Model KCTS-28, Vollrath, or Randell.

ITEM 45      MILK COOLER      QUANTITY AS SCHEDULED

Provide mobile carton milk cabinet having the following features:

- A. Forced-air, self-contained refrigeration, R290 Hydrocarbon refrigerant.
- B. (12) crates.
- C. Stainless-steel drop front/hold-open flip-up lids, lock.
- D. 33-38°F.
- E. Stainless-steel exterior.
- F. Stainless-steel interior & floor.
- G. (3) heavy-duty floor racks.
- H. Digital thermometer.
- I. (4) 4" casters.
- J. 1/5 HP.
- K. Voltage as scheduled, cord and plug set, daisy chain to single point connection.

Cabinet to be as manufactured by True, Model TMC-49-S-SS-HC, Beverage-Air, or Traulsen.

ITEM 46      COLD FOOD COUNTER      QUANTITY AS SCHEDULED

Provide modular cold food serving counter having the following features:

- A. Self-contained refrigeration, R404A refrigerant, size as shown on Plan.
- B. Bloomington style cold pan, 39" x 21.62" x 7".
- C. Drain with valve.
- D. Reinforced stainless steel enclosed base.
- E. (4) 5" casters.



Addendum 02

---

- F. Voltage as scheduled, cord and plug set, daisy chain to single point connection.
- G. 36" H.
- H. Line-up interlock device.
- I. Tray Slide:
  - Drop down design
  - Solid
  - 12" W
  - "V" ridge
  - 14-gauge stainless steel
  - 34" H.
- J. Sneeze Guard:
  - Single service
  - Flip-up
  - To meet NSF, State, and Local Codes
- K. LED light fixture.
- L. ¼ HP.

Counter to be as manufactured by Delfield, Model SCSC-50-B, Vollrath, or Randell.

ITEM 47      HOT FOOD COUNTER      QUANTITY AS SCHEDULED

Provide 5-well hot food counter of size and content as shown on plan drawings, having the following features:

- A. Electric, five (5) pan capacity.
- B. 14-gauge stainless steel top.
- C. 18-gauge stainless steel exterior.
- D. 14-gauge galvanized bottom.
- E. Enclosed base with no under storage.
- F. (4) 5" swivel casters.
- G. 2" drain(s) for hot food wells plumbed to common valve.
- H. 36" H.
- I. Dry storage compartments, double door.
- J. Line-up interlock device.

- 
- K. Tray Slide:
- 12"
  - V fold-down
  - 14-gauge stainless steel
  - 34" H.
- L. Glass front sneeze guard.
- M. Voltage as scheduled, cord and plug set, daisy chain to single point connection.

Counter to be as manufactured by Delfield, Model SH-5-NU, Vollrath, or Randell.

ITEM 48      SERVING COUNTER, UTILITY      QUANTITY AS SCHEDULED

Provide modular serving counter of size and content as shown on Plan drawings having the following features:

- A. 36" long.
- B. 14-gauge stainless-steel countertop.
- C. Open understorage with shelf.
- D. (4) 5" swivel casters.
- E. Line-up interlock device.

Counter to be as manufactured by Delfield, Model SC-36, Vollrath, or Randell.

ITEM 49      ALL PURPOSE SERVING COUNTER      QUANTITY AS SCHEDULED

Provide modular serving counter of size and content as shown on Plan drawings having the following features:

- A. 50" long.
- B. 14-gauge stainless-steel countertop.
- C. Storage unit.
- D. (4) 5" swivel casters.
- E. Line-up interlock device.
- F. Tray Slide:
- Drop down design
  - Solid
  - 12" W
  - "V" ridge
  - 14-gauge stainless steel

- 
- 34" H.

G. Coordinate cut out and air flow with refrigeration item 50.

Counter to be as manufactured by Delfield, Model SC-50, Vollrath, or Randell.

ITEM 50          DROP-IN REFRIGERATOR                                  QUANTITY AS SCHEDULED

Provide refrigerated display case with the following features:

- A. 38-1/8"W, 22-3/4"H (above counter) 46-3/4"H (overall), open front.
- B. (1) non-lighted glass shelf.
- C. LED top light.
- D. Rear sliding clear glass doors with inner acrylic plenum.
- E. Black interior and exterior.
- F. (2) glass ends.
- G. Self-contained refrigeration, energy efficient system with evaporation pan (rear access). Undercounter compressor air intake from below counter and through rear, counter configuration must allow air to be drawn in and discharged out the back.
- H. ETL-Sanitation.
- I. Voltage as scheduled, cord and plug set, daisy chain to single point connection.
- J. 29" minimum entry door clearance.
- K. Digital Fahrenheit thermometer.

Display case to be as manufactured by Structural Concepts, Model DOS3623R, Delfield, or QBD.

~~ITEM 51~~ \_\_\_\_\_ ~~NOT USED~~

**ITEM 51          ALL PURPOSE SERVING COUNTER \*ADD 02 QUANTITY AS SCHEDULED**

**Provide modular serving counter of size and content as shown on Plan drawings having the following features:**

- A. 74" long.**
- B. Stainless-steel flat top.**
- C. Front and rear removable panels.**
- D. Open base.**

---

**E. (4) casters.**

**Counter to be as manufactured by Delfield, Model SC-74, Vollrath, or Randell.**

ITEM 52      CASHIER'S COUNTER      QUANTITY AS SCHEDULED

Provide modular cashier counter having the following features:

- A. 50" deep.
- B. Stainless steel top, locking cash drawer, shelf, and base.
- C. (4) 5" swivel casters.
- D. Tray Slide:
  - Drop down design
  - Solid
  - 12" W
  - "V" ridge
  - 14-gauge stainless steel
  - 34" H.
- E. Line-up interlock device.
- F. Voltage as scheduled, (1) duplex outlet, cord and plug set, daisy chain to single point connection.

Cashier counter to be as manufactured by Delfield, Model SCS-50, Randell, or Vollrath.

ITEM 53      ALL PURPOSE SERVING COUNTER      QUANTITY AS SCHEDULED

Provide modular serving counter of size and content as shown on Plan drawings having the following features:

- A. 120" long.
- B. Stainless-steel flat top.
- C. Front and rear removable panels.
- D. Open base.
- E. (4) casters.
- F. Tray Slide:
  - Drop down design
  - Solid
  - 12" W
  - "V" ridge
  - 14-gauge stainless steel
  - 34" H.

- G. SA49G
- H. Provide duplex receptacle for item 54 heat merchandiser.
- I. Grommet hole.

Counter to be as manufactured by Delfield, Model DCBU-120, Vollrath, or Randell.

ITEM 54 HEATED DISPLAY MERCHANDISER QUANTITY AS SCHEDULED

Provide heated display unit having the following features:

- A. Counter model, pass-thru design.
- B. (14) rods.
- C. (2) shelves.
- D. Top shelf horizontal, lower shelf forward-slanted.
- E. Stainless/aluminum construction.
- F. 4" legs.
- G. Voltage as scheduled, cord and plug set, daisy chain to single point connection, connect to Item 53.
- H. Glossy gray, gloss finish.

Display warmer to be as manufactured by Hatco, Model GRSDS/H-36D, Delfield, or Traulsen.

ITEM 55 TRAFFIC GUIDE RAIL QUANTITY AS SCHEDULED

Provide traffic guide rail having the following features:

- A. Double horizontal floor mounted welded uprights 16-gauge stainless-steel.
- B. 3-hole or cored type fastening.
- C. Bull nose on end uprights.
- D. Die formed with (3) 3/8" holes for fastening rail to floor.
- E. 2" diameter post, stainless steel finish with Architect/Owner.

Guide rail to be United Showcase, Model WRD200, Lawrence, Eagle Group, or equal fabricator.

ITEM 56 CASH REGISTER N.I.K.C.

This item is to be furnished and installed by Owner; (2) connections at Cashier Counter, Item 52.

Addendum 02

---

ITEM 57 — ICE/WATER DISPENSER — QUANTITY AS SCHEDULED

Provide automatic ice and water dispenser having the following features:

- A. — Countertop.
- B. — 45 lb. storage capacity, manual fill.
- C. — Dispenses ice cube size up to 1" square.
- D. — Rocking chute lever.
- E. — Stainless steel exterior with "Ice" graphic.
- F. — Voltage as scheduled, cord and plug.
- G. — Water filter.
- H. — Drain pan and bin.

Unit to be as manufactured by Multiplex, Model M-45, Scotsman, or Ice-O-Matic.

**ITEM 57 ICE/WATER DISPENSER \*ADD01 QUANTITY AS SCHEDULED**

**Provide ice and water dispenser having the following features:**

- A. Countertop**
- B. 110 lb storage capacity, manual fill**
- C. Silver-based antimicrobial protection**
- D. Stainless steel cabinet with accent trim**
- E. Voltage as scheduled, cord and plug**
- F. Water filter**
- G. Pressurized Water Sanitizing Kit**

**Ice and water dispenser to be as manufactured by Follett Products, Model 110CM-NI-S, or equal.**

**ITEM 57.1 ICE MAKER \*ADD01 QUANTITY AS SCHEDULED**

**Provide ice maker having the following features:**

- A. 22"W**
- B. Air-cooled, self-contained condenser**

- 
- C. Programmable digital controls & display**
  - D. Automatic cleaning**
  - E. Overflow prevention**
  - F. Approximately 361 lb. production/24 hours**
  - G. LED lighting**
  - H. Stainless steel exterior with black trim**
  - I. Water filter**
  - J. Voltage as scheduled**

Ice maker to be as manufactured by Maxximum, Model MIM360NH, Ice-O-Matic, or equal

**ITEM 58      MICROWAVE OVEN \*ADD01                      QUANTITY AS SCHEDULED**

**Provide microwave oven having the following features:**

- A. 0.8 cu. ft. capacity,**
- B. 1000 watts**
- C. 4-stage cooking**
- D. (5) power levels**
- E. Touchpad controls**
- F. Interlock safety switch**
- G. LED display**
- H. Side hinged door with tempered glass**
- I. Stainless steel interior & exterior**
- J. Voltage as scheduled, cord and plug**

**Microwave to be as manufactured by ACP, Model RMS10TSA, or equal.**

**ITEM 59      HOSE REEL \*ADD01                      QUANTITY AS SCHEDULED**

**Provide hose station having the following features:**

- A. Hose Reel Assembly, open.**
- B. 35' hose, with blue front trigger water gun.**

- C. 8" concealed mixing valve.
- D. Service sink faucet.
- E. Vacuum breaker.
- F. Control valves in riser.
- G. Coated metal hose reel.
- H. 3/8" NPT flex connector assembly.
- I. Mount on wall at location shown on Plan drawings.
- J. Backflow prevention device.

Hose reel assembly to be as manufactured by T&S Brass, Model B-1454, Chicago Faucet, or Fisher.

END OF SECTION 114000



## Attachment: RFIs and answers for Addendum 2

RFI 1: Can you tell me what the owners existing key system is so we know what to quote?  
See Spec: (087100-11, 2.9 Lock Cylinders)  
Also See (087100-12, 2.10 Keying) It says to Key Cylinders per School District lock shop requirement.  
So, we need to know what they have.

**Answer: KEY SYSTEM N20 CORBIN RUSSEL**

RFI 2: SITE RELATED QUESTIONS

1. Price escalation – this needs to be addressed with using the NCDOT Asphalt index for all paving. Material quotes for major items are to be provided to the owner within 10 days of bid and then material quotes that have materially changed will be presented at time of delivery and the delta will be paid (or credited) out of an allowance. No markup from the supplier or GC to be added. This can be applied to steel, storefront (aluminum and glass), insulation, roofing materials.

**Answer: Design Team will not provide answer to this question**

2. Site retaining walls – please confirm where segmental retaining walls can be used – with sufficient area for grid placement.

**Answer: All site retaining walls are segmental walls. Only C.I.P. concrete retaining walls are walls adjacent to the gymnasium building, west side**

3. Site retaining walls parallel to Garrison Blvd – if these are determined to be cast in place walls, we need a design for the footings and walls. As currently shown, it appears the grid would undermine Garrison Blvd.

**Answer: The retaining walls parallel to Garrison Blvd are segmental retaining walls**

4. Clarify phases for construction and utilities.

**Answer: Phases are shown on civil and architectural plans, no additional clarification will be provided**

5. In looking at the new sewer line that reroutes the sewer from the existing school building through the current baseball field – this new line is above the existing grade. This line must be installed before grading on the football field can commence. Can these lines be lowered to allow for installation ASAP to allow grading to commence?

**Answer: SW+ to address this comment in Erosion Control Plan for Addendum 2**

6. Please verify the main school drive is heavy duty asphalt with a binder course – this drive will be used all through construction and needs to be heavy duty.

**Answer: SW+ has a hatch on plan - see site plan. Heavy duty asphalt is a finished condition, Civil/Design team does not control means and methods of construction.**

7. Phasing plans need to show what is included in each phase – A.001B shows bus lot in both phases, utilities in both phases, and need to clarify major grading tie-ins for each phase, there are site walls shown on both phases.

**Answer: SW+ ES&C plans show phases for the site work. Sheet A.001B is arch sheets and any site information shown as reference. Contractor to ensure proper grading/ stabilization through construction process.**

8. Does the canopy – two of them – that go to the auxiliary gym come out in Phase 1 demo? If there is no gym to go to, these can come out and allow more room for the fencing.

**Answer: GCS approved Gym to be removed in Phase 1 but did not mention anything further. SW+ is okay with removing the canopies but GCS to approve.**

9. Clarify if the Asbestos allowance is for asbestos removal or for excess asbestos that may be found.

**Answer: It's for the removal**

RFI 3: Civil pavers related questions

1. Detail 4/C7.1 states that the Concrete Pavers are to be manufactured by Hanover Pavers (or approved equal) series: Prest Pavers, Paver Styles/Colors: Match Architecture. What does this mean?

**Answer: The color of the pavers should match the color of the new middle school building. Coordinate with architecture drawings to match color for continuity.**

2. Is the size of these pavers 4" x 8" x 2 3/8"?

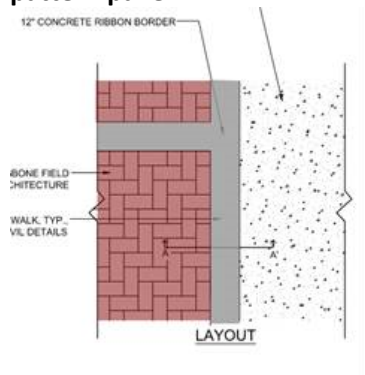
**Answer: Correct, the pavers are 4" x 8" x 2 3/8".**

3. Section A-A of detail 4/C7.1 shows a 12" concrete ribbon border. It scales 8" wide on this drawing as well as the Site Plan C4.0. Is this dimension supposed to be 12" or 8"?

**Answer: Ribbon curb is 12".**

4. Section A-A of detail 4/C7.1 shows a 12" concrete ribbon border, is this a 4" x 8" wide paver placed as a soldier course band?

**Answer: Gray area is solid concrete and not a soldier course of pavers. Red is a herringbone pattern paver.**



5. Can we use a Keystone Hardscape/Pavestone 60mm Holland paver in lieu of the Hanover Prest paver?

**Answer: Keystone/Pavestone 60mm pavers are an approved equal as long as it matches the architecture brick color.**

6. Can we use a Belgard 60mm Holland paver in lieu of the Hanover Prest paver? (see attached product data)

**Answer: Belgard's Holland 60mm pavers are an approved equal as long as it matches the architecture brick color.**

RFI 4: Beam's questions 1

1. G012 There are 2 areas that call for ULG701 on the roof of the Kitchen and the "connector roof" to the Gym building C - says 10' from wall. - This detail is for sprayed fireproofing - is this required? Please clarify.

**Answer: Proceed as shown on drawings**

2. C7.2 Detail for track states Track surface and see Detail 4 Is there an applied surface to the track? The detail says "track surface" but Spec 321801 refers to line markings. Please confirm no track surface other than asphalt. Detail 4 is the goalpost detail.

**Answer: The track detail will be updated for Addendum 2. Ignore the detail 4 label and we will be removing the aluminum curb on the inside edge of the track as well. We are currently calling out asphalt track**

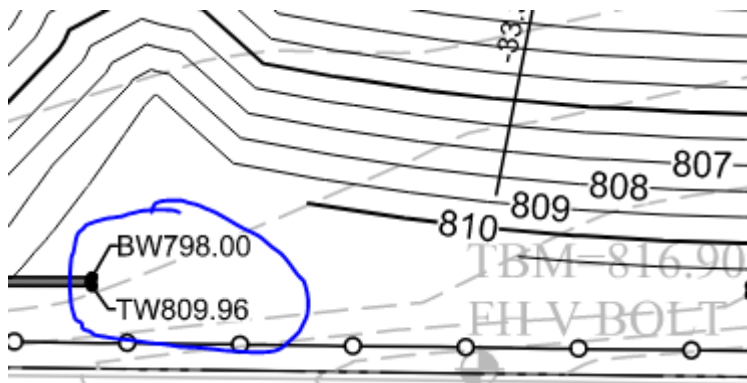
3. Please advise if HDPE can be used in lieu of RCP.

**Answer: From Gastonia Specs: "HDPE Pipe-Provisional Specification only. City Engineer approval required on a project by project basis". HDPE is ok as long as installed correctly with correct subgrade, compaction, backfill, etc.**

4. C5.8 It appears that the roof drains at the front "right" of the building drain to storm drain box B10. It appears B10 is not installed until the next phase after the building is occupied. How will the water from the roof be handled as these drains should be installed in the building phase.

**Answer: Storm box B10 should be installed before the new school building is occupied. B10 is shown to be installed at E&SC Phase 4, which is the milestone phase to achieve before the new school can be operational.**

5. C6.2 What I have circled would have this wall being almost 12' tall. I think the BW is supposed to be more like 808. Please advise.



**Answer: Spot elevation has been corrected. BW is 809.9.**

6. Elevation sheet A-205 shows wall flags – these are not on Belmont – and are not called out anywhere that I have found. Please advise if they are required and specs/details for what they are and where they go.

**Answer: Wall mounted flags are not in the scope**

7. A-355 shows back fill of the formed concrete walls as being full height with stone and the structural details show an area of stone around the drain at the bottom of the wall but dirt back fill above the drain. Which governs?

**Answer: Follow structural details**

8. A-355 shows stone below the elevated slab – I think this is in error. Please confirm.

**Answer: Please ignore stone layer underneath the elevated slab at gymnasium drawings (details A1, A2, A4 and A5 on sheet A-355)**

9. Spec 116623 With an elevated slab in the gym – the 4" floor sleeve will not work. Please provide a correct part number/detail for how to do volleyball post connections in the gym.

**Answer: Use sleeve assembly with through slab bolts, UL rated**

10. Detail A5 on A-517 calls for SS wainscot below the coiling doors at the kitchen – please advise if this is just immediately below the door openings or if there is more of the SS wainscot in the kitchen. The Door schedule calls for this same detail at the Concession G108B, D119B Central Receiving. Please advise where this is needed and if it continues beyond the door opening.

**Answer: wrong detail reference, no answer**

11. A-715 – in the Worksurface Material column – there are several places that use the term "<By Category> - What does this mean?

**Answer: That is showing up for the countertops in the basement. We suggest PLM-3 for the counters WITHOUT a sink and SSM-1 for countertops WITH a sink.**

RFI 5: Beam's questions 2

1. Civil Drawing show proposed building FFE: 789.00. Structural drawings call for first floor FFE: 794.00.

**Answer: Structural drawings will be revised to match civil FFE 789.00.**

2. C6.0 - All site retaining walls are noted to be Cast in Place or Segmental Block. Specify which is required.

**Answer: SW retaining wall to be shifted toward building approximately 7' to allow for segmental wall to be constructed. All retaining walls shall be segmental wall systems and labels will be updated for Addendum 2 submittal.**

3. C6.0 - The retaining wall at the SW steps of the Gym also calls for Cast in Place or Segmental Block. Specify which is required.

**Answer: Walls and stairs shall be constructed to meet details 10 and 11 on C7.1 with brick veneer to match architecture.**

4. C6.1 - Provide Top of Wall and Bottom of Wall elevations for the cast in place walls at the NW and SW Gym steps.

**Answer: Civil to add to grading plan for Addendum 2.**

5. S-201 – A step- in needed in the footing for the wall between rooms B104A & B104B

**Answer: The wall between B104A & B104B is supported by a thickened slab, so a footing step is not needed.**

6. S-201 – Does the wall between rooms 125 & 225H require a footing or thicken slab? None is shown.

**Answer: The wall between 125 and 225H will require a thickened slab.**

RFI 6: China's questions

1. On C7.3 & C7.4, it shows the potential school logo in the pavers, to be determined by client. Please confirm the bidder is not required to carry the cost to install logo in the pavers since no details were provided.

**Answer: pavers logo not in contract. Use regular field paver units. If logo is required, will be negotiated during the construction**

2. Please confirm if all the floor construction (including supporting beams and joists) and roof construction need to be 1-hour fire rated. G002 shows both 0-hour fire rating and 1-hour fire rating for the floor and roof construction, but it was not clear which area is 0 hour and which area is 1 hour.

**Answer: Proceed as shown on drawings**

3. A121B shows 2" K-13 spray at Band and Chorus Room, but no specification was provided. Please advise if a specification will be provided for this product.

**Answer: K-13 is for sound control. Min 2" thickness, white. New spec section 072129 will be provided in Addendum 2.**

4. The architectural drawings called out expansion joint, but no specification was provided. Please advise if a specification will be provided for this product.

**Answer: We are not using premanufactured EJ system. Proceed as shown on drawings**

5. The equipment schedule on A733 & 734 shows Smartboard and TVs. Please confirm the owner will provide the smartboard and TVs since no specification was provided for these products.

**Answer: This is FF&E, not in contract**

6. Detail D1 & D2/A510 calls for galvanized steel angle at the top of CMU parapet wall throughout the main building. Can you confirm if galvanized steel angle is required at all locations since this can be a very expensive cost to install it throughout the project? If so, please provide the size of these steel angles.

**Answer: Proceed as shown on drawings**

7. A1/A355 shows wall mounted flag outside gym, please confirm Owner will provide it.  
**Answer: Wall mounted flags are not in contract**
8. A424 shows canopy water will come down the canopy column and connect to the underground stormwater. But civil drawings didn't show the storm pipe adjacent to the canopy. Please advise.

**Answer: This will be addressed with Addendum 3, scheduled for Feb 14, 2023**

9. B1/A530 shows perimeter curb outside the exterior brick wall, but we couldn't find where this detail was called out. Please confirm this detail applies to all the exterior brick walls throughout the project.

**Answer: This is a detail for 16" concrete curb around the entire building perimeter, unless there is a sidewalk, retaining wall or any other obstacles. Purpose is ease of lawn maintenance**

10. D5/A721 shows the project screen is OFCI, but specification 115213 was provided. Please confirm project screens will be provided by Owner on the project.

**Answer: Motorized projection screen in cafeteria is in contract. Screen type is 16:10 format, size 100" x 160", rear type projector, w/ white case. Detail D5/A-721 will be revised and included with this addendum**

RFI 7: I am building a proposal for the food equipment portion of this project (114000)  
I am using the Volume 2 drawings of this project to build my proposal, but there are a lot of differences in the written spec and the drawings/equipment schedule.

- # 51 on the spec says it is "NOT USED", but the drawing shows that it is an All Purpose Serving Counter.
- #28 It says Gas Combi-Oven in the spec, but it is not on the schedule/drawing.
- #43 It says "NOT USED" on the spec, but says Tray Dryer on the schedule

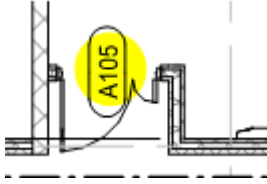
**Answer: Updated spec section 114000 included with Addendum 2**

RFI 8: Beam's questions 3

1. There are a few openings that do not appear on the door schedule:  
YE06, YE05, YE02  
Please provide the information for these openings. \*Size, Door/frame material, Hardware heading, Jamb/head/sill details\*
2. The following hardware headings are not on the specifications, but are called out on the door schedule
  - a. 28.1 (Openings 016, 125A, G119A, G123A)
  - b. 28.2 (Openings 015, 125B)
  - c. 51.1 (Openings 138, 228)
  - d. 54.1 (Openings 200, G129)
  - e. 59.1 (Opening G115a)Can you please provide these headings?
3. The following hardware headings are NOT used but are on the specifications:
  - a. 37.0
  - b. 42.0
  - c. 43.0
  - d. 50.0
  - e. 58.0

Are these headings to be used? If so, where?

4. Doors B203A, B203B, B206, and B208 have an elevation of **DD** which is not shown on the plans. Are these doors to match other classrooms (like B201 – Full Glass Cutout)? Or is there a new elevation forthcoming that shows DD?
5. Opening A105 is a paired opening with a hardware heading geared up for a single opening. This opening is shown to be an unequal pair, and is the **ONLY** unequal pair on the plans. Is this correct, or is the opening to be a single door/frame configuration?



6. Reference Spec 08 14 16 1.3B - it calls for cardboard cartons to be used for packaging, but does not require it to be left on the doors for the duration of the project. We can provide this item, but want to ensure this is required due to the extremely high cost associated with this requirement. Also, not all door manufacturers offer the cardboard carton shipping method. Would plastic polybags be acceptable instead?
7. Are exterior frames to truly be Kerf frames? Hollow Metal frame Fabrication section 08 11 13 2.6B state to provide exterior frames, where specified, with kerf however 08 11 13 2.3B3 does not match this statement.
8. Can you please confirm that the glazing for Wood doors/Hollow Metal doors will be picked up by the glazing contractor? Hollow metal specs do not call for factory glazing, but the wood door specs do.

Answer: All door related RFIs will be answered with Addendum 3, scheduled for February 14, 2023

**Answer to eight (8) questions above: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

RFI 9: Edison Foard's questions

1. A202 South & East Elevations – These two locations show dimensional letters on the drawing, but there are no details on materials, size, etc. Do you want a quote for these? If yes, provide details.

**Answer: dimensional letters are 24" high, 1" thick cast aluminum letters. color TBD**

2. A304 Gym Signage – No details on materials or sizes of the graphic on the wall. Shall I assume ¼" black dimensional acrylic letters and approximate the size in order to provide a quote for this item?

**Answer: gym graphics are not in project scope. It will be included in FF&E package**

3. A709 Gym shows a scoreboard (typically two). We can quote scoreboards, if part of this project. Please advise.

**Answer: Provide two scoreboards, as shown n drawings A-709 and A-710**

RFI 10: what is the height of the flagpoles – specs say see plans – plans don't call it out.

**Answer: There is only one flagpole in this project, near main entry. Shall be 35' high**

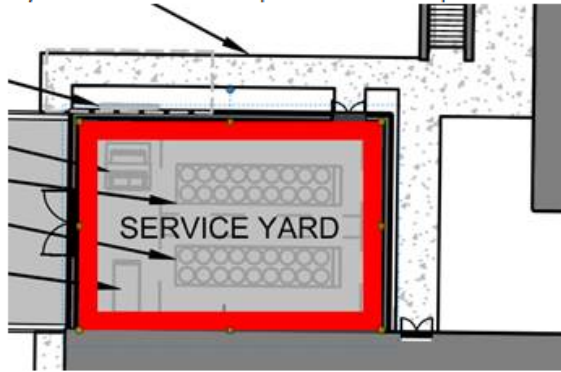
RFI 11: Beam's questions 4

1. Is all curb 18"?

**Answer: All curb and gutter is 18".**

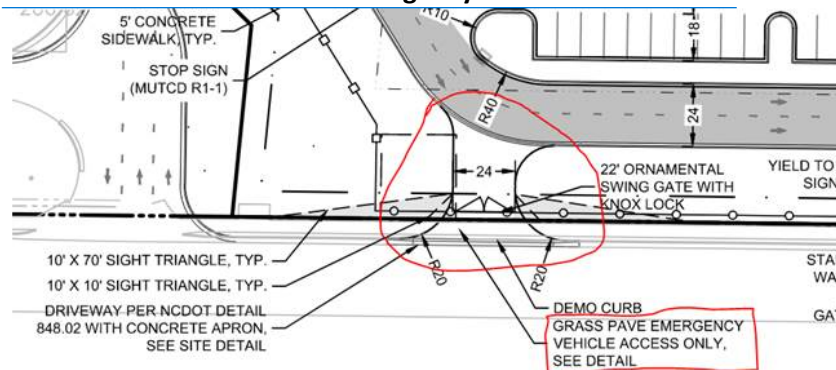
2. What is the extent of the 6" sidewalk indicated at the service yard?

**Answer: May need some further explanation on this question but the Service Yard area will be 6" Heavy Duty Concrete and it will be updated to show that hatch in Addendum 2 set. Please see the red area in the image below to show the extents of the area.**



3. Is grass pave detail 2 C7.0 used?

**Answer: Grass Pave will be used for emergency access on Garrison Blvd as shown in the image**



**below:**

4. Canopy specs call for concealed drains, drainage plan does not indicate roof drains from canopies. Will the pipe sizes shown support the increased volume of water being introduced from the canopies?

**Answer: This will be addressed with Addendum 3, scheduled for Feb 14, 2023**

RFI 12: Cleveland's questions

1. D1 & D2/A510 show a steel angle at the top of wall parapets. What size angle is this to be and what is attachment to CMU? We do not find this on the structural drawings.

**Answer: This will be addressed with Addendum 3, scheduled for Feb 14, 2023**

2. A501 and B3/A517 shows detail for expansion joint covers and notes to reference specification. No spec was issued for this, can one be provided?

**Answer: We are not using premanufactured EJ system. Proceed as shown on drawings**

3. B3/A517 shows detail for floor expansion joint but we do not find call out on floor plans where this is required, please advise.

**Answer: Only roof and exterior wall expansion joints applies for this project. Proceed as shown on drawings**

4. Can you provide the quantity and locations for new flagpoles? One appears to be shown on exterior elevation drawing but not on site plan.

**Answer: Wall mounted flags are not in the scope. There is only one flagpole in this project, near main entry. Shall be 35' high**

5. Music Casework: The 3 cabinets I have marked on A-715 do not match the description under the same number on A-412. We can provide the Wenger standard cabinet based on the number listed on A-412, but it will not match the dimensions and compartment count on A-715. Is this acceptable?

**Answer: The only elevation that is missing on A-715 is MS-1. If you could provide the numbers that are not correct we can thoroughly vet.**

6. Music Casework: Drawing A-715 shows some of the cabinets with doors and others without. There is no door type specified. However, Wenger AcoustiCabinets are listed as basis of design. They come standard with a patented wave-grill door. This design minimized vibration so the classroom will have less ringing. Is that acceptable?

**Answer: This is acceptable.**

7. Spec 123551 calls for Preface Conductor's Stand and conductor's podium but no count is indicated and they are not shown on the drawings. How many of each are needed? This product almost always falls into the FF&E package. Please clarify if it should be part of the bid.

**Answer: Not in contract**

8. Spec 11 52 13 calls for Projection Screens to be provided. Detail D5 on page A-721 mentions "OFCI Projection Screen". Are the projection screens owner furnished or should they be included in the Bid.

**Answer: Motorized projection screen in cafeteria is in contract. Screen type is 16:10 format, size 100" x 160", rear type projector, w/ white case. Detail D5/A-721 will be revised and included with this addendum**

9. A601 calls for door openings 136, 137C, 137D, 219A, 219B, 216A, 241, A206, B210 (and maybe others) to be door type FG (Pair). A101A plan shows these as single doors with sidelites? Please clarify these openings

**Answer: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

10. Door schedules appear to be missing door YE02 and the OH door shown on A422 at Pre-Eng. Building.

**Answer: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

11. A1/A422 notes a countertop in concession G010. Is this in addition to the counter shown on A2/A607? If that is correct provide what type and detail for this.

**Answer: It is same counter as shown on detail A2/A-607**

12. Finish Schedule appears to be missing for basement area C rooms 010 thru 016 finish requirements.

**Answer: This will be addressed with Addendum 3, scheduled for Feb 14, 2023**

13. A100C what detail should be used for 24" deep work counter? What is counter finish?

**Answer: That is showing up for the countertops in the basement. We suggest PLM-3 for the counters WITHOUT a sink and SSM-1 for countertops WITH a sink.**

14. Volume 1 drawing file is missing AP100, 101, and 102

**Answer: Will ignore this comment**

15. A100C does not have any interior wall partition types called out. Can this be provided.

**Answer: This will be addressed with Addendum 3, scheduled for Feb 14, 2023**

16. A100C - can you provide elevation or details on what cabinetry is required on wall in Break Area

**Answer: This will be addressed with Addendum 3, scheduled for Feb 14, 2023**

17. A100C for the toilet rooms 015 and 016, can you advise which enlarged plan would be applicable for these?

**Answer: This will be addressed with Addendum 3, scheduled for Feb 14, 2023**



18. M-100 shows 2 each 48" x 48" louvers by GC, A604 does not show this size louvers. C1/A205 shows 2 louvers but does not call out type. Can these be clarified.

**Answer: It is same louver shown on M-100: 48" x 48"**

19. Spec section 11 40 00 "Food Service Equipment" shows items #43 and #51 to be "NOT USED", but the equipment schedule on page FS-002 shows that it is an All Purpose Serving Counter (#51) and Tray Dryer (#43).

**Answer: Revised spec section 114000 is included with Addendum 2**

20. 004113 Bid Form page 2 notes November 2026 to complete Phase 2 and 3 of the project. Spec 011000 notes Phase 2 completion as November 2025 and Phase 3 as July 2026. Please clarify the completion dates.

**Answer: July 2026 is correct date. Revised Bid form will be reissued with Addendum 2**

21. A602 door schedule lists Type DD door for openings B203A, B203B, B206, B208. There is no type DD on the door legend? Also it calls for Type E frames that show sidelights each side of door but the floor plan only shows sidelight one side?

**Answer: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

22. A101A notes door openings YE05, YE06 at rooms 101A and 101B. Neither these door openings nor 101A, B are listed on door schedule.

**Answer: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

23. Opening A105 is a paired opening per A101B with a hardware heading geared up for a single opening. This opening is shown to be an unequal pair, and is the ONLY unequal pair on the plans. Is this correct, or is the opening to be a single door/frame configuration?

**Answer: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

24. The following hardware headings are not on the specifications, but are called out on the door schedule:

- a. 28.1 (Openings 016, 125A, G119A, G123A)
- b. 28.2 (Openings 015, 125B)
- c. 51.1 (Openings 138, 228)
- d. 54.1 (Openings 200, G129)
- e. 59.1 (Opening G115a)

Can you please provide these headings?

**Answer: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

25. The following hardware headings are NOT used but are on the specifications:

- a. 37.0
- b. 42.0
- c. 43.0
- d. 50.0
- e. 58.0

Are these headings to be used? If so, where?

**Answer: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

RFI 13: Beam's questions 5

- 1. What are the window type and size in the basement exterior walls in Offices 011 & 012 shown in Elevation C1/A-205?
- 2. What is the window type and size in Health Room 103?
- 3. What is the window type and size in ISS Room 133?

4. What are the type and size of the louvers in the basement exterior wall shown in Elevation C1/A- 205?
5. What are the window type and size in exterior wall in Collab Rooms #225G & 225F?
6. What is the window type in exterior wall of Classrooms 8-3 A203 & 8-2 A202?

**Answer: All six (6) questions above will be addressed with Addendum 3, scheduled for Feb 14, 2023**

7. On sheets A202 & A204 Building Elevations there are medallions shown in various locations and no details or descriptive information noted that defines what material and sizes these are. Provide detail information as to what these are.

**Answer: Medallions are molded GFRP (glass fiber reinforced polymer), surface applied. Type 1 (at the entrances) is 3'-8" in diameter, and type 2 (at pilasters) is 2'-4" in diameter**

RFI 14: Beam's questions 6

1. The food service revised specification still shows Items 43 and 51 as Not Used and the Food Service schedule still calls them out as Tray dryer and All Purpose Counter  
**Answer: Revised spec section 114000 is included with Addendum 2**
2. RFI 7 – 1. Your answer is that it is an 8'-8 hollow metal storefront with 1'-8 transom – You need to provide an elevation of this frame type.
3. The door numbers are not on the door schedule – so no frame – no door – no elevation – no hardware, etc. This needs to be added to the door schedule.
4. The B2 Aluminum storefront elevation you note is not shown on the drawings. We do not have a sheet A-605 in our set. Please provide sheet A-605 if there is one.
5. The aluminum storefront openings in Office 012 and 011 need to be shown in elevation as well and shown on the building elevation also. None of the storefront windows appear to show this and it needs a label as well.
6. ISS 133 – Please provide an elevation of this hollow metal window frame. Please confirm that the ceiling height on each side of this wall is more than 10'. Otherwise the ceiling grid will hit the frame since the sill is at 6' AFF and the window height is 4'.

**Answer for five (5) questions above: All door and door hardware related questions will be addressed with Addendum 3, scheduled for Feb 14, 2023**

7. We do not have sheet A-605 in our drawings. Please provide.  
**Answer: Page A-605 does not exist**
8. A-100C – shows a 24" deep work counter but does not give any casework elevation – please provide a detail if this is to be in the contract.  
**Answer: That is showing up for the countertops in the basement. We suggest PLM-3 for the counters WITHOUT a sink and SSM-1 for countertops WITH a sink.**
9. A-100C – shows something against the wall in the Break Area. Possibly a cabinet? Marker board? Furred out wall? Please clarify if this is part of the contract.  
**Answer: This will be addressed with Addendum 3, scheduled for Feb 14, 2023**

REVISIONS:

No.	Description	Date
2	ADDENDUM 1	01.31.2023
3	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

LEGEND & REVISION NOTES

C1.1

# DRAWING LEGEND

NOTE: THIS LEGEND DOES NOT APPLY TO 'EXISTING CONDITIONS' SHEET(S). THOSE ARE SHOWN IN THE ORIGINAL FORMAT AS RECEIVED BY THE SURVEYOR

OBJECTS AND SYMBOLS	EXISTING	NEW	OBJECTS AND SYMBOLS	EXISTING	NEW	ABBREVIATIONS	EXISTING	NEW	SWPP PLAN LEGEND
Right of Way	---	---	Benchmark	⊕	N/A	Sewer Easement	Ex. S.E.	S.E.	Turf Reinforcement Mat (TR)
Lot Line	---	---	Sanitary Sewer Manhole	⊕	⊕	Storm Easement	Ex. W.E.	W.E.	Sodding (See Turf and Grasses Specs) (S)
Adjacent Property Line	---	N/A	Sanitary Sewer Manhole ID #	⊕	⊕	Drainage Easement	Ex. D.E.	D.E.	Surface Roughening (SR)
Centerline	---	(Same as Existing)	Sanitary Sewer Cleanout	⊕	⊕	General Utility Easement	Ex. G.U.E.	G.U.E.	Temporary Seeding (See Schedule in EC Notes) (TS)
Easement	---	(Same as Existing)	Double Sanitary Sewer Service (Residential Only)	⊕	⊕	Access Easement	Ex. A.E.	A.E.	Permanent Seeding (See Turf and Grasses Specs) (PS)
Setback	---	(Same as Existing)	Single Sanitary Sewer Service (Residential Only)	⊕	⊕	Ingress/Egress Easement	Ex. I.E.E.	I.E.E.	Mulching (See Turf and Grasses Specs) (M)
Sanitary Sewer (Gravity)	SS	SS	TYPE 1 Storm Drainage Structure (CB)	⊕	⊕	Pond Maintenance Easement	Ex. P.M.E.	P.M.E.	Typical Lot Erosion Control Plan (LE)
Sanitary Sewer (Force Main)	FSM	FSM	TYPE 16 Storm Drainage Structure (CI-16)	⊕	⊕	Water Surface Elevation	Ex. W.S.E.	W.S.E.	Flexible Growth Medium (See Turf and Grasses Specs) (FG)
Water Line	WL	WL	TYPE 17 Storm Drainage Structure (Right) (CI-17)	⊕	⊕	Polymer Chloride Pipe	Ex. PVC	PVC	Erosion Control Blanket (See Turf and Grasses Specs) (EC)
Curb & Gutter (Straight)	---	---	TYPE 18 Storm Drainage Structure (Left) (CI-17)	⊕	⊕	Reinforced Concrete Pipe	Ex. RCP	RCP	Dust Control (DC)
Curb & Gutter (Roll)	---	---	TYPE 18 Storm Drainage Structure (CI-16)	⊕	⊕	High Density Corrugated Polyethylene Pipe	Ex. HDPE	HDPE	Bonded Fiber Mats (See Turf and Grasses Specs) (BF)
Previous Phase Storm Drain Pipe	---	(Width varies with size)	Drop Inlet (DI)	⊕	⊕	Ductile Iron Pipe	Ex. DIP	DIP	Concrete Washout Basin (CW)
Storm Drain Pipe	SD	(Width varies with size)	Isolation Box (IB)	⊕	⊕	Corrugated Metal Pipe	Ex. CMP	CMP	Portable Toilet (PT)
Drainage Flow Arrow	N/A	---	Storm Drainage Junction Box (JB)	⊕	⊕	Home Owner's Association	Ex. HOA	HOA	Block & Stone Inlet Protection (BS)
Roof Drain	RD	RD	Yard Inlet (YI)	⊕	⊕	Property Owners Association	Ex. POA	POA	Temp. Sediment Control Tube (See Tube) (ST)
Subsurface Drainage	SD	SD	Control Structure (CS)	⊕	⊕				Temp. Rock Ditch Checks (RC)
Silt Fence, Standard	SF	SF	Storm Drainage Structure ID #	---	---				Turf Reinforcement Mat Outlet Protection (and Turf and Grasses Specs) (TM)
Silt Fence, Reinforced	RSF	RSF	Telephone Box	⊕	⊕				Fabric Inlet Protection (FI)
Phase Line	N/A	N/A	Telephone Manhole	⊕	⊕				Temp. Curb Inlet Weep Filter (CF)
Drainage Basin Limits	N/A	N/A	Electrical Box	⊕	⊕				Curb Inlet Sediment Filter (CSF)
Flood Zone	---	N/A	Electrical Manhole	⊕	⊕				Both Curb Inlet Filters (See Above) (BI)
Conduit	C	C	Power Pole	⊕	⊕				Construction Entrance (CE)
Natural Gas	NG	NG	Light Pole	⊕	⊕				Dandy Sack or Gate Gator Inlet Protection (DS)
Overhead Electrical	OE	OE	Fire Hydrant Assembly	⊕	⊕				
Underground Electrical	UE	UE	Water Blowoff	⊕	⊕				
Underground Telephone	UT	UT	Water Line Bends, Angle Varies	---	---				
Underground Cable	UC	UC	Water Line Valve	⊕	⊕				
Underground Fiber Optic	UFO	UFO	Water Line Reducer	⊕	⊕				
Fence	F	F	Single Water Service (Residential Only)	⊕	⊕				
Elevation Contour	---	---	Double Water Service (Residential Only)	⊕	⊕				
Revision Cloud (Encloses Revision)	N/A	---	ADA Accessible Parking Space	⊕	⊕				
			Spot Elevation	⊕	⊕				
			Drainage Basin Area	⊕	⊕				
			Keynote	⊕	⊕				
			Parking Count ID #	⊕	⊕				
			Lot #	⊕	⊕				
			Revision ID #	⊕	⊕				
			Rip Rap at Pipe Outlet	⊕	⊕				

REVISION LOG

- ADDENDUM 1 - 1.31.2023**
- A. SHEET C3.0 - E&SC PHASE 1: Make the following revisions:  
 1. Relocate existing BMP serving Schiele Museum and adjust silt fence, diversion ditch, LOD.  
 2. Add inlet protection around existing CMP outlet pipe in existing BMP.  
 3. Demo existing fence on Schiele property.  
 4. Revisions to temporary and permanent sewer mains and manholes as indicated.  
 5. Revise construction sequence.
- B. SHEET C3.1 - E&SC PHASE 2: Make the following revisions:  
 1. Show permanent relocated BMP serving Schiele Museum, adjust silt fence.  
 2. Add diversion ditch and inlet protection for temporary pipe as indicated.  
 3. Add temporary storm pipe under construction drive.  
 4. Revise construction sequence.
- C. SHEET C3.2 - E&SC PHASE 3: Make the following revisions:  
 1. Remove Temporary Skimmer Sediment Basin #2B  
 2. Revise Basin #2A to Temporary Sediment Basin, and make revisions as indicated.  
 3. Connect Temp Structure A2 to Structure A30.  
 4. Add silt fence on west side of site as indicated  
 5. Revise construction sequence
- D. SHEET C3.3 - E&SC PHASE 4: Make the following revisions:  
 1. Revise construction fencing and silt fence as shown  
 2. Temporary Sediment Basin #2A revised  
 3. Revise construction sequence
- E. SHEET C3.4 - E&SC PHASE 5: Make the following revisions:  
 1. Permanent seeding revised in areas indicated  
 2. Revise construction sequence
- F. SHEET C3.6 - E&SC DETAILS  
 1. Added Details 1.0 and 7.1
- G. SHEET C4.0 - SITE PLAN: Make the following revisions:  
 1. Added sight triangle hatch on legend  
 2. Separated ornamental fence and chain link fence line type on legend  
 3. Added 10'x10' and 10'x70' sight triangles to entrances and corner of Garrison Blvd and Burtonwood  
 4. Changed landscape buffer to 10'  
 5. Revised football/track concession layout  
 6. Added stairs with cheek wall and sidewalk connection to Schiele Museum property  
 7. Added road connection to Schiele Museum and updated retaining wall  
 8. Added BMP Access Easement  
 9. Added label for 30' Sewer GDUE Easement
- H. SHEET C4.1 - FIRE PROTECTION PLAN: Make the following revisions:  
 1. Added "200' hose stretch to all sides of all buildings (radius measurement)" label to circle indicating that minimum requirement is met
- I. SHEET C4.2 - ADA ACCESSIBILITY ROUTE PLAN  
 1. Added FFE to all buildings and concessions  
 2. Updated accessibility routes that changed
- J. SHEET C5.0 - DRAINAGE PLAN: Make the following revisions:  
 1. Emergency spillway shifted to the right, away from retaining wall  
 2. CB added to storm sewer line between CB A2 & A1.1 to avoid conflicts with trees  
 3. Storm pipe between B14.1 - B5.1 removed, and storm pipe added between B14 - B5. Storm pipe size increased (B5 - B5.1)  
 4. Inlet drainage areas removed and exhibited in drainage report  
 5. Storm structure A18 rotated  
 6. Labels added to following storm structures: B5.1, A31, B28, and storm pipe A15-A31  
 7. Property line type made continuous
- K. SHEET C5.1 - STORM DRAINAGE PROFILES: Make the following revisions:  
 1. Storm pipe run A1-A29 shallowed  
 2. Updates to profile labels
- L. SHEET C5.2 - STORM DRAINAGE PROFILES: Make the following revisions:  
 1. HGL's revised  
 2. Water crossings added to profiles  
 3. Updates to profile labels
- M. SHEET C5.3 - STORM DRAINAGE PROFILES: Make the following revisions:  
 1. Storm pipe run B1-B11 shallowed  
 2. Water crossings added to profiles
- N. SHEET C5.4 - STORM DRAINAGE PROFILES: Make the following revisions:  
 1. Sewer crossings added to profiles
- O. SHEET C5.7 - WET POND DETAILS: Make the following revisions:  
 1. Revise outlet pipe downstream invert and slope  
 2. Shift emergency spillway location
- P. ADD SHEET C5.8 - ROOF DRAINAGE PLAN  
 1. Roof drainage revised and sizes added at main school building  
 2. Roof drainage added at football concession, baseball/softball concession, and metal building
- Q. SHEET 6.0 - OVERALL GRADING PLAN: Make the following revisions:  
 1. Relocate existing BMP serving Schiele Museum.  
 2. Update retaining walls along driveway plan East of site to accommodate relocated BMP  
 3. Add a driveway connection between the site and Schiele Museum property.  
 4. Flatten loading dock and adjust concrete ramp grades.  
 5. Add stairs to sidewalk connection to Schiele Museum property.  
 6. Adjust grades around the concrete pad plan south of proposed track.  
 7. Adjust grades along driveway connection to Burtonwood Drive plan north of site.
- R. SHEET C6.1 - ENLARGED GRADING PLAN: Make the following revisions:  
 1. Relocate existing BMP serving Schiele Museum.  
 2. Update retaining walls along driveway plan East of site to accommodate relocated BMP  
 3. Add a driveway connection between the site and Schiele Museum property.  
 4. Add callout to concrete band surrounding buildings.
- S. SHEET C6.2 - ENLARGED GRADING PLAN: Make the following revisions:  
 1. Flatten loading dock and adjust concrete ramp grades.  
 2. Add stairs to sidewalk connection to Schiele Museum property.  
 3. Add callout to concrete band surrounding buildings.

- T. SHEET C6.3 - ENLARGED GRADING PLAN: Make the following revisions:  
 1. Adjust grades along driveway connection to Burtonwood Drive plan north of site.
- U. SHEET C6.4 - ENLARGED GRADING PLAN: Make the following revisions:  
 1. Adjust grades around the concrete pad plan south of proposed track.
- V. SHEET C7.1 - SITE DETAILS: Make the following revisions:  
 1. Revised handrail detail on Details 9 and 10
- W. SHEET C7.2 - SITE DETAILS: Make the following revisions:  
 1. Added note to Detail 1
- X. SHEET C7.3 - SITE DETAILS: Make the following revisions:  
 1. Revised Baseball/Softball concession building and fence layout on Detail 1
- Y. SHEET C7.4 - SITE DETAILS: Make the following revisions:  
 1. Revised Football/Track concession building and fence layout on Detail 1  
 2. Removed Detail 4 which was a tree grate detail
- Z. SHEET C8.0 - WATER & SEWER PLAN: Make the following revisions:  
 1. Updated Sewer layout  
 2. Updated Water layout  
 3. Updates to callouts and notes  
 4. Grease Trap updated to match MEP Plans
- AA. SHEET C8.1 - SEWER PROFILES: Make the following revisions:  
 1. Updated Vertical design of Sewer  
 2. Added Drop Manholes to the plan
- AB. SHEET L1.0 - LANDSCAPE PLAN: Make the following revisions:  
 1. Added 10'x10' and 10'x70' sight triangles to entrances and corner of Garrison Boulevard and Burtonwood Drive  
 2. Changed landscape buffer to 10'  
 3. Revised perimeter buffer calculations  
 4. Revised landscape around backflow preventers  
 5. Revised landscape around sidewalk connection to Schiele Museum  
 6. Revised landscape around road connection to Schiele Museum  
 7. Revised landscape around Football/Track concession building  
 8. Revised landscape around Baseball/Softball concession building
- AC. SHEET L1.2 - LANDSCAPE SCHEDULE, DETAILS, & NOTES: Make the following revisions:  
 1. Updated plant schedule for tree sizes  
 2. Updated plant schedule for quantities

ADDENDUM 2 - 2.7.2023

- A. SHEET C3.0 - E&SC PHASE 1: Make the following revisions:  
 1. Remove temporary fill over sewer.
- B. SHEET C3.1 - E&SC PHASE 2: Make the following revisions:  
 1. Adjust surface grade at sewer manholes as indicated.
- C. SHEET C3.2 - E&SC PHASE 3: Make the following revisions:  
 1. Update label to reflect new survey information (2 water meters found in same vault).  
 2. Adjust surface grade at sewer manholes as indicated.
- D. SHEET C3.3 - E&SC PHASE 4: Make the following revisions:  
 1. Update label to reflect new survey information (2 water meters found in same vault).
- E. SHEET C4.0 - SITE PLAN: Make the following revisions:  
 1. Service Yard updated to be heavy duty concrete.  
 2. Stair west of the basement updated to extend retaining wall.  
 3. Stair at NW of basement removed stairs and reduced retaining wall.  
 4. Removed 2 flag poles. Only 1 flag pole remaining.
- F. SHEET C6.0 - OVERALL GRADING PLAN: Make the following revisions:  
 1. Specify types of retaining walls
- G. SHEET C6.1 - ENLARGED GRADING PLAN: Make the following revisions:  
 1. Specify types of retaining walls
- H. SHEET C6.2 - ENLARGED GRADING PLAN: Make the following revisions:  
 2. Add top of wall and bottom of wall spot elevations to 2 sets of stairs at gymnasium
- I. SHEET C6.4 - ENLARGED GRADING PLAN: Make the following revisions:  
 1. Specify types of retaining walls
- J. SHEET C7.2 - SITE DETAILS: Make the following revisions:  
 1. Detail #2 was revised to remove aluminum curb and remove detail callout on Track Surfacing note.
- K. SHEET C7.4 - SITE DETAILS:  
 1. Add Detail #8, 18" Ribbon Curb  
 2. Add Detail #9, 35' Flag Pole
- L. ADD SHEET C7.5 - SITE DETAILS  
 1. Typical retaining wall details for reference only
- M. SHEET C8.0 - WATER & SEWER PLAN: Make the following revisions:  
 1. Update label to reflect new survey information (2 water meters found in same vault).

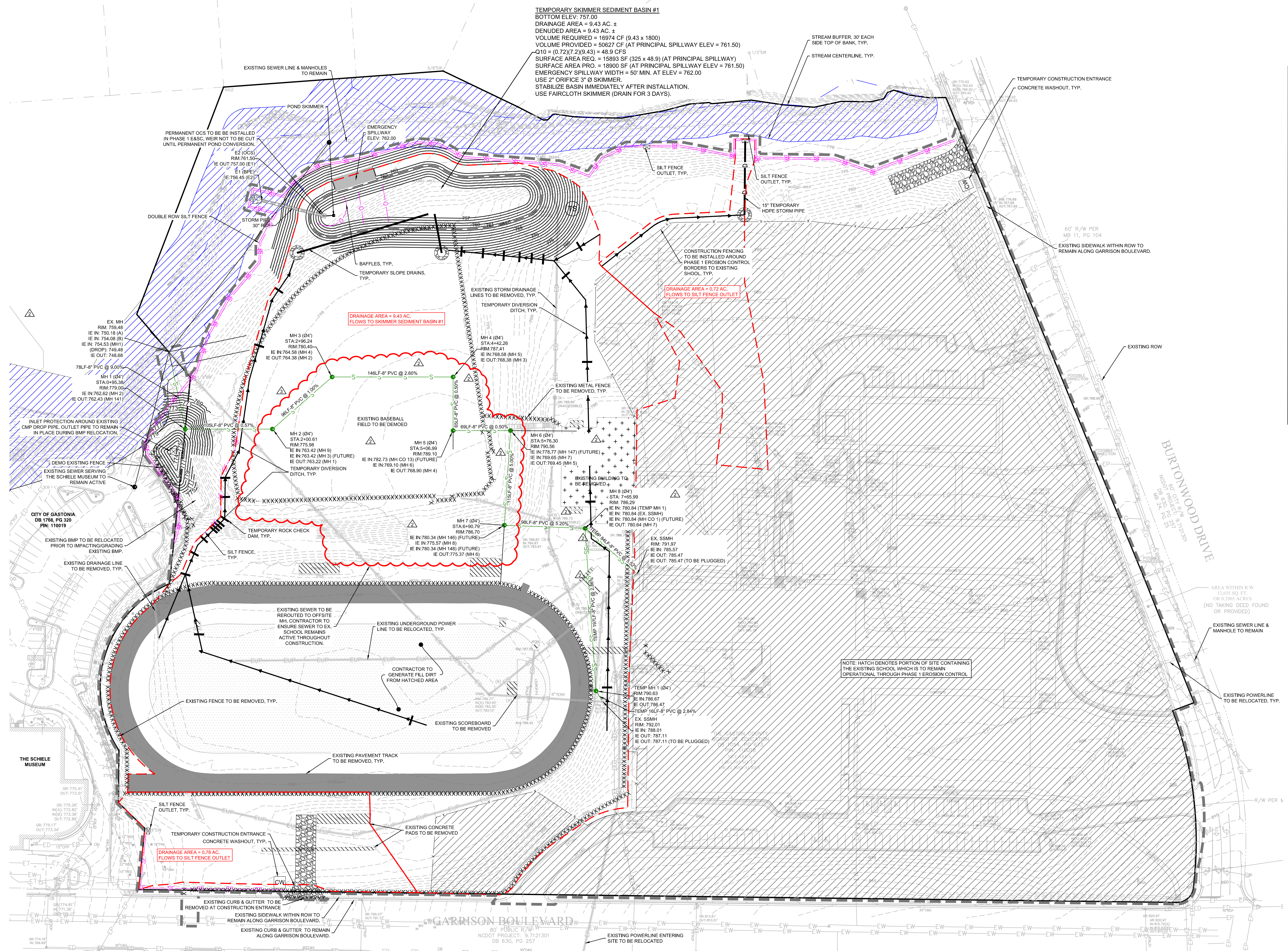
REVISIONS:

No.	Description	Date
1	ADDENDUM 1	01.31.2023
2	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

**EROSION CONTROL SEQUENCE OF CONSTRUCTION:**

- OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES (NCDEQ DEMLR).
- SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH NCDEQ DEMLR EROSION CONTROL INSPECTOR TO DISCUSS EROSION CONTROL MEASURES.
- INSTALL CONSTRUCTION ENTRANCE, SILT FENCE, TEMPORARY DIVERSION DITCHES, AND SKIMMER SEDIMENT BASIN AS INDICATED ON PHASE 1 E&SC PLAN, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
- EXISTING BMP SERVING THE SCHEILE MUSEUM SITE TO BE RELOCATED PRIOR TO STARTING WORK ON THE GRIER MIDDLE SCHOOL SITE. RELOCATE BMP PRIOR TO IMPACTING/GRADING EXISTING BMP. THIS AREA IS TO BE IMMEDIATELY STABILIZED.
- CALL FOR ON-SITE INSPECTION BY INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND DEMOLITION/CONSTRUCTION MAY BEGIN.
- DEMO EXISTING BUILDINGS AND HARDSCAPES AND BEGIN SITE AND BUILDING CONSTRUCTION.
- IN PHASE 1 E&SC, CONTRACTOR TO ENSURE ALL UTILITIES SERVING EXISTING SCHOOL AND SCHEILE MUSEUM REMAIN IN SERVICE. BEFORE EXISTING SANITARY SEWER IS DEMOLISHED, PROPOSED SANITARY SEWER AS SHOWN ON THIS PLAN TO BE INSTALLED AND CERTIFIED. CONTRACTOR TO GENERATE FILL DIRT FROM HATCHED AREA TO ENSURE PROPOSED SEWER HAS ADEQUATE COVER.
- AFTER PROPOSED SEWER IS INSTALLED AND CERTIFIED, EXISTING SEWER SERVING EXISTING SCHOOL AND SCHEILE MUSEUM MAY BE REMOVED.
- THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
- CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.
- STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
- COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, GASTONIA EROSION CONTROL ORDINANCE, AND THE GASTONIA UDO.



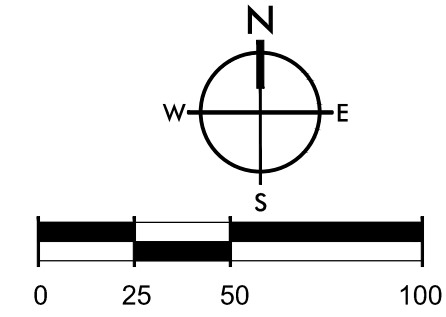
**E&SC PLAN LEGEND**

Erosion Control Mat (NCDEQ STD. 6.17)	EM
Seeding (NCDEQ STD. 6.12)	S
Surface Roughening (NCDEQ STD. 6.03)	SR
Temporary Seeding (NCDEQ STD. 6.10)	TS
Permanent Seeding (NCDEQ STD. 6.11)	PS
Matching (NCDEQ STD. 6.14)	M
Dust Control (NCDEQ STD. 6.94)	DC
Filter Fabric Inlet Protection (See Detail)	
Inlet Protection with Sediment Tube (See Detail)	
Temp. Rock Dam (NCDEQ STD. 6.63)	
RIPRAP Outlet Protection (NCDEQ STD. 6.41)	
Construction Entrance (See Detail)	
Stone Outlet, Standard	
Silt Fence, Standard (NCDEQ STD. 6.42)	SF
Silt Fence, Reinforced (See Detail)	RSF
Construction Documents Phase Line	
Drainage Area Delineation	
Limits of Disturbance	

**DEMOLITION LEGEND**

DEMO EXISTING GRAVEL	
DEMO EXISTING BUILDING	
DEMOLISH EXISTING SITE FEATURE	XXXXXXXXXX
DEMO EXISTING CONCRETE/PAVEMENT	

- NOTES:**
- DIVERSION SWALES SHOWN ON PLANS TO APPROXIMATE LOCATION TO SHOW INTENT. CONTRACTOR SHALL REFERENCE PLANS AND DETAILS TO INSTALL DIVERSION SWALES TO MEET THE INTENT OF THE PLANS.
  - PROVIDE APPROPRIATE INLET PROTECTION FOR VARIOUS PHASES OF THE CONSTRUCTION. HARDWARE CLOTH & GRAVEL PROTECTION SHALL BE PROVIDED FOR INLETS IN NON-PAVED AREAS. SILT BAG INLET PROTECTION SHALL BE PROVIDED FOR INLETS IN PAVED AREAS.
  - ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NCDEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, THE US DEPARTMENT OF AGRICULTURE, US SOIL CONSERVATION SERVICE, NCDEQ, AND GASTON COUNTY.
  - APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFFSITE GRADING, THE CONTRACTOR MUST CONTACT AND HAVE WRITTEN PERMISSION FROM THE APPROPRIATE PROPERTY OWNERS BEFORE PROCEEDING.
  - IF BORROW OR WASTE MATERIAL IS REQUIRED OR GENERATED DURING GRADING OPERATIONS, AN APPROVED EROSION AND SEDIMENT CONTROL PERMIT MUST BE SECURED FOR THE BORROW OR WASTE MATERIAL SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.
  - NPDES INSPECTION RECORDS TO BE MAINTAINED ON SITE.
  - SOIL TEST TO DETERMINE FERTILIZER TYPE AND APPLICATION RATES.

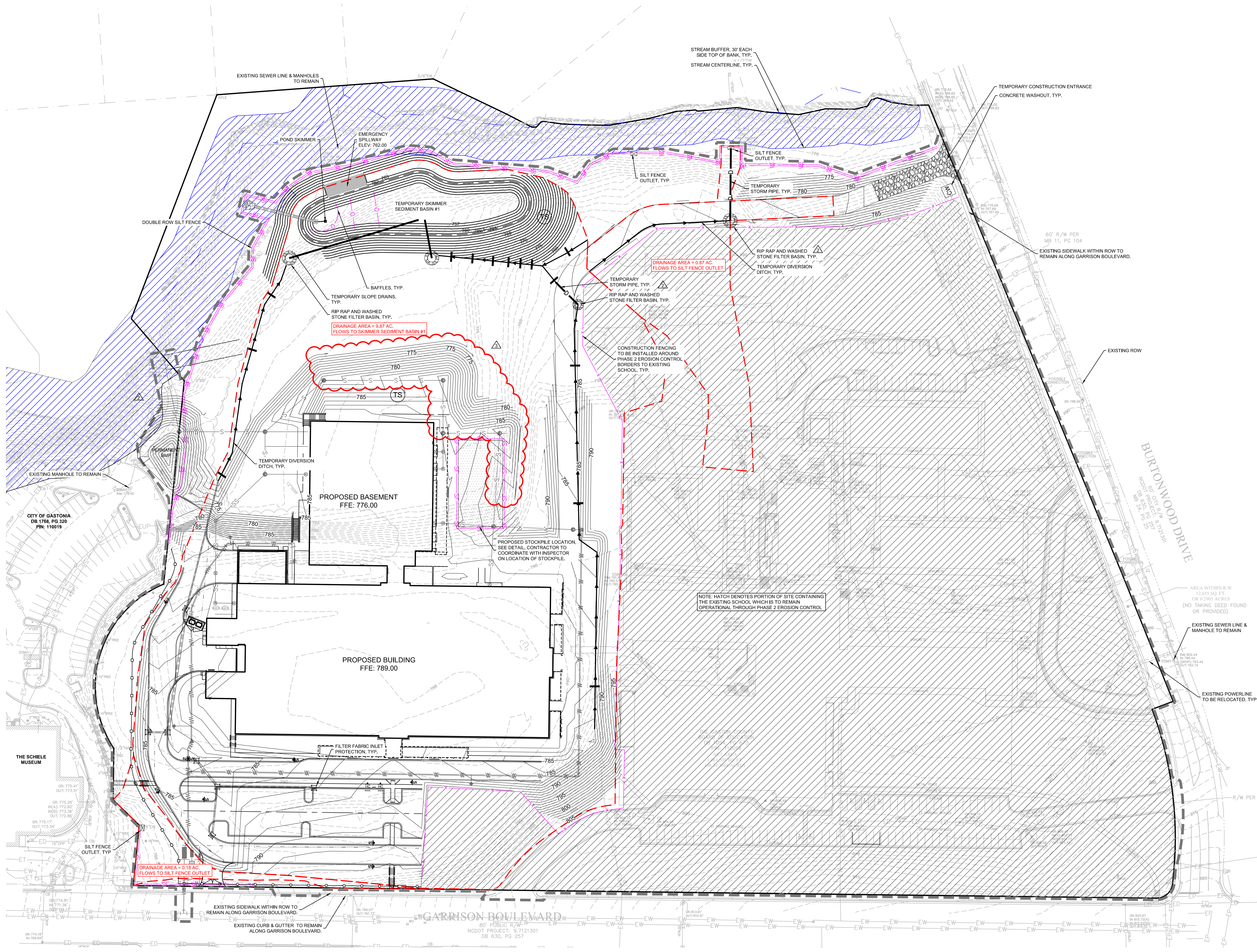


NOTE: CONTRACTOR TO ENSURE ALL EXISTING UTILITIES SERVING SCHOOL REMAIN ACTIVE THROUGHOUT CONSTRUCTION.

TOTAL LAND DISTURBANCE = 25 AC.

**EROSION CONTROL SEQUENCE OF CONSTRUCTION:**

1. CONTACT SEDIMENT CONTROL INSPECTOR FOR APPROVAL TO PROCEED.
2. TEMPORARILY STABILIZE GRADED AREAS (NON-STEEP SLOPES) AS REQUIRED.
3. RELOCATED BMP SERVING THE SCHEILE MUSEUM SHALL BE PERMANENTLY STABILIZED AND CONVERTED TO PERMANENT BMP BY THIS PHASE.
4. START ROUGH GRADING OF SITE AND CONSTRUCTION ENTRANCE.
5. INSTALLATION OF WATER, SEWER, AND STORM DRAINAGE SYSTEMS MAY BEGIN.
6. WHEN APPLICABLE, DRY UTILITIES AND VERTICAL CONSTRUCTION ON THE NEW SCHOOL MAY BEGIN.
7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
8. CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.
9. STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
10. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
11. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, GASTONIA EROSION CONTROL ORDINANCE, AND THE GASTONIA UDO.



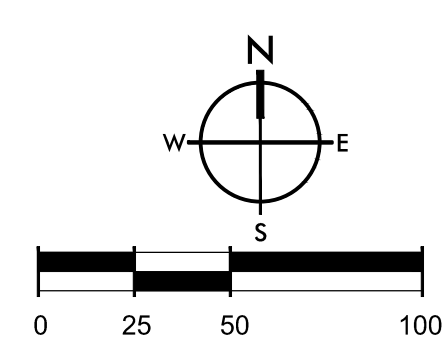
**EASC PLAN LEGEND**

Erosion Control Mat (NCDEQ STD. 6.17)	EM
Seeding (NCDEQ STD. 6.12)	S
Surface Roughening (NCDEQ STD. 6.03)	SR
Temporary Seeding (NCDEQ STD. 6.10)	TS
Permanent Seeding (NCDEQ STD. 6.11)	PS
Mulching (NCDEQ STD. 6.14)	M
Dust Control (NCDEQ STD. 6.84)	DC
Filter Fabric Inlet Protection (See Detail)	[Symbol]
Inlet Protection with Sediment Tube (See Detail)	[Symbol]
Temp. Rock Dam (NCDEQ STD. 6.03)	[Symbol]
RIPRAP Outlet Protection (NCDEQ STD. 6.41)	[Symbol]
Construction Entrance (See Detail)	[Symbol]
Stone Outlet, Standard	[Symbol]
Silt Fence, Standard (NCDEQ STD. 6.82)	SF
Silt Fence, Reinforced (See Detail)	RSF
Construction Documents Phase Line	[Symbol]
Drainage Area Delineation	[Symbol]
Limits of Disturbance	[Symbol]

**DEMOLITION LEGEND**

DEMO EXISTING GRAVEL	[Symbol]
DEMO EXISTING BUILDING	[Symbol]
DEMOLISH EXISTING SITE FEATURE	XXXXXXXXXX
DEMO EXISTING CONCRETE / PAVEMENT	[Symbol]

- NOTES:**
1. DIVERSION SWALES SHOWN ON PLANS TO APPROXIMATE LOCATION TO SHOW INTENT. CONTRACTOR SHALL REFERENCE PLANS AND DETAILS TO INSTALL DIVERSION SWALES TO MEET THE INTENT OF THE PLANS.
  2. PROVIDE APPROPRIATE INLET PROTECTION FOR VARIOUS PHASES OF THE CONSTRUCTION. HARDWARE CLOTH & GRAVEL PROTECTION SHALL BE PROVIDED FOR INLETS IN NON-PAVED AREAS. SILT BAG INLET PROTECTION SHALL BE PROVIDED FOR INLETS IN PAVED AREAS.
  3. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NCDEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, THE US DEPARTMENT OF AGRICULTURE, US SOIL CONSERVATION SERVICE, NCDEQ, AND GASTON COUNTY.
  4. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFFSITE GRADING, THE CONTRACTOR MUST CONTACT AND HAVE WRITTEN PERMISSION FROM THE APPROPRIATE PROPERTY OWNERS BEFORE PROCEEDING.
  5. IF BORROW OR WASTE MATERIAL IS REQUIRED OR GENERATED DURING GRADING OPERATIONS, AN APPROVED EROSION AND SEDIMENT CONTROL PERMIT MUST BE SECURED FOR THE BORROW OR WASTE MATERIAL SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.
  6. NPDES INSPECTION RECORDS TO BE MAINTAINED ON SITE.
  7. SOIL TEST TO DETERMINE FERTILIZER TYPE AND APPLICATION RATES.



NOTE: CONTRACTOR TO ENSURE ALL EXISTING UTILITIES SERVING SCHOOL REMAIN ACTIVE THROUGHOUT CONSTRUCTION.

TOTAL LAND DISTURBANCE = 25 AC.

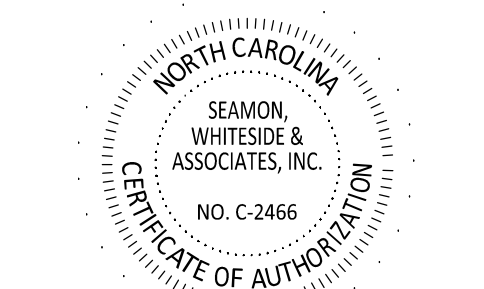


**GRIER MIDDLE SCHOOL REPLACEMENT**

**SW SEAMONWHITESIDE**  
 MOUNT PLEASANT, SC 843.884.1667  
 GREENVILLE, SC 864.296.0534  
 SUMMERVILLE, SC 843.972.0710  
 SPARTANBURG, SC 864.272.1272  
 CHARLOTTE, NC 980.312.5450  
 WWW.SEAMONWHITESIDE.COM



227 WEST TRADE STREET SUITE 700  
 CHARLOTTE, NORTH CAROLINA 28202  
 TEL. 704.333.6686 FAX 704.333.2926  
 WWW.LS3P.COM



COPYRIGHT 2018 ALL RIGHTS RESERVED  
 PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

**REVISIONS:**

No.	Description	Date
1	ADDENDUM 1	01.31.2023
2	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

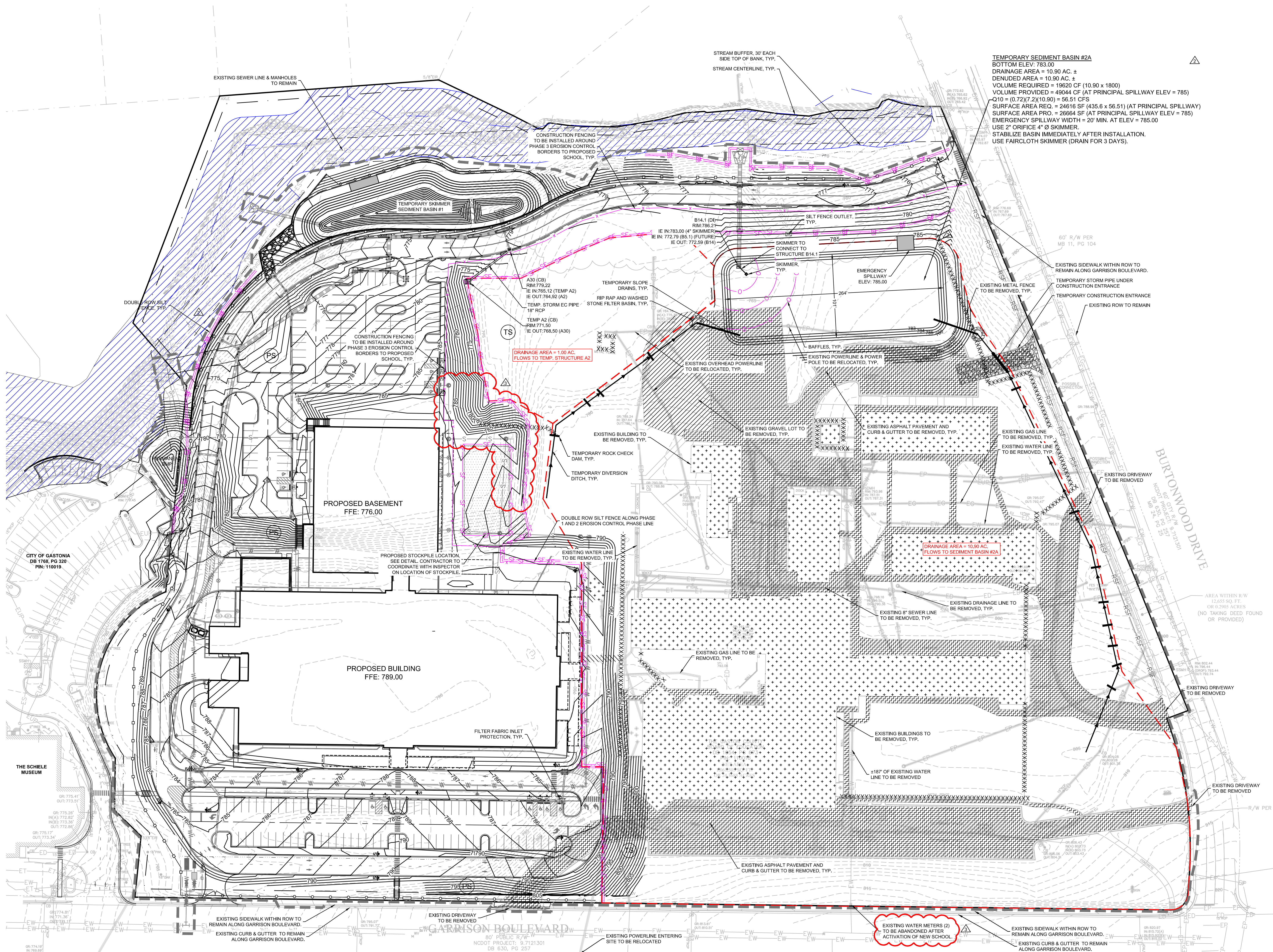
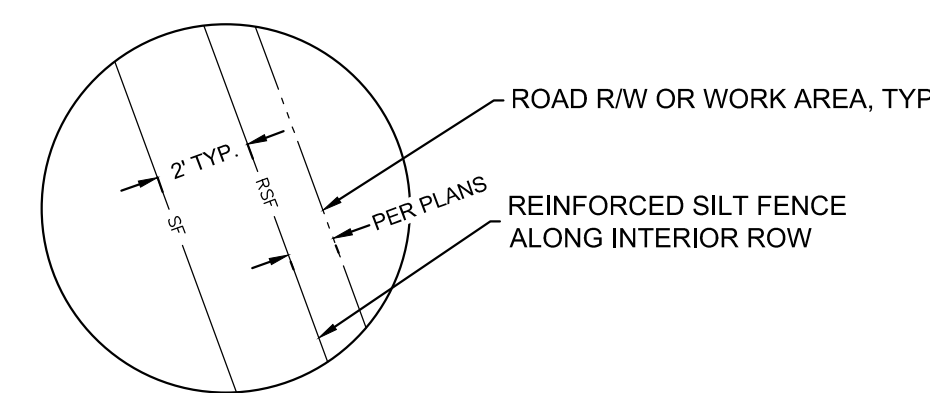
**E&S C PHASE 2**

**C3.1**

**EROSION CONTROL SEQUENCE OF CONSTRUCTION:**

1. ONCE CONTRACTOR HAS MET WITH EROSION CONTROL INSPECTOR AND HAS DEEMED PHASE 2 OF CONSTRUCTION AS STABILIZED, THE CONTRACTOR CAN THEN PROCEED WITH PHASE 3 OF EROSION CONTROL.
2. THE NEW SCHOOL SHOULD BE FULLY FUNCTIONING AND SERVICEABLE BEFORE MOVING FORWARD WITH PHASE 3 OF CONSTRUCTION.
3. REAR ACCESS DRIVE AND RETAINING WALL TO BE INSTALLED AND STABILIZED. WESTERN EDGE OF ACCESS ROAD TO BE BUILT FIRST AND TEMPORARY DIVERSION DITCH MOVED TO THE TOP OF THE ROAD TO ENSURE DRAINAGE IS CONVEYED TO BASIN #1 DURING ROAD AND WALL CONSTRUCTION.
4. STRAW WATTLES SHOULD BE UTILIZED BETWEEN THE FILL SLOPES AND RETAINING WALL INSTALLATION AND THE NEARBY BUFFER IN AREAS WHERE SILT FENCE DOES NOT EXIST.
5. SKIMMER SEDIMENT BASIN #1 TO REMAIN THROUGH THIS PHASE. BASIN SHALL NOT BE CONVERTED INTO PERMANENT BMP UNTIL ALL UPGRADIENT AREAS HAVE BEEN STABILIZED.
6. CONTRACTOR SHALL INSTALL CONSTRUCTION FENCING AROUND PHASE 3 OF CONSTRUCTION TO KEEP UNWANTED PEDESTRIAN TRAFFIC OUT OF THE AREA.
7. CONTRACTOR SHALL INSTALL PERIMETER CONTROLS AND ALL OTHER EROSION CONTROL FEATURES PRIOR TO BUILDING DEMOLITION.
8. CONTRACTOR TO COORDINATE WITH EROSION CONTROL INSPECTOR THROUGHOUT DEMOLITION OF SCHOOL AND EXISTING STORM DRAINS TO ENSURE CONVEYANCE OF RUNOFF TO SEDIMENT BASINS.
9. STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
10. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
11. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, GASTONIA EROSION CONTROL ORDINANCE, AND THE GASTONIA UDO.

**DOUBLE ROW SILT FENCE BLOWUP (NTS.)**



**TEMPORARY SEDIMENT BASIN #2A**  
 BOTTOM ELEV. 783.00  
 DRAINAGE AREA = 10.90 AC. ±  
 DENUDE AREA = 10.90 AC. ±  
 VOLUME REQUIRED = 19820 CF (AT PRINCIPAL SPILLWAY ELEV = 785)  
 VOLUME PROVIDED = 49044 CF (AT PRINCIPAL SPILLWAY ELEV = 785)  
 $Q_{10} = (0.72)(7.2)(10.90) = 56.51$  CFS  
 SURFACE AREA REQ. = 24616 SF (455.6' x 56.51') (AT PRINCIPAL SPILLWAY)  
 SURFACE AREA FRO. = 26664 SF (AT PRINCIPAL SPILLWAY ELEV = 785)  
 EMERGENCY SPILLWAY WIDTH = 20' MIN. AT ELEV = 785.00  
 USE 2" ORIFICE 4" Ø SKIMMER.  
 STABILIZE BASIN IMMEDIATELY AFTER INSTALLATION.  
 USE FAIRCLOTH SKIMMER (DRAIN FOR 3 DAYS).

**STABILIZATION NOTE:**  
 SEE LANDSCAPE PLAN FOR DIRECTION ON FINAL STABILIZATION (BUILDINGS, SOIL SEED, ETC.). ANY DISTURBED AREAS NOT EXPLICITLY DESCRIBED ON THE LANDSCAPE PLAN SHALL BE PERMANENT SEED PER THE SCHEDULE PROVIDED IN DETAILS.

**E&SC PLAN LEGEND**

Erosion Control Mat (NCEQ STD. 6.17)	EM
Seeding (NCEQ STD. 6.12)	S
Surface Roughening (NCEQ STD. 6.13)	SR
Temporary Seeding (NCEQ STD. 6.14)	TS
Permanent Seeding (NCEQ STD. 6.11)	PS
Mulching (NCEQ STD. 6.14)	M
Dust Control (NCEQ STD. 6.84)	DC
Filter Fabric Inlet Protection (See Detail)	IF
Inlet Protection with Sediment Tube (See Detail)	IST
Temp. Rock Dam (NCEQ STD. 6.13)	RD
RIPRAP Outlet Protection (NCEQ STD. 6.41)	ROP
Construction Entrance (See Detail)	CE
Stone Outlet, Standard	SO
Silt Fence, Standard (NCEQ STD. 6.62)	SF
Silt Fence, Reinforced (See Detail)	RSF
Construction Documents Phase Line	CL
Drainage Area Delineation	DA
Limits of Disturbance	LD

**DEMOLITION LEGEND**

DEMO EXISTING GRAVEL	[Pattern]
DEMO EXISTING BUILDING	[Pattern]
DEMOLISH EXISTING SITE FEATURE	XXXXXXXXXX
DEMO EXISTING CONCRETE / PAVEMENT	[Pattern]

**NOTES:**

1. DIVERSION SWALES SHOWN ON PLANS TO APPROXIMATE LOCATION TO SHOW INTENT. CONTRACTOR SHALL REFERENCE PLANS AND DETAILS TO INSTALL DIVERSION SWALES TO MEET THE INTENT OF THE PLANS.
2. PROVIDE APPROPRIATE INLET PROTECTION FOR VARIOUS PHASES OF THE CONSTRUCTION. HARDWARE CLOTH & GRAVEL PROTECTION SHALL BE PROVIDED FOR INLETS IN NON-PAVED AREAS. SILT BAG INLET PROTECTION SHALL BE PROVIDED FOR INLETS IN PAVED AREAS.
3. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NCEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, THE US DEPARTMENT OF AGRICULTURE, US SOIL CONSERVATION SERVICE, NCEQ, AND GASTON COUNTY.
4. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFFSITE GRADING, THE CONTRACTOR MUST CONTACT AND HAVE WRITTEN PERMISSION FROM THE APPROPRIATE PROPERTY OWNERS BEFORE PROCEEDING.
5. IF BORROW OR WASTE MATERIAL IS REQUIRED OR GENERATED DURING GRADING OPERATIONS, AN APPROVED EROSION AND SEDIMENT CONTROL PERMIT MUST BE SECURED FOR THE BORROW OR WASTE MATERIAL SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.
6. NPDES INSPECTION RECORDS TO BE MAINTAINED ON SITE.
7. SOIL TEST TO DETERMINE FERTILIZER TYPE AND APPLICATION RATES.

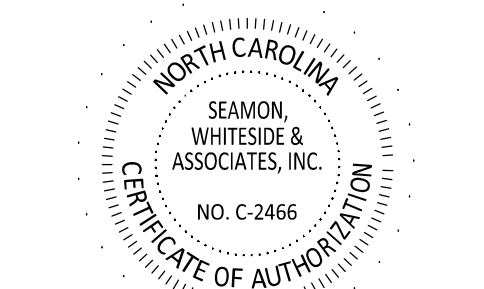


**GRIER MIDDLE SCHOOL REPLACEMENT**

**SW SEAMONWHITESIDE**  
 MOUNT PLEASANT, SC 843.884.1667  
 GREENVILLE, SC 864.296.0534  
 SUMMERVILLE, SC 843.972.0710  
 SPARTANBURG, SC 864.272.1272  
 CHARLOTTE, NC 980.312.5450  
 WWW.SEAMONWHITESIDE.COM



227 WEST TRADE STREET SUITE 700  
 CHARLOTTE, NORTH CAROLINA 28202  
 TEL. 704.333.6666 FAX 704.333.2926  
 WWW.LS3P.COM



COPYRIGHT 2018 ALL RIGHTS RESERVED  
 PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

**REVISIONS:**

No.	Description	Date
2	ADDENDUM 1	01.31.2023
3	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

**E&SC PHASE 3**

**C3.2**

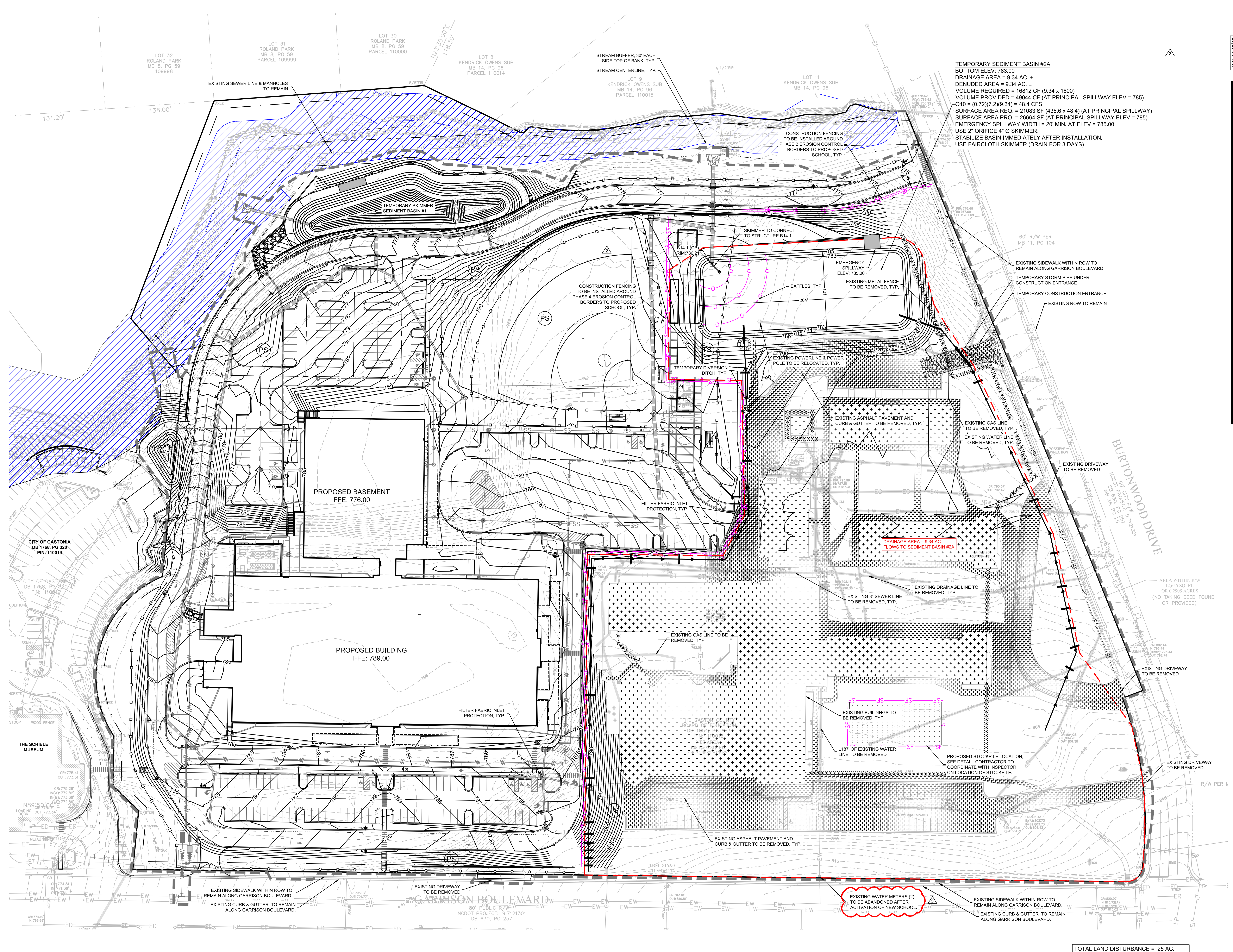
**REVISIONS:**

No.	Description	Date
2	ADDENDUM 1	01.31.2023
3	ADDENDUM 2	02.07.2023

**PROJECT:** CL1253  
**DATE:** 01-12-2023  
**DRAWN BY:** MEM  
**CHECKED BY:** TNC

**EROSION CONTROL SEQUENCE OF CONSTRUCTION:**

1. CONTRACTOR SHALL INSTALL CONSTRUCTION FENCING AROUND PHASE 4 OF CONSTRUCTION TO KEEP UNWANTED PEDESTRIAN TRAFFIC OUT OF THE AREA.
2. SKIMMER SEDIMENT BASIN #1 TO REMAIN THROUGH THIS PHASE. BASIN SHALL NOT BE CONVERTED INTO PERMANENT BMP UNTIL ALL UPGRADIENT AREAS HAVE BEEN STABILIZED.
3. CONTRACTOR TO COORDINATE WITH EROSION CONTROL INSPECTOR THROUGHOUT DEMOLITION OF SCHOOL AND EXISTING STORM DRAINS TO ENSURE CONVEYANCE OF RUNOFF TO SEDIMENT BASINS.
4. PERMANENTLY STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
5. BUS PARKING, DRIVE AISLES AND BASEBALL FIELD INSTALLED IN THIS PHASE ARE TO BE IN THEIR FINAL CONDITION AND OPERATIONAL (PAVED, CURB AND GUTTER, PERMANENTLY STABILIZED) TO ENSURE CLEAN WATER DRAINING INTO PERMANENT STORM DRAINAGE SYSTEM.
6. INLET PROTECTION TO REMAIN ON INLETS ADJACENT TO CONSTRUCTION PHASE LINE THROUGHOUT THIS PHASE.
7. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
8. PHASE 4 OF CONSTRUCTION TO BE COMPLETED PRIOR TO THE START OF THE SCHOOL YEAR.
9. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, GASTONIA EROSION CONTROL ORDINANCE, AND THE GASTONIA UDO.



**TEMPORARY SEDIMENT BASIN #2A**  
 BOTTOM ELEV. 783.00  
 DRAINAGE AREA = 9.34 AC. ±  
 DENUDED AREA = 9.34 AC. ±  
 VOLUME REQUIRED = 16812 CF (9.34 x 1800)  
 VOLUME PROVIDED = 49044 CF (AT PRINCIPAL SPILLWAY ELEV = 785)  
 $Q_{10} = (0.72)^{1.2} (9.34) = 48.4$  CFS  
 SURFACE AREA REQ. = 21083 SF (435.6' x 48.4') (AT PRINCIPAL SPILLWAY)  
 SURFACE AREA PRO. = 26694 SF (AT PRINCIPAL SPILLWAY ELEV = 785)  
 EMERGENCY SPILLWAY WIDTH = 20' MIN. AT ELEV = 785.00  
 USE 2" ORIFICE 4" Ø SKIMMER.  
 STABILIZE BASIN IMMEDIATELY AFTER INSTALLATION.  
 USE FAIRCLOTH SKIMMER (DRAIN FOR 3 DAYS).

**STABILIZATION NOTE:**  
 SEE LANDSCAPE PLAN FOR DIRECTION ON FINAL STABILIZATION (BUILDINGS, SOD, SEED, ETC.). ANY DISTURBED AREAS NOT EXPLICITLY DESCRIBED ON THE LANDSCAPE PLAN SHALL BE PERMANENT SEEDING PER THE SCHEDULE PROVIDED IN DETAILS.

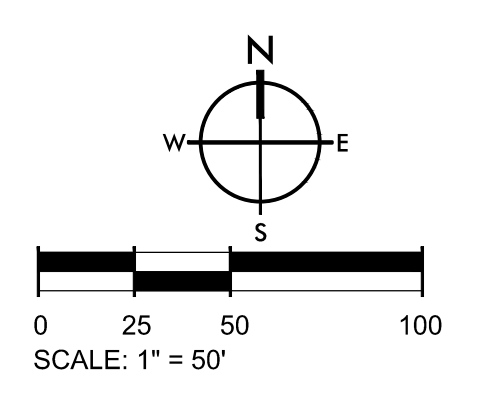
**E&S C PLAN LEGEND**

Erosion Control Mat (NCDEQ STD. 6.17)	EM
Seeding (NCDEQ STD. 6.12)	S
Surface Roughening (NCDEQ STD. 6.03)	SR
Temporary Seeding (NCDEQ STD. 6.10)	TS
Permanent Seeding (NCDEQ STD. 6.11)	PS
Mulching (NCDEQ STD. 6.14)	M
Dust Control (NCDEQ STD. 6.04)	DC
Filter Fabric Inlet Protection (See Detail)	IF
Inlet Protection with Sediment Tube (See Detail)	IS
Temp. Rock Dam (NCDEQ STD. 6.03)	RD
RIPRAP Outlet Protection (NCDEQ STD. 6.41)	RO
Construction Entrance (See Detail)	CE
Stone Outlet, Standard	SO
Silt Fence, Standard (NCDEQ STD. 6.02)	SF
Silt Fence, Reinforced (See Detail)	RSF
Construction Documents Phase Line	CL
Drainage Area Delineation	DA
Limits of Disturbance	LD

**DEMOLITION LEGEND**

DEMO EXISTING GRAVEL	XXXXXX
DEMO EXISTING BUILDING	XXXXXX
DEMOLISH EXISTING SITE FEATURE	XXXXXXXXXX
DEMO EXISTING CONCRETE / PAVEMENT	XXXXXX

- NOTES:**
1. DIVERSION SWALES SHOWN ON PLANS TO APPROXIMATE LOCATION TO SHOW INTENT. CONTRACTOR SHALL REFERENCE PLANS AND DETAILS TO INSTALL DIVERSION SWALES TO MEET THE INTENT OF THE PLANS.
  2. PROVIDE APPROPRIATE INLET PROTECTION FOR VARIOUS PHASES OF THE CONSTRUCTION. HARDWARE CLOTH & GRAVEL PROTECTION SHALL BE PROVIDED FOR INLETS IN NON-PAVED AREAS. SILT BAG INLET PROTECTION SHALL BE PROVIDED FOR INLETS IN PAVED AREAS.
  3. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NCDEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, THE US DEPARTMENT OF AGRICULTURE, US SOIL CONSERVATION SERVICE, NCDEQ, AND GASTON COUNTY.
  4. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFFSITE GRADING, THE CONTRACTOR MUST CONTACT AND HAVE WRITTEN PERMISSION FROM THE APPROPRIATE PROPERTY OWNERS BEFORE PROCEEDING.
  5. IF BORROW OR WASTE MATERIAL IS REQUIRED OR GENERATED DURING GRADING OPERATIONS, AN APPROVED EROSION AND SEDIMENT CONTROL PERMIT MUST BE SECURED FOR THE BORROW OR WASTE MATERIAL SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.
  6. NPDES INSPECTION RECORDS TO BE MAINTAINED ON SITE.
  7. SOIL TEST TO DETERMINE FERTILIZER TYPE AND APPLICATION RATES.



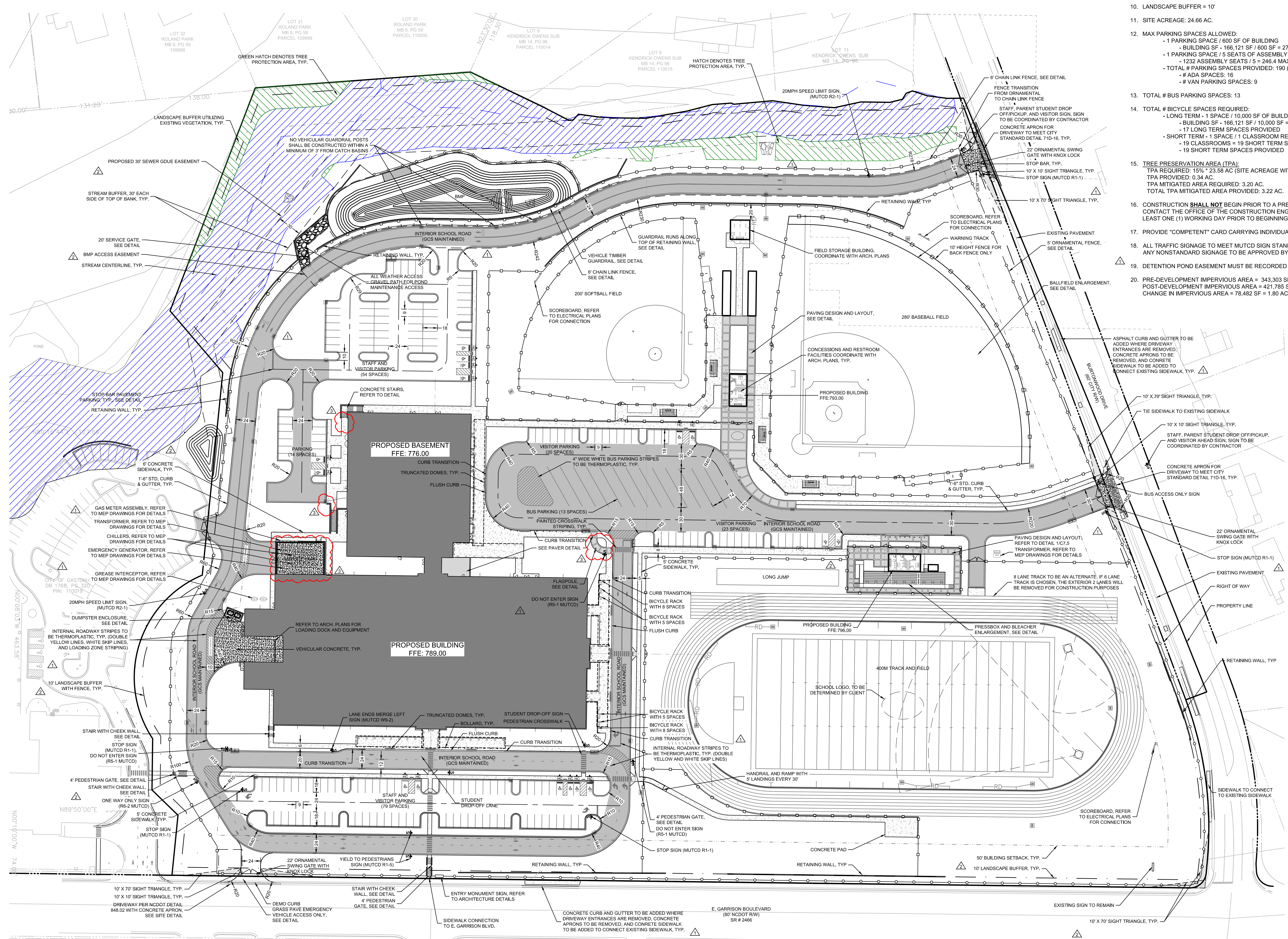
TOTAL LAND DISTURBANCE = 25 AC.

REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11.11.2022
2	ADDENDUM 1	01.31.2023
3	ADDENDUM 2	02.07.2023

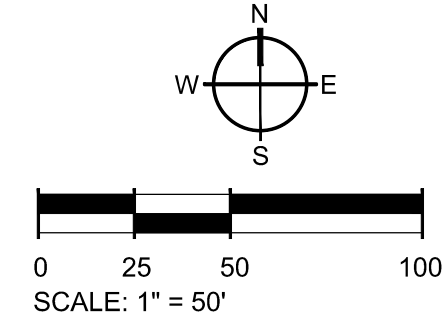
PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

- NOTES:**
- BOUNDARY, TOPOGRAPHIC, AND OTHER EXISTING CONDITIONS SHOWN ARE FROM SURVEY PREPARED BY R.B. PHARR & ASSOCIATES, P.A., DATED NOVEMBER 28, 2022.
  - TOPOGRAPHIC DATUM IS NAD83/NAVD83.
  - ANYTHING SHOWN OUTSIDE OF THE BOUNDARY OF THIS PROJECT IS FOR DESCRIPTIVE PURPOSES ONLY.
  - THIS PROPERTY IS SHOWN ON TAX MAP TMS# 3555646402.
  - PROJECT IS LOCATED IN ZONE X PER F.E.M.A. MAP COMMUNITY PANEL NO. 371035500J, EFFECTIVE 9/28/2007.
  - TWO RIVER'S UTILITIES IS THE WATER SYSTEM AND SANITARY SEWER SYSTEM PROVIDER.
  - CURRENT ZONING: RS-12
  - CURRENT AND PROPOSED LAND USE: MIDDLE SCHOOL
  - BUILDING SETBACK = 50'
  - LANDSCAPE BUFFER = 10'
  - SITE ACREAGE: 24.66 AC.
  - MAX PARKING SPACES ALLOWED:
    - 1 PARKING SPACE / 600 SF OF BUILDING
    - BUILDING SF = 166,121 SF / 600 SF = 276.9 MAX PARKING SPACES ALLOWED
    - 1 PARKING SPACE / 5 SEATS OF ASSEMBLY
    - 1232 ASSEMBLY SEATS / 5 = 246.4 MAX PARKING SPACES ALLOWED
    - TOTAL # PARKING SPACES PROVIDED: 190 (NOT INCLUDING BUS PARKING)
    - # ADA SPACES: 16
    - # VAN PARKING SPACES: 9
  - TOTAL # BUS PARKING SPACES: 13
  - TOTAL # BICYCLE SPACES REQUIRED:
    - LONG TERM - 1 SPACE / 10,000 SF OF BUILDING SF REQUIRED
    - BUILDING SF = 166,121 SF / 10,000 SF = 16.6(17) LONG TERM SPACES REQUIRED
    - 17 LONG TERM SPACES PROVIDED
    - SHORT TERM - 1 SPACE / 1 CLASSROOM REQUIRED
    - 19 CLASSROOMS = 19 SHORT TERM SPACES REQUIRED
    - 19 SHORT TERM SPACES PROVIDED
  - CONSTRUCTION SHALL NOT BEGIN PRIOR TO A PRELIMINARY CONSTRUCTION INSPECTION OF THE SITE. CONTACT THE OFFICE OF THE CONSTRUCTION ENGINEER/RIGHT-OF-WAY ADMINISTRATOR AT (704) 866-6015 AT LEAST ONE (1) WORKING DAY PRIOR TO BEGINNING CONSTRUCTION FOR INSPECTION.
  - PROVIDE "COMPETENT" CARD CARRYING INDIVIDUALS FOR OSHA REGULATIONS.
  - ALL TRAFFIC SIGNAGE TO MEET MUTCD SIGN STANDARDS. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ANY NONSTANDARD SIGNAGE TO BE APPROVED BY LANDSCAPE ARCHITECT.
  - DETENTION POND EASEMENT MUST BE RECORDED BEFORE RELEASE OF THE CERTIFICATE OF OCCUPANCY.
  - PRE-DEVELOPMENT IMPERVIOUS AREA = 343,303 SF = 7.88 AC  
 POST-DEVELOPMENT IMPERVIOUS AREA = 421,785 SF = 9.68 AC  
 CHANGE IN IMPERVIOUS AREA = 78,482 SF = 1.80 AC



**MATERIAL LEGEND**

- ASPHALT PAVEMENT "STANDARD DUTY"
- ASPHALT PAVEMENT "HEAVY DUTY"
- VEHICULAR GRADE CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- BUILDING HATCH
- HERRINGBONE PAVEMENT PATTERN
- SIGHT TRIANGLE
- VEHICULAR TIMBER GUARDRAIL, REFER TO PLAN
- ORNAMENTAL FENCE, REFER TO PLAN
- CHAIN LINK FENCE, REFER TO PLAN
- TRAFFIC SIGN, REFER TO PLAN FOR SIGNAGE TYPE
- HANDICAP SIGN





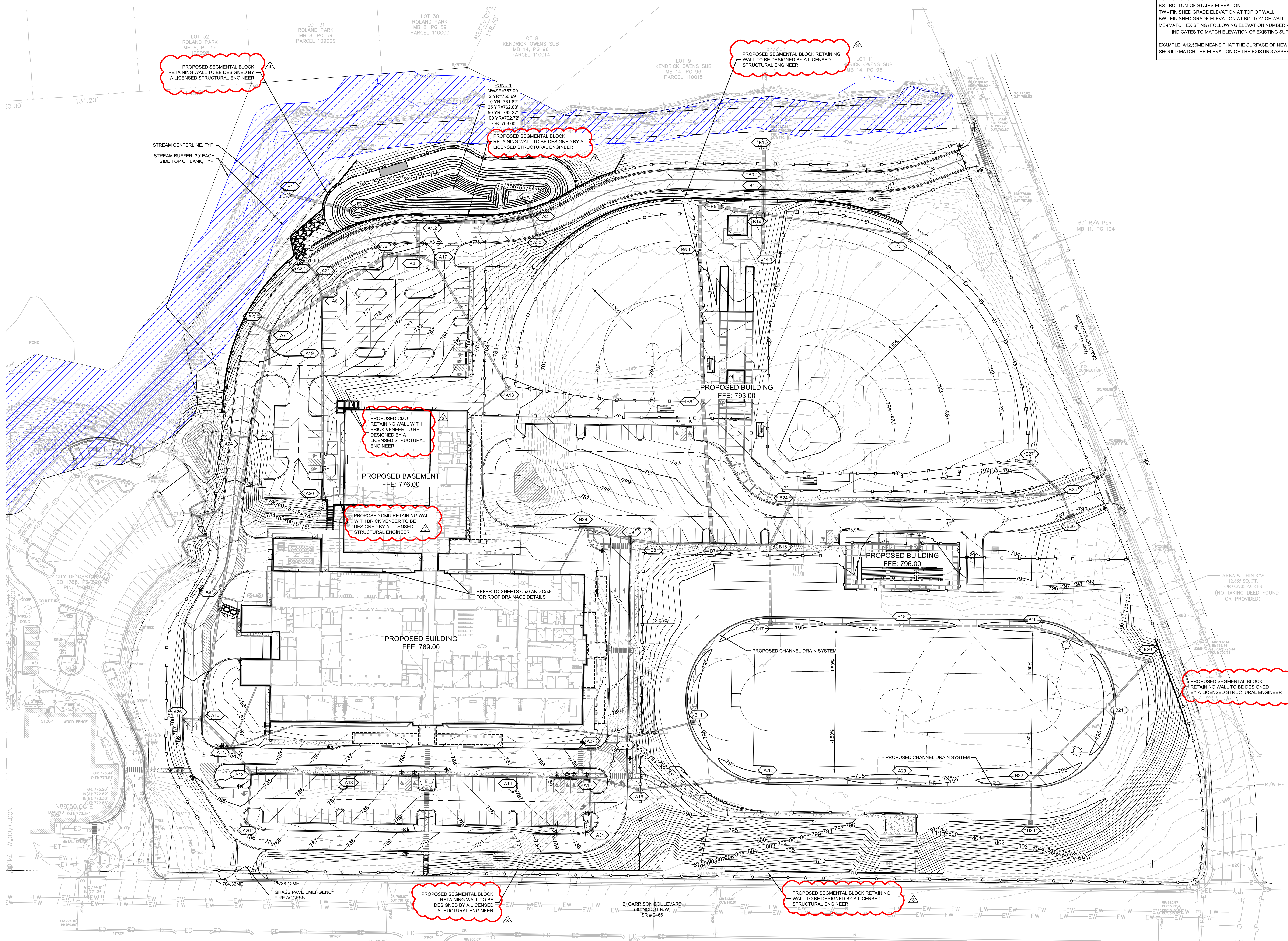
**STANDARD GRADING PLAN NOTES**

- FOR PROJECT SURVEY INFORMATION INCLUDING VERTICAL DATUM AND BENCHMARK LOCATIONS, SEE "PROJECT SURVEY INFORMATION AND CONTRACTOR VERIFICATION REQUIREMENTS" ON SHEET C1.0.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO TOPOGRAPHIC, TREE, STORM DRAINAGE FACILITIES, AND ALL UTILITIES. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES. ANY DISCREPANCIES OR CONFLICTS IDENTIFIED DURING VERIFICATION OF EXISTING CONDITIONS AND UTILITIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. ANY COSTS ASSOCIATED WITH CORRECTIVE WORK OR DAMAGES THAT ARE A RESULT OF THE CONTRACTOR NOT VERIFYING EXISTING CONDITIONS AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- REFER TO SITE DETAIL SHEETS FOR ADDITIONAL DRAINAGE AND GRADING INFORMATION AND REQUIREMENTS.
- REFER TO THE "SPOT ELEVATION KEY" FOR INFORMATION ON SPOT ELEVATIONS.
- COORDINATE WITH THE OWNER AND THE PROJECT GEOTECHNICAL CONSULTANT FOR FILL COMPACTION AND TESTING REQUIREMENTS.
- CONTRACTOR TO SELF-VERIFY THAT SITE GRADES, PONDS, POND DIKES, DRAINAGE PIPES, AND DRAINAGE STRUCTURES ARE CONSTRUCTED PER THE PLANS PRIOR TO REQUESTING FINAL AS-BUILT SURVEY FROM SURVEYOR.

**SPOT ELEV KEY (FINISHED GRADING)**

- A-(ASPHALT) SURFACE OF FINISHED ASPHALT ROADWAY OR WALKING PATH
- C-(CONCRETE) CONCRETE PAVING
- D-(DIRT) FINISHED GROUND ELEVATION
- F-FLOW ELEVATION AT WHICH SURFACE WATER FLOWS INTO DRAINAGE STRUCTURE
- G-SURFACE OF ASPHALT ADJACENT TO THROAT OR GRATE AT CURB INLET
- H-SURFACE OF ACCESS COVER FOR JUNCTION OR ISOLATION BOX
- I-SURFACE OF GRATE AT OUTSIDE EDGE FOR CATCH BASIN, GUTTER INLET, OR GRATED POND STRUCTURE
- FFE - FINISHED FLOOR ELEVATION
- G-(GUTTER) SURFACE OF FINISHED GUTTER AT LOWEST POINT (ALONG WATER FLOW PATH)
- W-(WALK) SURFACE OF FINISHED CONCRETE OR INTERLOCKING PAVEMENT SIDEWALK, PATIO, PLAZA, OR SLAB
- TC - TOP OF CURB ELEVATION
- BC - BOTTOM OF CURB ELEVATION
- TS - TOP OF STAIRS ELEVATION
- BS - BOTTOM OF STAIRS ELEVATION
- TW - FINISHED GRADE ELEVATION AT TOP OF WALL
- BW - FINISHED GRADE ELEVATION AT BOTTOM OF WALL
- ME-(MATCH EXISTING) FOLLOWING ELEVATION NUMBER - INDICATES TO MATCH ELEVATION OF EXISTING SURFACE AT POINT OF CONNECTION

EXAMPLE: A12.5ME MEANS THAT THE SURFACE OF NEW ASPHALT IS TO BE AT ELEVATION 12.56 WHICH SHOULD MATCH THE ELEVATION OF THE EXISTING ASPHALT SURFACE AT THE JOINT

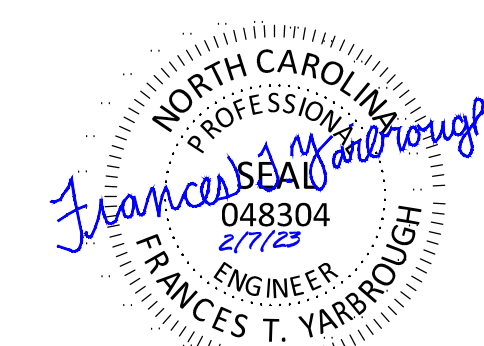


**GRIER MIDDLE SCHOOL REPLACEMENT**

**SW SEAMONWHITESIDE**  
 MOUNT PLEASANT, SC 843.884.1667  
 GREENVILLE, SC 864.296.0534  
 SUMMERVILLE, SC 843.972.0710  
 SPARTANBURG, SC 864.272.1272  
 CHARLOTTE, NC 980.312.5450  
 WWW.SEAMONWHITESIDE.COM



227 WEST TRADE STREET SUITE 700  
 CHARLOTTE, NORTH CAROLINA 28202  
 TEL. 704.333.6686 FAX 704.333.2926  
 WWW.LS3P.COM



COPYRIGHT 2018 ALL RIGHTS RESERVED  
 PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

**REVISIONS:**

No.	Description	Date
1	ADDENDUM 1	01.31.2023
2	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

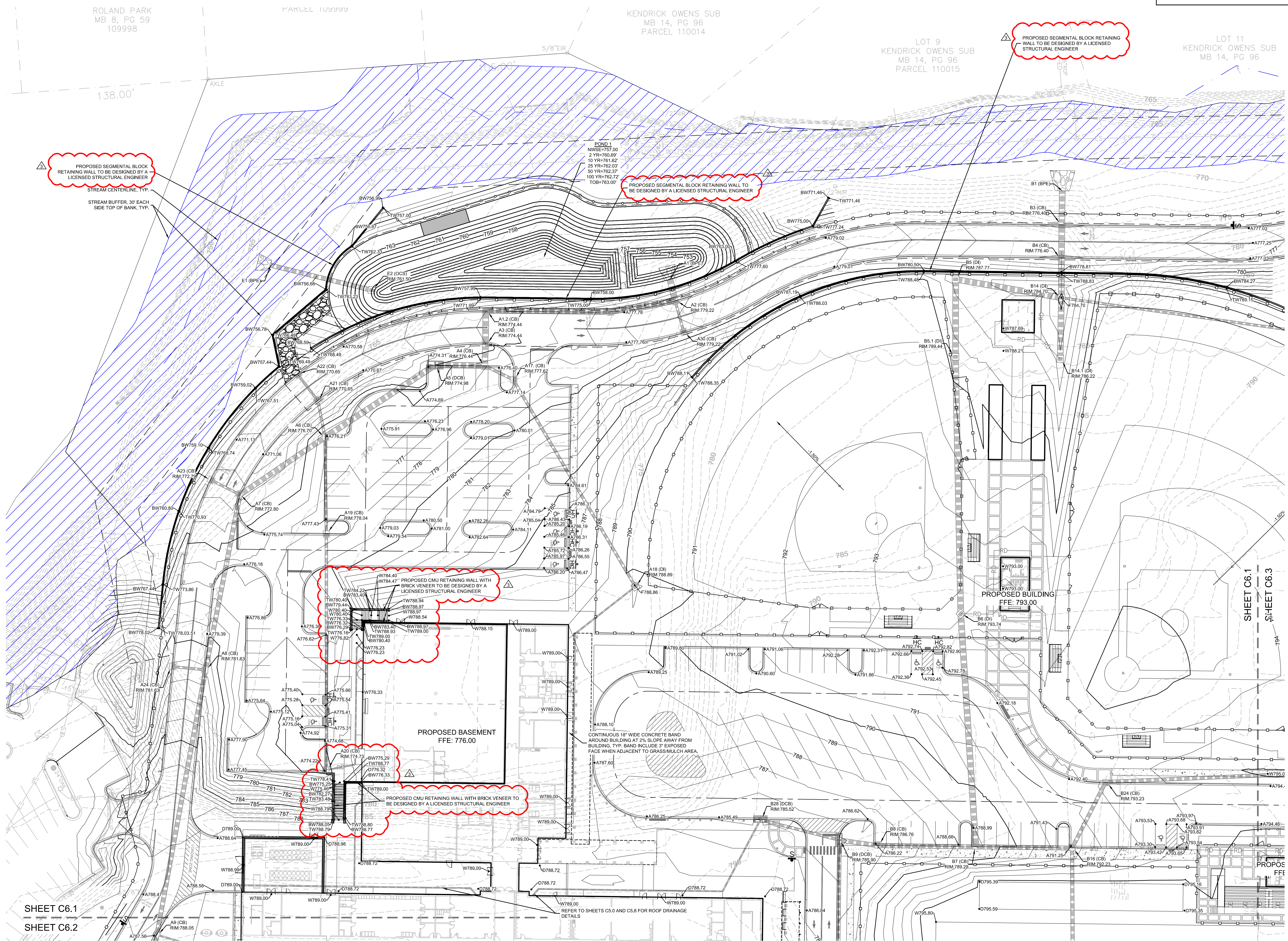
**OVERALL GRADING PLAN**  
**C6.0**

**STANDARD GRADING PLAN NOTES**

- FOR PROJECT SURVEY INFORMATION INCLUDING VERTICAL DATUM AND BENCHMARK LOCATIONS, SEE "PROJECT SURVEY INFORMATION AND CONTRACTOR VERIFICATION REQUIREMENTS" ON SHEET C1.0.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO TOPOGRAPHIC, TREE, STORM DRAINAGE FACILITIES, AND ALL UTILITIES. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES. ANY DISCREPANCIES OR CONFLICTS IDENTIFIED DURING VERIFICATION OF EXISTING CONDITIONS AND UTILITIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. ANY COSTS ASSOCIATED WITH CORRECTIVE WORK OR DAMAGES THAT ARE A RESULT OF THE CONTRACTOR NOT VERIFYING EXISTING CONDITIONS AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- REFER TO ROADWAY PLAN & PROFILE SHEETS, DRAINAGE PLAN SHEETS, AND ROADWAY & DRAINAGE DETAIL SHEETS FOR ADDITIONAL DRAINAGE AND GRADING INFORMATION AND REQUIREMENTS.
- REFER TO THE "SPOT ELEVATION KEY" FOR INFORMATION ON SPOT ELEVATIONS.
- COORDINATE WITH THE OWNER AND THE PROJECT GEOTECHNICAL CONSULTANT FOR LOT FILL COMPACTION AND TESTING REQUIREMENTS.
- CONTRACTOR TO SELF-VERIFY THAT SITE GRADES, PONDS, POND DIKES, DRAINAGE PIPES, AND DRAINAGE STRUCTURES ARE CONSTRUCTED PER THE PLANS PRIOR TO REQUESTING FINAL AS-BUILT SURVEY FROM SURVEYOR.

**SPOT ELEV KEY (FINISHED GRADING)**

- A-(ASPHALT) SURFACE OF FINISHED ASPHALT ROADWAY OR WALKING PATH
  - C-(CONCRETE) CONCRETE PAVING
  - D-(DIRT) FINISHED GROUND ELEVATION
  - F-(FLOW) ELEVATION AT WHICH SURFACE WATER FLOWS INTO DRAINAGE STRUCTURE
  - G-(GRATE) SURFACE OF GRATE AT THROAT OR GRATE AT CURB INLET
  - H-(SURFACE OF ACCESS COVER FOR JUNCTION OR ISOLATION BOX)
  - I-(SURFACE OF GRATE AT OUTSIDE EDGE FOR CATCH BASIN, GUTTER INLET, OR GRATED POND STRUCTURE)
  - J-(FINISHED FLOOR ELEVATION)
  - K-(GUTTER) SURFACE OF FINISHED GUTTER AT LOWEST POINT (ALONG WATER FLOW PATH)
  - L-(WALK) SURFACE OF FINISHED CONCRETE OR INTERLOCKING PAVEMENT SIDEWALK, PATIO, PLAZA, OR SLAB
  - M-(TOP OF CURB ELEVATION)
  - N-(BOTTOM OF CURB ELEVATION)
  - O-(TOP OF STAIRS ELEVATION)
  - P-(BOTTOM OF STAIRS ELEVATION)
  - Q-(FINISHED GRADE ELEVATION AT TOP OF WALL)
  - R-(FINISHED GRADE ELEVATION AT BOTTOM OF WALL)
  - S-(MATCH EXISTING) FOLLOWING ELEVATION NUMBER - INDICATES TO MATCH ELEVATION OF EXISTING SURFACE AT POINT OF CONNECTION
- EXAMPLE: A12.56ME MEANS THAT THE SURFACE OF NEW ASPHALT IS TO BE AT ELEVATION 12.56 WHICH SHOULD MATCH THE ELEVATION OF THE EXISTING ASPHALT SURFACE AT THE JOINT

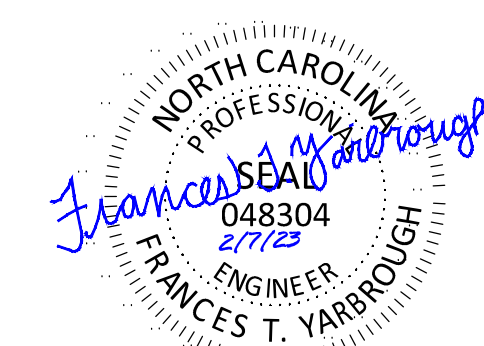
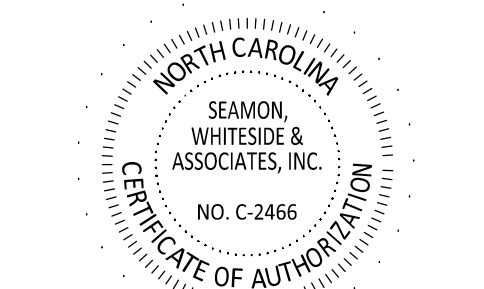


**GRIER MIDDLE SCHOOL REPLACEMENT**

**SW SEAMONWHITESIDE**  
 MOUNT PLEASANT, SC 843.884.1667  
 GREENVILLE, SC 864.296.0534  
 SUMMERVILLE, SC 843.972.0710  
 SPARTANBURG, SC 864.272.1272  
 CHARLOTTE, NC 980.312.5450  
 WWW.SEAMONWHITESIDE.COM



227 WEST TRADE STREET SUITE 700  
 CHARLOTTE, NORTH CAROLINA 28202  
 TEL. 704.333.6686 FAX 704.333.2926  
 WWW.LS3P.COM



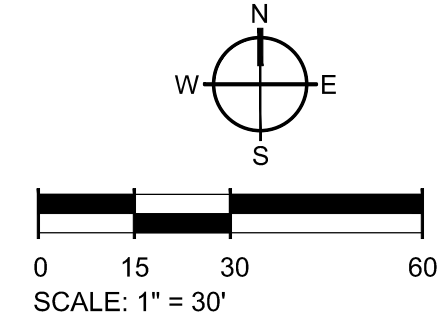
COPYRIGHT 2018 ALL RIGHTS RESERVED  
 PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

No.	Description	Date
2	ADDENDUM 1	01.31.2023
3	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

**ENLARGED GRADING PLAN**  
**C6.1**



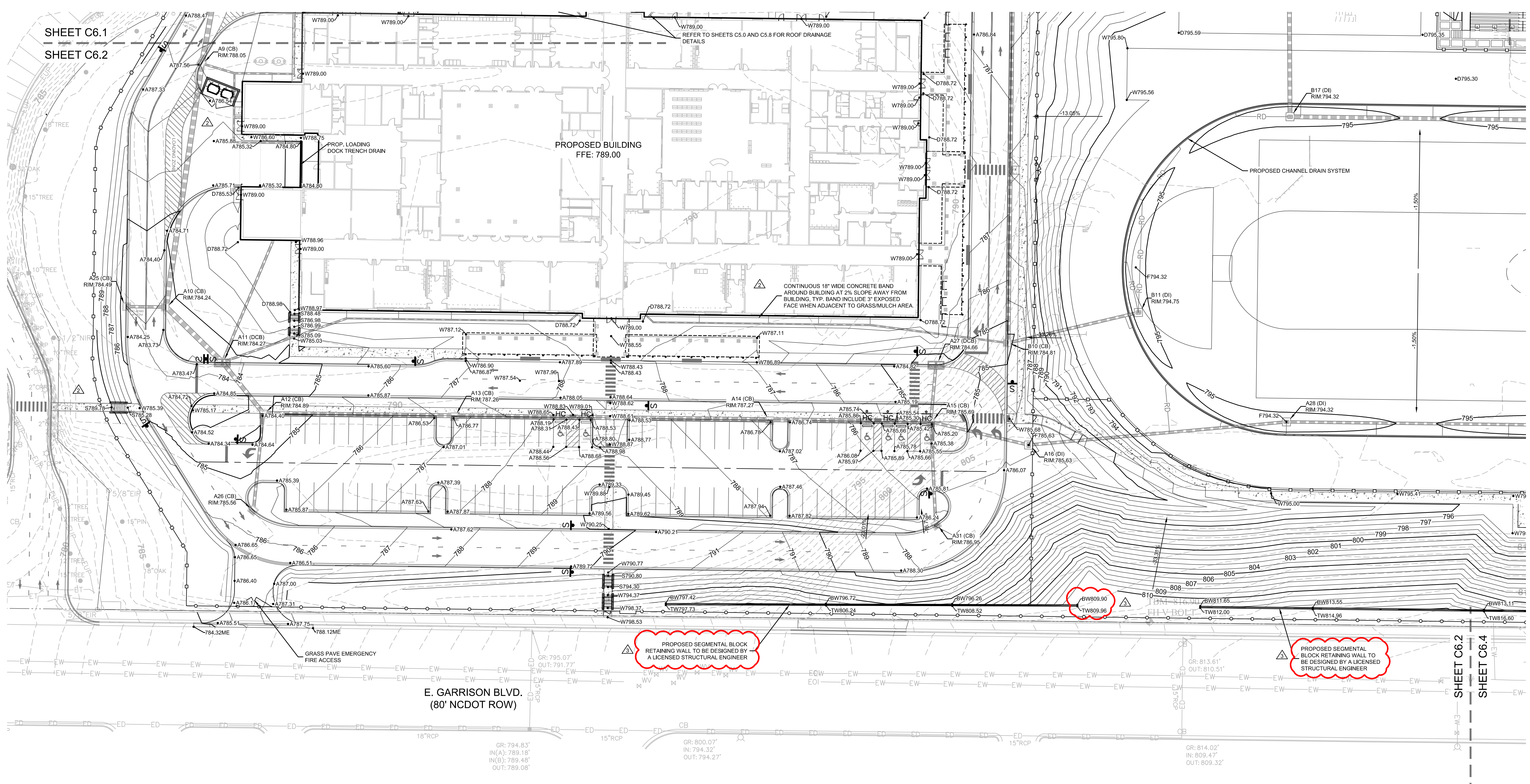
**STANDARD GRADING PLAN NOTES**

- FOR PROJECT SURVEY INFORMATION INCLUDING VERTICAL DATUM AND BENCHMARK LOCATIONS, SEE "PROJECT SURVEY INFORMATION AND CONTRACTOR VERIFICATION REQUIREMENTS" ON SHEET C1.0.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO TOPOGRAPHIC, TREE, STORM DRAINAGE FACILITIES, AND ALL UTILITIES. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES. ANY DISCREPANCIES OR CONFLICTS IDENTIFIED DURING VERIFICATION OF EXISTING CONDITIONS AND UTILITIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. ANY COSTS ASSOCIATED WITH CORRECTIVE WORK OR DAMAGES THAT ARE A RESULT OF THE CONTRACTOR NOT VERIFYING EXISTING CONDITIONS AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- REFER TO ROADWAY PLAN & PROFILE SHEETS, DRAINAGE PLAN SHEETS, AND ROADWAY & DRAINAGE DETAIL SHEETS FOR ADDITIONAL DRAINAGE AND GRADING INFORMATION AND REQUIREMENTS.
- REFER TO THE "SPOT ELEVATION KEY" FOR INFORMATION ON SPOT ELEVATIONS.
- COORDINATE WITH THE OWNER AND THE PROJECT GEOTECHNICAL CONSULTANT FOR LOT FILL COMPACTION AND TESTING REQUIREMENTS.
- CONTRACTOR TO SELF-VERIFY THAT SITE GRADES, PONDS, POND DIKES, DRAINAGE PIPES, AND DRAINAGE STRUCTURES ARE CONSTRUCTED PER THE PLANS PRIOR TO REQUESTING FINAL AS-BUILT SURVEY FROM SURVEYOR.

**SPOT ELEV KEY (FINISHED GRADING)**

- A-(ASPHALT) SURFACE OF FINISHED ASPHALT ROADWAY OR WALKING PATH
- C-(CONCRETE) CONCRETE PAVING
- D-(DIRT) FINISHED GROUND ELEVATION
- F-(FLOW) ELEVATION AT WHICH SURFACE WATER FLOWS INTO DRAINAGE STRUCTURE
- G-(GUTTER) SURFACE OF FINISHED GUTTER AT LOWEST POINT (ALONG WATER FLOW PATH)
- W-(WALK) SURFACE OF FINISHED CONCRETE OR INTERLOCKING PAVEMENT SIDEWALK, PATIO, PLAZA, OR SLAB
- TC - TOP OF CURB ELEVATION
- BC - BOTTOM OF CURB ELEVATION
- TS - TOP OF STAIRS ELEVATION
- BS - BOTTOM OF STAIRS ELEVATION
- TW - FINISHED GRADE ELEVATION AT TOP OF WALL
- BW - FINISHED GRADE ELEVATION AT BOTTOM OF WALL
- ME-(MATCH EXISTING) FOLLOWING ELEVATION NUMBER - INDICATES TO MATCH ELEVATION OF EXISTING SURFACE AT POINT OF CONNECTION

EXAMPLE: A12.55ME MEANS THAT THE SURFACE OF NEW ASPHALT IS TO BE AT ELEVATION 12.56 WHICH SHOULD MATCH THE ELEVATION OF THE EXISTING ASPHALT SURFACE AT THE JOINT



**GRIER MIDDLE SCHOOL REPLACEMENT**

**SW SEAMONWHITESIDE**  
 MOUNT PLEASANT, SC 843.884.1667  
 GREENVILLE, SC 864.296.0534  
 SUMMERVILLE, SC 843.972.0710  
 SPARTANBURG, SC 864.272.1272  
 CHARLOTTE, NC 980.312.5450  
 WWW.SEAMONWHITESIDE.COM



227 WEST TRADE STREET SUITE 700  
 CHARLOTTE, NORTH CAROLINA 28202  
 TEL. 704.333.6666 FAX 704.333.2926  
 WWW.LS3P.COM



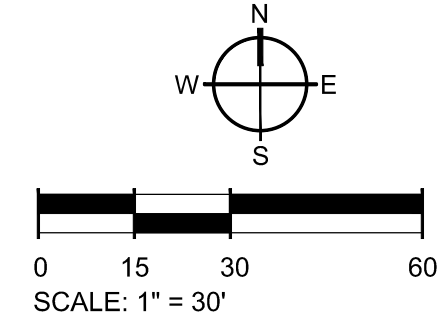
COPYRIGHT 2018 ALL RIGHTS RESERVED  
 PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

No.	Description	Date
2	ADDENDUM 1	01.31.2023
3	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

**ENLARGED GRADING PLAN**  
**C6.2**



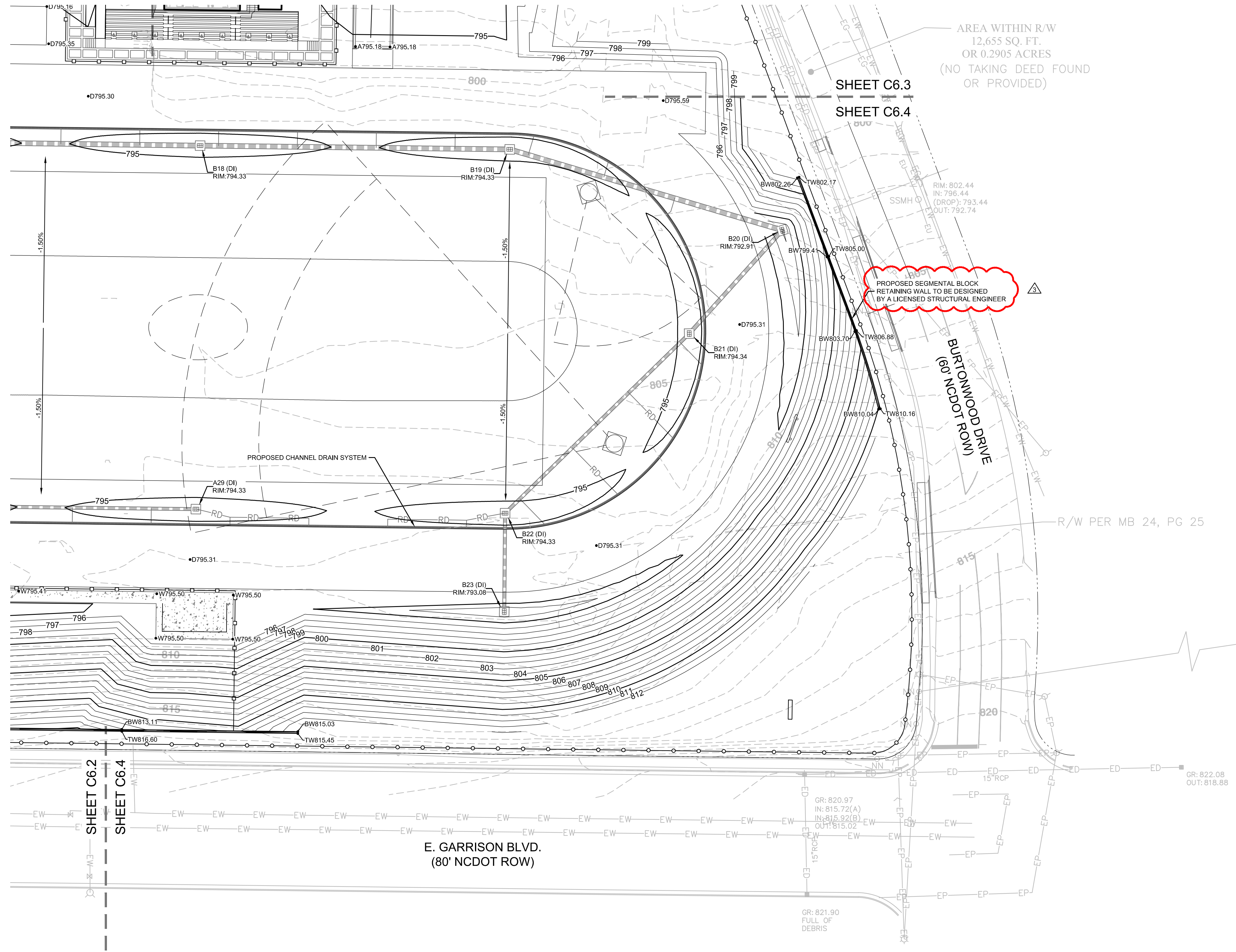
STANDARD GRADING PLAN NOTES

- FOR PROJECT SURVEY INFORMATION INCLUDING VERTICAL DATUM AND BENCHMARK LOCATIONS, SEE "PROJECT SURVEY INFORMATION AND CONTRACTOR VERIFICATION REQUIREMENTS" ON SHEET C1.0.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO TOPOGRAPHIC, TREE, STORM DRAINAGE FACILITIES, AND ALL UTILITIES. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES. ANY DISCREPANCIES OR CONFLICTS IDENTIFIED DURING VERIFICATION OF EXISTING CONDITIONS AND UTILITIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. ANY COSTS ASSOCIATED WITH CORRECTIVE WORK OR DAMAGES THAT ARE A RESULT OF THE CONTRACTOR NOT VERIFYING EXISTING CONDITIONS AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- REFER TO ROADWAY PLAN & PROFILE SHEETS, DRAINAGE PLAN SHEETS, AND ROADWAY & DRAINAGE DETAIL SHEETS FOR ADDITIONAL DRAINAGE AND GRADING INFORMATION AND REQUIREMENTS.
- REFER TO THE "SPOT ELEVATION KEY" FOR INFORMATION ON SPOT ELEVATIONS.
- COORDINATE WITH THE OWNER AND THE PROJECT GEOTECHNICAL CONSULTANT FOR LOT FILL COMPACTION AND TESTING REQUIREMENTS.
- CONTRACTOR TO SELF-VERIFY THAT SITE GRADES, PONDS, POND DIKES, DRAINAGE PIPES, AND DRAINAGE STRUCTURES ARE CONSTRUCTED PER THE PLANS PRIOR TO REQUESTING FINAL AS-BUILT SURVEY FROM SURVEYOR.

SPOT ELEV KEY (FINISHED GRADING)

- A-(ASPHALT) SURFACE OF FINISHED ASPHALT ROADWAY OR WALKING PATH
- C-(CONCRETE) CONCRETE PAVING
- D-(DIRT) FINISHED GROUND ELEVATION
- F-(FLOW) ELEVATION AT WHICH SURFACE WATER FLOWS INTO DRAINAGE STRUCTURE
- G-(GUTTER) SURFACE OF FINISHED GUTTER AT LOWEST POINT (ALONG WATER FLOW PATH)
- W-(WALK) SURFACE OF FINISHED CONCRETE OR INTERLOCKING PAVEMENT SIDEWALK, PATIO, PLAZA, OR SLAB
- TS - TOP OF STAIRS ELEVATION
- SS - BOTTOM OF STAIRS ELEVATION
- TW - FINISHED GRADE ELEVATION AT TOP OF WALL
- BW - FINISHED GRADE ELEVATION AT BOTTOM OF WALL
- ME-(MATCH EXISTING) FOLLOWING ELEVATION NUMBER - INDICATES TO MATCH ELEVATION OF EXISTING SURFACE AT POINT OF CONNECTION

EXAMPLE: A12.56ME MEANS THAT THE SURFACE OF NEW ASPHALT IS TO BE AT ELEVATION 12.56 WHICH SHOULD MATCH THE ELEVATION OF THE EXISTING ASPHALT SURFACE AT THE JOINT



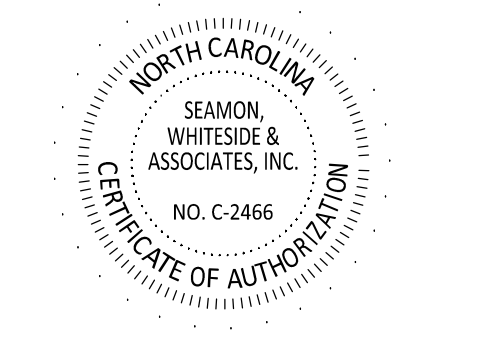
GRIER MIDDLE SCHOOL REPLACEMENT

**SW**  
SEAMONWHITESIDE

MOUNT PLEASANT, SC 843.884.1667  
GREENVILLE, SC 864.296.0534  
SUMMERVILLE, SC 843.972.0710  
SPARTANBURG, SC 864.272.1272  
CHARLOTTE, NC 980.312.5450  
WWW.SEAMONWHITESIDE.COM



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL. 704.333.6686 FAX 704.333.2926  
WWW.LS3P.COM



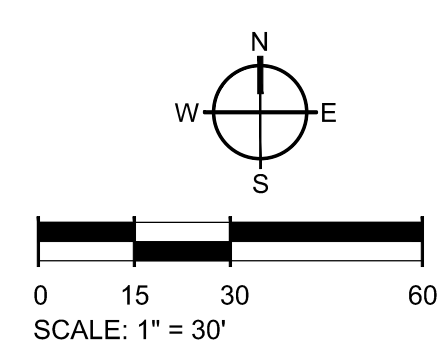
COPYRIGHT 2018 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

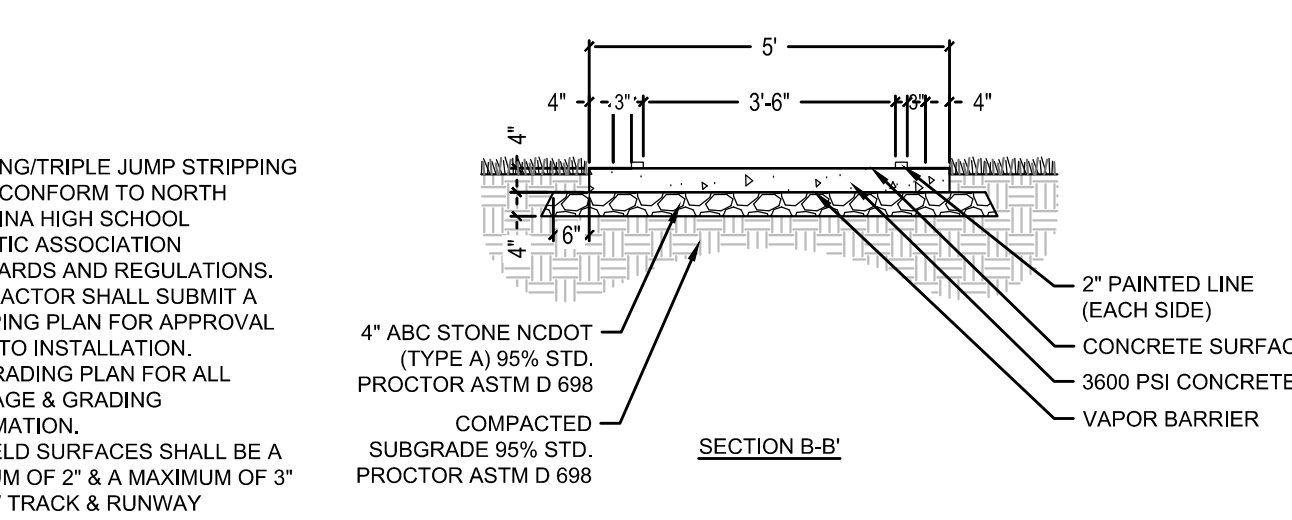
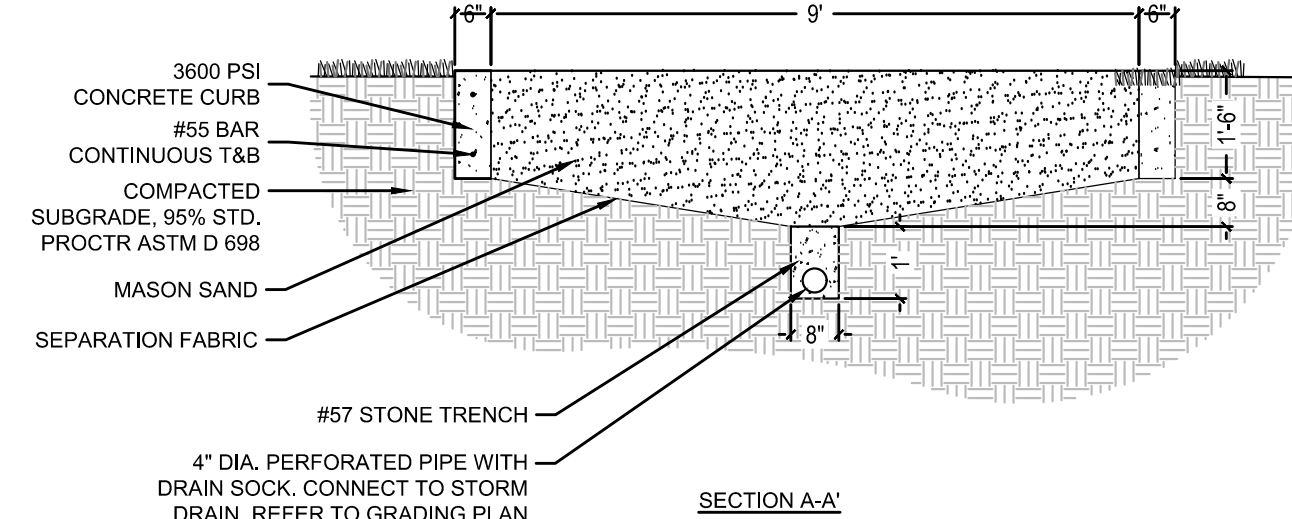
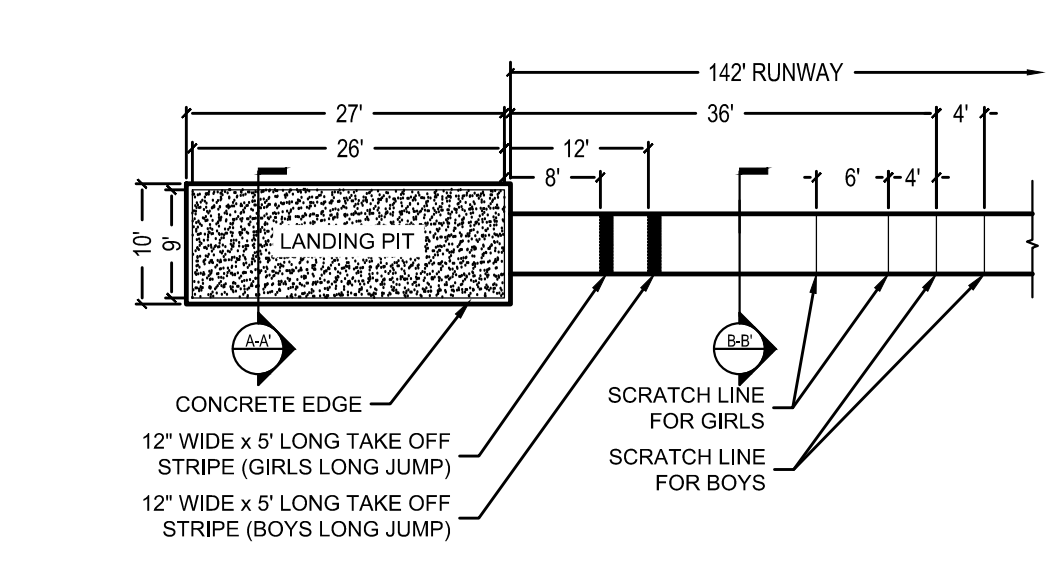
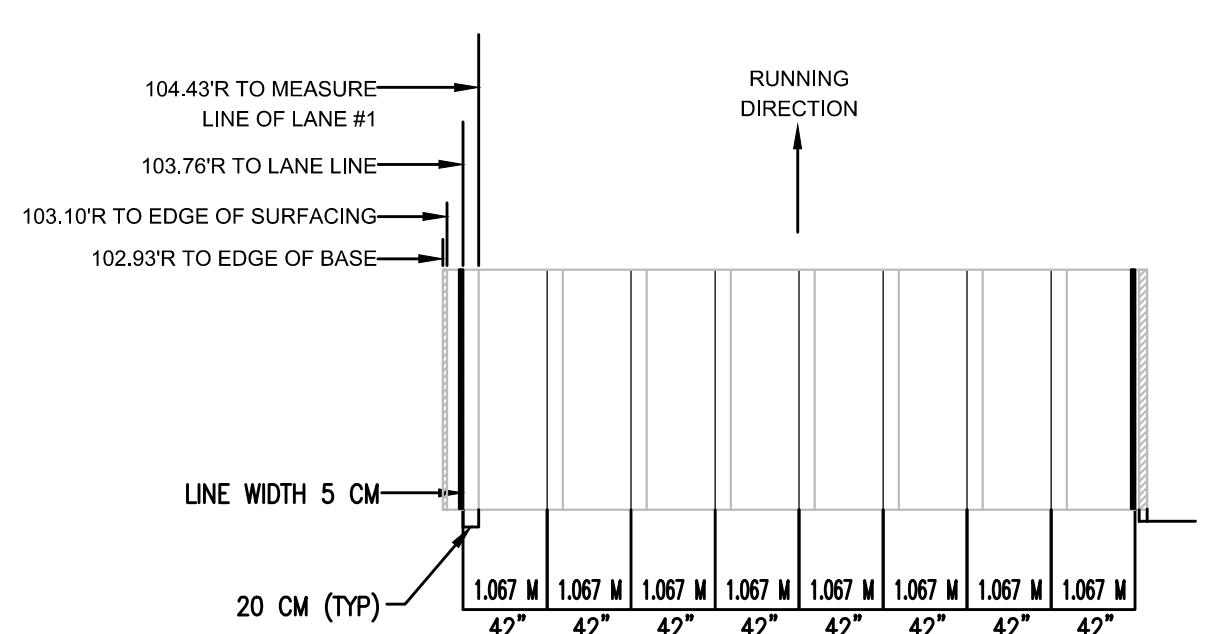
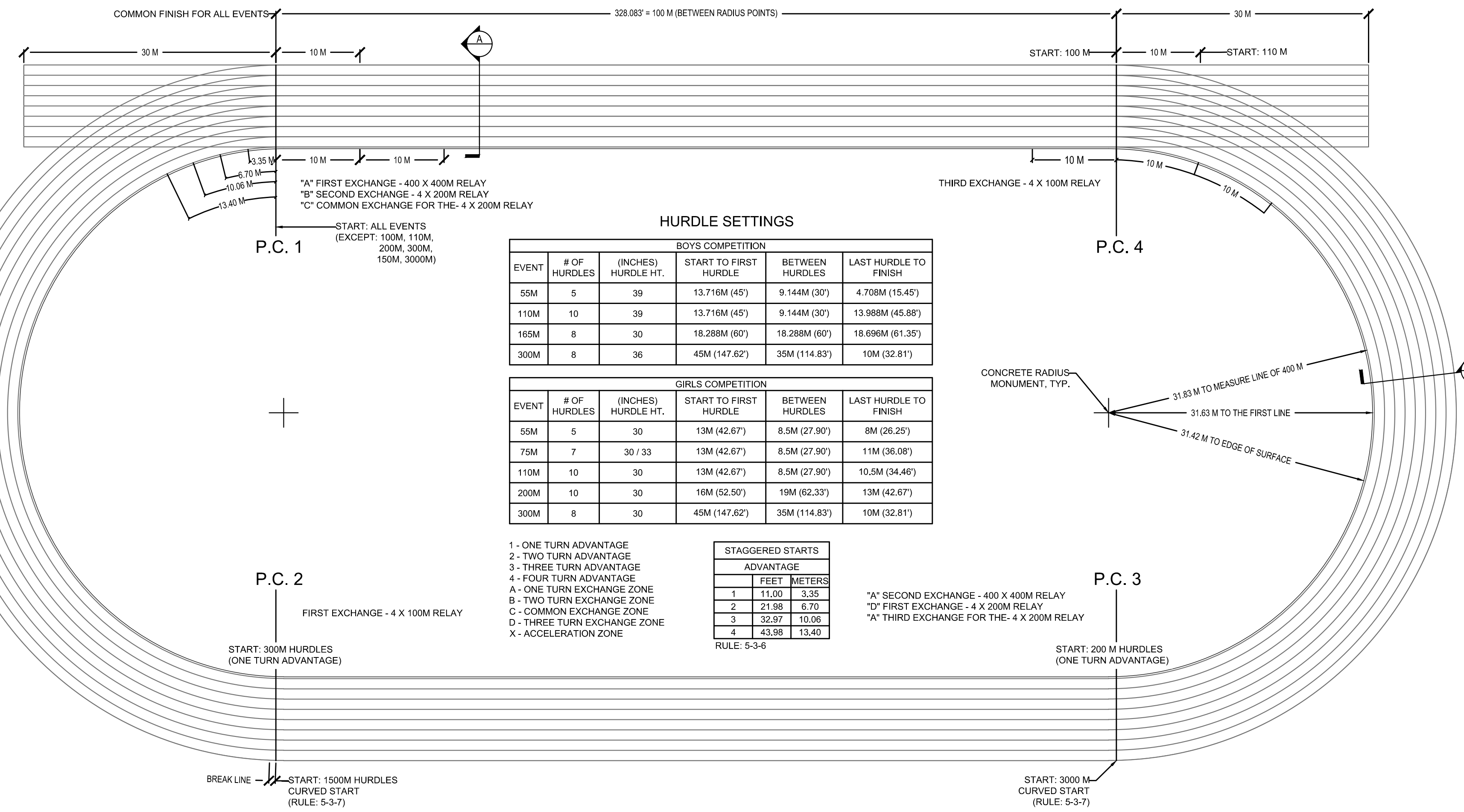
No.	Description	Date
2	ADDENDUM 1	01.31.2023
3	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
DATE: 01-12-2023  
DRAWN BY: MEM  
CHECKED BY: TNC

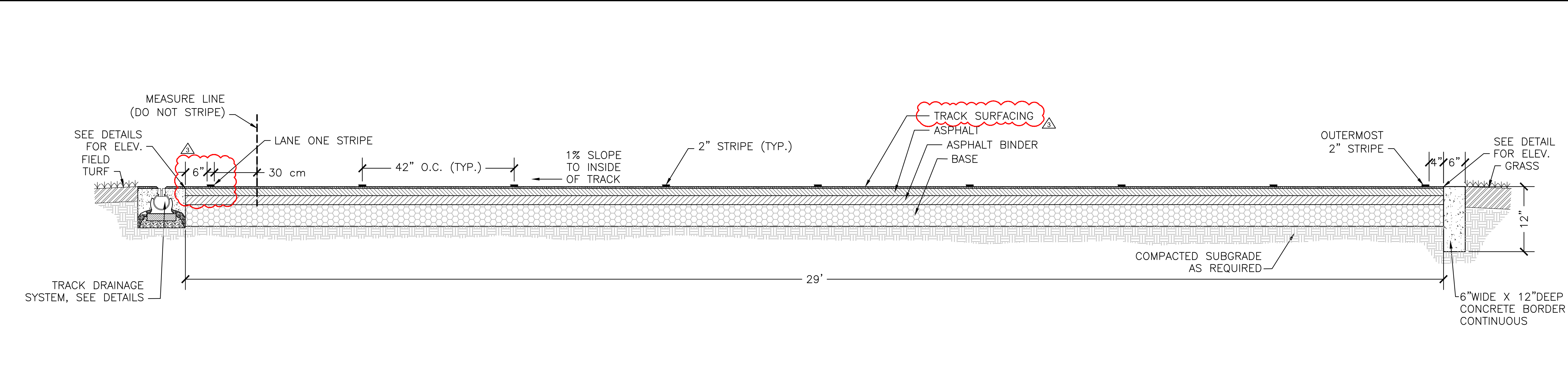
ENLARGED GRADING PLAN  
**C6.4**



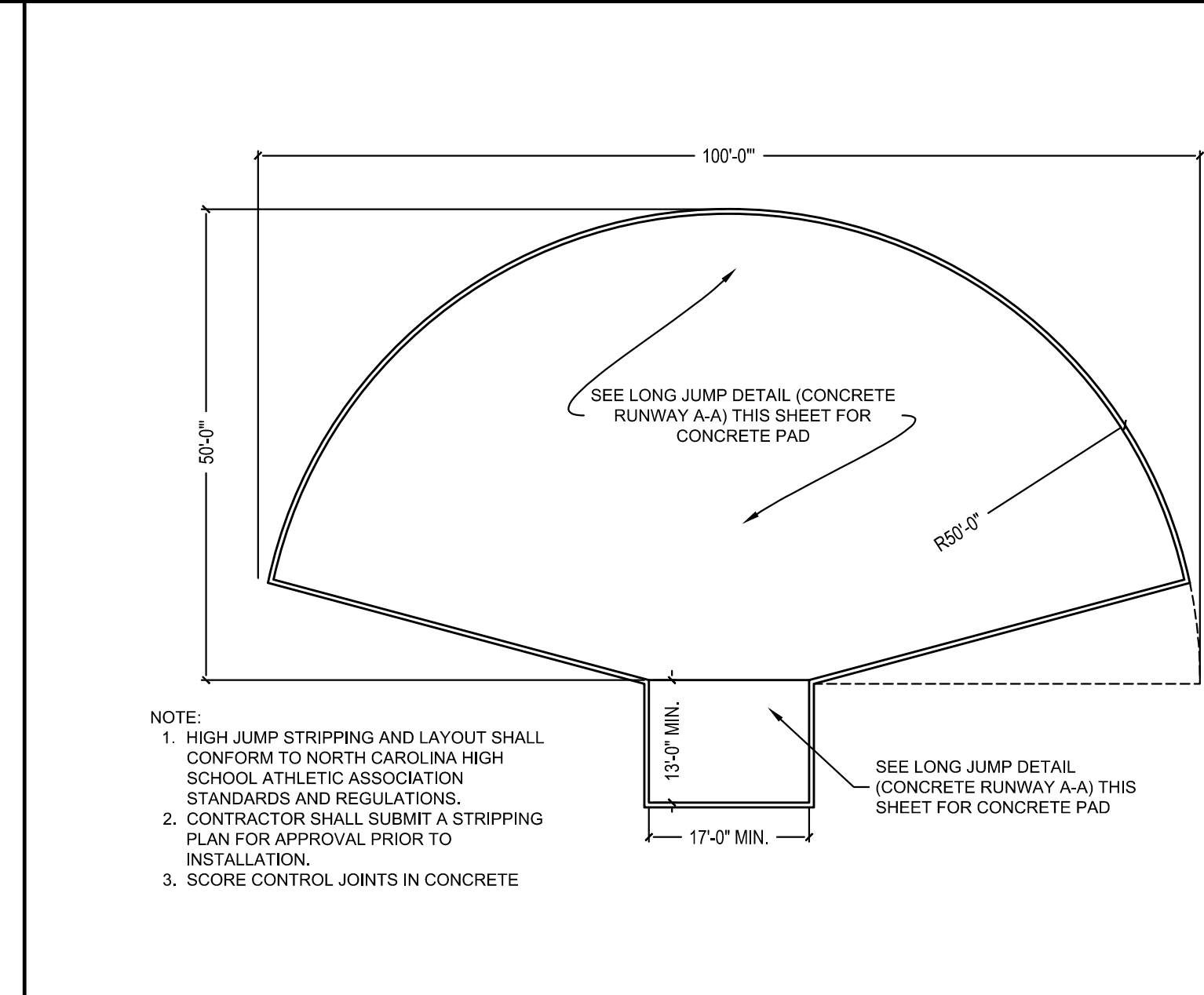
400 METER TRACK EVENT MARKINGS LAYOUT



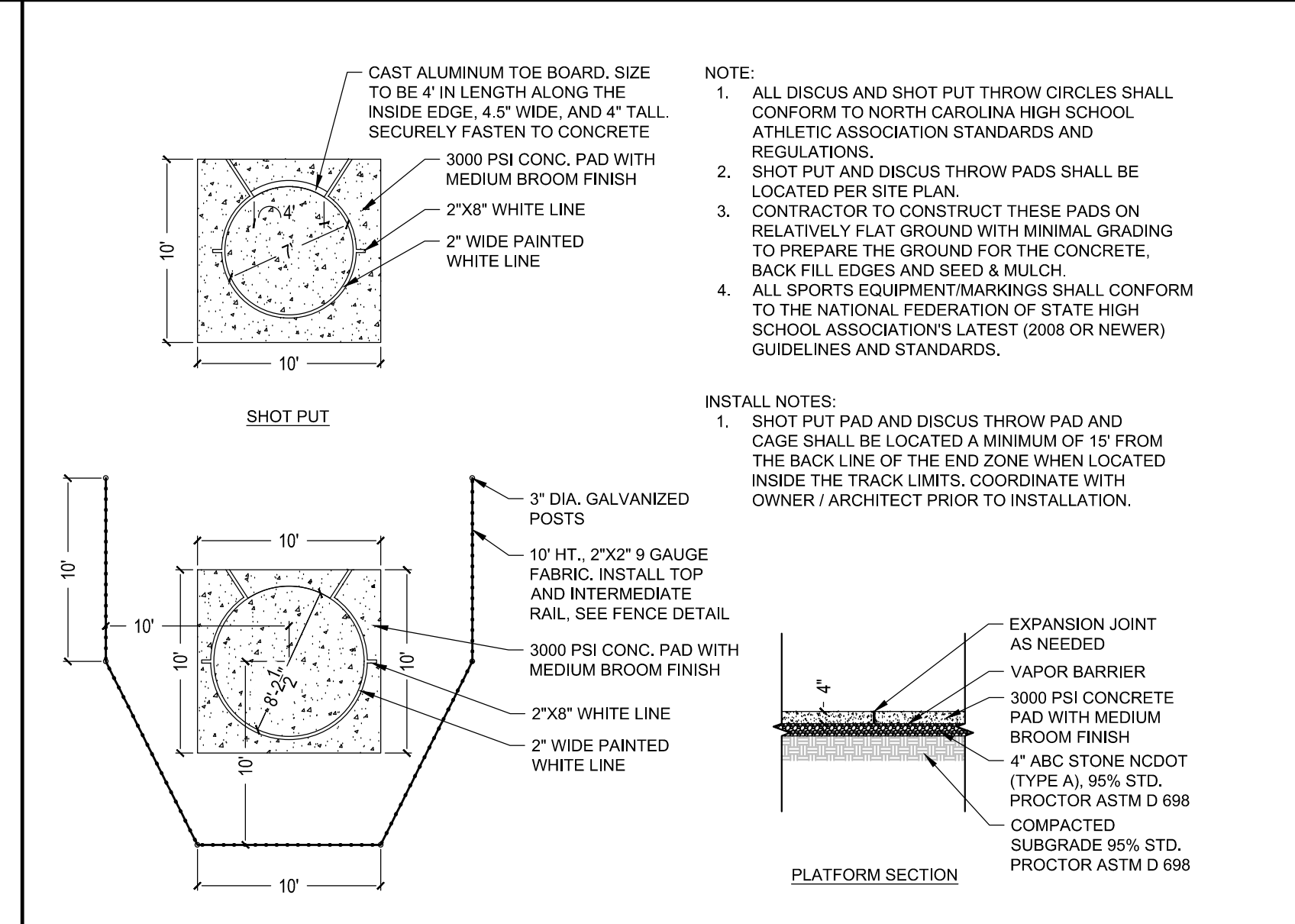
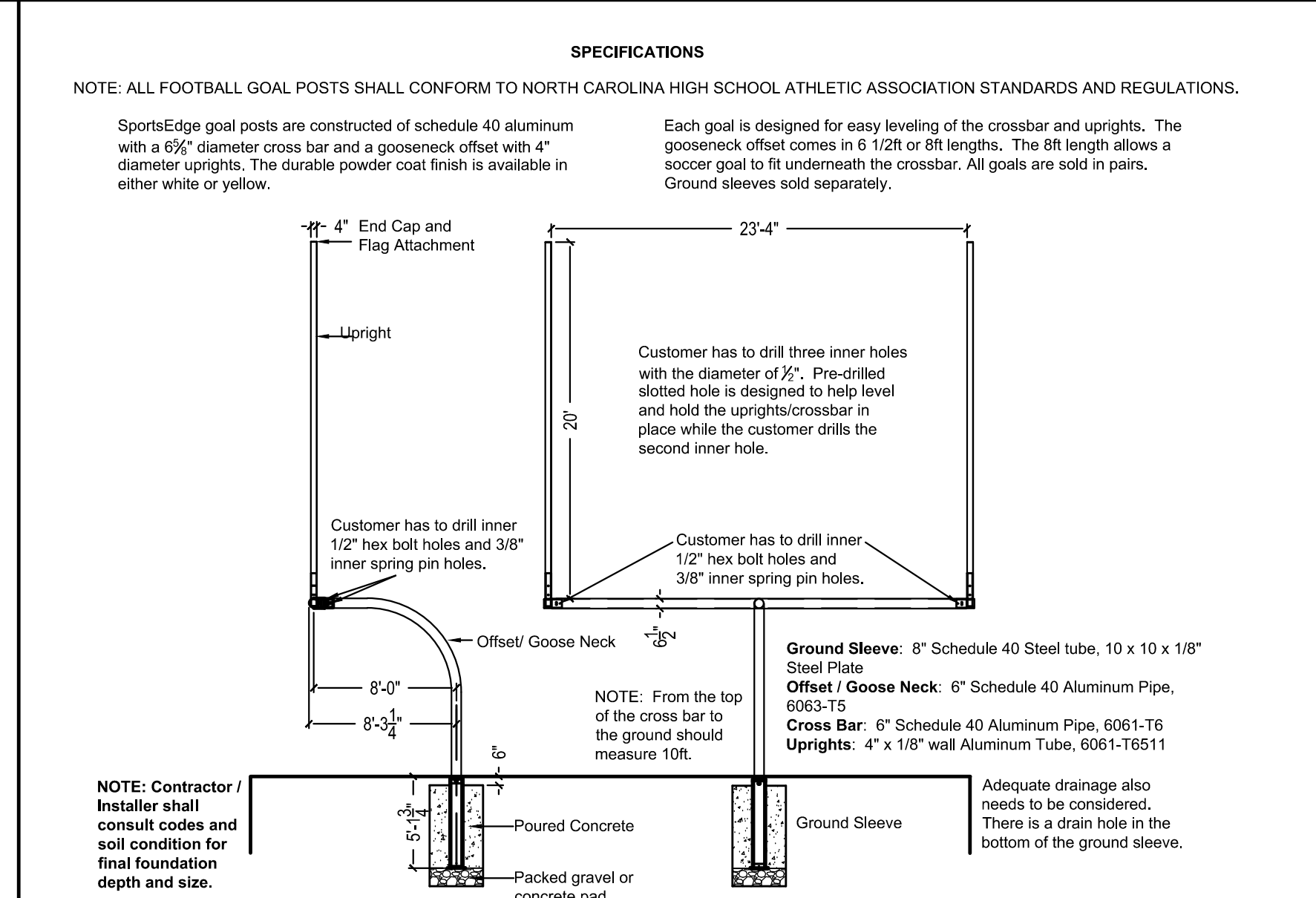
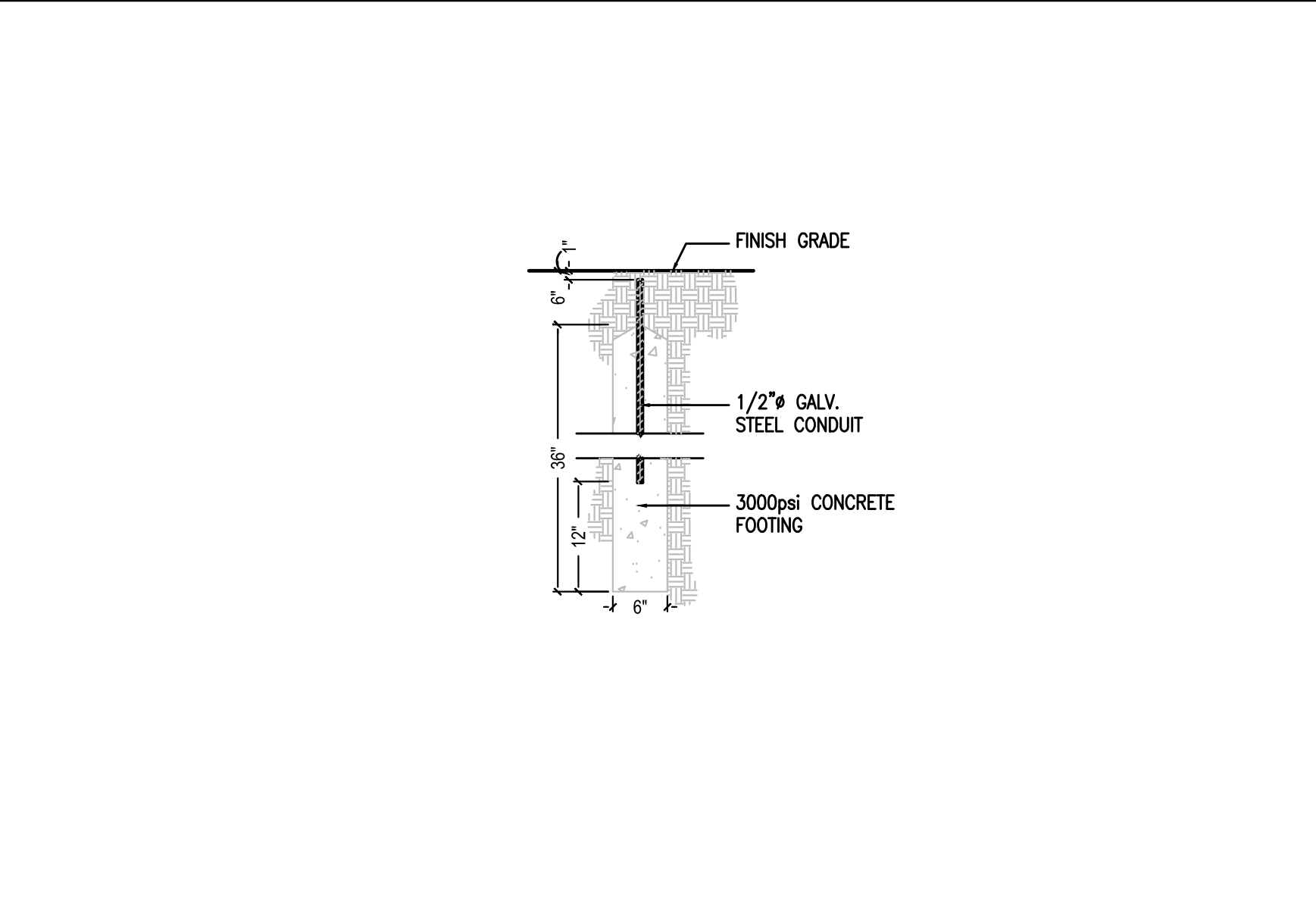
1 400 METER TRACK AND FIELD  
SCALE: 1/32"=1'-1"



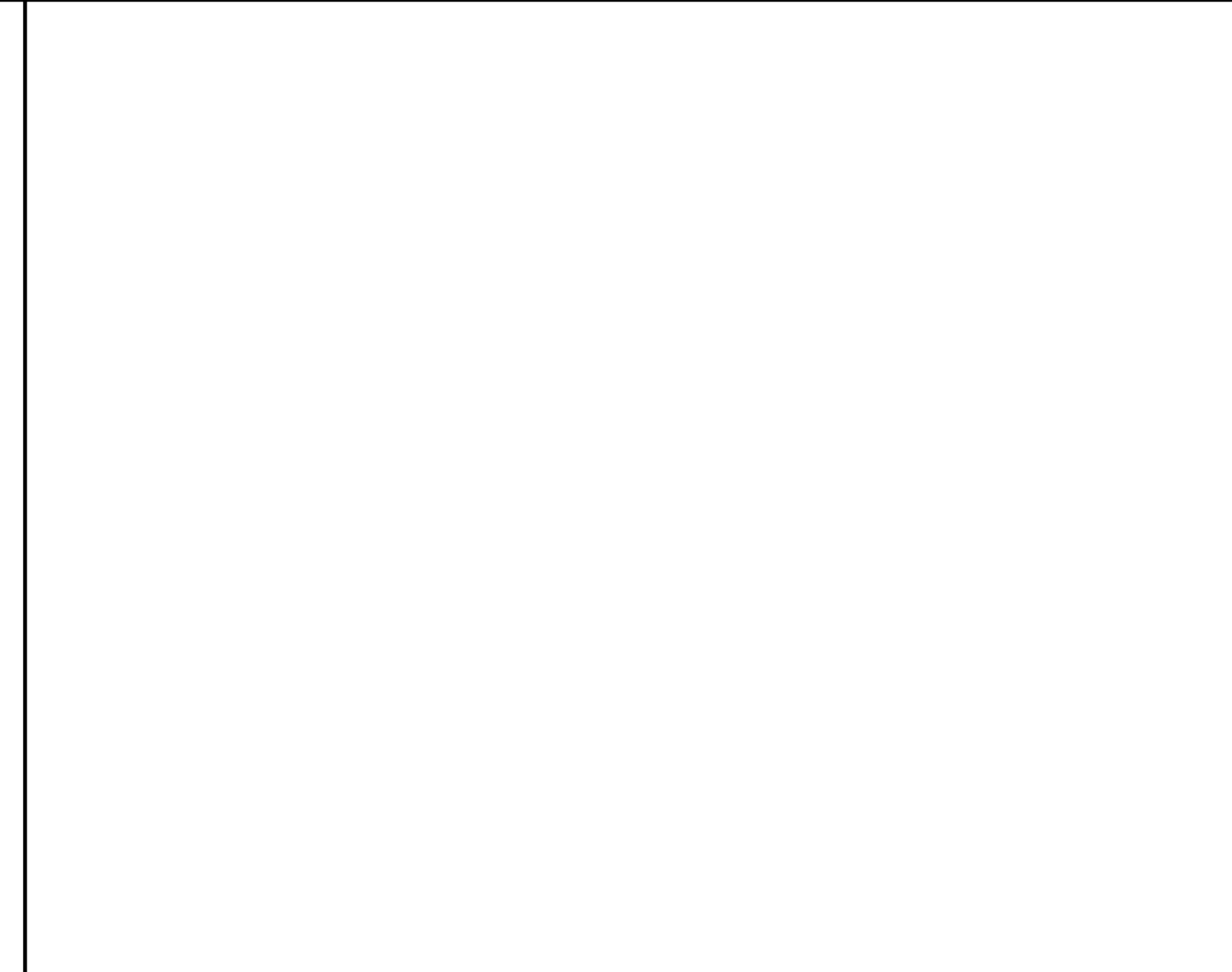
7 LONG/TRIPLE JUMP SECTIONS  
SCALE: 3/8"=1'-0"



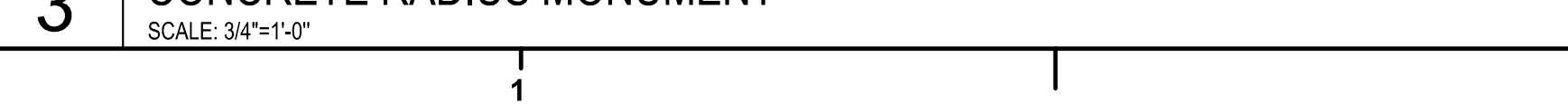
2 TRACK SECTION  
SCALE: 3/4"=1'-0"



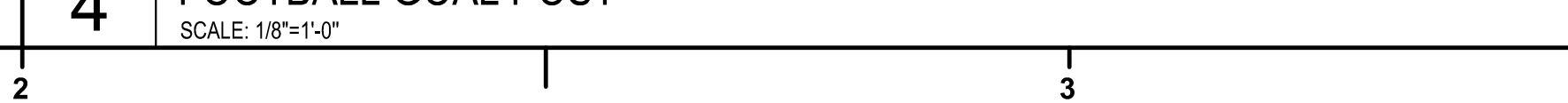
8 HIGH JUMP PLAN  
SCALE: 1/16"=1'-0"



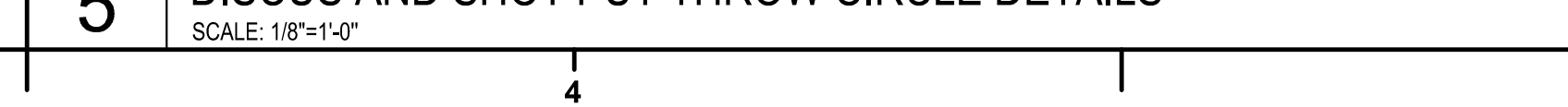
3 CONCRETE RADIUS MONUMENT  
SCALE: 3/4"=1'-0"



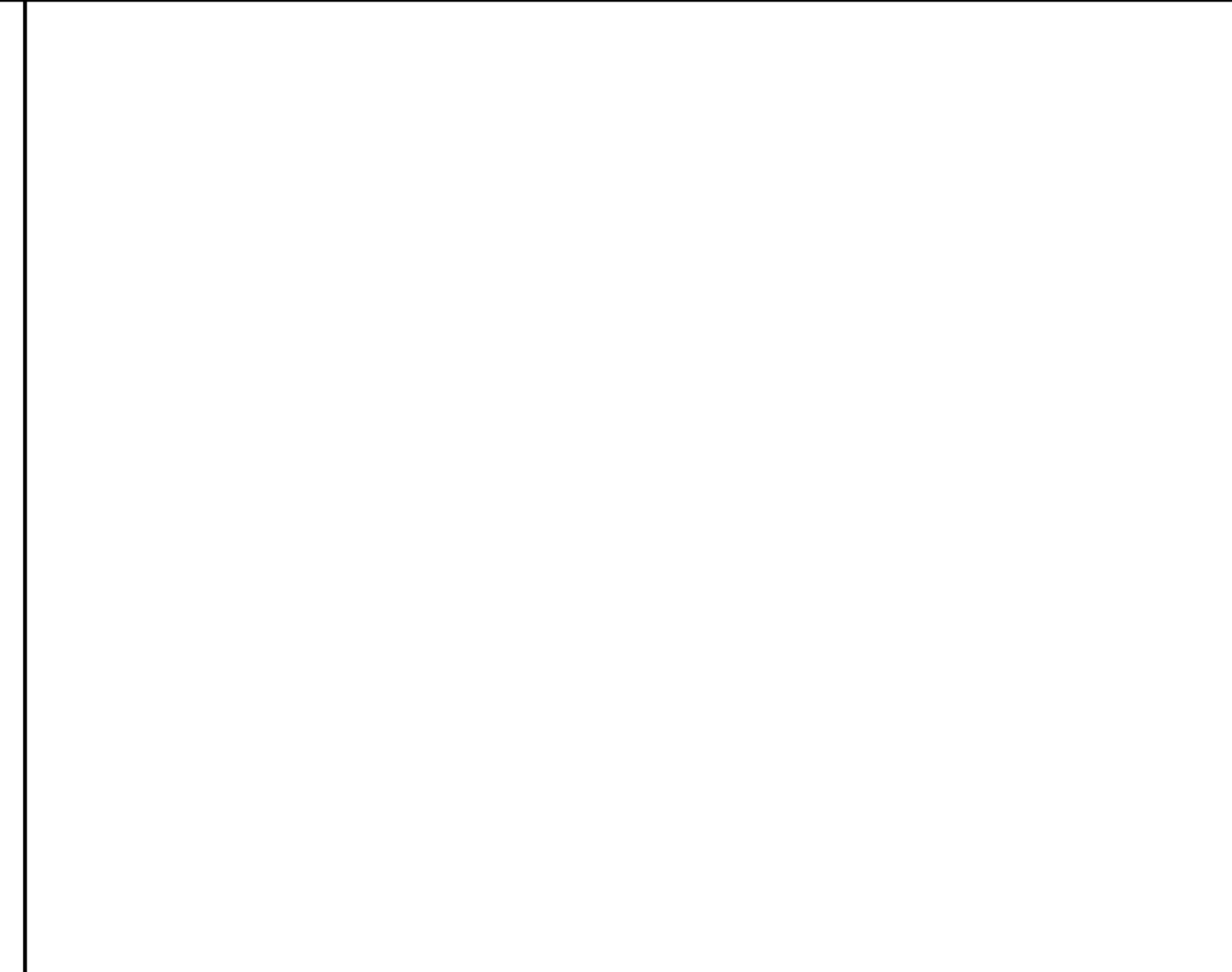
4 FOOTBALL GOAL POST  
SCALE: 1/8"=1'-4"



5 DISCUS AND SHOT PUT THROW CIRCLE DETAILS  
SCALE: 1/8"=1'-4"



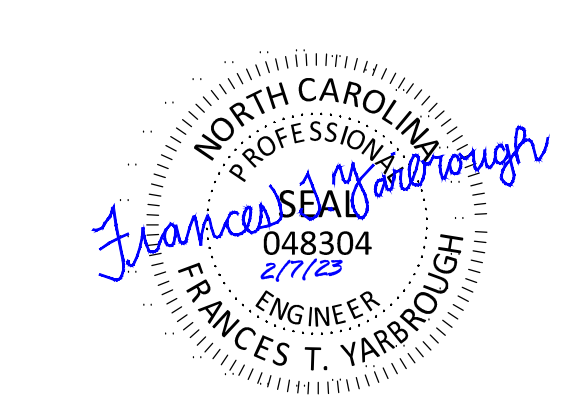
8 HIGH JUMP PLAN  
SCALE: 1/16"=1'-0"



GRIER MIDDLE SCHOOL REPLACEMENT

SW SEAMONWHITESIDE  
MOUNT PLEASANT, SC  
GREENVILLE, SC  
SUMMERVILLE, SC  
SPARTANBURG, SC  
CHARLOTTE, NC

LS3P  
227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL. 704.333.6686 FAX 704.333.2926  
WWW.LS3P.COM



COPYRIGHT 2018 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

No.	Description	Date
1	ADDENDUM 1	01.31.2023
2	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
DATE: 01-12-2023  
DRAWN BY: MEM  
CHECKED BY: TNC

SITE DETAILS  
C7.2



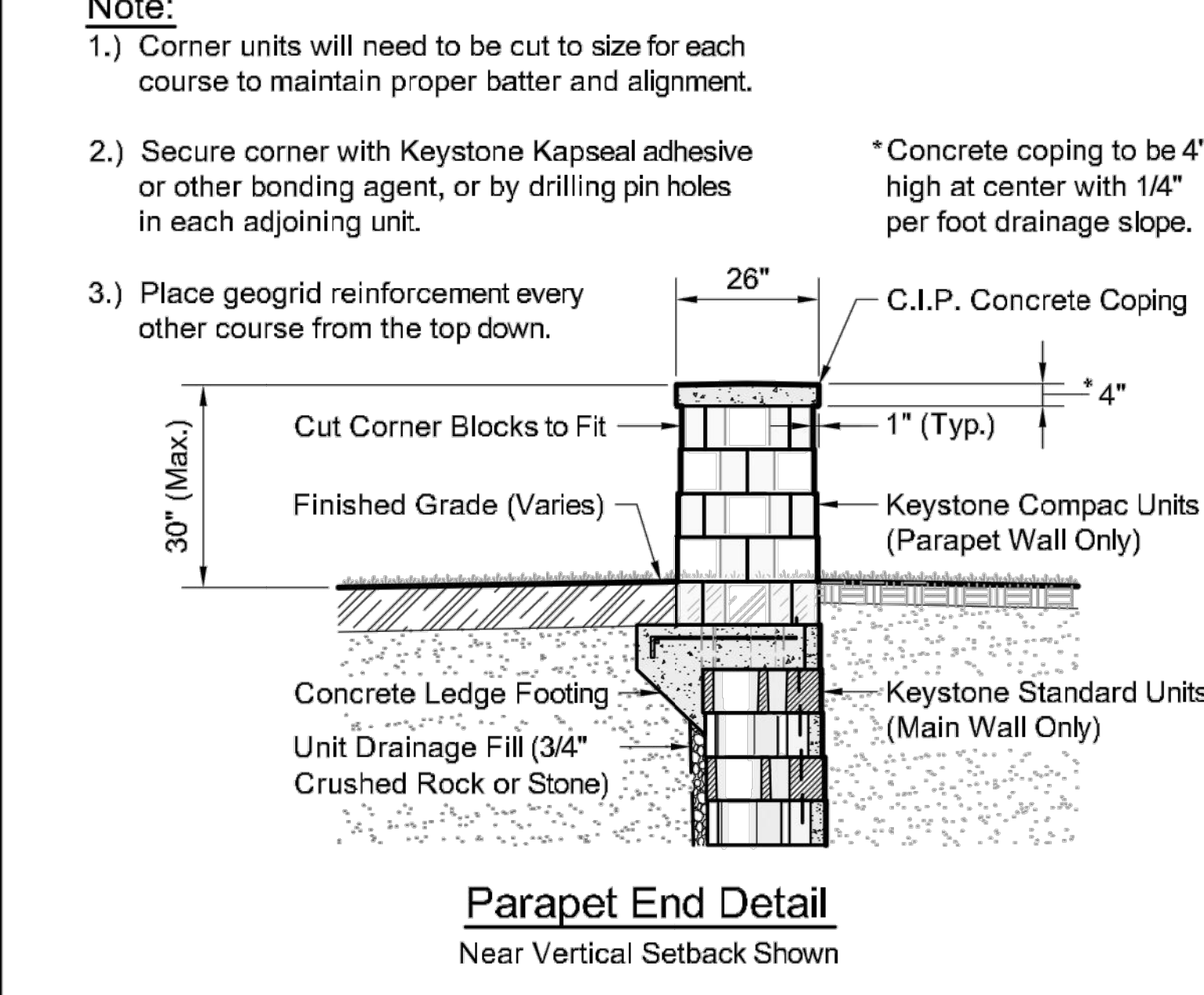
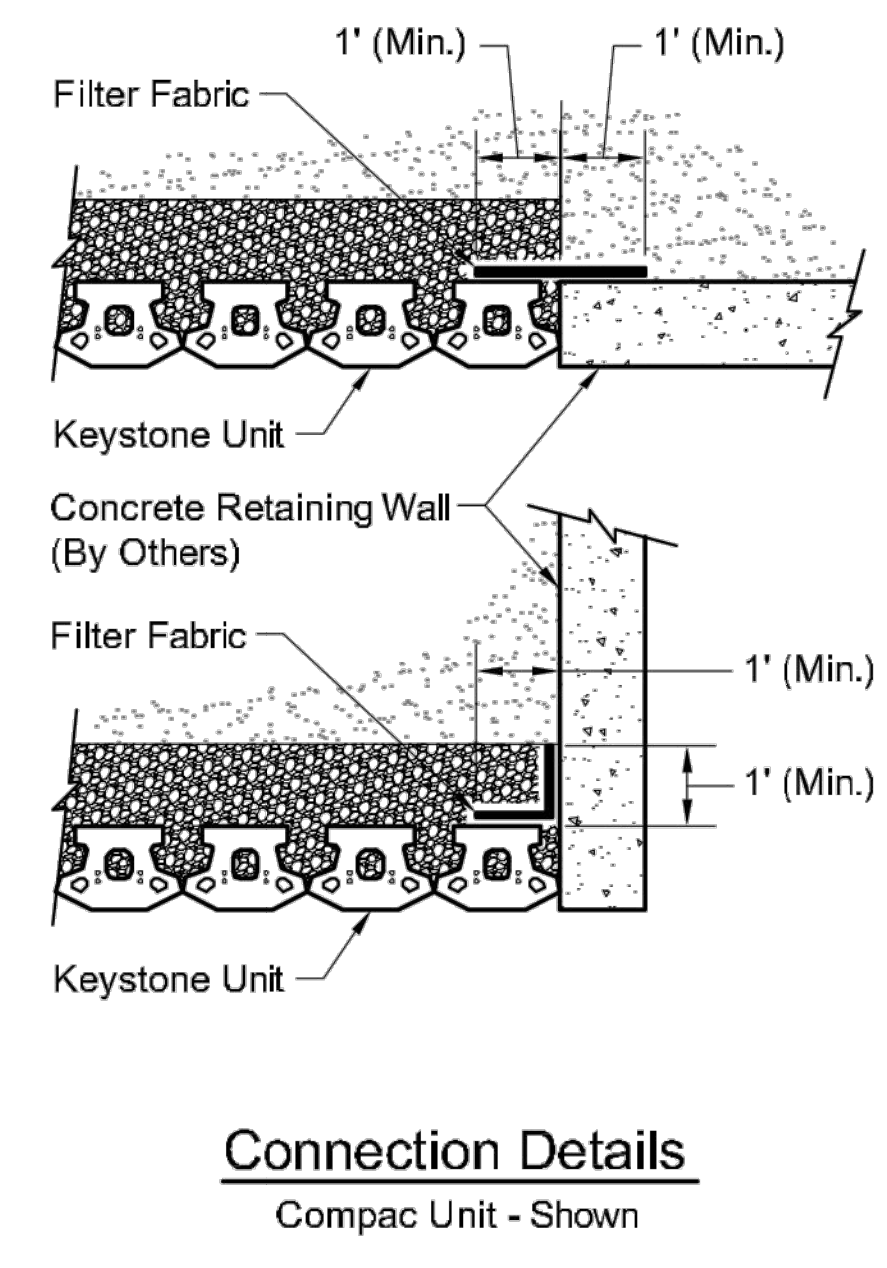
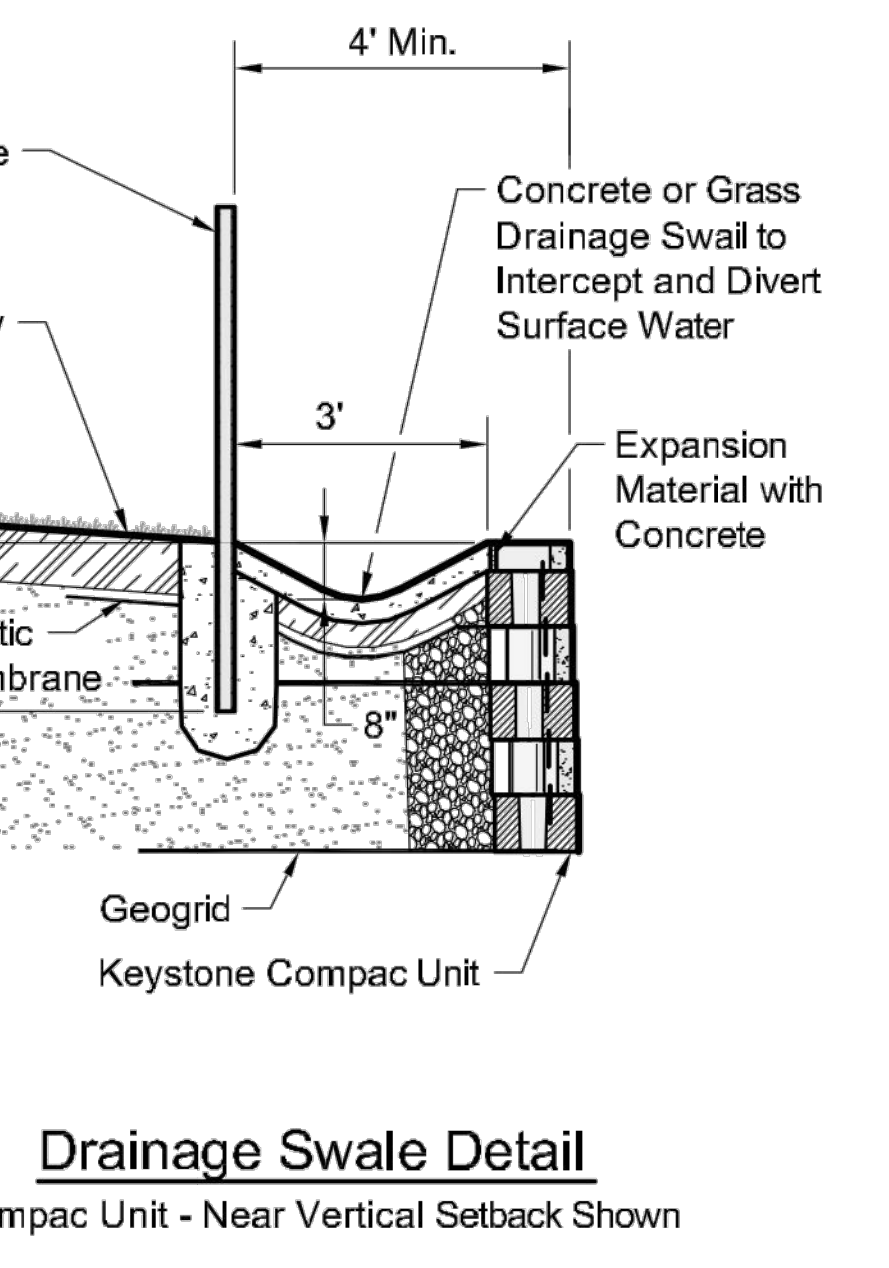
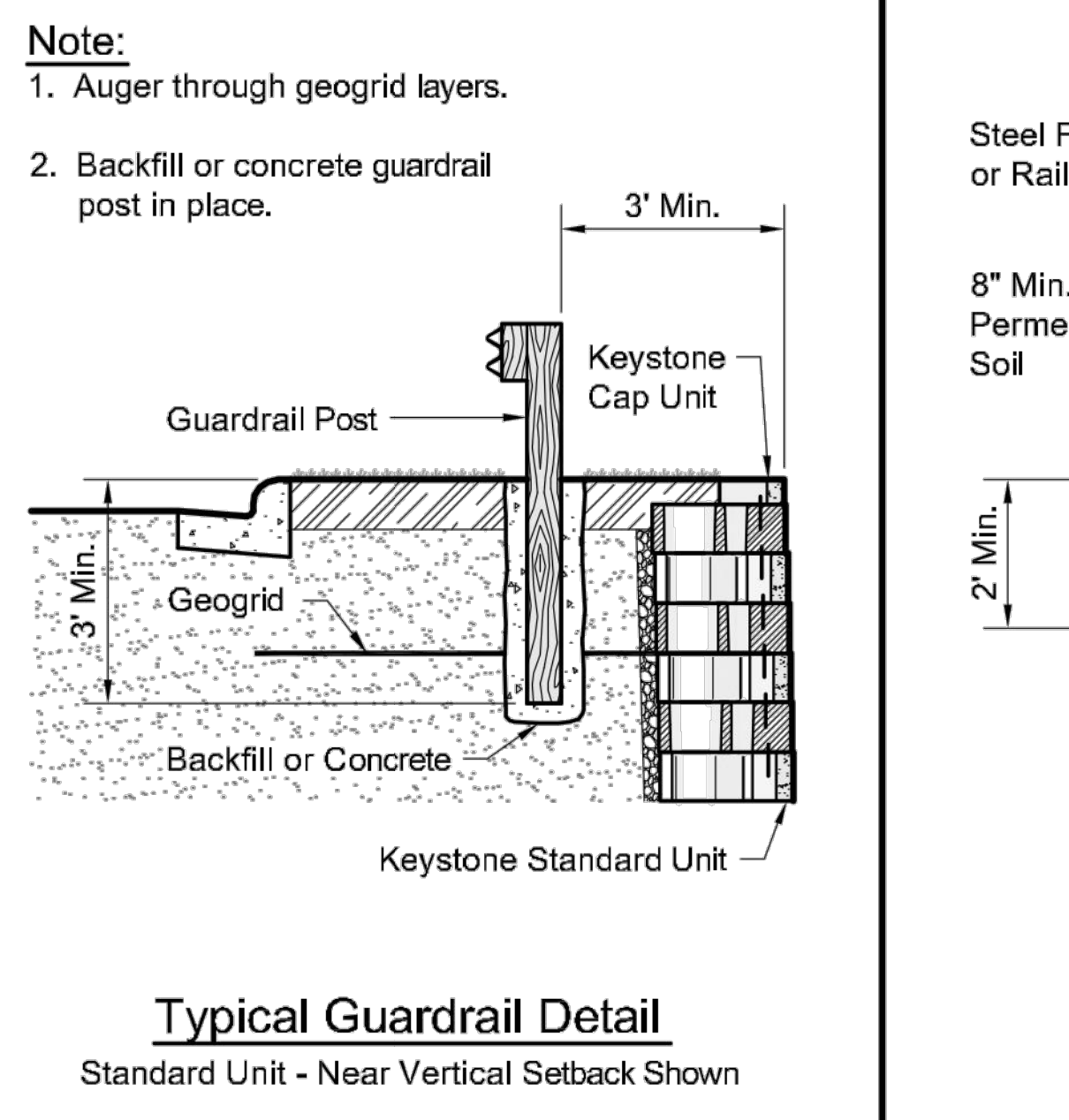
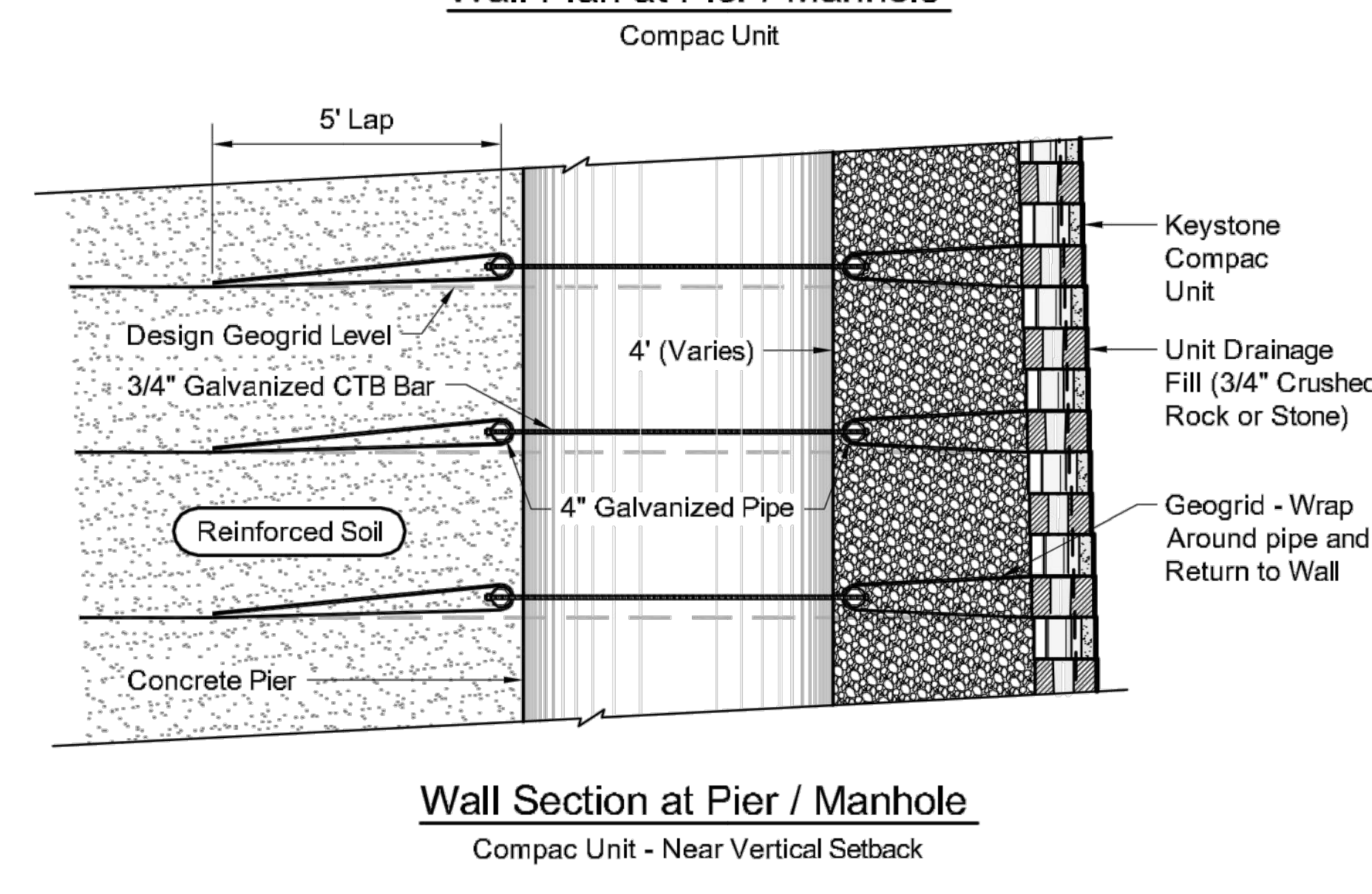
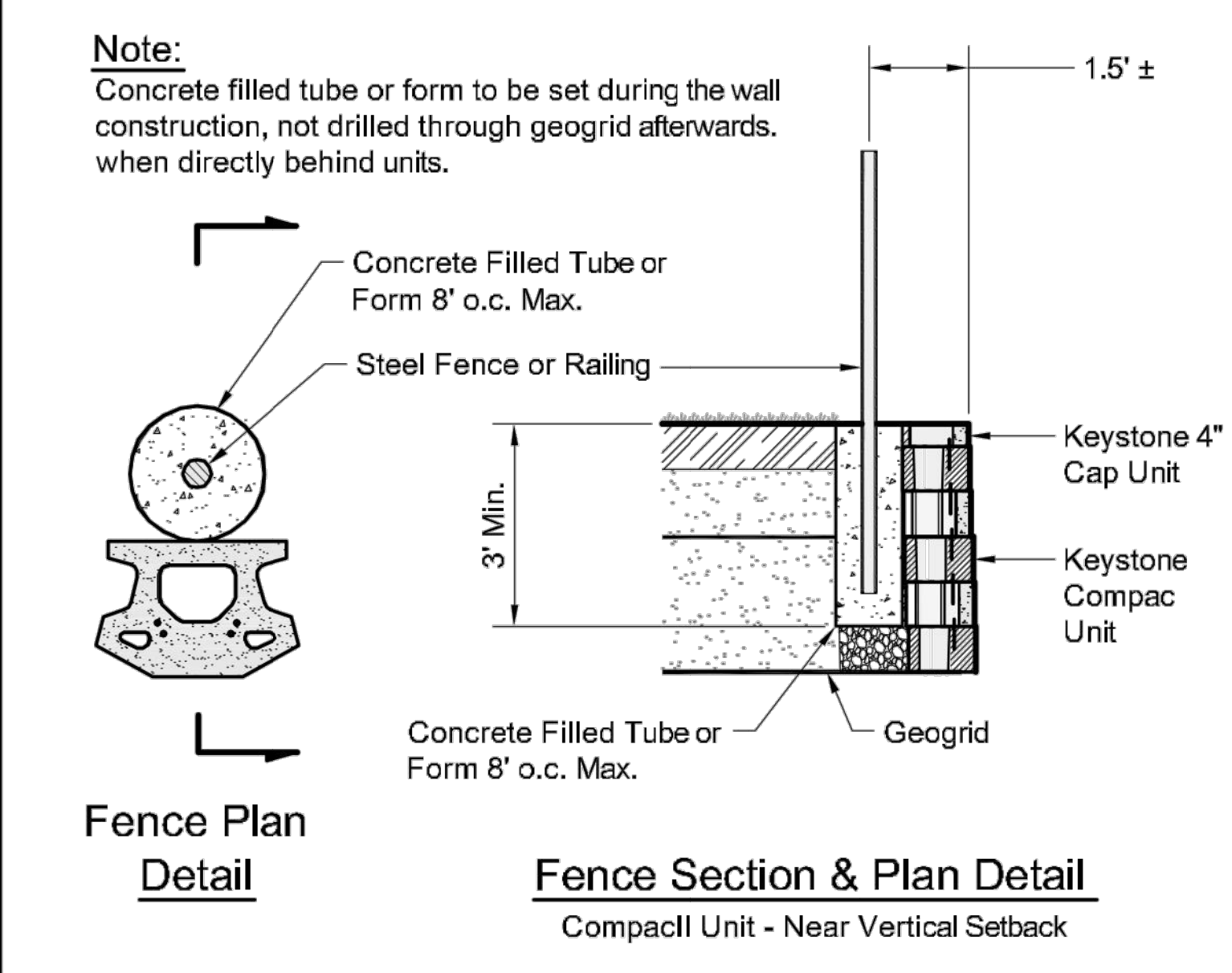
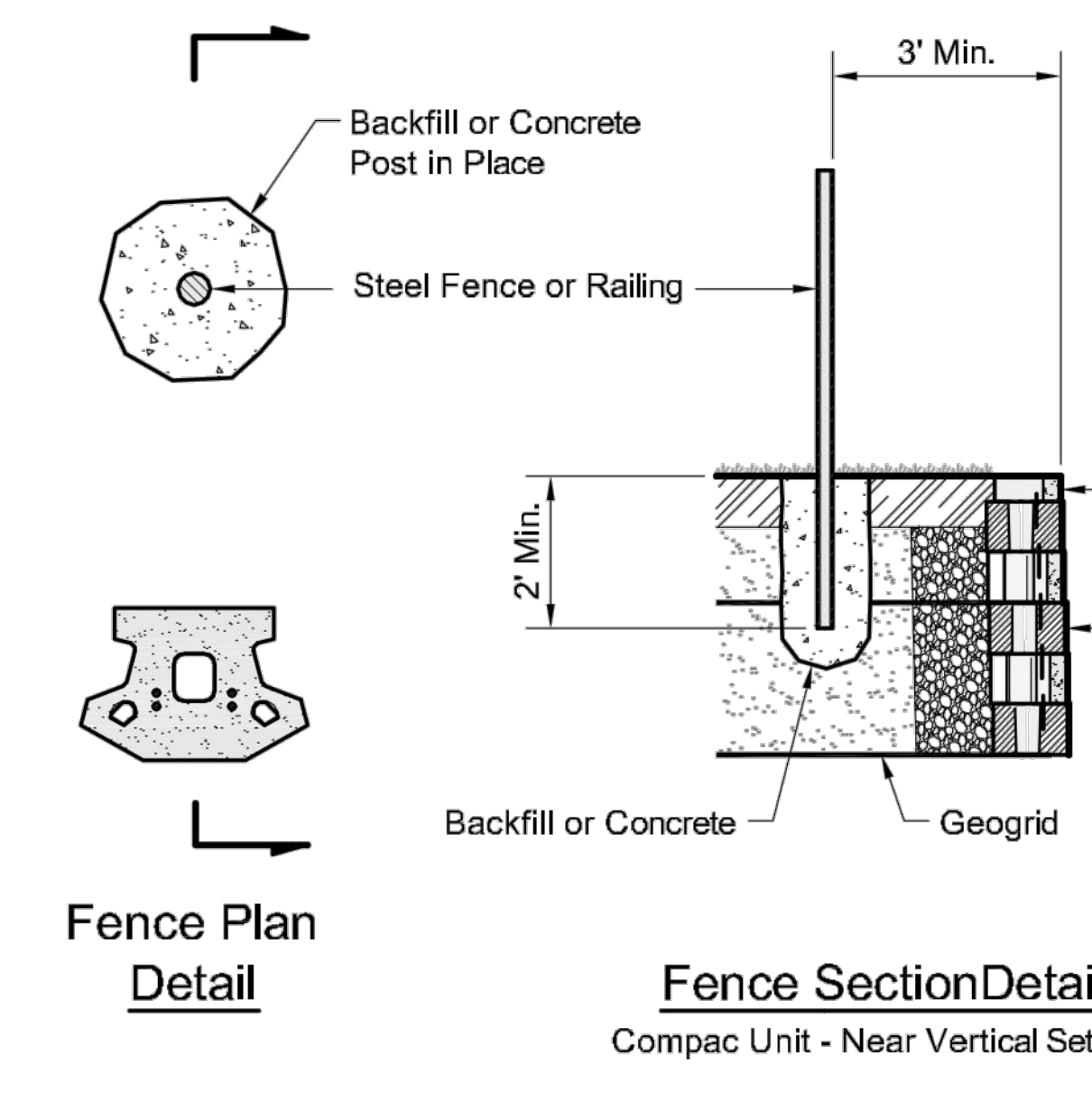
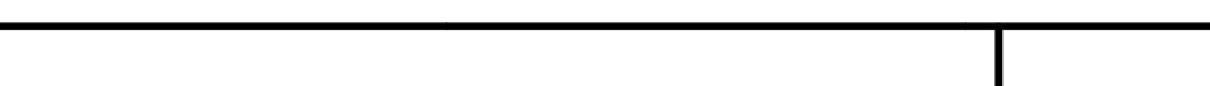
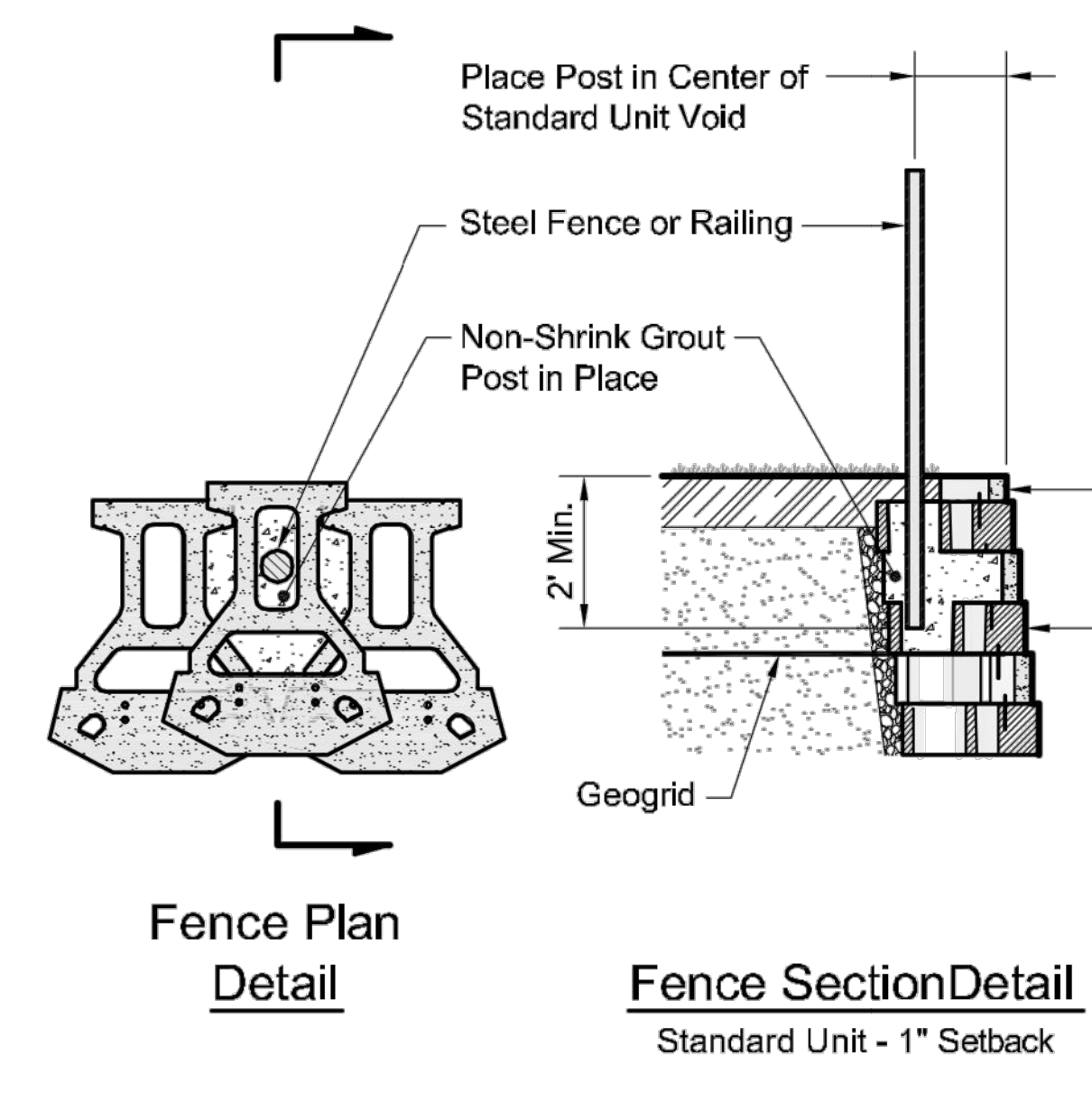
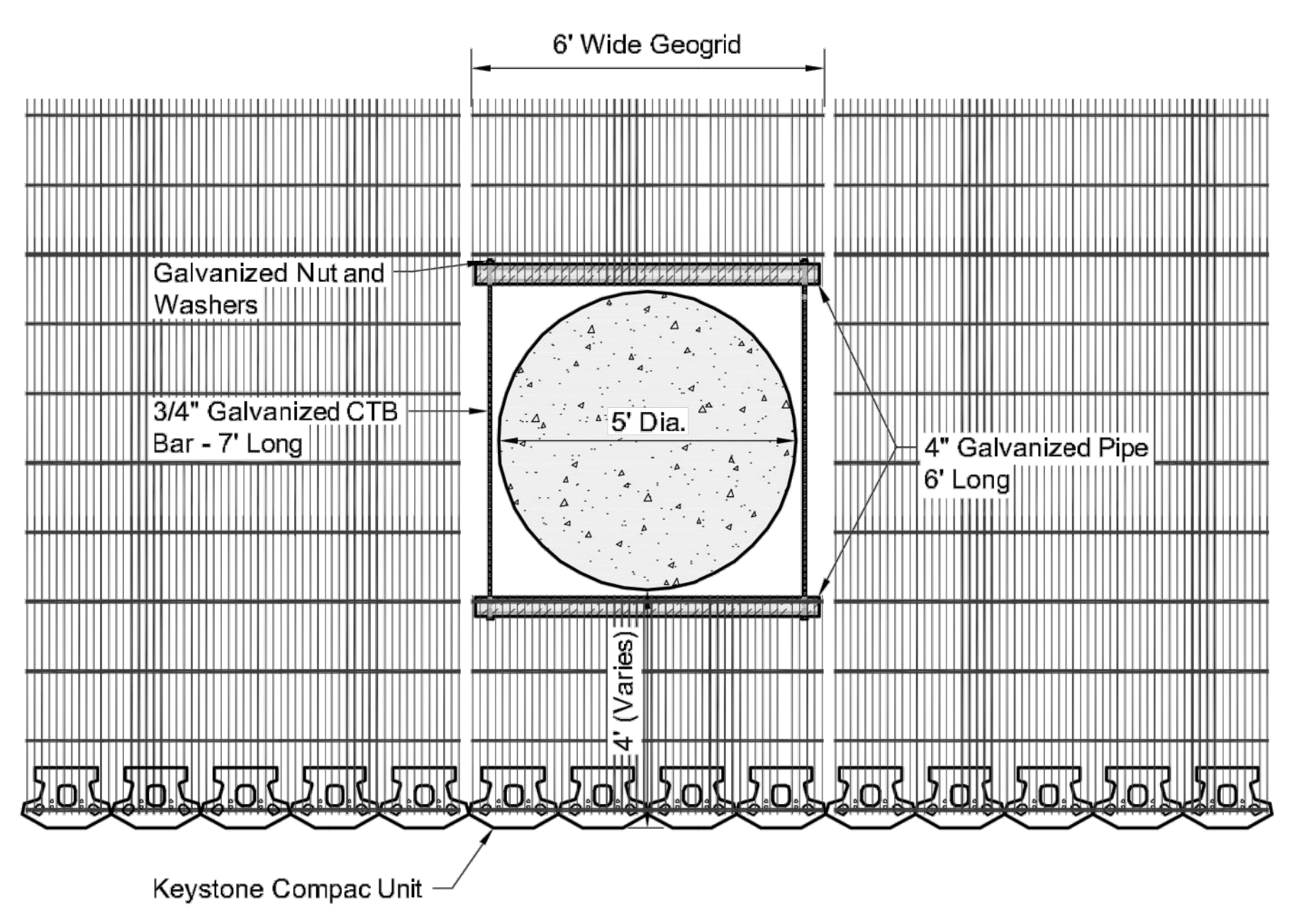
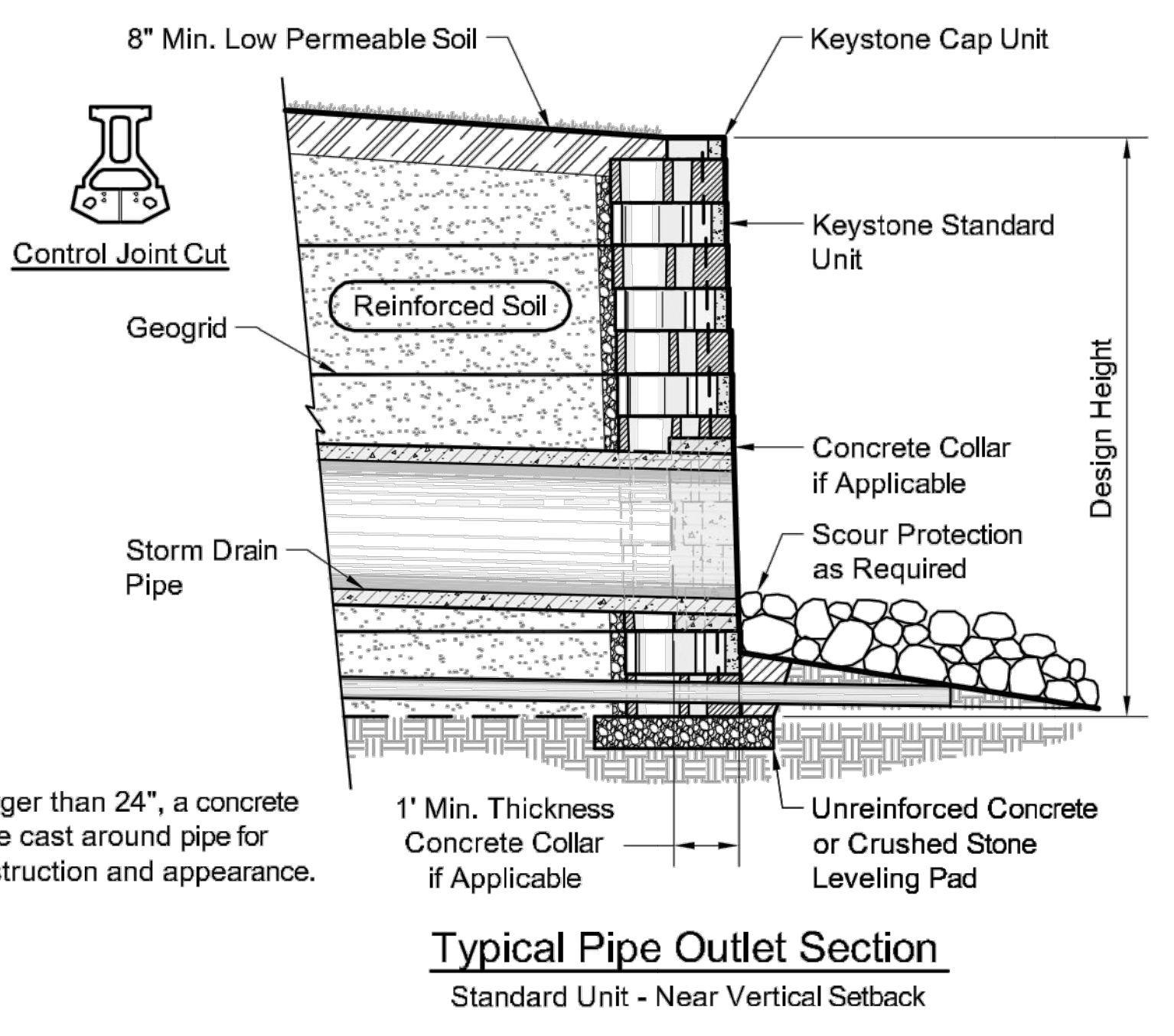
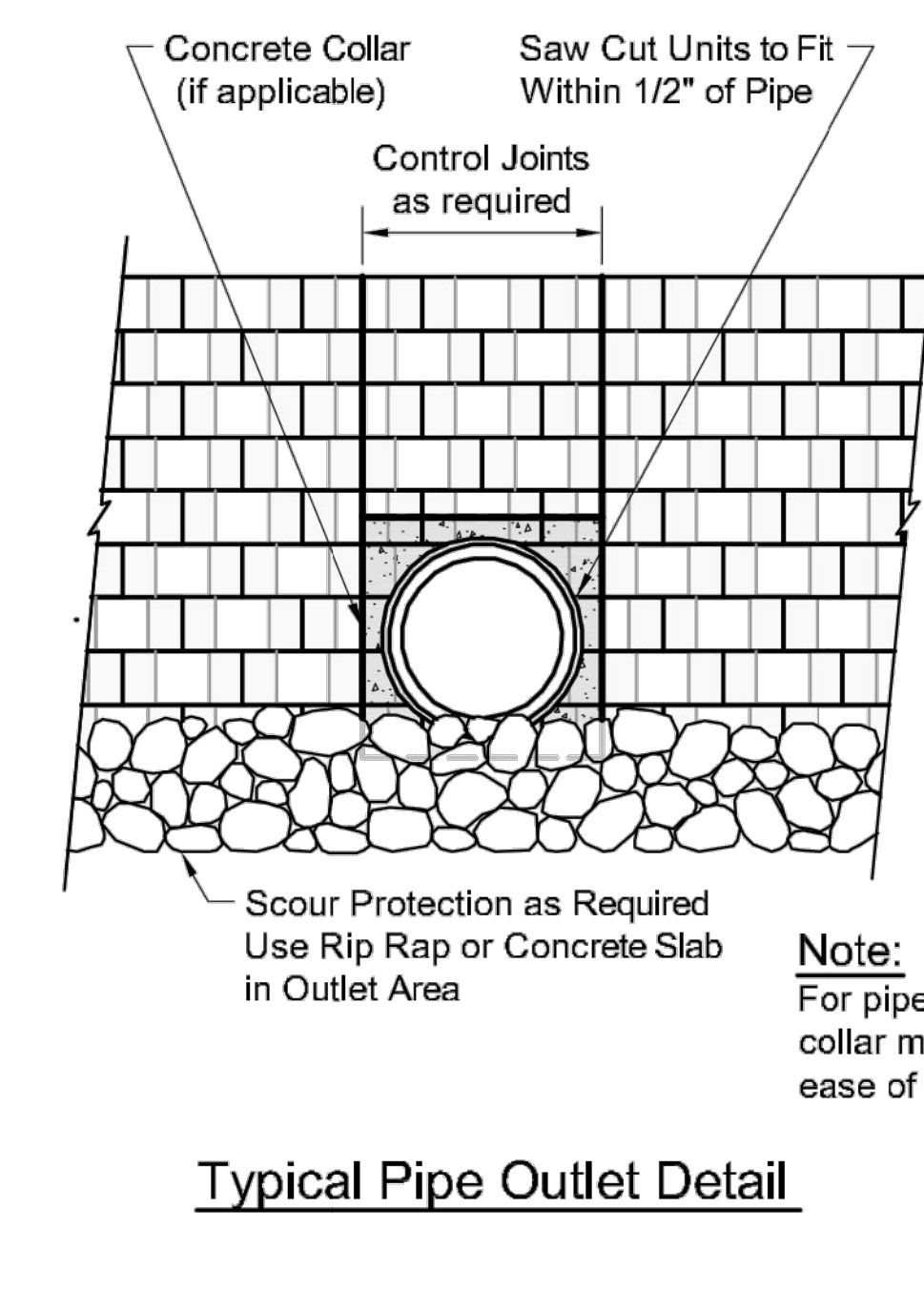
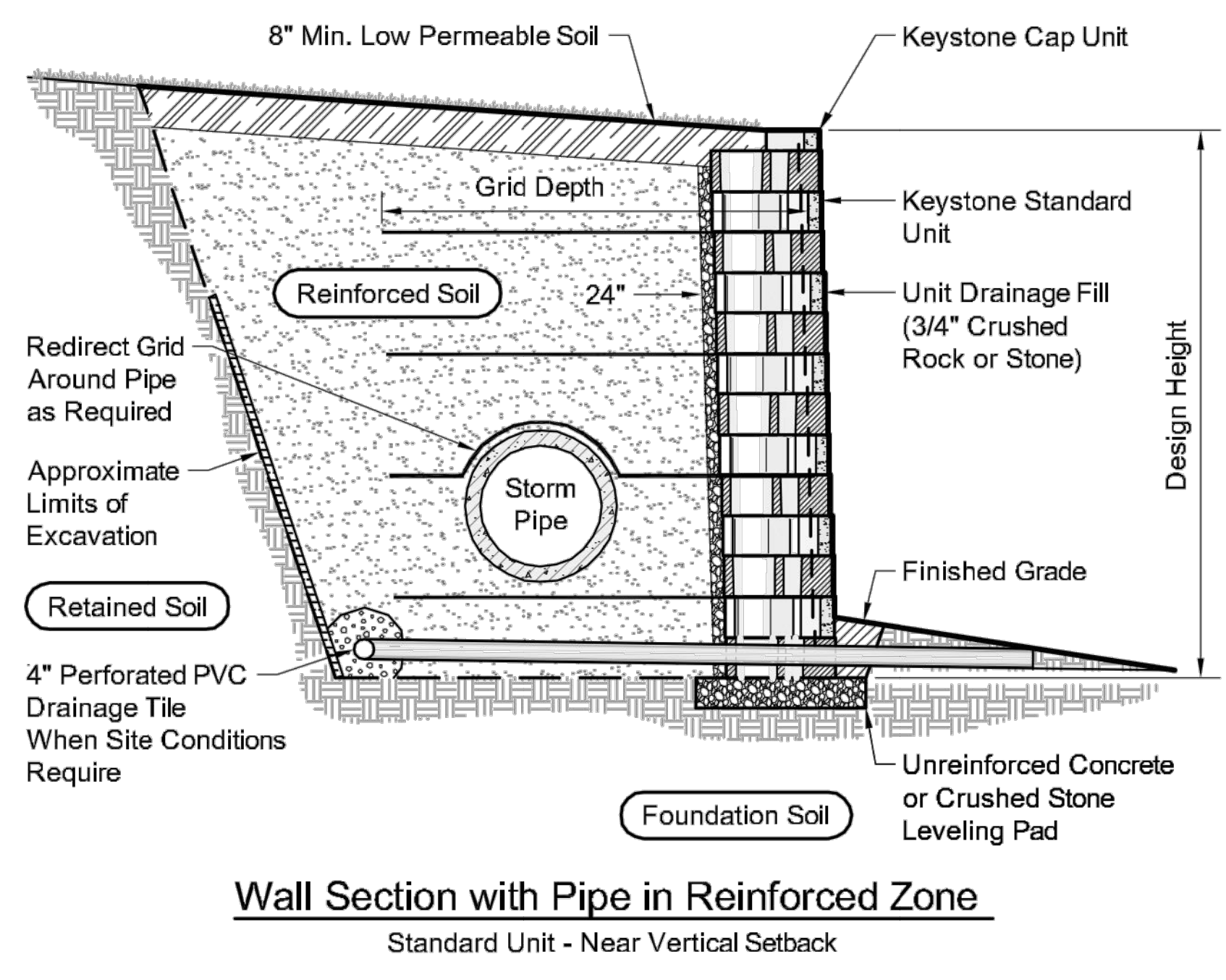
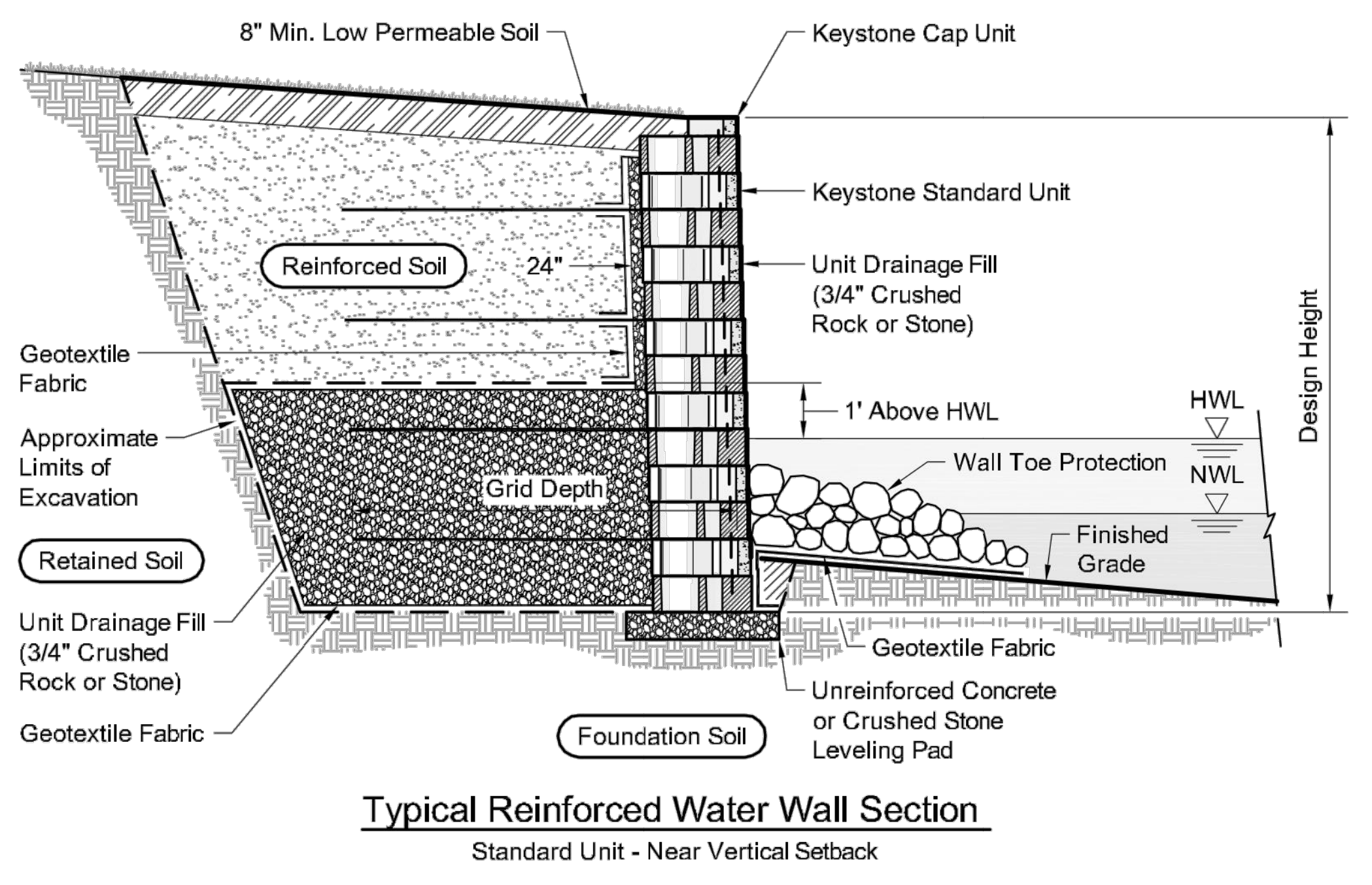
REVISIONS:

No.	Description	Date
3	ADDENDUM 2	02.07.2023

PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

SITE DETAILS

C7.5



Copyright 2003 Keystone Retaining Wall Systems  
 Design is for internal stability of the KEYSTONE wall structure only. External stability, including but not limited to foundation and slope stability is the responsibility of the Owner. The design is based on the assumption that the materials within the retained mass, methods of construction, and quality of materials conform to KEYSTONE's specification for this project.  
 This drawing is being furnished for this specific project only. Any party accepting this document does so in confidence and agrees that it shall not be duplicated in whole or in part, nor disclosed to others without the consent of Keystone Retaining Wall Systems, Inc.

No.	Date	Revision	By

**KEYSTONE**  
 RETAINING WALL SYSTEMS  
 A CONTECH COMPANY  
 4444 W 78th Street  
 Minneapolis, MN 55435  
 952-897-1040

Designed By: RKM  
 Checked By: CDM  
 Scale: No Scale  
 Title: Conceptual Details  
 Project: Keystone Retaining Wall Systems  
 Typical Wall Details  
 Date:                        
 Project No:                        
 Drawing No:                      

NOTE: WALL DESIGN TO BE PROVIDED BY STRUCTURAL ENGINEER. DETAIL SHOWN FOR REFERENCE ONLY.

**STANDARD SEWER PLAN NOTES**

- FOR PROJECT SURVEY INFORMATION INCLUDING VERTICAL DATUM AND BENCHMARK LOCATIONS, SEE "PROJECT SURVEY INFORMATION AND CONTRACTOR VERIFICATION REQUIREMENTS" ON SHEET C1.0.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO TOPOGRAPHIC, TREE, STORM DRAINAGE FACILITIES, AND ALL UTILITIES. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES. ANY DISCREPANCIES OR CONFLICTS IDENTIFIED DURING VERIFICATION OF EXISTING CONDITIONS AND UTILITIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. ANY COSTS ASSOCIATED WITH CORRECTIVE WORK OR DAMAGES THAT ARE A RESULT OF THE CONTRACTOR NOT VERIFYING EXISTING CONDITIONS AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- MANHOLE COVERS ARE NOT ALLOWED WITHIN CURB AND GUTTER AND ARE TO BE INSTALLED COMPLETELY WITHIN OR COMPLETELY OUT OF PAVED AREAS (INCLUDING SIDEWALKS).
- SEWER MANHOLE CONES ADJACENT TO CURB AND/OR SIDEWALK RAMP SHALL BE ROTATED TO LOCATE MANHOLE FRAME AND COVER AWAY FROM THE SIDEWALK RAMP AND CURBS.
- REFER TO THE CITY OF GASTONIA'S STANDARD NOTES, DETAILS, AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND PROCEDURES, INCLUDING WATERTIGHT MANHOLE LOCATIONS.
- REFER TO SEWER DETAIL SHEETS AND SEWER PROFILE SHEETS FOR DETAILS AND ANY ADDITIONAL SEWER SYSTEM INFORMATION.

**STANDARD WATER PLAN NOTES**

- FOR PROJECT SURVEY INFORMATION INCLUDING VERTICAL DATUM AND BENCHMARK LOCATIONS, SEE "PROJECT SURVEY INFORMATION AND CONTRACTOR VERIFICATION REQUIREMENTS" ON SHEET C1.0.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO TOPOGRAPHIC, TREE, STORM DRAINAGE FACILITIES, AND ALL UTILITIES. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES. ANY DISCREPANCIES OR CONFLICTS IDENTIFIED DURING VERIFICATION OF EXISTING CONDITIONS AND UTILITIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. ANY COSTS ASSOCIATED WITH CORRECTIVE WORK OR DAMAGES THAT ARE A RESULT OF THE CONTRACTOR NOT VERIFYING EXISTING CONDITIONS AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- VALVES ARE NOT TO BE LOCATED WITHIN CURB AND GUTTER.
- FIRE HYDRANTS, VALVES, WATER SERVICES, AND OTHER SYMBOLS MAY NOT BE TO SCALE FOR CLARITY PURPOSES. REFER TO WATER DETAIL SHEETS AND COORDINATE WITH ENGINEER AND/OR WATER PROVIDER FOR ADDITIONAL INFORMATION AND REQUIREMENTS REGARDING FIRE HYDRANT LOCATIONS AND WATER FITTING SEPARATION DISTANCES.
- REFER TO WATER DETAIL SHEETS FOR SPECIFIC INFORMATION REGARDING EXACT PLACEMENT REQUIRED FOR WATER SERVICES, INCLUDING RELATIONSHIP TO PROPERTY LINES, EASEMENTS, AND SIDEWALKS.
- REFER TO WATER DETAIL SHEETS AND WATER PROFILE SHEETS (IF APPLICABLE) FOR DETAILS AND ANY ADDITIONAL WATER SYSTEM INFORMATION.
- REFER TO THE CITY OF GASTONIA'S STANDARD NOTES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND PROCEDURES.

**ADDITIONAL NOTES**

- BACKFLOWS MUST BE TESTED BY A CERTIFIED BACKFLOW TESTER UPON INSTALLATION AND YEARLY THEREAFTER. SUBMIT PASSING BACKFLOW TEST REPORTS TO TYLER ALEXANDER AT TWO RIVERS UTILITIES

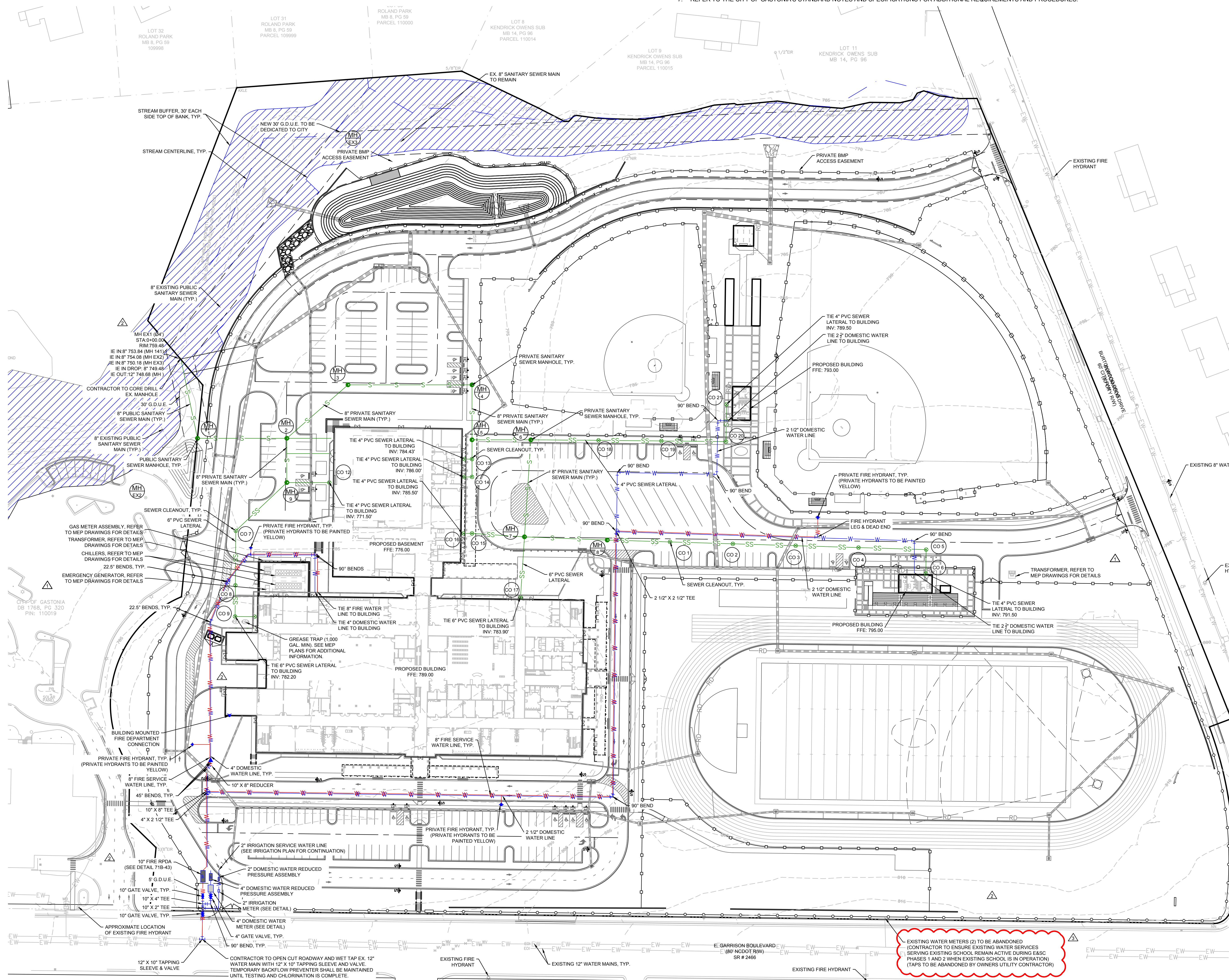
E

D

C

B

A



**LEGEND**

8" PRIVATE SEWER MAIN	—S—S—S—S—
8" PUBLIC SEWER MAIN	—S—S—S—S—
SEWER SERVICE	—SS—SS—SS—

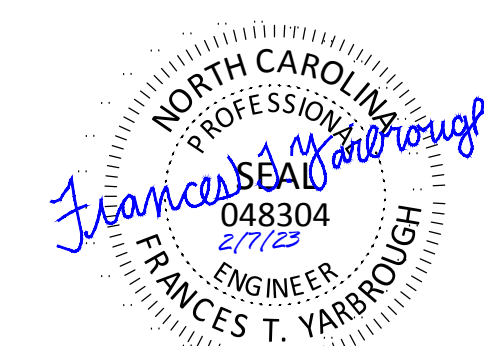
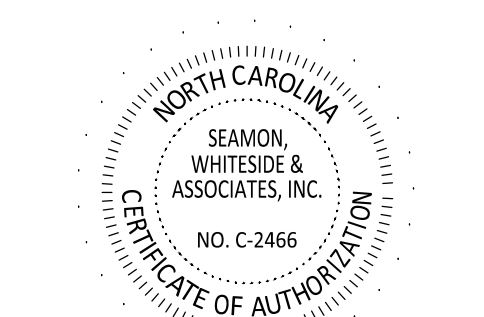


**GRIER MIDDLE SCHOOL REPLACEMENT**

**SW SEAMONWHITESIDE**  
 MOUNT PLEASANT, SC 843.884.1667  
 GREENVILLE, SC 864.296.0534  
 SUMMERVILLE, SC 843.972.0710  
 SPARTANBURG, SC 864.272.1272  
 CHARLOTTE, NC 980.312.5450  
 WWW.SEAMONWHITESIDE.COM



227 WEST TRADE STREET SUITE 700  
 CHARLOTTE, NORTH CAROLINA 28202  
 TEL. 704.333.6686 FAX 704.333.2926  
 WWW.LS3P.COM



COPYRIGHT 2018 ALL RIGHTS RESERVED  
 PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

**REVISIONS:**

No.	Description	Date
1	AGENCY REVIEW	11.11.2022
2	ADDENDUM 1	01.31.2023
3	ADDENDUM 2	02.07.2023

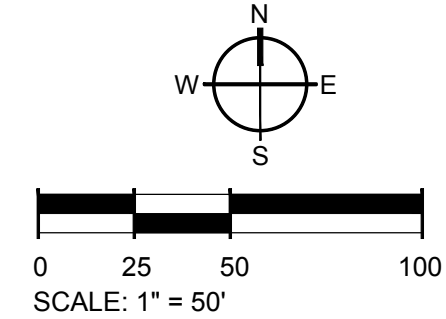
PROJECT: CL1253  
 DATE: 01-12-2023  
 DRAWN BY: MEM  
 CHECKED BY: TNC

**WATER & SEWER PLAN**  
**C8.0**

- ADDITIONAL NOTES**
- WATER AND SEWER TAPS TO BE INSTALLED BY DEVELOPER OR OWNER'S UTILITY CONTRACTOR WITH APPROVAL OF CITY OF GASTONIA/TWO RIVERS.
  - TAP APPLICATION AND TAP MATERIALS MUST BE SUBMITTED TO TWO RIVERS UTILITIES FOR APPROVAL PRIOR TO INSTALLATION.

EXISTING WATER METERS (2) TO BE ABANDONED (CONTRACTOR TO ENSURE EXISTING WATER SERVICES SERVING EXISTING SCHOOL REMAIN ACTIVE DURING E&S.C. PHASES 1 AND 2 WHEN EXISTING SCHOOL IS IN OPERATION) (TAPS TO BE ABANDONED BY OWNERS UTILITY CONTRACTOR)

**NOTES:**  
 EXISTING METERS TO BE ABANDONED AFTER NEW METERS ARE INSTALLED & OPERATING. CONTRACTOR TO COORDINATE WITH CITY OF GASTONIA & TWO RIVERS ON ABANDONMENT  
 ALL LICENSES, PERMITS, FEES, CONNECTION FEES, TAPPING FEES, INSPECTION FEES, ETC. SHALL BE OBTAINED BY THE CONTRACTOR AND THE COST SHALL BE INCLUDED IN THE CONTRACT PRICE.

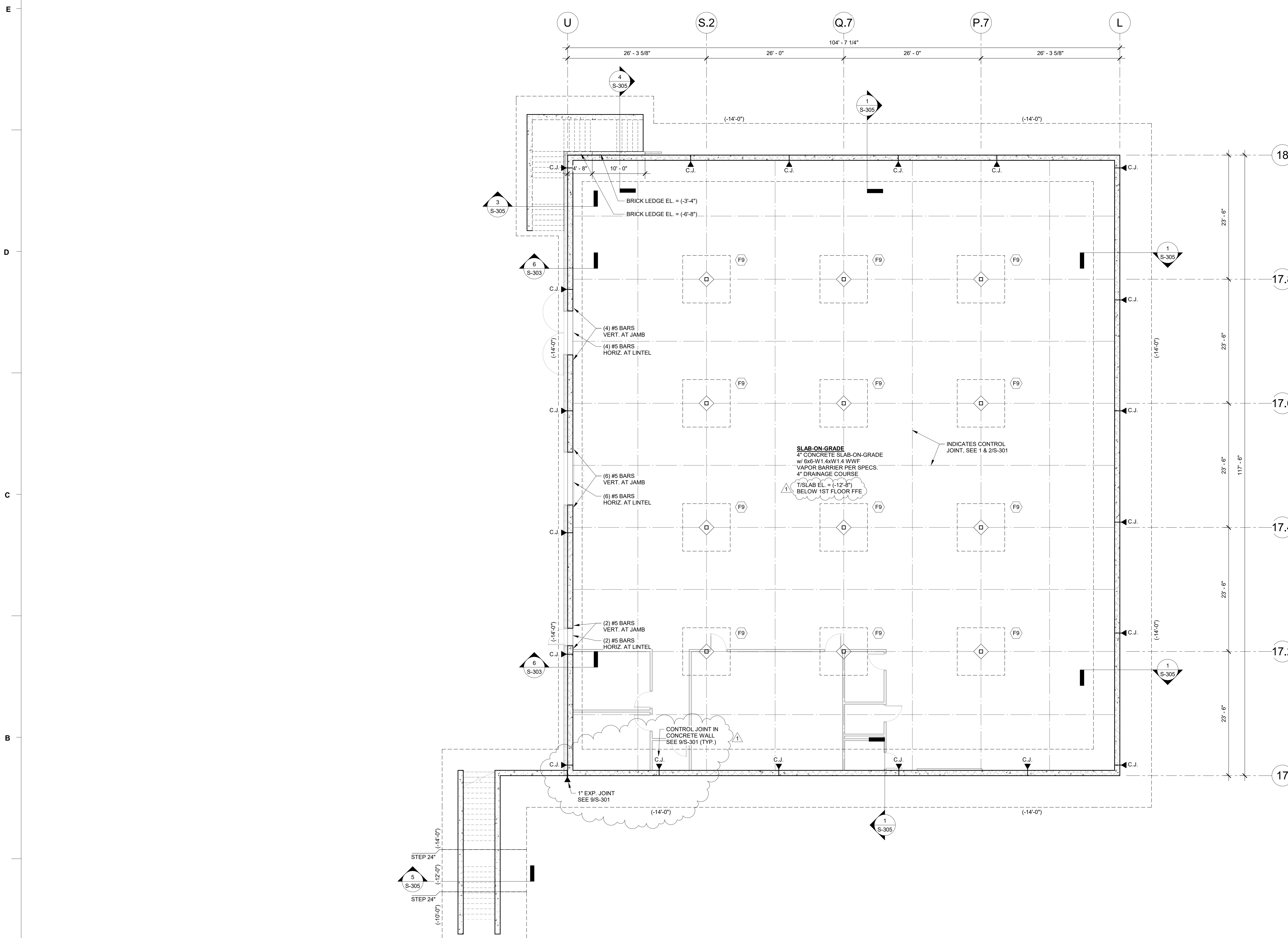




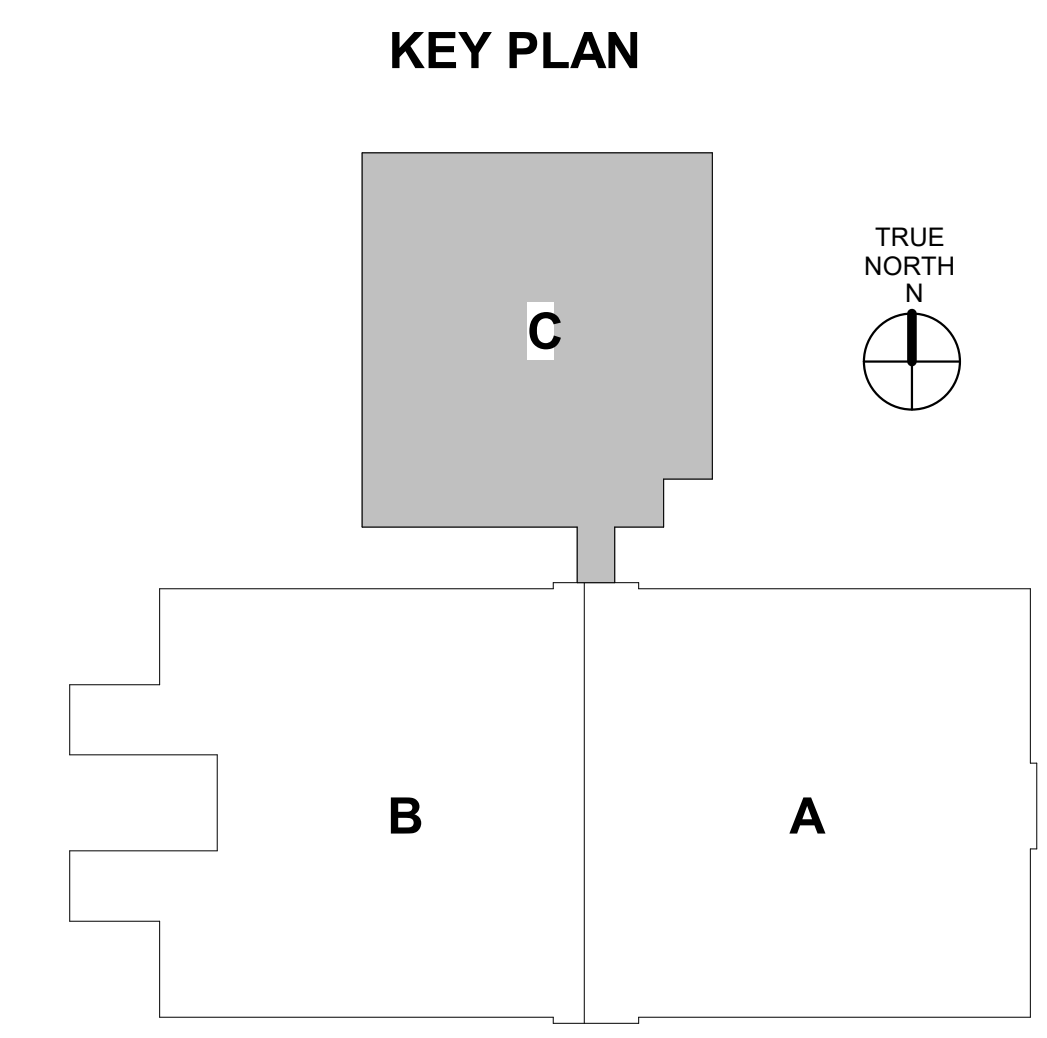


- LEGEND:**
- FFE = FINISHED FLOOR ELEVATION
  - EOS = EDGE OF SLAB
  - EOD = EDGE OF DECK
  - FOB = FACE OF BUILDING
  - FOV = FACE OF BRICK VENEER
  - FOC = FACE OF CONCRETE
  - FOM = FACE OF MASONRY
  - FOS = FACE OF METAL STUD
  - FD = FLOOR DRAIN (COORDINATE WITH PLUMB'G AND ARCH. DWGS.)
  - TCX = TOP CHORD EXTENSION
  - CP\* = INDICATES CONCRETE PIER
  - BF\*- = INDICATES BRACE FRAME (SEE BRACE FRAME ELEVATIONS)
  - BM2A- = INDICATES REINFORCED MASONRY PIER (SEE SHEET S-302)
  - EP\* = INDICATES EMBED PLATE IN CONCRETE WALL (SEE SHEET S-306)
  - L'- = INDICATES LINTEL (SEE SCHEDULE ON SHEET S-601)
  - V'- = INDICATES BRICK LINTEL (SEE SCHEDULE ON SHEET S-601)
  - ▽ = INDICATES SPREAD FOOTING (SEE SCHEDULE ON SHEET S-601)

- FOUNDATION & SLAB PLAN NOTES:**
1. TOP OF FOOTING ELEVATIONS GIVEN THUS ("'-") ARE IN REFERENCE TO 1ST FLOOR FINISHED FLOOR ELEVATION = 788.00'
  2. TYPICAL EXTERIOR WALL TOP OF FOOTING ELEVATION IS (-1'-4") BELOW REFERENCE FINISHED FLOOR ELEVATION, U.N.O.
  3. TYPICAL INTERIOR WALL TOP OF FOOTING ELEVATION IS (-0'-8") BELOW REFERENCE FINISHED FLOOR ELEVATION, U.N.O.
  4. TYPICAL TOP OF SLAB-ON-GRADE ELEVATION IS AT REFERENCED FINISHED FLOOR ELEVATION, U.N.O.
  5. SEE SHEET S-302 FOR TYPICAL MASONRY DETAILS.
  6. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
  7. SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  8. COORDINATE MASONRY WALL LOCATIONS AND OPENINGS WITH THE ARCHITECTURAL DRAWINGS.
  9. FINISH SURFACE OF SLAB-ON-GRADE PER PROJECT SPECIFICATIONS AND ARCHITECTURAL DRAWINGS.
  10. LOCATE SLAB JOINTS PER PLAN, SEE 1/S-301 AND 2/S-301

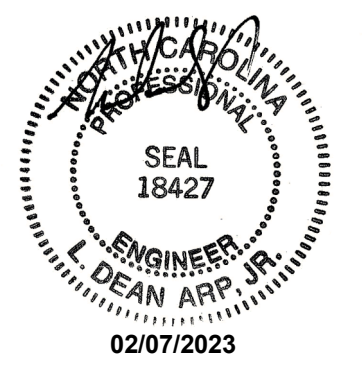


1 GYM BASEMENT FOUNDATION PLAN  
S-200 1/8" = 1'-0"



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL. 704.333.6686 FAX 704.333.2926  
WWW.LSP3.COM

ARP ENGINEERING, INC.  
CONSULTING ENGINEERS  
303 EAST FRANKLIN STREET, SUITE A  
PO BOX 587 MONROE NC 28111  
(704) 225-0079  
NC COA C2424



ALL DESIGN, DRAWING, AND SPECIFICATIONS SHOWN THEREON ARE THE PROPERTY OF ARP ENGINEERING, INC. ALL RIGHTS RESERVED INCLUDING RIGHTS OF REPRODUCTION. THIS DRAWING MUST NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF ARP ENGINEERING, INC.  
COPYRIGHT © 2022, ARP ENGINEERING, INC.

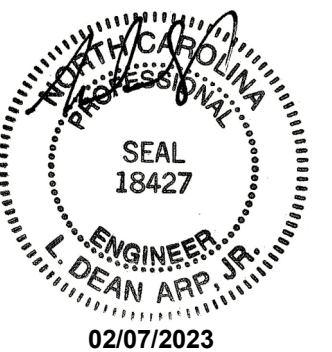
**REVISIONS:**

No.	Description	Date
1	ADDENDUM 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

GYM BASEMENT FOUNDATION PLAN

S-200



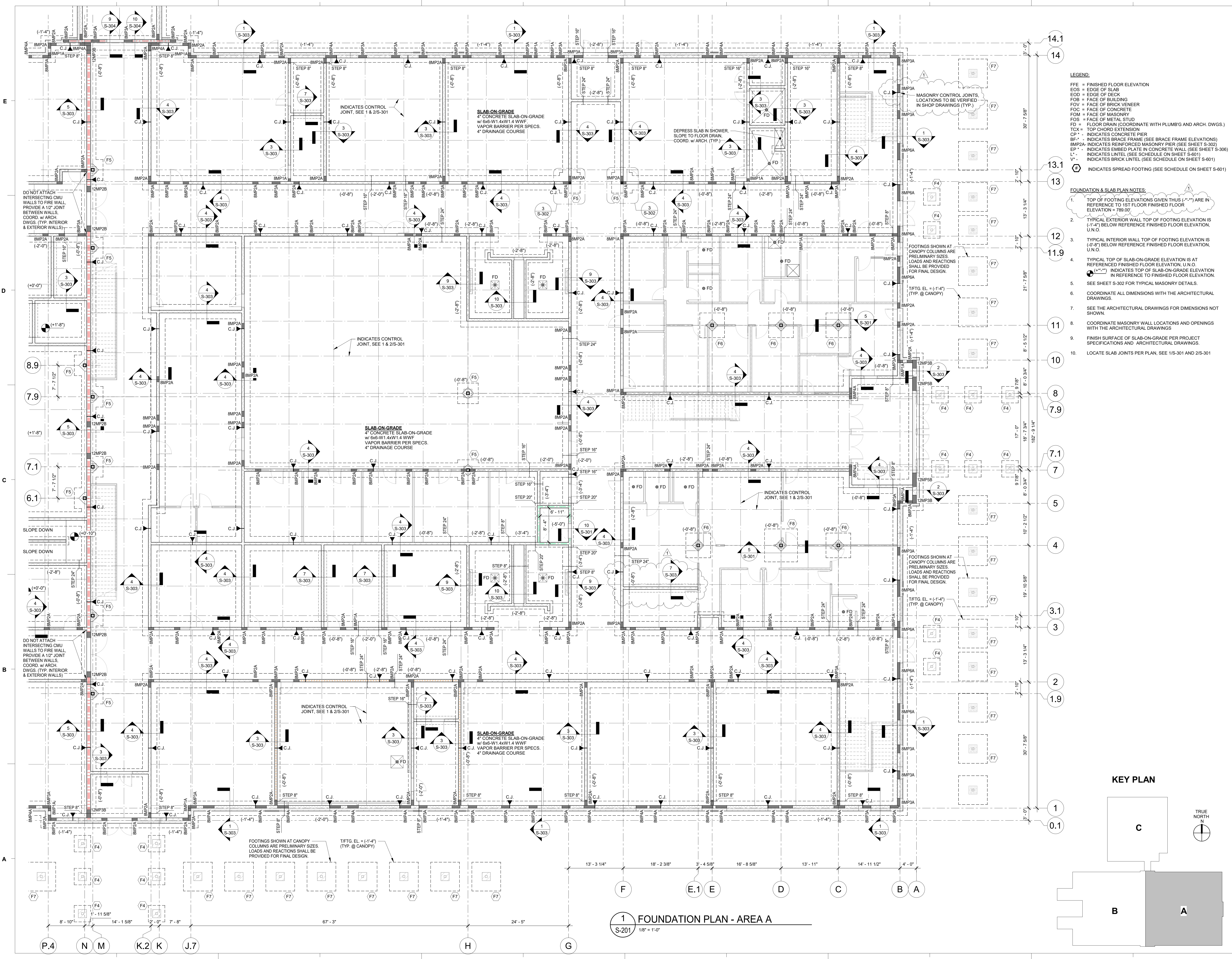
REVISIONS:

No.	Description	Date
1	ADDENDUM 2	02.07.2023

PROJECT: 9201-216240  
DATE: 01-12-2023

FOUNDATION PLAN - AREA A

S-201



- LEGEND:**
- FFE = FINISHED FLOOR ELEVATION
  - EOS = EDGE OF SLAB
  - EOD = EDGE OF DECK
  - FOB = FACE OF BUILDING
  - FOV = FACE OF BRICK VENEER
  - FOM = FACE OF CONCRETE
  - FOS = FACE OF METAL STUD
  - FD = FLOOR DRAIN (COORDINATE WITH PLUMB'G AND ARCH. DWGS.)
  - TCX = TOP CHORD EXTENSION
  - CP\* = INDICATES CONCRETE PIER
  - BF\* = INDICATES BRACE FRAME (SEE BRACE FRAME ELEVATIONS)
  - BMP2A = INDICATES REINFORCED MASONRY PIER (SEE SHEET S-302)
  - EP\* = INDICATES EMBED PLATE IN CONCRETE WALL (SEE SHEET S-306)
  - L\* = INDICATES LINTEL (SEE SCHEDULE ON SHEET S-601)
  - V\* = INDICATES BRICK LINTEL (SEE SCHEDULE ON SHEET S-601)
  - Ⓛ = INDICATES SPREAD FOOTING (SEE SCHEDULE ON SHEET S-601)
- FOUNDATION & SLAB PLAN NOTES:**
1. TOP OF FOOTING ELEVATIONS GIVEN THUS ("...") ARE IN REFERENCE TO 1ST FLOOR FINISHED FLOOR ELEVATION = +00.00'
  2. TYPICAL EXTERIOR WALL TOP OF FOOTING ELEVATION IS (-1'-4") BELOW REFERENCE FINISHED FLOOR ELEVATION, U.N.O.
  3. TYPICAL INTERIOR WALL TOP OF FOOTING ELEVATION IS (-0'-8") BELOW REFERENCE FINISHED FLOOR ELEVATION, U.N.O.
  4. TYPICAL TOP OF SLAB-ON-GRADE ELEVATION IS AT REFERENCED FINISHED FLOOR ELEVATION, U.N.O.
  5. SEE SHEET S-302 FOR TYPICAL MASONRY DETAILS.
  6. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
  7. SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  8. COORDINATE MASONRY WALL LOCATIONS AND OPENINGS WITH THE ARCHITECTURAL DRAWINGS.
  9. FINISH SURFACE OF SLAB-ON-GRADE PER PROJECT SPECIFICATIONS AND ARCHITECTURAL DRAWINGS.
  10. LOCATE SLAB JOINTS PER PLAN, SEE 1/S-301 AND 2/S-301

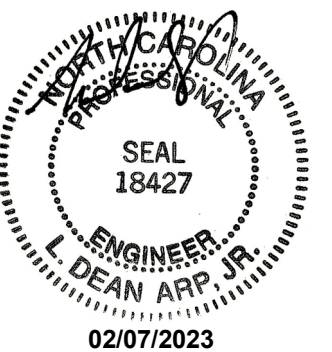
1 FOUNDATION PLAN - AREA A  
S-201 1/8" = 1'-0"



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL. 704.333.6686 FAX 704.333.2926  
WWW.LS3P.COM

ARP ENGINEERING, INC.  
CONSULTING ENGINEERS

303 EAST FRANKLIN STREET, SUITE A  
PO BOX 587 MONROE NC 28111  
(704) 225-0079  
NC COA C2424



ALL IDEAS, DESIGN, DRAWINGS, AND SPECIFICATIONS SHOWN THEREON ARE THE PROPERTY OF ARP ENGINEERING, INC. ALL RIGHTS RESERVED INCLUDING RIGHTS OF REPRODUCTION. THIS DRAWING MUST NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF ARP ENGINEERING, INC.  
COPYRIGHT © 2022, ARP ENGINEERING, INC.

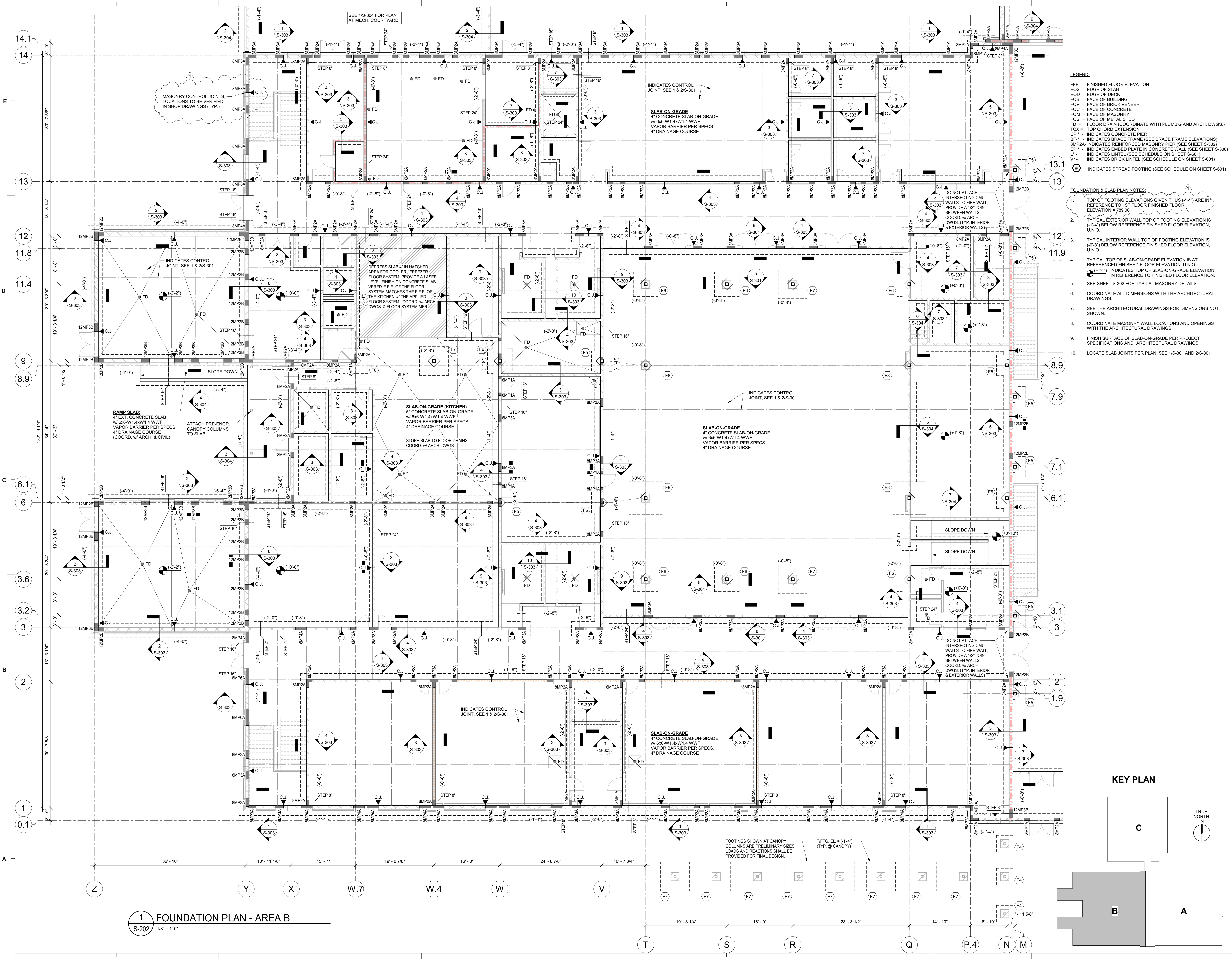
REVISIONS:

No.	Description	Date
1	ADDENDUM 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

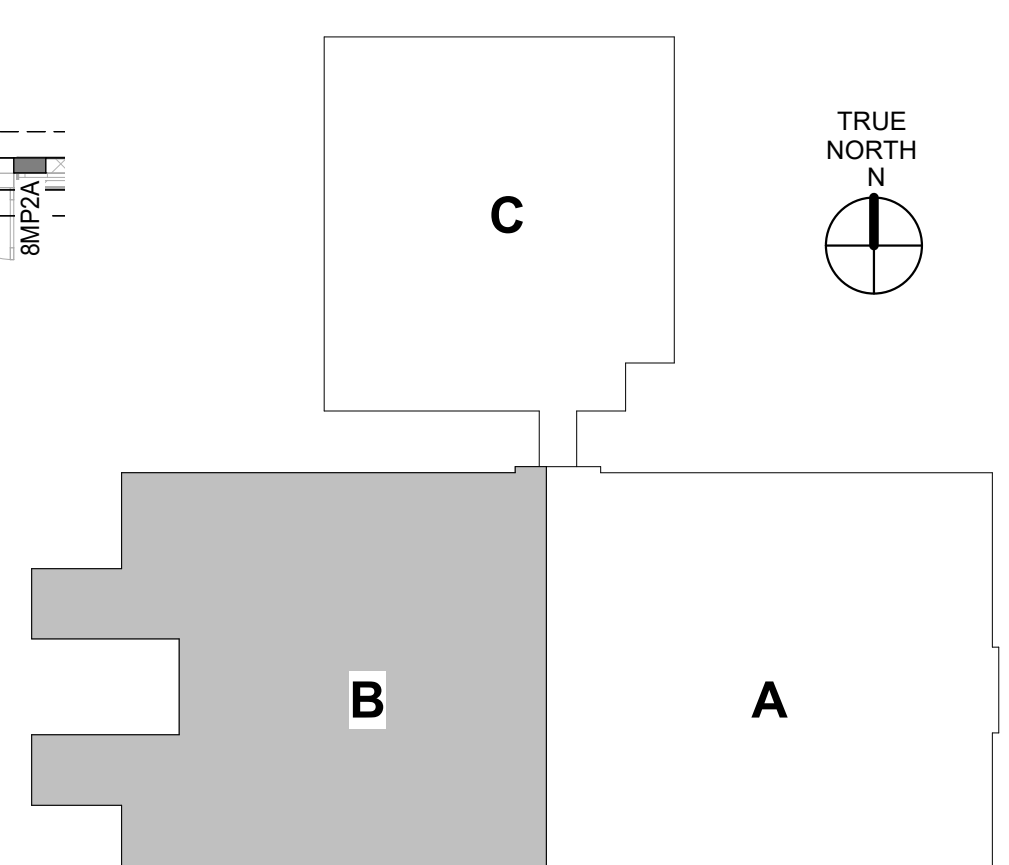
FOUNDATION PLAN - AREA B

S-202

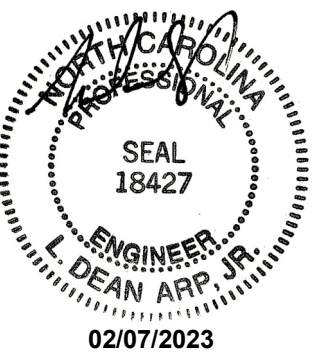


- LEGEND:**
- FFE = FINISHED FLOOR ELEVATION
  - EOS = EDGE OF SLAB
  - EOD = EDGE OF DECK
  - FOB = FACE OF BUILDING
  - FOV = FACE OF BRICK VENEER
  - FOC = FACE OF CONCRETE
  - FOM = FACE OF MASONRY
  - FOS = FACE OF METAL STUD
  - FD = FLOOR DRAIN (COORDINATE WITH PLUMB'G AND ARCH. DWGS.)
  - TKX = TOP CHORD EXTENSION
  - CS\* = INDICATES CONCRETE PIER
  - BF-\* = INDICATES BRACE FRAME (SEE BRACE FRAME ELEVATIONS)
  - BMP2A = INDICATES REINFORCED MASONRY PIER (SEE SHEET S-302)
  - EP\* = INDICATES EMBED PLATE IN CONCRETE WALL (SEE SHEET S-306)
  - L\* = INDICATES LINTEL (SEE SCHEDULE ON SHEET S-601)
  - V\* = INDICATES BRICK LINTEL (SEE SCHEDULE ON SHEET S-601)
  - = INDICATES SPREAD FOOTING (SEE SCHEDULE ON SHEET S-601)
- FOUNDATION & SLAB PLAN NOTES:**
1. TOP OF FOOTING ELEVATIONS GIVEN WITH ("...") ARE IN REFERENCE TO 1ST FLOOR FINISHED FLOOR ELEVATION = 788.00'
  2. TYPICAL EXTERIOR WALL TOP OF FOOTING ELEVATION IS (-1'-4") BELOW REFERENCE FINISHED FLOOR ELEVATION, U.N.O.
  3. TYPICAL INTERIOR WALL TOP OF FOOTING ELEVATION IS (-0'-8") BELOW REFERENCE FINISHED FLOOR ELEVATION, U.N.O.
  4. TYPICAL TOP OF SLAB-ON-GRADE ELEVATION IS AT REFERENCED FINISHED FLOOR ELEVATION, U.N.O.
  5. ("...") INDICATES TOP OF SLAB-ON-GRADE ELEVATION IN REFERENCE TO FINISHED FLOOR ELEVATION.
  6. SEE SHEET S-302 FOR TYPICAL MASONRY DETAILS.
  7. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
  8. SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  9. COORDINATE MASONRY WALL LOCATIONS AND OPENINGS WITH THE ARCHITECTURAL DRAWINGS.
  10. FINISH SURFACE OF SLAB-ON-GRADE PER PROJECT SPECIFICATIONS AND ARCHITECTURAL DRAWINGS.
  11. LOCATE SLAB JOINTS PER PLAN, SEE 1/S-301 AND 2/S-301

KEY PLAN



1 FOUNDATION PLAN - AREA B  
S-202 1/8" = 1'-0"



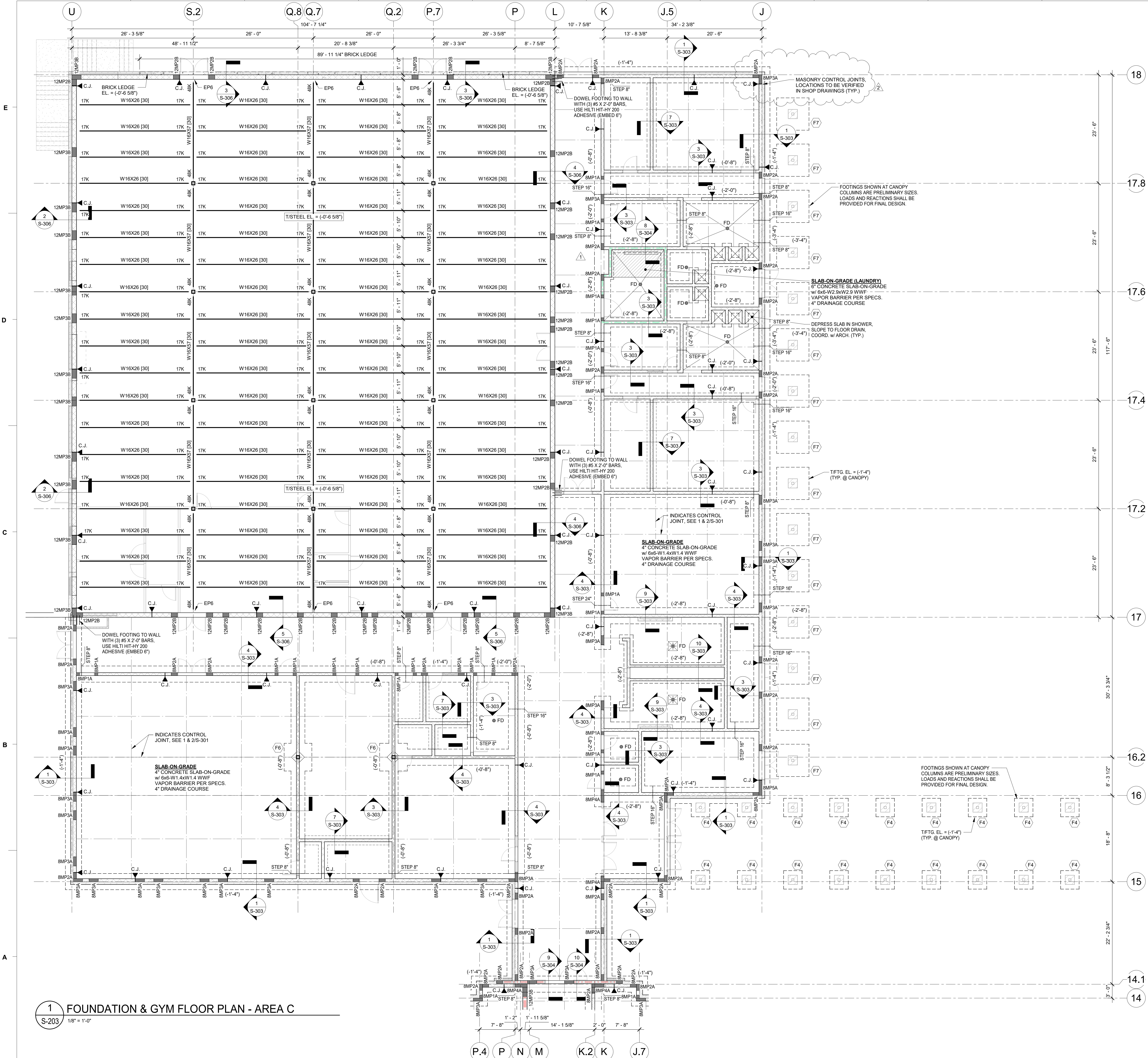
REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11.11.2022
2	ADDENDUM 2	02.07.2023

PROJECT: 9201-216240  
DATE: 01-12-2023

FOUNDATION & GYM FLOOR PLAN - AREA C

S-203

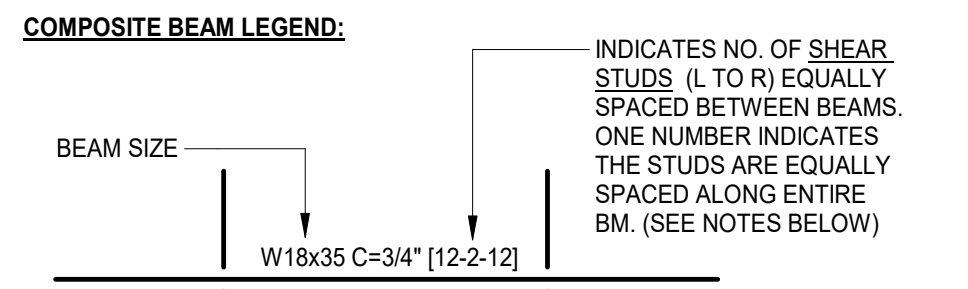


- LEGEND:**
- FFE = FINISHED FLOOR ELEVATION
  - EOS = EDGE OF SLAB
  - EOD = EDGE OF DECK
  - FOB = FACE OF BUILDING
  - FOV = FACE OF BRICK VENEER
  - FOC = FACE OF CONCRETE
  - FOM = FACE OF MASONRY
  - FOS = FACE OF METAL STUD
  - FD = FLOOR DRAIN (COORDINATE WITH PLUMB'G AND ARCH. DWGS.)
  - TKX = TOP CHORD EXTENSION
  - CP\* = INDICATES CONCRETE PIER
  - BF-\* = INDICATES BRACE FRAME (SEE BRACE FRAME ELEVATIONS)
  - BMP2A = INDICATES REINFORCED MASONRY PIER (SEE SHEET S-302)
  - EP\* = INDICATES EMBED PLATE IN CONCRETE WALL (SEE SHEET S-306)
  - L\* = INDICATES LINTEL (SEE SCHEDULE ON SHEET S-801)
  - V\* = INDICATES BRICK LINTEL (SEE SCHEDULE ON SHEET S-801)
  - (F) = INDICATES SPREAD FOOTING (SEE SCHEDULE ON SHEET S-801)

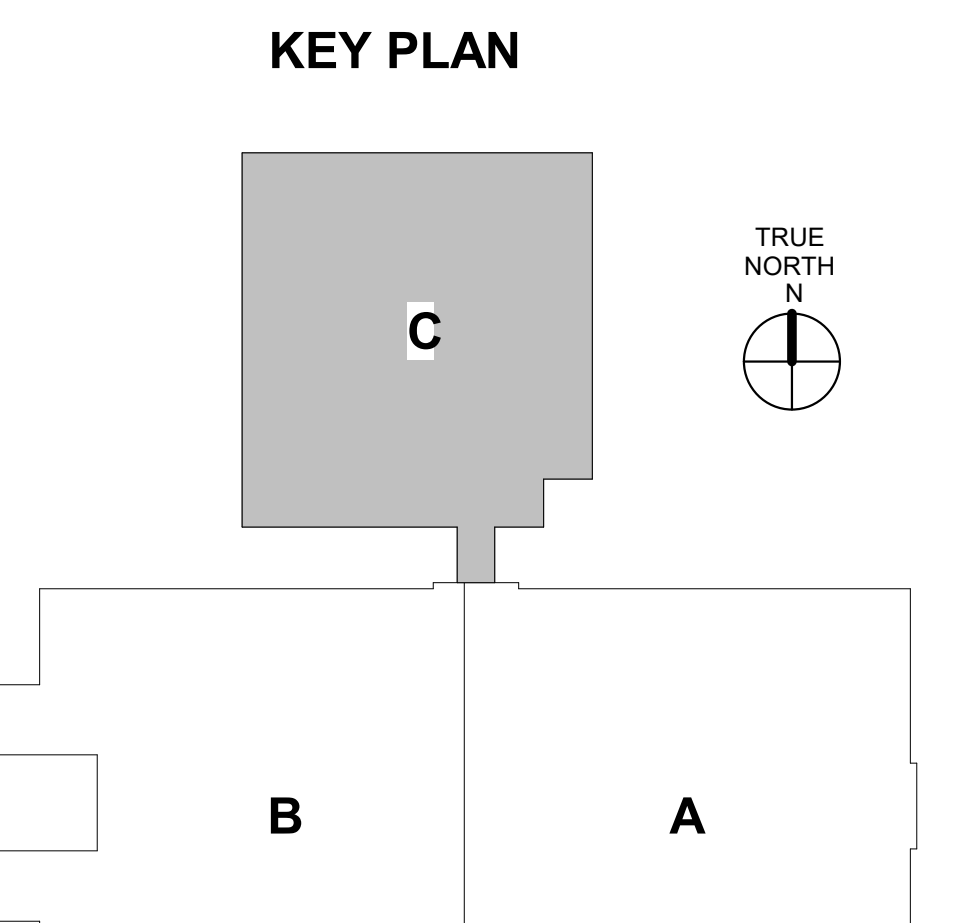
- FOUNDATION & SLAB PLAN NOTES:**
1. TOP OF FOOTING ELEVATIONS GIVEN THUS ("\*-") ARE IN REFERENCE TO 1ST FLOOR FINISHED FLOOR ELEVATION = 788.00'
  2. TYPICAL EXTERIOR WALL TOP OF FOOTING ELEVATION IS (-1'-4") BELOW REFERENCE FINISHED FLOOR ELEVATION, U.N.O.
  3. TYPICAL INTERIOR WALL TOP OF FOOTING ELEVATION IS (-0'-8") BELOW REFERENCE FINISHED FLOOR ELEVATION, U.N.O.
  4. TYPICAL TOP OF SLAB-ON-GRADE ELEVATION IS AT REFERENCED FINISHED FLOOR ELEVATION, U.N.O.
  5. (L\*"-") INDICATES TOP OF SLAB-ON-GRADE ELEVATION IN REFERENCE TO FINISHED FLOOR ELEVATION.
  6. SEE SHEET S-302 FOR TYPICAL MASONRY DETAILS.
  7. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
  8. SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  9. COORDINATE MASONRY WALL LOCATIONS AND OPENINGS WITH THE ARCHITECTURAL DRAWINGS.
  10. FINISH SURFACE OF SLAB-ON-GRADE PER PROJECT SPECIFICATIONS AND ARCHITECTURAL DRAWINGS.
  11. LOCATE SLAB JOINTS PER PLAN, SEE 1/S-301 AND 2/S-301

- FLOOR FRAMING PLAN NOTES (GYM FLOOR):**
1. TOP OF STEEL ELEVATIONS GIVEN THUS ("\*# - #") ARE IN REFERENCE TO 1ST FLOOR FFE.
  2. FINISHED FLOOR ELEVATION AT THE SUPPORTED FLOOR MATCHES THE 1ST FLOOR FFE UNLESS NOTED OTHERWISE.
  3. TOP OF CONCRETE SLAB-ON-DECK IS (-0'-2") BELOW FINISHED FLOOR ELEVATION FOR WOOD GYM FLOOR SYSTEM. COORDINATE WITH ARCHITECTURAL DRAWINGS AND FLOOR SYSTEM MANUFACTURER.
  4. TYPICAL TOP OF STEEL ELEVATIONS AT SUPPORTED FLOORS IS (-0'-6") BELOW THE FINISHED FLOOR ELEVATION.
  5. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
  6. SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  7. COORDINATE THE LOCATION OF FLOOR OPENINGS FOR MECHANICAL DUCTS AND PLUMBING PIPING WITH THE M.E.P. DRAWINGS AND THE ARCHITECTURAL DRAWINGS.

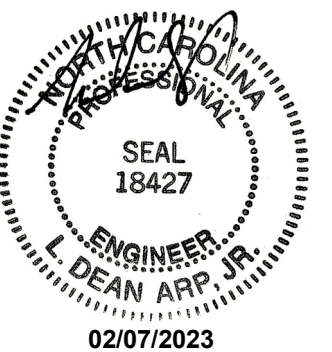
- SUPPORTED FLOOR CONSTRUCTION:**
1. 2 1/2" NORMAL WEIGHT CONCRETE ON 1 1/2" DEEP COMPOSITE (VLR) METAL FLOOR DECK (4" TOTAL THICKNESS), 20 GAUGE, G-60 GALVANIZED FINISH w/ 6x6-W1.4xW1.4 WWF (CENTERED). INSTALL DECK IN CONFORMANCE WITH S.D.I. AND THE DECK MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. SHORE ALL SINGLE SPANS.
  2. DECK ATTACHMENT: SUPPORTS - 3/8" PUDDLE WELDS AT 12" oc OR WELDING SHEAR STUDS THROUGH THE DECK FOR A COMPOSITE FLOOR SYSTEM. SIDE LAPS - #10 TEK SCREWS @ 36" oc



- SHEAR CONNECTOR NOTES:**
1. CONNECTORS SHALL BE 3/4" DIA. x 3 3/16" HD STUDS
  2. STUDS SHALL BE LOCATED DIRECTLY OVER THE BEAM WEB IF THE BEAM FLANGE THICKNESS IS LESS THAN 0.500 INCHES

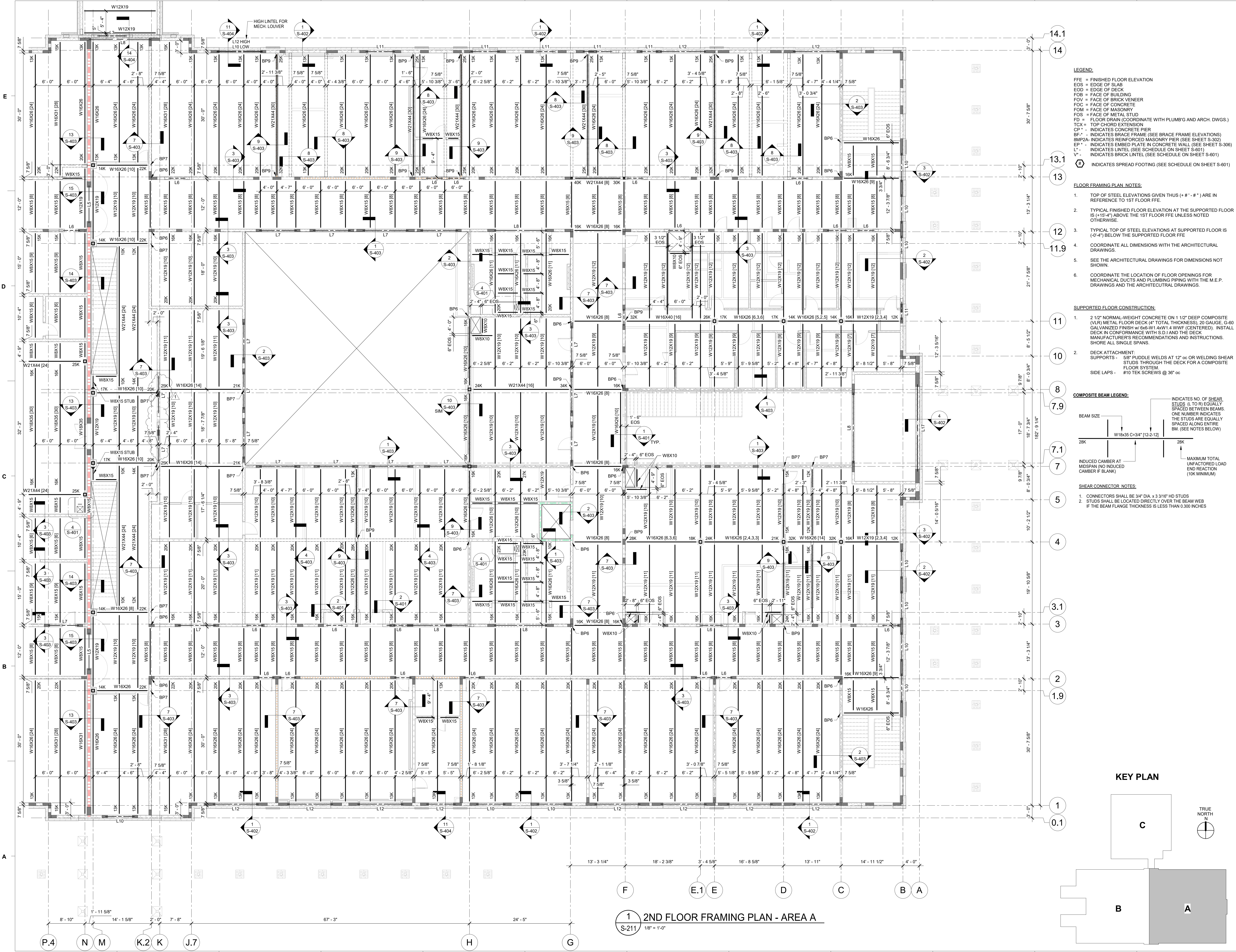


1 FOUNDATION & GYM FLOOR PLAN - AREA C  
1/8" = 1'-0"



REVISIONS:

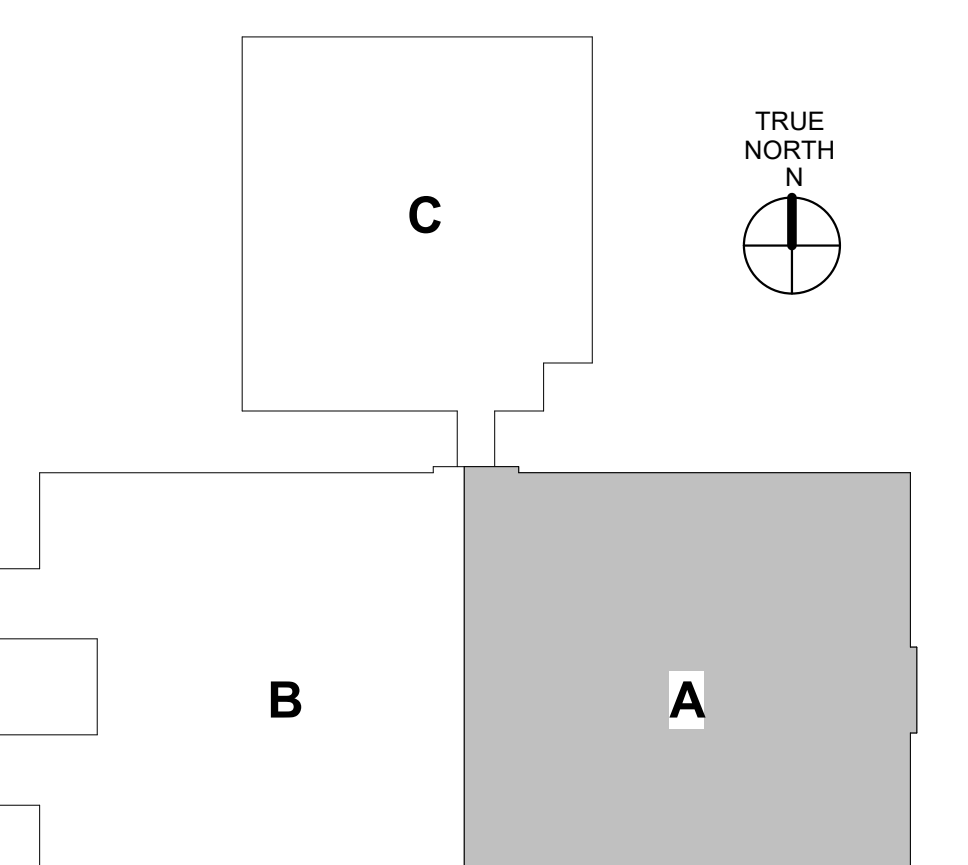
No.	Description	Date
1	ADDENDUM 2	02.07.2023

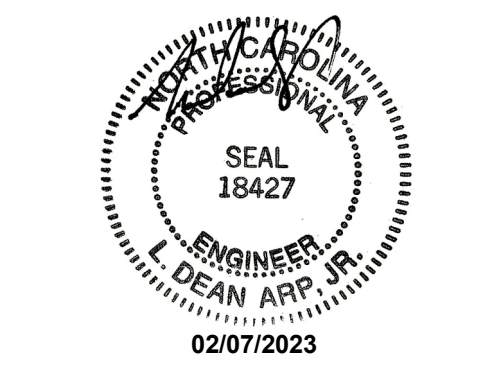


- LEGEND:**
- FFE = FINISHED FLOOR ELEVATION
  - EOS = EDGE OF SLAB
  - EOD = EDGE OF DECK
  - FOB = FACE OF BUILDING
  - FVB = FACE OF BRICK VENEER
  - FCC = FACE OF CONCRETE
  - FOM = FACE OF MASONRY
  - FOS = FACE OF METAL STUD
  - FD = FLOOR DRAIN (COORDINATE WITH PLUMB'G AND ARCH. DWGS.)
  - TCX = TOP CHORD EXTENSION
  - CS\* = INDICATES CONCRETE PIER
  - BF- = INDICATES BRACE FRAME (SEE BRACE FRAME ELEVATIONS)
  - BMP2A- INDICATES REINFORCED MASONRY PIER (SEE SHEET S-302)
  - EP\* = INDICATES EMBED PLATE IN CONCRETE WALL (SEE SHEET S-306)
  - L' = INDICATES LINTEL (SEE SCHEDULE ON SHEET S-601)
  - V' = INDICATES BRICK LINTEL (SEE SCHEDULE ON SHEET S-601)
  - ⊕ = INDICATES SPREAD FOOTING (SEE SCHEDULE ON SHEET S-601)
- FLOOR FRAMING PLAN NOTES:**
- TOP OF STEEL ELEVATIONS GIVEN THUS (+ #'-#") ARE IN REFERENCE TO 1ST FLOOR FFE.
  - TYPICAL FINISHED FLOOR ELEVATION AT THE SUPPORTED FLOOR IS (+15'-4") ABOVE THE 1ST FLOOR FFE UNLESS NOTED OTHERWISE.
  - TYPICAL TOP OF STEEL ELEVATIONS AT SUPPORTED FLOOR IS (-0'-4") BELOW THE SUPPORTED FLOOR FFE.
  - COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
  - SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  - COORDINATE THE LOCATION OF FLOOR OPENINGS FOR MECHANICAL DUCTS AND PLUMBING PIPING WITH THE M.E.P. DRAWINGS AND THE ARCHITECTURAL DRAWINGS.
- SUPPORTED FLOOR CONSTRUCTION:**
- 2 1/2" NORMAL WEIGHT CONCRETE ON 1 1/2" DEEP COMPOSITE (VLR) METAL FLOOR DECK (4" TOTAL THICKNESS), 20 GAUGE, G-60 GALVANIZED FINISH w/ 6x6-W1.4xW1.4 WVF (CENTERED). INSTALL DECK IN CONFORMANCE WITH S.D.I. AND THE DECK MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. SHORE ALL SINGLE SPANS.
  - DECK ATTACHMENT: SUPPORTS - 5/8" PUDDLE WELDS AT 12" OC OR WELDING SHEAR STUDS THROUGH THE DECK FOR A COMPOSITE FLOOR SYSTEM.  
SIDE LAPS - #10 TEK SCREWS @ 36" OC
- COMPOSITE BEAM LEGEND:**
- INDICATES NO. OF SHEAR STUDS (L TO R) EQUALLY SPACED BETWEEN BEAMS. ONE NUMBER INDICATES THE STUDS ARE EQUALLY SPACED ALONG ENTIRE BEAM. (SEE NOTES BELOW)
- INDUCED CAMBER AT MIDSPAN (NO INDUCED CAMBER IF BLANK)
- MAXIMUM TOTAL UNFACTORED LOAD END REACTION (10K MINIMUM)
- SHEAR CONNECTOR NOTES:**
- CONNECTORS SHALL BE 3/4" DIA. x 3 3/16" HD STUDS
  - STUDS SHALL BE LOCATED DIRECTLY OVER THE BEAM WEB IF THE BEAM FLANGE THICKNESS IS LESS THAN 0.500 INCHES

1 2ND FLOOR FRAMING PLAN - AREA A  
S-211 1/8" = 1'-0"

KEY PLAN





ALL IDEAS, DESIGN, DRAWINGS, AND SPECIFICATIONS SHOWN THEREIN ARE THE PROPERTY OF ARP ENGINEERING, INC. ALL RIGHTS RESERVED. INCLUDING RIGHTS OF REPRODUCTION. THIS DRAWING MUST NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF ARP ENGINEERING, INC.  
 COPYRIGHT © 2022, ARP ENGINEERING, INC.

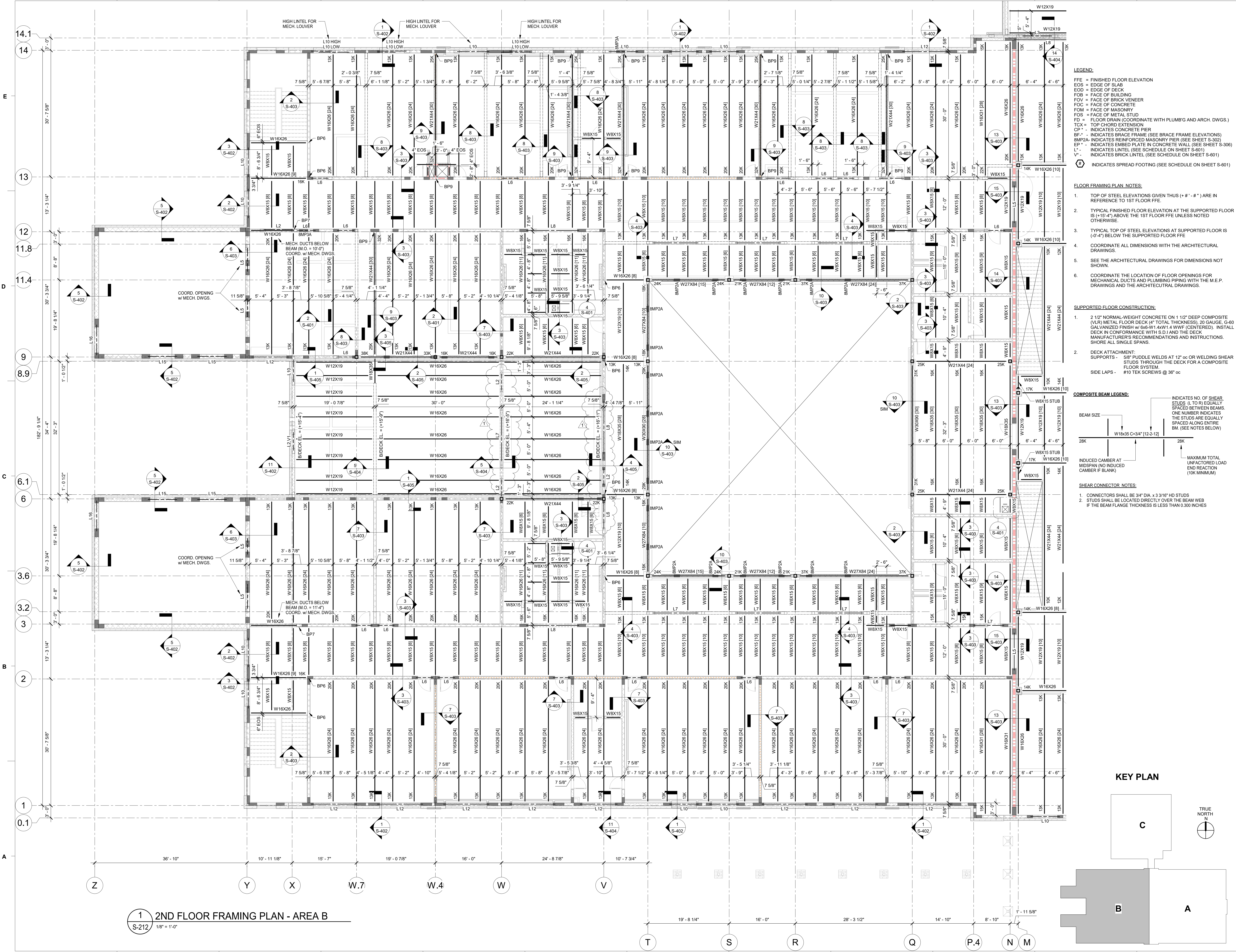
REVISIONS:

No.	Description	Date
1	ADDENDUM 2	02.07.2023

PROJECT: 9201-216240  
 DATE: 01-12-2023

2ND FLOOR FRAMING PLAN - AREA B

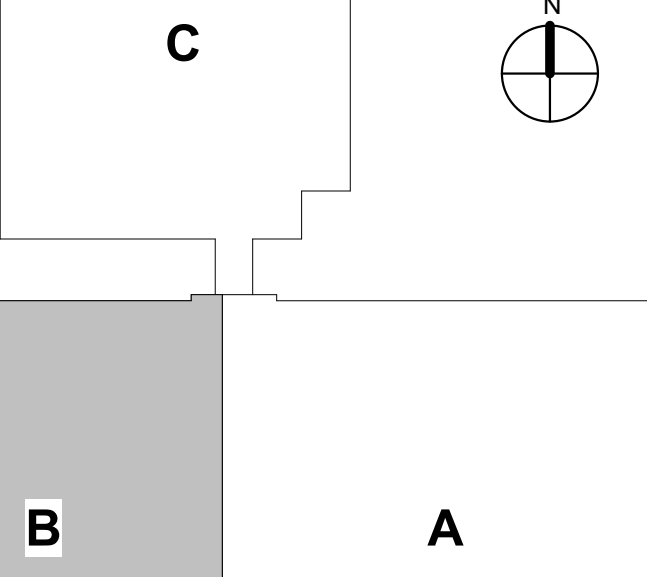
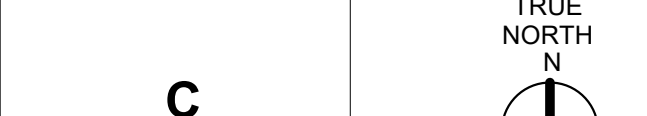
S-212

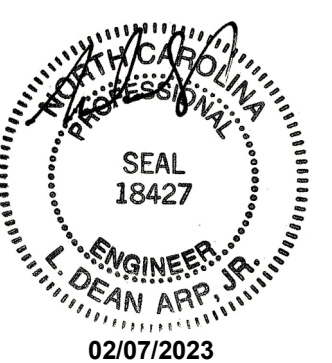


- LEGEND:**
- FFE = FINISHED FLOOR ELEVATION
  - EOS = EDGE OF SLAB
  - EOD = EDGE OF DECK
  - FOB = FACE OF BUILDING
  - FOB = FACE OF BRICK VENEER
  - FCC = FACE OF CONCRETE
  - FOM = FACE OF MASONRY
  - FOS = FACE OF METAL STUD
  - FD = FLOOR DRAIN COORDINATE WITH PLUMB'G AND ARCH. DWGS.)
  - TCX = TOP CHORD EXTENSION
  - CP = INDICATES CONCRETE PIER
  - BF = INDICATES BRACE FRAME (SEE BRACE FRAME ELEVATIONS)
  - BMP2A = INDICATES REINFORCED MASONRY PIER (SEE SHEET S-302)
  - EP = INDICATES EMBED PLATE IN CONCRETE WALL (SEE SHEET S-306)
  - L = INDICATES LINTEL (SEE SCHEDULE ON SHEET S-601)
  - V = INDICATES BRICK LINTEL (SEE SCHEDULE ON SHEET S-601)
  - ⊕ = INDICATES SPREAD FOOTING (SEE SCHEDULE ON SHEET S-601)
- FLOOR FRAMING PLAN NOTES:**
- TOP OF STEEL ELEVATIONS GIVEN THUS (+ # - # ) ARE IN REFERENCE TO 1ST FLOOR FFE.
  - TYPICAL FINISHED FLOOR ELEVATION AT THE SUPPORTED FLOOR IS (+15'-4") ABOVE THE 1ST FLOOR FFE UNLESS NOTED OTHERWISE.
  - TYPICAL TOP OF STEEL ELEVATIONS AT SUPPORTED FLOOR IS (-0'-4") BELOW THE SUPPORTED FLOOR FFE.
  - COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
  - SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  - COORDINATE THE LOCATION OF FLOOR OPENINGS FOR MECHANICAL DUCTS AND PLUMBING PIPING WITH THE M.E.P. DRAWINGS AND THE ARCHITECTURAL DRAWINGS.
- SUPPORTED FLOOR CONSTRUCTION:**
- 2 1/2" NORMAL-WEIGHT CONCRETE ON 1 1/2" DEEP COMPOSITE (VLR) METAL FLOOR DECK (4" TOTAL THICKNESS), 20 GAUGE, G-60 GALVANIZED FINISH W/ 6X6 W-4.4X11.4 WVF (CENTERED). INSTALL DECK IN CONFORMANCE WITH S.D.I. AND THE DECK MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. SHORE ALL SINGLE SPANS.
  - DECK ATTACHMENT: SUPPORTS - 3/8" PUDDLE WELDS AT 12" OC OR WELDING SHEAR STUDS THROUGH THE DECK FOR A COMPOSITE FLOOR SYSTEM.  
 SIDE LAPS - #10 TEK SCREWS @ 36" OC
- COMPOSITE BEAM LEGEND:**
- INDICATES NO. OF SHEAR STUDS (L TO R) EQUALLY SPACED BETWEEN BEAMS. ONE NUMBER INDICATES STUDS ARE EQUALLY SPACED ALONG ENTIRE BM. (SEE NOTES BELOW)
- INDUCED CAMBER AT MIDSPAN (NO INDUCED CAMBER IF BLANK)
- MAXIMUM TOTAL UNFACTORED LOAD END REACTION (10K MINIMUM)
- SHEAR CONNECTOR NOTES:**
- CONNECTORS SHALL BE 3/4" DIA. x 3 3/16" HD STUDS
  - STUDS SHALL BE LOCATED DIRECTLY OVER THE WEB BEAM IF THE BEAM FLANGE THICKNESS IS LESS THAN 6.000 INCHES

1 2ND FLOOR FRAMING PLAN - AREA B  
 S-212 1/8" = 1'-0"

KEY PLAN





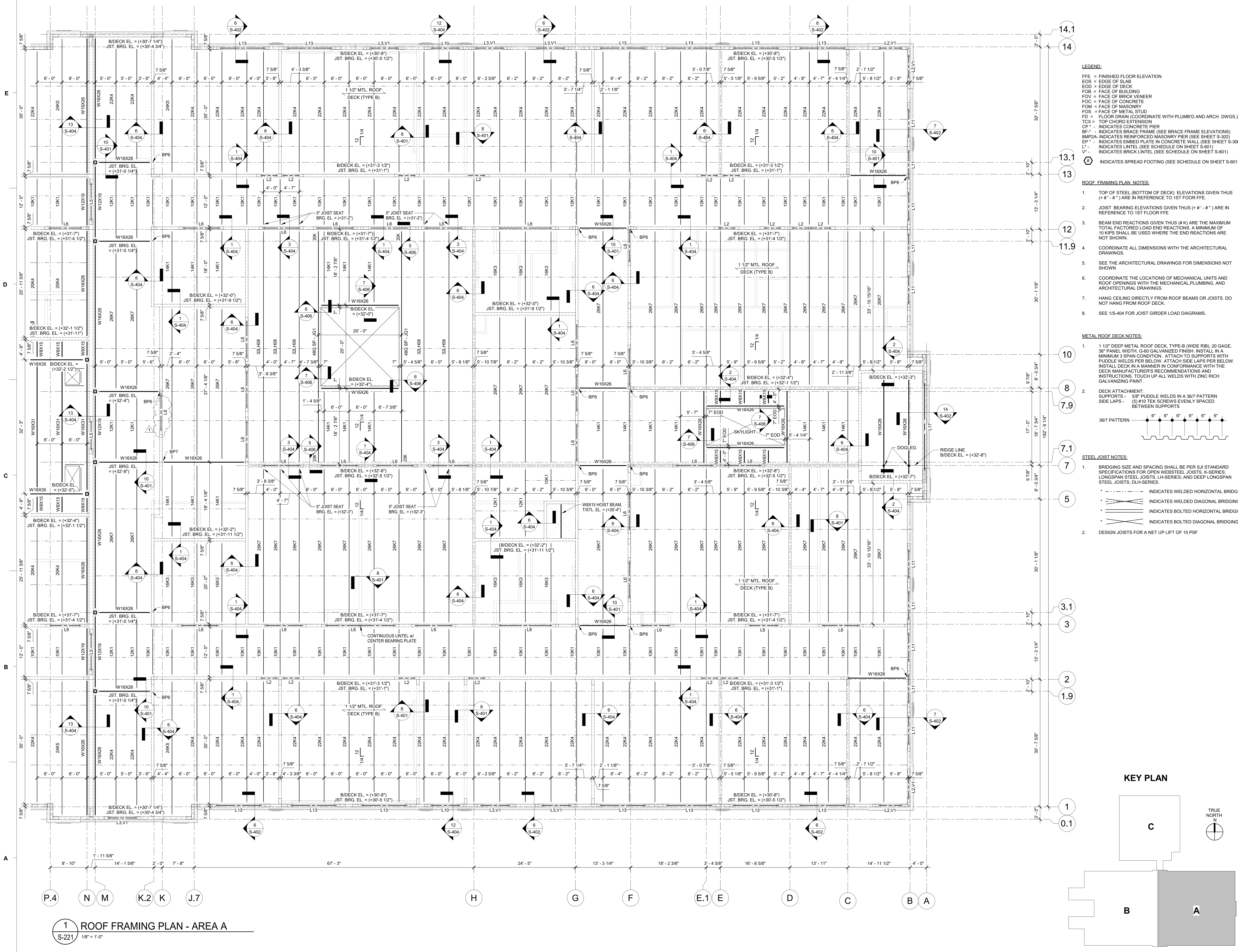
REVISIONS:

No.	Description	Date
1	ADDENDUM 2	02.07.2023

PROJECT: 9201-216240  
DATE: 01-12-2023

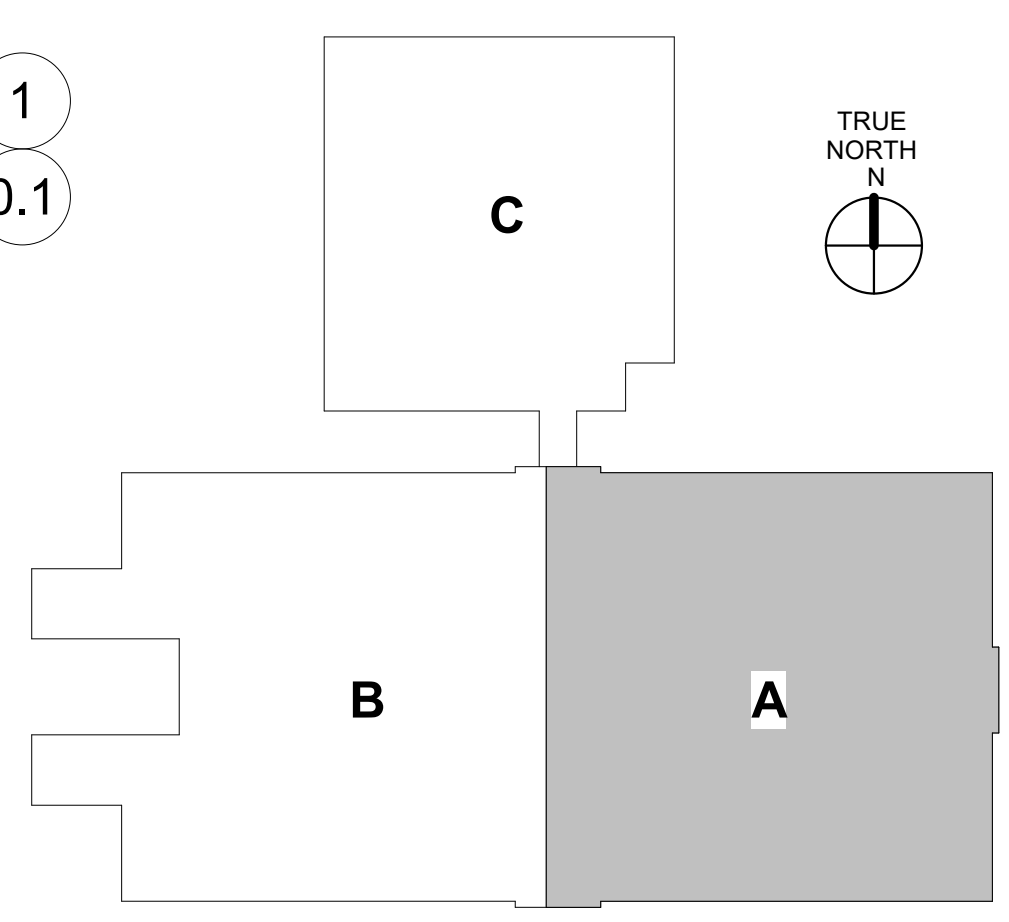
ROOF FRAMING PLAN - AREA A

S-221



- LEGEND:**
- FFE = FINISHED FLOOR ELEVATION
  - EOS = EDGE OF SLAB
  - EOD = EDGE OF DECK
  - FOB = FACE OF BUILDING
  - FOV = FACE OF BRICK VENEER
  - FOC = FACE OF CONCRETE
  - FOM = FACE OF MASONRY
  - FOS = FACE OF METAL STUD
  - FD = FLOOR DRAIN (COORDINATE WITH PLUMB'G AND ARCH. DWGS.)
  - TCX = TOP CHORD EXTENSION
  - CS\* = INDICATES CONCRETE PIER
  - BF\* = INDICATES BRACE FRAME (SEE BRACE FRAME ELEVATIONS)
  - BMP2A = INDICATES REINFORCED MASONRY PIER (SEE SHEET S-302)
  - EP\* = INDICATES EMBED PLATE IN CONCRETE WALL (SEE SHEET S-306)
  - L\* = INDICATES LINTEL (SEE SCHEDULE ON SHEET S-601)
  - V\* = INDICATES BRICK LINTEL (SEE SCHEDULE ON SHEET S-601)
  - ◇ = INDICATES SPREAD FOOTINGS (SEE SCHEDULE ON SHEET S-601)
- ROOF FRAMING PLAN NOTES:**
- TOP OF STEEL (BOTTOM OF DECK) ELEVATIONS GIVEN THUS (+ #'-#") ARE IN REFERENCE TO 1ST FLOOR FFE.
  - JOIST BEARING ELEVATIONS GIVEN THUS (+ #'-#") ARE IN REFERENCE TO 1ST FLOOR FFE.
  - BEAM END REACTIONS GIVEN THUS (# K) ARE THE MAXIMUM TOTAL FACTORED LOAD END REACTIONS. A MINIMUM OF 10 KIPS SHALL BE USED WHERE THE END REACTIONS ARE NOT SHOWN.
  - COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
  - SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
  - COORDINATE THE LOCATIONS OF MECHANICAL UNITS AND ROOF OPENINGS WITH THE MECHANICAL, PLUMBING, AND ARCHITECTURAL DRAWINGS.
  - HANG CEILING DIRECTLY FROM ROOF BEAMS OR JOISTS. DO NOT HANG FROM ROOF DECK.
  - SEE IYS-404 FOR JOIST GIRDER LOAD DIAGRAMS.
- METAL ROOF DECK NOTES:**
- 1 1/2" DEEP METAL ROOF DECK TYPE-B (WIDE RIB), 20 GAGE, 36" PANEL WIDTH, G-60 GALVANIZED FINISH. INSTALL IN A MINIMUM 3 SPAN CONDITION. ATTACH TO SUPPORTS WITH PUDDLE WELDS PER BELOW. ATTACH SIDE LAPS PER BELOW. INSTALL DECK IN A MANNER IN CONFORMANCE WITH THE DECK MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. TOUCH UP ALL WELDS WITH ZINC RICH GALVANIZING PAINT.
  - DECK ATTACHMENT:  
SUPPORTS - 5/8" PUDDLE WELDS IN A 3/8" PATTERN  
SIDE LAPS - (5) #10 TEK SCREWS EVENLY SPACED BETWEEN SUPPORTS
- STEEL JOIST NOTES:**
- BRIDGING SIZE AND SPACING SHALL BE PER SJI STANDARD SPECIFICATIONS FOR OPEN WEBSTEEL JOISTS, K-SERIES, LONGSPAN STEEL JOISTS, LH-SERIES, AND DEEP LONGSPAN STEEL JOISTS, DLH-SERIES.
    - INDICATES WELDED HORIZONTAL BRIDGING
    - INDICATES WELDED DIAGONAL BRIDGING
    - INDICATES BOLTED HORIZONTAL BRIDGING
    - INDICATES BOLTED DIAGONAL BRIDGING
  - DESIGN JOISTS FOR A NET UP LIFT OF 15 PSF

KEY PLAN



1 ROOF FRAMING PLAN - AREA A  
S-221 1/8" = 1'-0"

### ARCH- MILLWORK- BASE AND FULL HEIGHT

Count	TAG	OVERALL DIMENSION	DESCRIPTION	Family and Type	CABINET CARCASS			NOMINAL FEATURE HEIGHT				FACE STYLE GAP DIMS		TOE KICK		DETAIL	BODY MATERIAL	HARDWARE MATERIAL	LOCK FEATURE A	LOCK FEATURE B	LOCK FEATURE C	COMMENTS		
					WIDTH	HEIGHT	DEPTH	A	B	C	D	HEIGHT	WIDTH	HEIGHT	DEPTH									
2	B11.1	18X32.5X24HC	CABINET- BASE - 1 DOOR	12-CSWK-CAB-BASE-11: 18X32.5X24HC	18"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B11	PLM2							
32	B11.1	18X32.5X24HC	CABINET- BASE - 1 DOOR	12-CSWK-CAB-BASE-11: 18X32.5X24HC	18"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B11	WS1							
4	B12.1	24X32.5X24HC	CABINET- BASE - 2 DOOR	12-CSWK-CAB-BASE-12: 24X32.5X24HC	24"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B12	PLM2							
38	B12.1	24X32.5X24HC	CABINET- BASE - 2 DOOR	12-CSWK-CAB-BASE-12: 24X32.5X24HC	24"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B12	WS1							
98	B12.2	36X32.5X24HC	CABINET- BASE - 2 DOOR	12-CSWK-CAB-BASE-12: 36X32.5X24HC	36"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B12	PLM2							
58	B12.2	36X32.5X24HC	CABINET- BASE - 2 DOOR	12-CSWK-CAB-BASE-12: 36X32.5X24HC	36"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B12	WS1							
2	B12.3	24X32.5X24HC	CABINET- BASE- BLIND- 2 DOOR	12-CSWK-CAB-BASE-12B: 24X32.5X24HC	24"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B12B	PLM2							
2	B12.3	24X32.5X24HC	CABINET- BASE- BLIND- 2 DOOR	12-CSWK-CAB-BASE-12B: 24X32.5X24HC	24"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B12B	WS1							
1	B12.4	36X32.5X24HC	CABINET- BASE- BLIND- 2 DOOR	12-CSWK-CAB-BASE-12B: 36X32.5X24HC	36"	32 1/2"	24"	28 1/2"				0' - 1"	0' - 1"	4"	3"	B12B	PLM2							
9	B24.2	36X32.5X24HC	CABINET- BASE- FIXED PANEL 2 DOOR (HC)	12-CSWK-CAB-BASE-24HC: 36X32.5X24HC	36"	32 1/2"	24"	6"	22 1/2"			0' - 1"	0' - 1"	4"	3"	B24H	PLM2			Yes				
64	B24.2	36X32.5X24HC	CABINET- BASE- FIXED PANEL 2 DOOR (HC)	12-CSWK-CAB-BASE-24HC: 36X32.5X24HC	36"	32 1/2"	24"	6"	22 1/2"			0' - 1"	0' - 1"	4"	3"	B24H	WS1			Yes				
1	B43.1	18X32.5X24HC	CABINET- BASE- 3 DRAWER	12-CSWK-CAB-BASE-43: 18X32.5X24HC	18"	32 1/2"	24"	6"	10 1/2"	12"		0' - 1"	0' - 1"	4"	3"	B43	PLM2			Yes		Yes		
1	B43.1	18X32.5X24HC	CABINET- BASE- 3 DRAWER	12-CSWK-CAB-BASE-43: 18X32.5X24HC	18"	32 1/2"	24"	6"	10 1/2"	12"		0' - 1"	0' - 1"	4"	3"	B43	WS1			Yes		Yes		
5	B44.1	18X32.5X24HC	CABINET- BASE- 4 DRAWER	12-CSWK-CAB-BASE-44: 18X32.5X24HC	18"	32 1/2"	24"	6"	5 1/4"	5 1/4"	12"	0' - 1"	0' - 1"	4"	3"	B44	WS1			Yes		Yes		Yes
35	B44.2	24X32.5X24HC	CABINET- BASE- 4 DRAWER	12-CSWK-CAB-BASE-44: 24X32.5X24HC	24"	32 1/2"	24"	6"	5 1/4"	5 1/4"	12"	0' - 1"	0' - 1"	4"	3"	B44	PLM2			Yes		Yes		Yes
6	B47.1	36X32.5X24HC	CABINET- BASE- 7 DRAWER	12-CSWK-CAB-BASE-47: 36X32.5X24HC	36"	32 1/2"	24"	4 9/128"	4 9/128"	4 9/128"	12"	0' - 1"	0' - 1"	4"	3"	B47	PLM2			Yes		Yes		Yes
12	B61.1	12X32.5X24HC	CABINET- BASE- OPEN- 1 SHELF	12-CSWK-CAB-BASE-61: 12X32.5X24HC	12"	32 1/2"	24"	14"	14 1/2"					4"	3"	B61	PLM2							
2	B61.2	36X32.5X24HC	CABINET- BASE- OPEN- 1 SHELF	12-CSWK-CAB-BASE-61: 36X32.5X24HC	36"	32 1/2"	24"	14"	14 1/2"					4"	3"	B61	PLM2							
4	B62.1	36X42X12A	CABINET- BASE- OPEN- 2 SHELF	12-CSWK-CAB-BASE-62: 36X42X12A	36"	42"	12"	12"	14"	12"				4"	3"	B62	WS1							
36	B64.2	36"X42"X24"	CABINET- BASE- OPEN- 2 SHELF	12-CSWK-CAB-BASE-64 DBL: 36"X42"X24"	36"	42"	24"	6"	20"	12"				4"	3"	B64	WS1							INTEGRAL CASTERS
26	B64.1	36"X42"X12"	CABINET- BASE- OPEN- 2 SHELF	12-CSWK-CAB-BASE-64: 36"X42"X12"	36"	42"	12"	6"	20"	12"				4"	3"	B64	WS1							
1	F12.1	36X84X24A	CABINET- FULL HEIGHT - 2 DOOR (2X)	12-CSWK-CAB-FULL-12: 36X84X24A	36"	84"	24"	80"				0' - 1"	0' - 1"	4"	3"	F12	PLM2			Yes				
12	F12.1	36X84X24A	CABINET- FULL HEIGHT - 2 DOOR (2X)	12-CSWK-CAB-FULL-12: 36X84X24A	36"	84"	24"	80"				0' - 1"	0' - 1"	4"	3"	F12	WS1			Yes				
33	F12.2	42X84X24A	CABINET- FULL HEIGHT - 2 DOOR (2X)	12-CSWK-CAB-FULL-12: 42X84X24A	42"	84"	24"	80"				0' - 1"	0' - 1"	4"	3"	F12	PLM2			Yes				
18	F60.1	36x72x12	CABINET- FULL HEIGHT - OPEN- 5 SHELF	12-CSWK-CAB-FULL-62: 36x72x12	36"	72"	12"	6"	50"	12"				4"	3"	F36	PLM2							
10	F60.1	36x72x12	CABINET- FULL HEIGHT - OPEN- 5 SHELF	12-CSWK-CAB-FULL-62: 36x72x12	36"	72"	12"	6"	50"	12"				4"	3"	F36	WS1							
6	F60.2	36x84x12	CABINET- FULL HEIGHT - OPEN- 5 SHELF	12-CSWK-CAB-FULL-62: 36x84x12	36"	84"	12"	6"	62"	12"				4"	3"	F36	WS1							
24	F60.3	36x84x24	CABINET- FULL HEIGHT - OPEN- 5 SHELF	12-CSWK-CAB-FULL-62: 36x84x24	36"	84"	24"	6"	62"	12"				4"	3"	F36	WS1							

### ARCH- MILLWORK- UPPER CABINETS

Type Mark	TYPE	DESCRIPTION	CABINET CARCASS			NOMINAL FEATURE HEIGHT		FACE STYLE GAP DIMS		TAG	BODY MATERIAL	LOCK FEATURE A	COMMENTS
			WIDTH	HEIGHT	DEPTH	A	B	HEIGHT	WIDTH				
U11.1	12X30x12A	CABINET- UPPER- 1 DOOR	12"	30"	12"	30"	0' - 1"	0' - 1"	U11	PLM2	Yes		
U11.1	12X30x12A	CABINET- UPPER- 1 DOOR	12"	30"	12"	30"	0' - 1"	0' - 1"	U11	WS1	Yes		
U11.2	18X30x12A	CABINET- UPPER- 1 DOOR	18"	30"	12"	30"	0' - 1"	0' - 1"	U11	PLM2	Yes		
U11.2	18X30x12A	CABINET- UPPER- 1 DOOR	18"	30"	12"	30"	0' - 1"	0' - 1"	U11	WS1	Yes		
U11.3	12X30x12A	CABINET- UPPER- BLIND- 1 DOOR	12"	30"	12"	30"	0' - 1"	0' - 1"	U11B	PLM2	Yes		
U11.3	12X30x12A	CABINET- UPPER- BLIND- 1 DOOR	12"	30"	12"	30"	0' - 1"	0' - 1"	U11B	WS1	Yes		
U12.1	24X30x12A	CABINET- UPPER- 2 DOOR	24"	30"	12"	30"	0' - 1"	0' - 1"	U12	PLM2	Yes		
U12.1	24X30x12A	CABINET- UPPER- 2 DOOR	24"	30"	12"	30"	0' - 1"	0' - 1"	U12	WS1	Yes		
U12.2	30X30x12A	CABINET- UPPER- 2 DOOR	30"	30"	12"	30"	0' - 1"	0' - 1"	U12	PLM2	Yes		
U12.2	30X30x12A	CABINET- UPPER- 2 DOOR	30"	30"	12"	30"	0' - 1"	0' - 1"	U12	WS1	Yes		
U12.3	36X18x12A	CABINET- UPPER- 2 DOOR	36"	18"	12"	18"	0' - 1"	0' - 1"	U12	PLM2	Yes		
U12.3	36X18x12A	CABINET- UPPER- 2 DOOR	36"	18"	12"	18"	0' - 1"	0' - 1"	U12	WS1	Yes		
U12.4	36X30x12A	CABINET- UPPER- 2 DOOR	36"	30"	12"	30"	0' - 1"	0' - 1"	U12	PLM2	Yes		
U12.4	36X30x12A	CABINET- UPPER- 2 DOOR	36"	30"	12"	30"	0' - 1"	0' - 1"	U12	WS1	Yes		
U12.5	36X30x12A	CABINET- UPPER- BLIND- 2 DOOR	36"	30"	12"	30"	0' - 1"	0' - 1"	U12A	PLM2	Yes		
U12.5	36X30x12A	CABINET- UPPER- BLIND- 2 DOOR	36"	30"	12"	30"	0' - 1"	0' - 1"	U12A	WS1	Yes		
U32.1	18X30x12A	CABINET- UPPER- 1 SHELF	18"	30"	12"	14"	14 1/2"	0' - 0"	U32	PLM2			

### ARCH- MILLWORK- COUNTERTOPS

ROOM NUMBER	TYPE	Family and Type	COUNTERTOP DEPTH		COUNTERTOP LENGTH		WORKSURFACE		BACK AND SIDE SPLASHES				COMMENTS
			LEG 1	LEG 2	LEG 1	LEG 2	HEIGHT	MATERIAL	BACK SPLASH 1 PRESENT	BACK SPLASH 2 PRESENT	BACK SPLASH 1 HEIGHT IF PRESENT	BACK SPLASH 2 HEIGHT IF PRESENT	
010		12-CSWK(GM)-CNTR-11: A	2' - 1"		9' - 0"		3' - 0"	SSM1	Yes	0' - 4"			Yes
010		12-CSWK(GM)-CNTR-11: A	2' - 1"		7' 0" - 6 1/4"		3' - 0"	PLM3	Yes	0' - 4"			Yes
G108	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		7' - 6"		2' - 10"	PLM3	Yes	0' - 4"			Yes
B101	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B102	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B103	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B105	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B106	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B107	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B111	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
I36	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B112	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B110	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A102	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A103	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
G106	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B216	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B217	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B215	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B212	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B211	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B209	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B205	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B204	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B202	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
B210	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A206	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A201	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A207	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A208	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A212	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A213	CT11	12-CSWK(GM)-CNTR-11: HC	2' - 1"		8' - 0"		2' - 10"	PLM1	Yes	0' - 4"			No
A211													



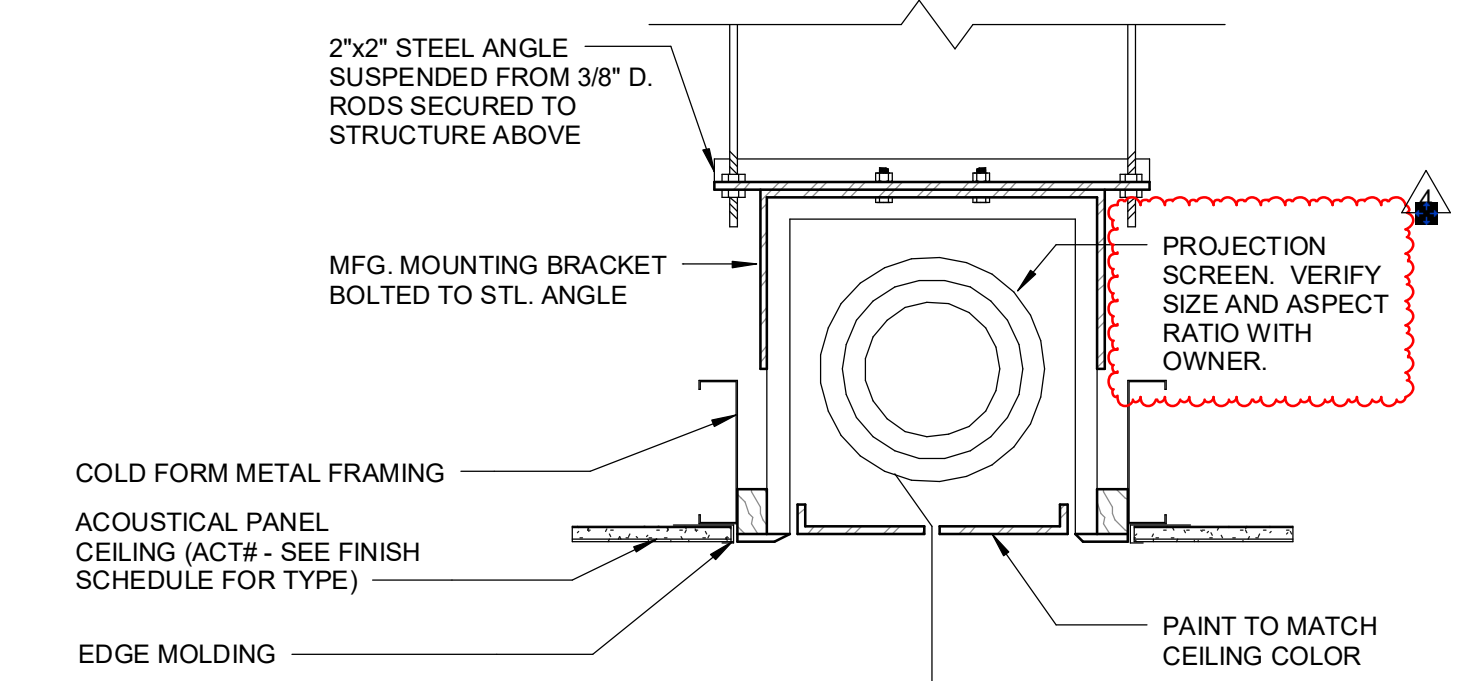
REVISIONS:

No.	Description	Date
4	ADDENDUM 2	02-07-23

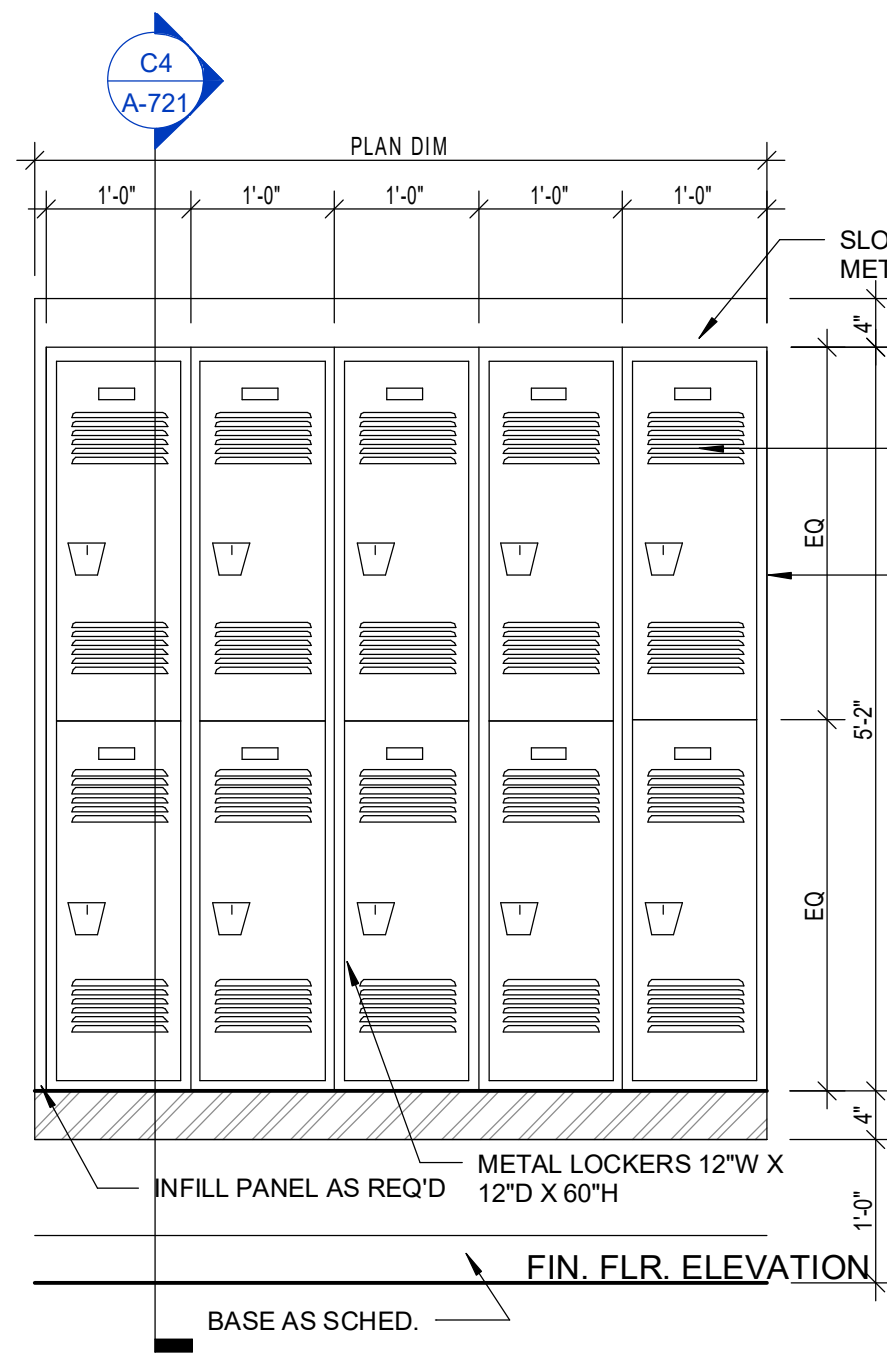
PROJECT: 9201-218240  
DATE: 01-12-2023

MISC. DETAILS

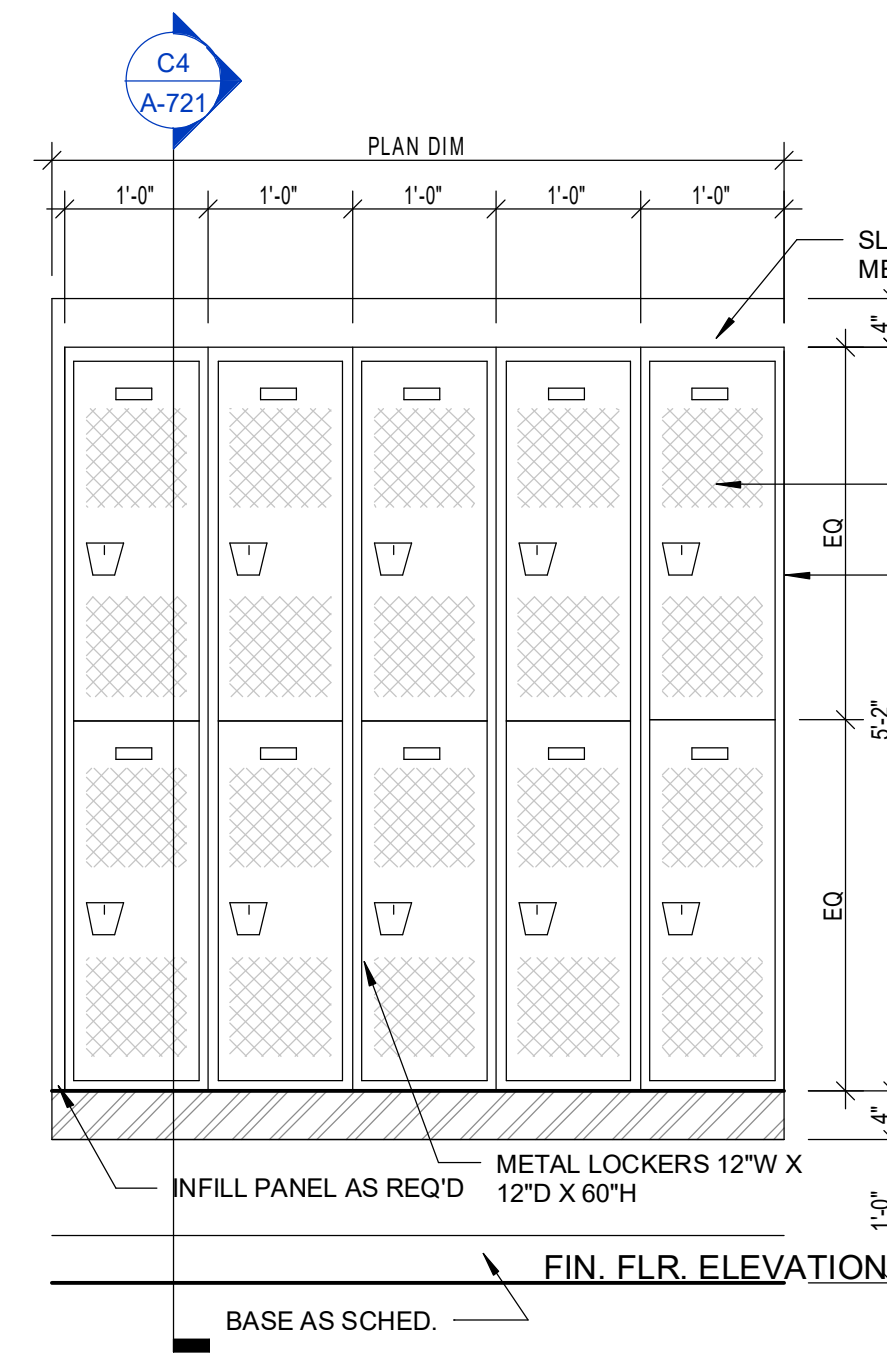
A-721



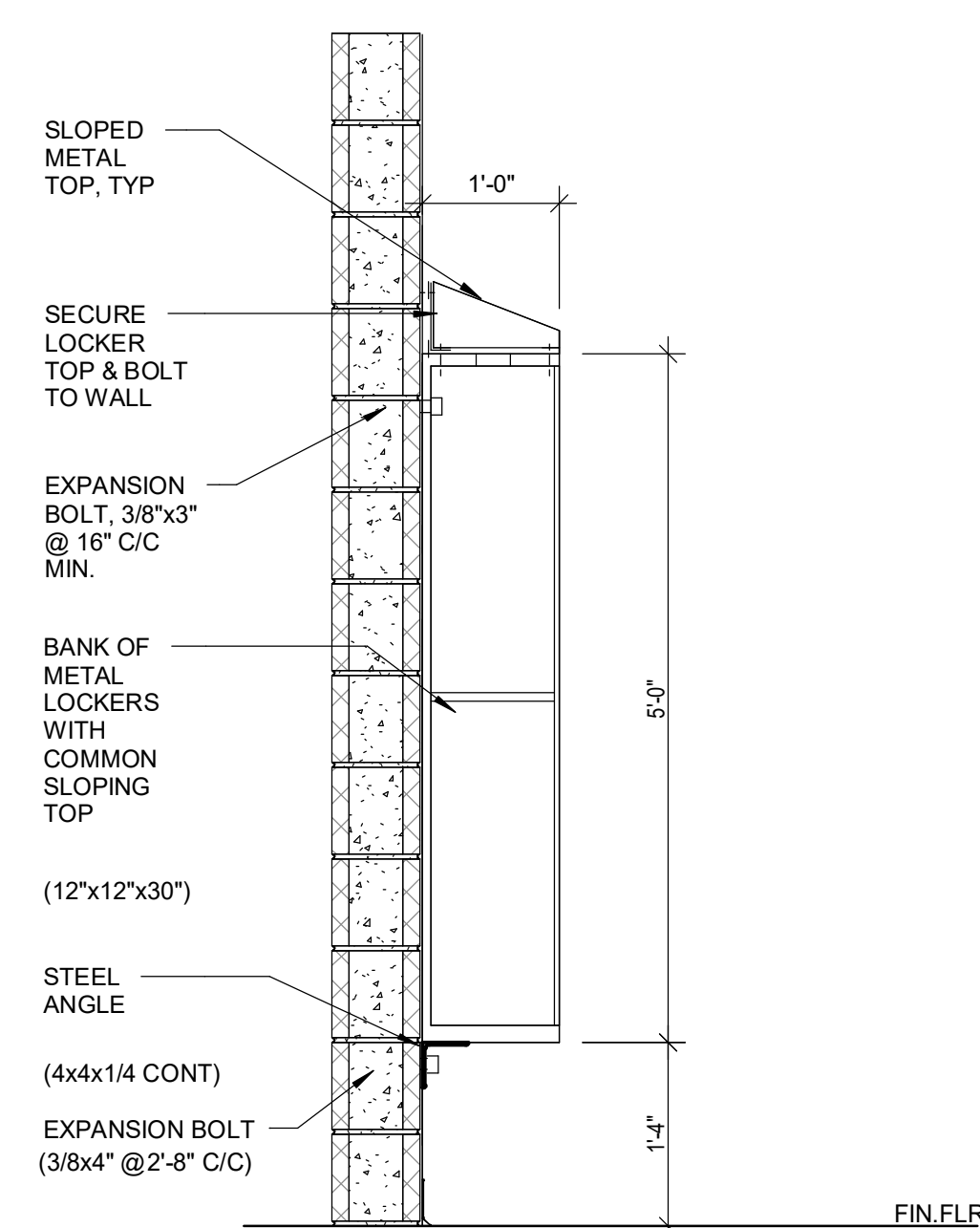
D5 MOTORIZED AV SCREEN - TYP  
1 1/2" = 1'-0"



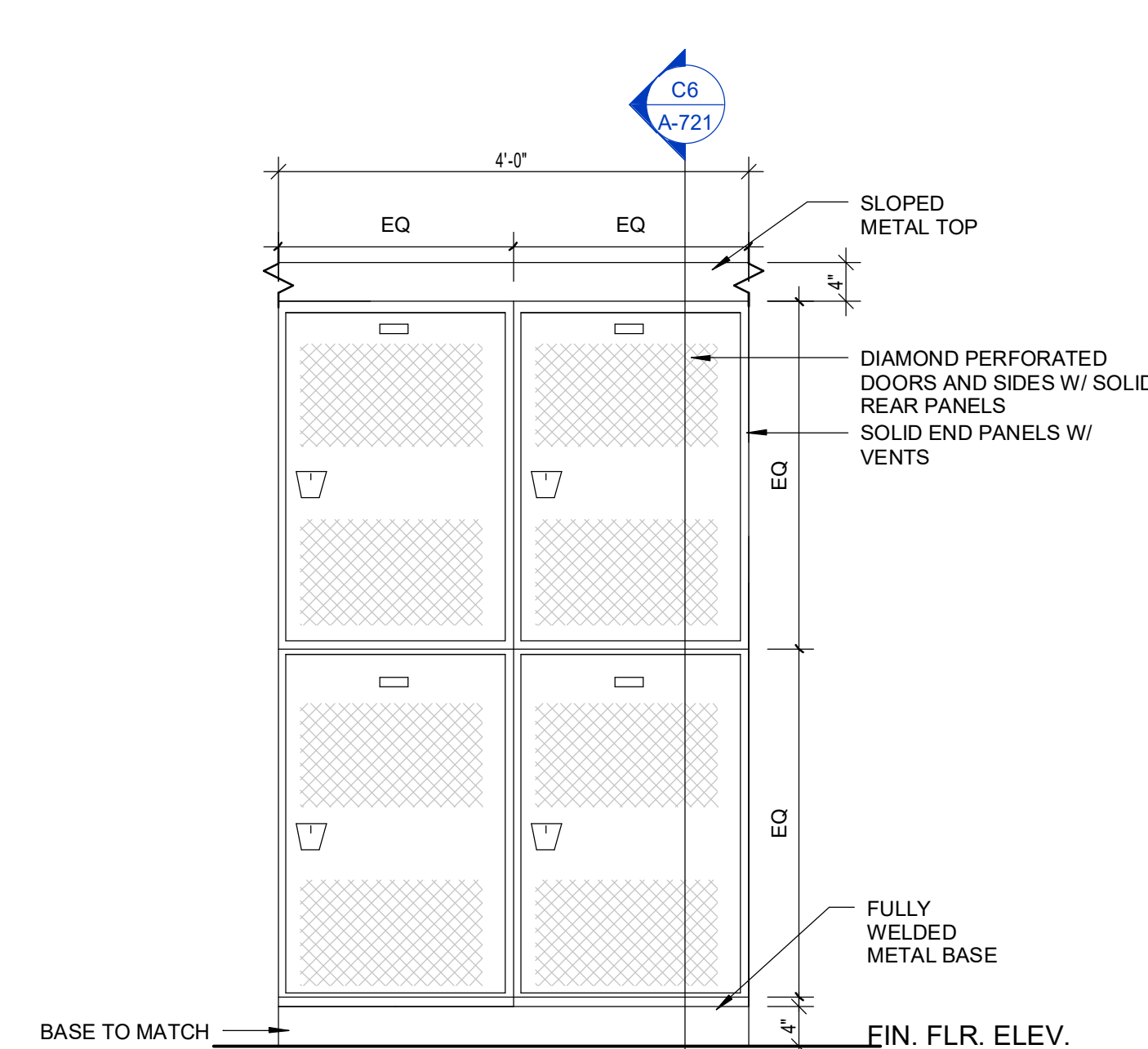
C1 LOCKER ELEVATION - STAFF LOCKERS  
3/4" = 1'-0"



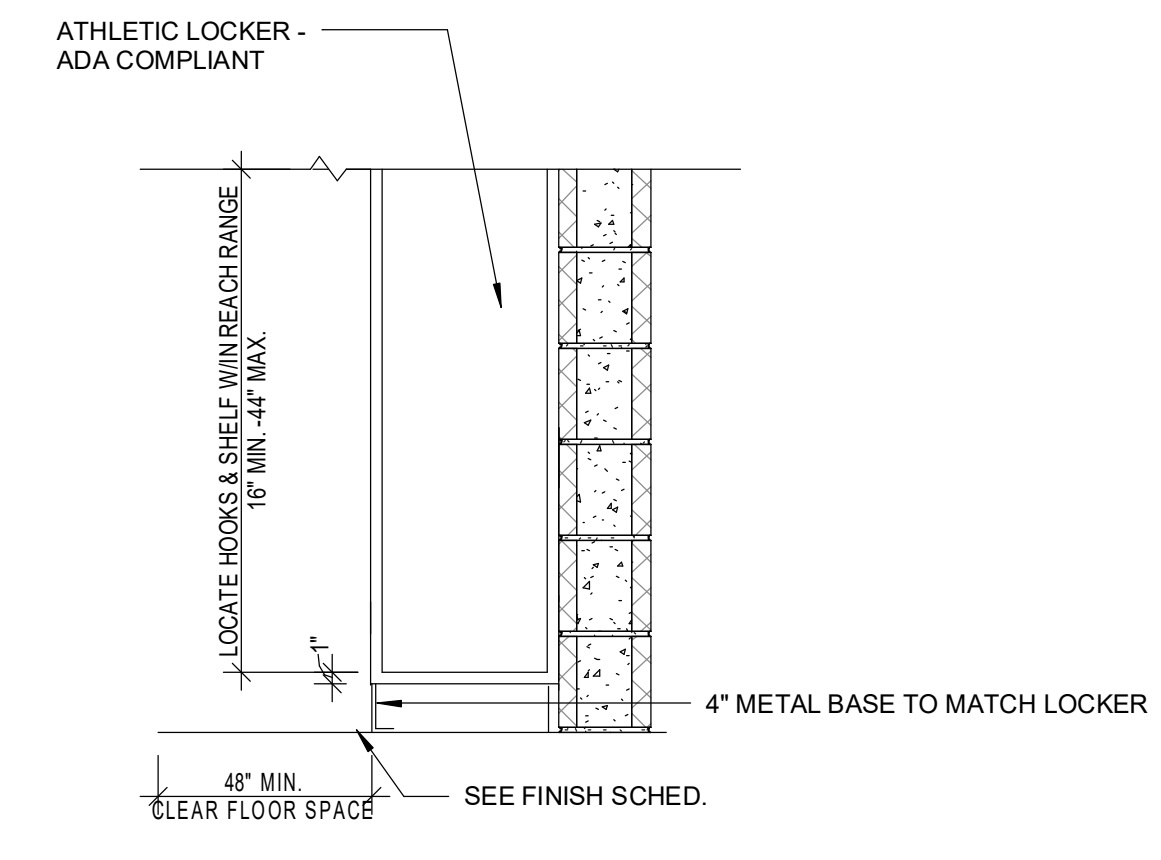
C3 LOCKER ELEVATION - P.E. LOCKERS  
3/4" = 1'-0"



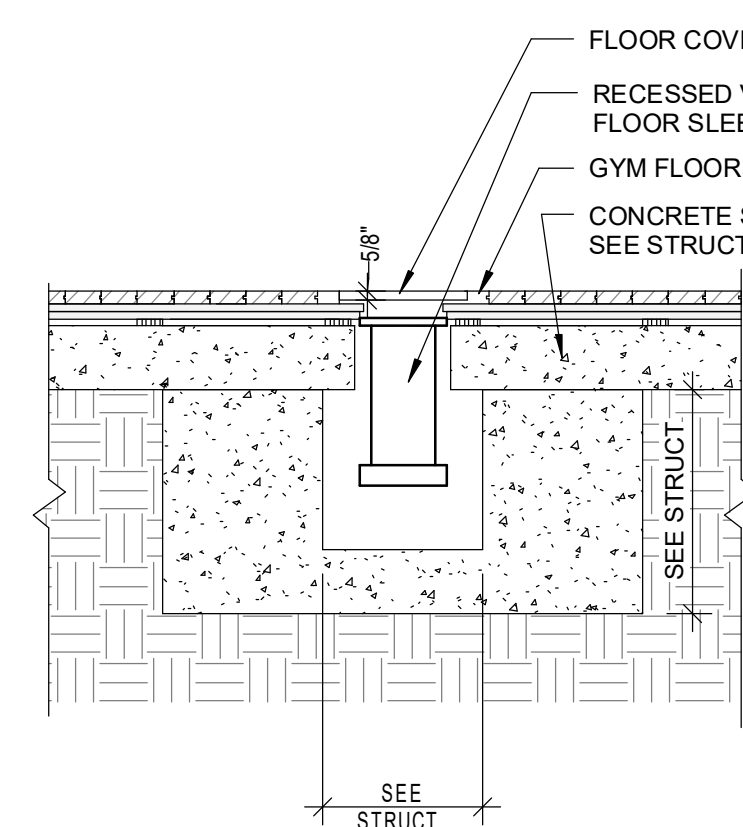
C4 LOCKER SECTION @ STAFF & P.E. LOCKERS  
3/4" = 1'-0"



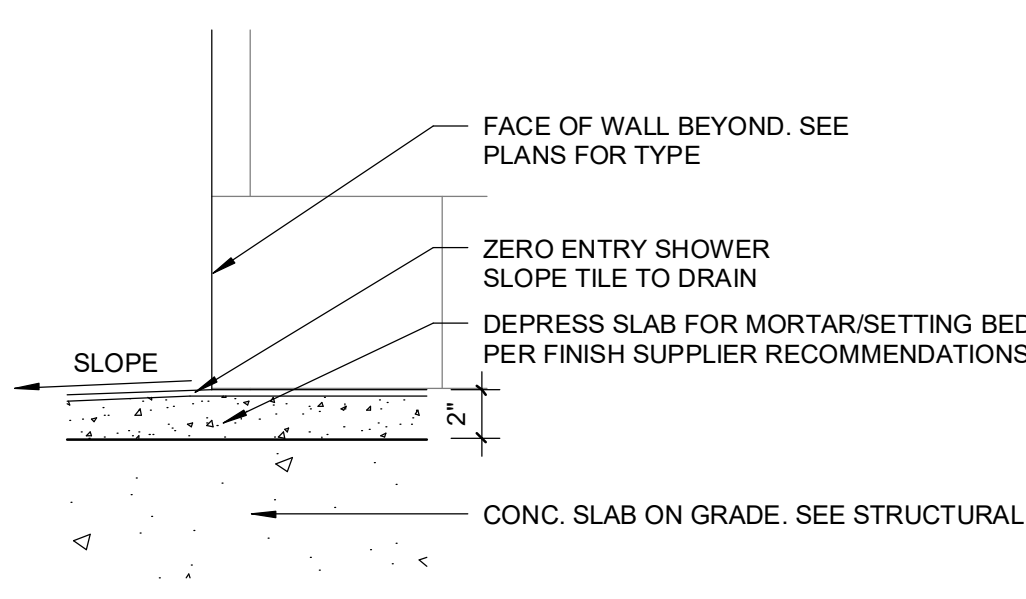
C5 LOCKER ELEVATION @ TEAM LOCKERS  
3/4" = 1'-0"



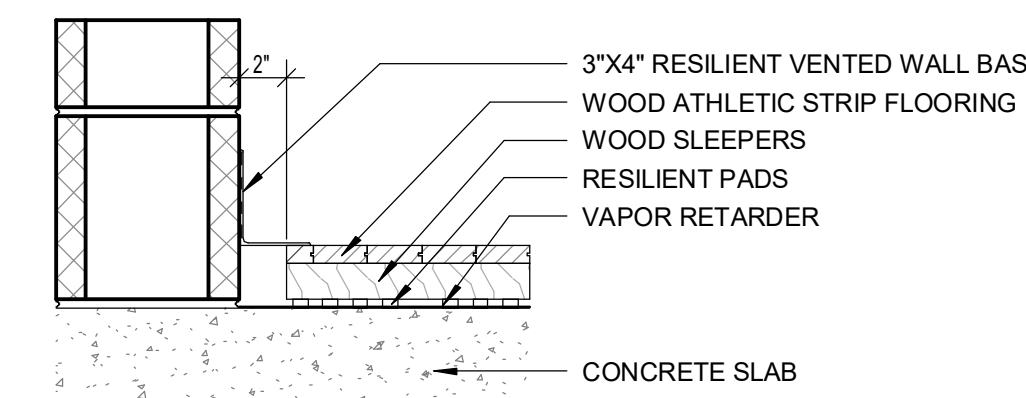
C6 LOCKER SECTION @ TEAM LOCKERS  
3/4" = 1'-0"



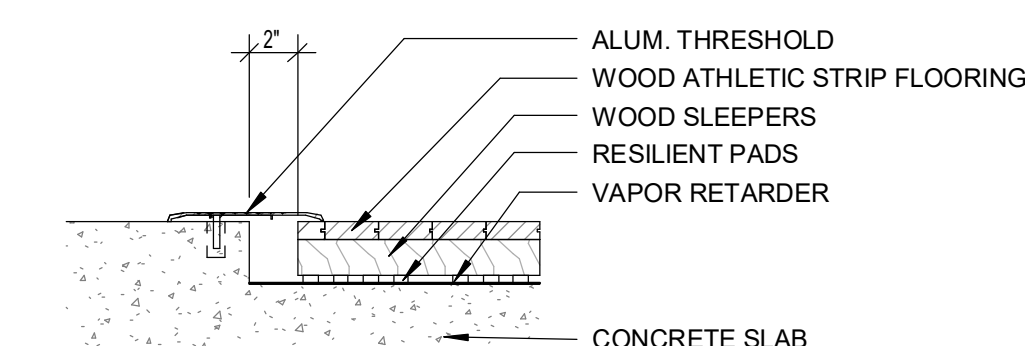
A3 SLEEVE AND COVER PLATE- FLOOR DETAIL  
1" = 1'-0"



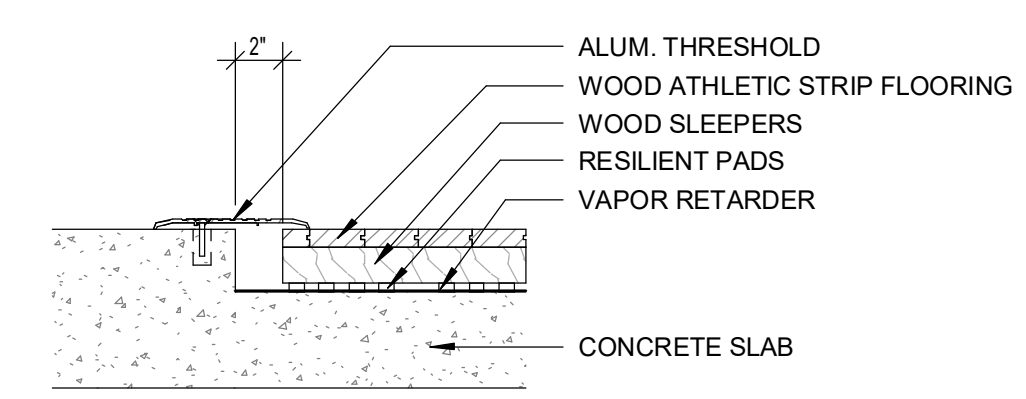
A4 SHOWER STALL THRESHOLD DETAIL  
1 1/2" = 1'-0"



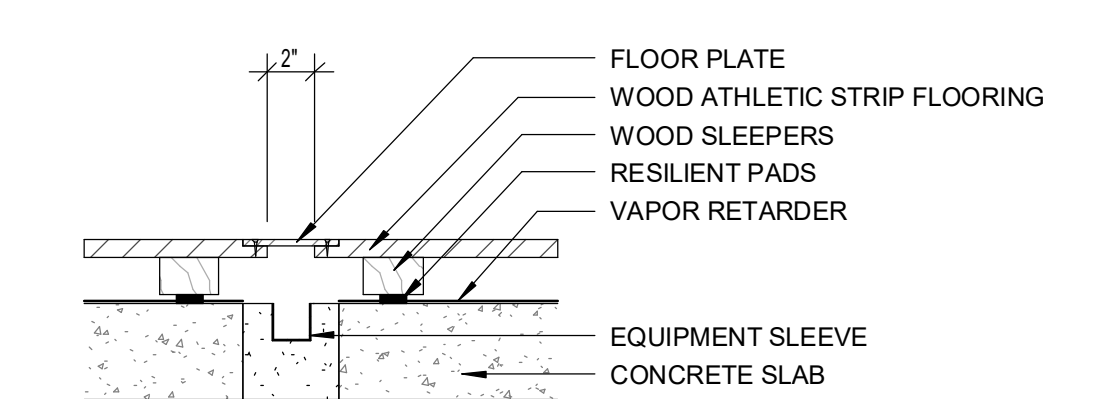
B5 STAGE AND GYM WOOD FLOOR WALL BASE DETAIL  
1 1/2" = 1'-0"



B6 GYM FLOOR THRESHOLD DETAIL  
1 1/2" = 1'-0"



A5 FLOOR TRANSITION DETAIL- GYM WOOD FLOOR TO CONCRETE FLOOR  
1 1/2" = 1'-0"



A6 FLOOR PLATE/ EQUIPMENT SLEEVE DETAIL  
1 1/2" = 1'-0"

- DETAIL NOTES:
1. COMPACTED STONE BASE AND VAPOR BARRIER SHALL BE CONTINUOUS BELOW THICKENED SLAB.
  2. DIMENSIONS SHOWN ARE RELATED TO THE SLEEVE AND COVER PLATE SPEC'ED AS THEY BASIS OF DESIGN AND MAY VARY PER OTHER APPROVED MANUFACTURE'S MODELS. VERIFY ALL DIMENSIONS PER MANUFACTURER RECOMMENDED INSTALLATION INSTRUCTIONS.
  3. COVER PLATE SHALL BE ROUTED FLUSH INTO ATHLETIC FLOORING SYSTEM WITH CONCEALED FASTENERS, SEALED TO BE WATER TIGHT.



**2 FIRST FLOOR SYSTEMS PLAN - AREA B**  
1/8" = 1'-0"

**KEYED NOTES:**

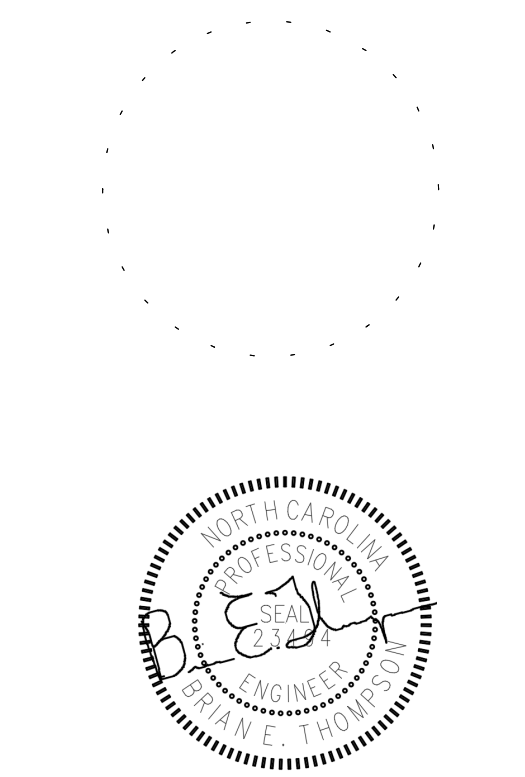
- FIRE ALARM CONTRACTOR SHALL PROVIDE AUX I/O MODULE COMPATIBLE WITH RAULAND INTERCOM SYSTEM. CONTRACTOR SHALL COORDINATE REQUIREMENTS WITH RAULAND INTERCOM VENDOR.



**GRIER MIDDLE SCHOOL REPLACEMENT**



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL. 704.333.6686 FAX 704.333.2926  
WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

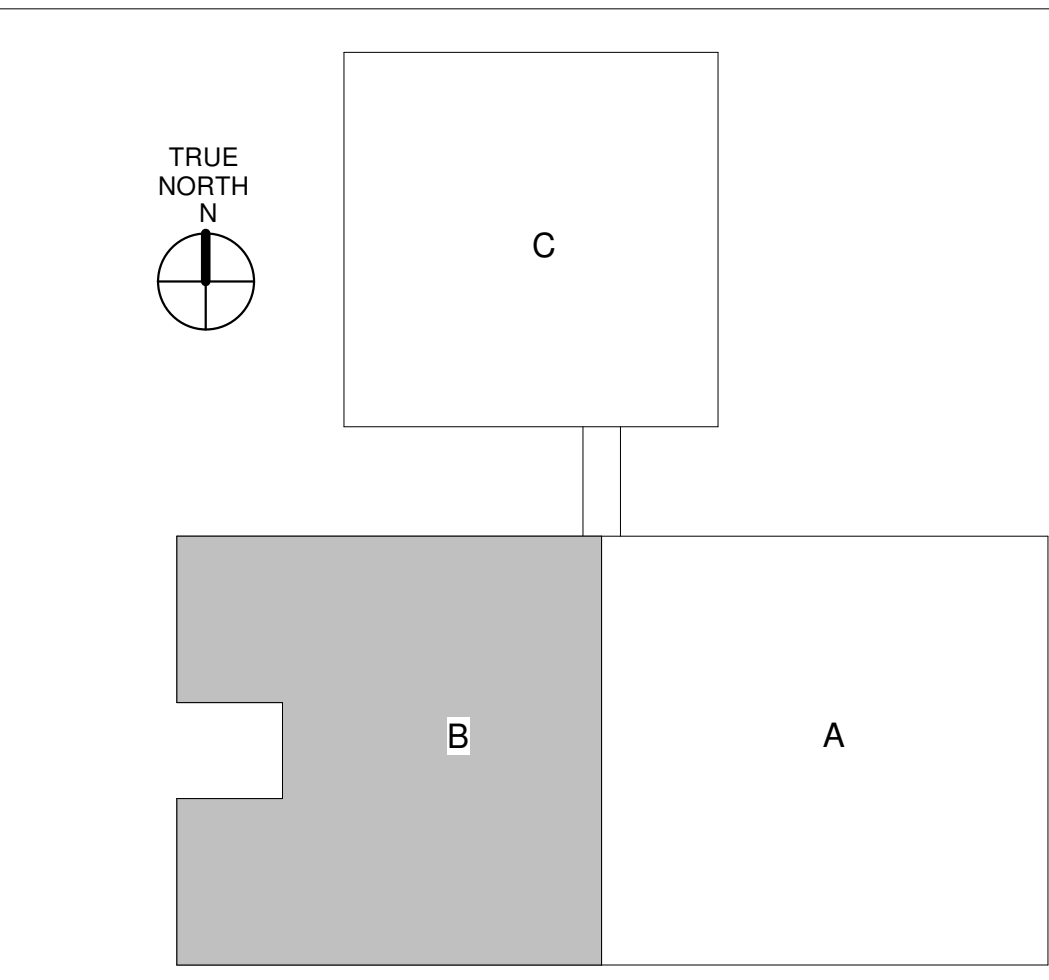
REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
2	Permit Revisions	01-11-2023
4	ADDENDUM NO 2	02.07.2023

**PARTITION LEGEND**

- ALL EXTERIOR WALLS TO BE W1 U.N.O.
  - ALL INTERIOR MASONRY PARTITIONS TO BE M8NX U.N.O.
  - ALL INTERIOR METAL STUD PARTITIONS TO BE TYPE ASSX U.N.O.
- NON-RATED PARTITION TO 4" ABOVE CEILING
  - NON-RATED METAL STUD PARTITION TO DECK
  - NON-RATED CMU PARTITION
  - SMOKE PARTITION TO DECK
  - 1 HR. RATED PARTITION TO DECK
  - 2 HR. RATED PARTITION TO DECK

**KEY PLAN**



PROJECT: 9201-218240  
DATE: 01-12-2023

**FIRST FLOOR SPECIAL SYSTEMS PLAN AREA B**

**E-301B**

Optima # 22-0082

01.12.2023 - BID SET

THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT, WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A., IS EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING P.A. 2021. ALL RIGHTS RESERVED.

E  
D  
C  
B  
A

SYMBOLS:	
SYMBOL	DESCRIPTION
	NETWORK OUTLET, STANDARD HEIGHT (+18" AFF). ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE QUANTITY OF CATEGORY 6A CABLES AS INDICATED BY SUBSCRIPT.
	NETWORK OUTLET, ELEVATED HEIGHT (+42" AFF, UNLESS OTHERWISE NOTED). ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE QUANTITY OF CATEGORY 6A CABLES AS INDICATED BY SUBSCRIPT.
	NETWORK OUTLET, CEILING MOUNTED. ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE QUANTITY OF CATEGORY 6A CABLES AS INDICATED BY SUBSCRIPT.
	NETWORK WALL PHONE OUTLET, ELEVATED HEIGHT (+42" AFF). ELECTRICAL CONTRACTOR SHALL PROVIDE 1-GANG JUNCTION BOX AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLE AND PHONE WALL MOUNT FACEPLATE.
	NETWORK OUTLET - RACEWAY ONLY, STANDARD HEIGHT (+18" AFF). ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE.
	NETWORK OUTLET - RACEWAY ONLY, ELEVATED HEIGHT (+42" AFF, UNLESS OTHERWISE NOTED). ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE.
	WIRELESS ACCESS POINT CONNECTION (CEILING). WHEN INSTALLED IN HARD/OPEN CEILING, ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. REFER TO WIRELESS ACCESS POINT DETAIL (HARD/OPEN CEILING). STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLES FOR EACH WIRELESS ACCESS POINT CONNECTION. WHEN INSTALLED IN ACCESSIBLE CEILING, STRUCTURED CABLING CONTRACTOR SHALL PROVIDE ABOVE CEILING BRACKET AND SURFACE BOX. REFER TO WIRELESS ACCESS POINT DETAIL (ACCESSIBLE CEILING). STRUCTURED CABLING CONTRACTOR SHALL PROVIDE 3'-0" EQUIPMENT CORD. WIRELESS ACCESS POINT EQUIPMENT SHALL BE OWNER FURNISHED. CONTRACTOR INSTALLED COORDINATE WITH OWNER EXACT LOCATION AND MOUNTING METHOD OF WIRELESS ACCESS POINT EQUIPMENT.
	WIRELESS ACCESS POINT CONNECTION (WALL). ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. REFER TO WIRELESS ACCESS POINT DETAIL (WALL). STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLES FOR EACH WIRELESS ACCESS POINT CONNECTION. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE 3'-0" EQUIPMENT CORD. WIRELESS ACCESS POINT EQUIPMENT SHALL BE OWNER FURNISHED. CONTRACTOR INSTALLED COORDINATE WITH OWNER EXACT LOCATION AND MOUNTING METHOD OF WIRELESS ACCESS POINT EQUIPMENT.
	WIRELESS ACCESS POINT CONNECTION (EXTERIOR). ELECTRICAL CONTRACTOR SHALL PROVIDE 12"x12"x6" DEEP JUNCTION BOX, 1" SLEEVE TO EXTERIOR AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLES FOR EACH WIRELESS ACCESS POINT CONNECTION. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE SURGE PROTECTION AND 3'-0" EQUIPMENT CORD. WIRELESS ACCESS POINT EQUIPMENT SHALL BE OWNER FURNISHED. CONTRACTOR INSTALLED. REFER TO EXTERIOR NETWORK DEVICE DETAIL. COORDINATE WITH OWNER EXACT LOCATION AND MOUNTING METHOD OF WIRELESS ACCESS POINT EQUIPMENT.
	DISPLAY CONNECTION WITH NETWORK AND DUPLEX POWER. ELECTRICAL CONTRACTOR SHALL PROVIDE 3-GANG JUNCTION BOX WITH OFFSET 1-GANG TRIM RING FOR LOW VOLTAGE SECTION, LOW VOLTAGE DIVIDER, 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE FOR NETWORK CABLING, 0.75" CONDUIT FOR POWER AND DUPLEX RECEPTACLE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLE. REFER TO DISPLAY DETAIL.  SUBSCRIPT: "AV-WP" - REFER TO AV DISPLAY WITH WALL PLATE DETAIL FOR REQUIREMENTS. "AV-FB" - REFER TO AV DISPLAY WITH FLOOR BOX DETAIL FOR REQUIREMENTS.
	CONDUIT/SLEEVE, 2" UNLESS OTHERWISE NOTED.
	RUNWAY LADDER CABLE TRAY IN TELECOMMUNICATIONS ROOMS.
	WIRE MESH CABLE TRAY ABOVE ACCESSIBLE CEILING; LENGTH AND WIDTH PER PLANS, 4" TALL.
	TWO-POST EQUIPMENT RACK WITH VERTICAL WIRE MANAGEMENT. PROVIDED BY TELECOMMUNICATIONS CONTRACTOR.
	FOUR-POST EQUIPMENT RACK WITH VERTICAL WIRE MANAGEMENT. PROVIDED BY TELECOMMUNICATIONS CONTRACTOR.
	3/4" FIRE-RATED AC PLYWOOD WITH TWO COATS OF FIRE RETARDANT LIGHT-COLORED PAINT ON ALL SIDES. STAMP SHALL BE VISIBLE. MOUNT 8" AFF WITH GRADE A SURFACE EXPOSED.
	PRIMARY BONDING BUSBAR
	SECONDARY BONDING BUSBAR
	DRAWING NOTE

SYMBOLS:	
SYMBOL	DESCRIPTION
	NETWORK CAMERA (CEILING). WHEN INSTALLED IN HARD/OPEN CEILING, ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. REFER TO CAMERA DETAIL (HARD/OPEN CEILING). STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLES FOR EACH CAMERA CONNECTION. WHEN INSTALLED IN ACCESSIBLE CEILING, ACCESSIBLE CEILING, SECURITY CONTRACTOR SHALL PROVIDE ABOVE CEILING BRACKET AND SURFACE BOX. REFER TO CAMERA DETAIL (ACCESSIBLE CEILING). QUANTITY OF SENSORS REQUIRED INDICATED INSIDE CAMERA BY A NUMBER.
	NETWORK CAMERA (WALL). ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLE FOR EACH CAMERA CONNECTION. REFER TO CAMERA DETAIL (WALL MOUNTED). QUANTITY OF SENSORS REQUIRED INDICATED INSIDE CAMERA BY A NUMBER.
	NETWORK CAMERA (EXTERIOR CEILING). ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLE FOR EACH CAMERA CONNECTION. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE SURGE PROTECTION AND 1'-0" EQUIPMENT CORD. REFER TO EXTERIOR NETWORK DEVICE DETAIL. QUANTITY OF SENSORS REQUIRED INDICATED INSIDE CAMERA BY A NUMBER.
	NETWORK CAMERA (EXTERIOR WALL). ELECTRICAL CONTRACTOR SHALL PROVIDE 12"x12"x6" DEEP JUNCTION BOX, 1" SLEEVE TO EXTERIOR AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLE FOR EACH CAMERA CONNECTION. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE SURGE PROTECTION AND 1'-0" EQUIPMENT CORD. REFER TO EXTERIOR NETWORK DEVICE DETAIL. QUANTITY OF SENSORS REQUIRED INDICATED INSIDE CAMERA BY A NUMBER.
	CARD READER. ELECTRICAL CONTRACTOR SHALL PROVIDE 1-GANG JUNCTION BOX AND 3/4" CONDUIT TO ACCESS CONTROL JUNCTION BOX ON SECURE SIDE OF DOOR. SECURITY CONTRACTOR SHALL PROVIDE DEVICE AND CABLING.
	DOOR CONTACT. ELECTRICAL CONTRACTOR SHALL PROVIDE 3/4" CONDUIT TO ACCESS CONTROL JUNCTION BOX ON SECURE SIDE OF DOOR. SECURITY CONTRACTOR SHALL PROVIDE DEVICE AND CABLING.
	REQUEST TO EXIT DEVICE/CONNECTION. ELECTRICAL CONTRACTOR SHALL PROVIDE 1-GANG JUNCTION BOX AND 1" CONDUIT TO ACCESS CONTROL JUNCTION BOX ON SECURE SIDE OF DOOR. SECURITY CONTRACTOR SHALL PROVIDE DEVICE AND CABLING.
	KEYPAD. ELECTRICAL CONTRACTOR SHALL PROVIDE 1-GANG JUNCTION BOX AND 1" CONDUIT TO INTRUSION DETECTION CONTROL PANEL. SECURITY CONTRACTOR SHALL PROVIDE DEVICE AND CABLING.
	ELECTRIC STRIKE. ELECTRICAL CONTRACTOR SHALL PROVIDE 1" CONDUIT WITH PULL STRING IN DOOR FRAME TO ACCESS CONTROL JUNCTION BOX ON SECURE SIDE OF DOOR. HARDWARE CONTRACTOR SHALL PROVIDE DEVICE AND SECURITY CONTRACTOR SHALL PROVIDE CABLING.
	ELECTRIFIED LOCKSET. ELECTRICAL CONTRACTOR SHALL PROVIDE 1" CONDUIT WITH PULL STRING IN DOOR FRAME TO ACCESS CONTROL JUNCTION BOX ON SECURE SIDE OF DOOR. HARDWARE CONTRACTOR SHALL PROVIDE DEVICE AND SECURITY CONTRACTOR SHALL PROVIDE CABLING.
	PUSH BUTTON DOOR RELEASE. ELECTRICAL CONTRACTOR SHALL PROVIDE 1-GANG JUNCTION BOX AND 3/4" CONDUIT TO ACCESS CONTROL JUNCTION BOX ON SECURE SIDE OF DOOR. SECURITY CONTRACTOR SHALL PROVIDE DEVICE AND CABLING.
	NETWORK INTERCOM 2-WAY SPEAKER (CEILING). WHEN INSTALLED IN HARD/OPEN CEILING, ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. WHEN INSTALLED IN ACCESSIBLE CEILING, STRUCTURED CABLING CONTRACTOR SHALL PROVIDE ABOVE CEILING BISCUIT BOX. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLE FOR EACH ROOM WITH A NETWORK SPEAKER CONNECTION. PROVIDE 10' CABLE SLACK AND COIL AT CABLE TRAY//HOOKS ABOVE ACCESSIBLE CEILING. IN CLASSROOM MODULE SHALL BE LOCATED ABOVE CEILING (PROVIDED AND INSTALLED BY INTERCOM CONTRACTOR). INTERCOM VENDOR/CONTRACTOR SHALL PROVIDE AND INSTALL EQUIPMENT CORDS AND ALL NECESSARY ACCESSORIES FOR A COMPLETE AND OPERABLE SYSTEM.
	70-VOLT INTERCOM SPEAKER (CEILING). WHEN INSTALLED IN HARD/OPEN CEILING, ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX WITH 1-GANG TRIM RING AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. WHEN INSTALLED IN ACCESSIBLE CEILING, STRUCTURED CABLING CONTRACTOR SHALL PROVIDE ABOVE CEILING BISCUIT BOX. INTERCOM VENDOR/CONTRACTOR SHALL PROVIDE AND INSTALL EQUIPMENT CORDS AND ALL NECESSARY ACCESSORIES FOR A COMPLETE AND OPERABLE SYSTEM.
	70-VOLT INTERCOM SPEAKER (WALL). ELECTRICAL CONTRACTOR SHALL PROVIDE 2-GANG JUNCTION BOX AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING. INTERCOM CONTRACTOR SHALL PROVIDE MINIMUM 18/2 WIRE TO AND BETWEEN SPEAKERS. PROVIDE 10' CABLE SLACK AND COIL AT CABLE TRAY//HOOKS ABOVE ACCESSIBLE CEILING. *SPEAKERS NOTED AS HIGH OUTPUT SHALL BE RAULAN ACC1412 OR APPROVED EQUAL.
	HIGH OUTPUT 70-VOLT EXTERIOR INTERCOM SPEAKER (RAULAN ACC1412 OR APPROVED EQUAL). ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL RAULAN RECESSED, WEATHERPROOF BACKBOX, 1" SLEEVE TO EXTERIOR AND 1.25" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. INTERCOM VENDOR/CONTRACTOR SHALL PROVIDE MINIMUM 18/2 WIRE TO AND BETWEEN SPEAKERS. PROVIDE 10' CABLE SLACK AND COIL AT CABLE TRAY//HOOKS ABOVE ACCESSIBLE CEILING.
	CALL STATION, 2-BUTTON IP CALL BUTTON, CALL & EMERGENCY. ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE GANG JUNCTION BOX AND 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE TERMINATED CATEGORY 6A CABLE IN JUNCTION BOX AND 10 FT SLACK ABOVE CEILING AT IP CLASSROOM MODULE LOCATION. INTERCOM VENDOR/CONTRACTOR SHALL PROVIDE ALL NECESSARY ACCESSORIES FOR A COMPLETE AND OPERABLE SYSTEM.
	70-VOLT INTERCOM SPEAK VOLUME CONTROL. ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE GANG JUNCTION BOX AND 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. INTERCOM CONTRACTOR SHALL PROVIDE 18/2 WIRE AS REQUIRED.
	NETWORK VIDEO INTERCOM CALL STATION, ELEVATED HEIGHT (+42" AFF). ELECTRICAL CONTRACTOR SHALL PROVIDE 1-GANG JUNCTION BOX AND 1" CONDUIT TO LOCAL ACCESSIBLE CEILING SPACE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLE FROM NETWORK INTERCOM TO LOCAL NETWORK SPEAKER.
	DISPLAY CONNECTION WITH NETWORK, QUAD POWER AND AV. ELECTRICAL CONTRACTOR SHALL PROVIDE RECESSED AV WALL BOX, 2" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE FOR NETWORK AND AV CABLING, 2" CONDUIT TO ASSOCIATED FLOOR BOX AV CABLING (WHEN FLOOR BOX IS IN SAME ROOM), 0.75" CONDUIT FOR POWER AND DUPLEX RECEPTACLE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (1) CATEGORY 6A CABLE, (1) HDMI TO WALL BOX "AV3", USB-C 3.2 OR HIGHER TO WALL BOX "AV3".
	DATA FOR TEACHING DESK; NETWORK, QUAD POWER AND AV ROUGH-IN. ELECTRICAL CONTRACTOR SHALL PROVIDE RECESSED AV WALL BOX, 2" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE FOR NETWORK AND AV CABLING, 0.75" CONDUIT FOR POWER AND QUAD RECEPTACLE. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE (2) CATEGORY 6A CABLE.
	MICROPHONE INPUT. SEE GYM SOUND SYSTEM DETAIL FOR ADDITIONAL INFORMATION.
	SPEAKER. SEE GYM SOUND SYSTEM DETAIL FOR ADDITIONAL INFORMATION.

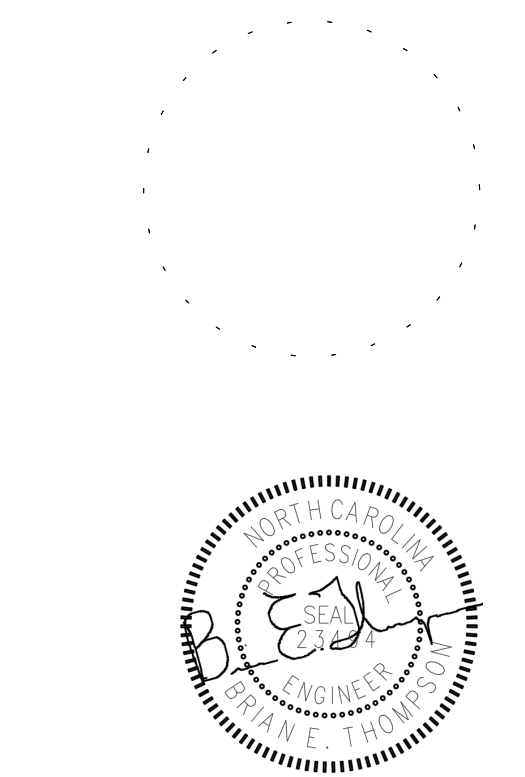
FLOOR BOXES:	
SYMBOL	DESCRIPTION
	4-GANG MULTI-SERVICE FLOOR BOX. ELECTRICAL CONTRACTOR SHALL PROVIDE FLOOR BOX, COVER, CONDUITS, ELECTRICAL DEVICES AND ASSOCIATED MOUNTING PLATES FOR A COMPLETE INSTALLATION. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE QUANTITY OF CATEGORY 6A CABLES AS INDICATED BY SUBSCRIPT. LEGRAND: EVOLUTION EB455-0G OR APPROVED EQUAL.
	6-GANG MULTI-SERVICE FLOOR BOX. ELECTRICAL CONTRACTOR SHALL PROVIDE FLOOR BOX, COVER, CONDUITS, ELECTRICAL DEVICES AND ASSOCIATED MOUNTING PLATES FOR A COMPLETE INSTALLATION. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE QUANTITY OF CATEGORY 6A CABLES AS INDICATED BY SUBSCRIPT. LEGRAND: EVOLUTION EB665-0G OR APPROVED EQUAL.
	6" MULTI-SERVICE POKE-THRU FLOOR BOX. ELECTRICAL CONTRACTOR SHALL PROVIDE FLOOR BOX, COVER, CONDUITS, ELECTRICAL DEVICES AND ASSOCIATED MOUNTING PLATES FOR A COMPLETE INSTALLATION. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE QUANTITY OF CATEGORY 6A CABLES AS INDICATED BY SUBSCRIPT. LEGRAND: EVOLUTION 6AT OR APPROVED EQUAL.
	8" MULTI-SERVICE POKE-THRU FLOOR BOX. ELECTRICAL CONTRACTOR SHALL PROVIDE FLOOR BOX, COVER, CONDUITS, ELECTRICAL DEVICES AND ASSOCIATED MOUNTING PLATES FOR A COMPLETE INSTALLATION. STRUCTURED CABLING CONTRACTOR SHALL PROVIDE QUANTITY OF CATEGORY 6A CABLES AS INDICATED BY SUBSCRIPT. LEGRAND: EVOLUTION 8AT OR APPROVED EQUAL.



GRIER MIDDLE SCHOOL REPLACEMENT



227 WEST TRADE STREET SUITE 700 CHARLOTTE, NORTH CAROLINA 28202 TEL. 704.333.6686 FAX 704.333.2926 WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

TECHNOLOGY SYMBOLS

T-002



1927 South Tryon St., Suite 300, Charlotte, NC 28203  
Phone: 704.333.1281 - www.optimaengineering.com  
North Carolina License Number: C-0914



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL: 704.333.6686 FAX: 704.333.2926  
WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

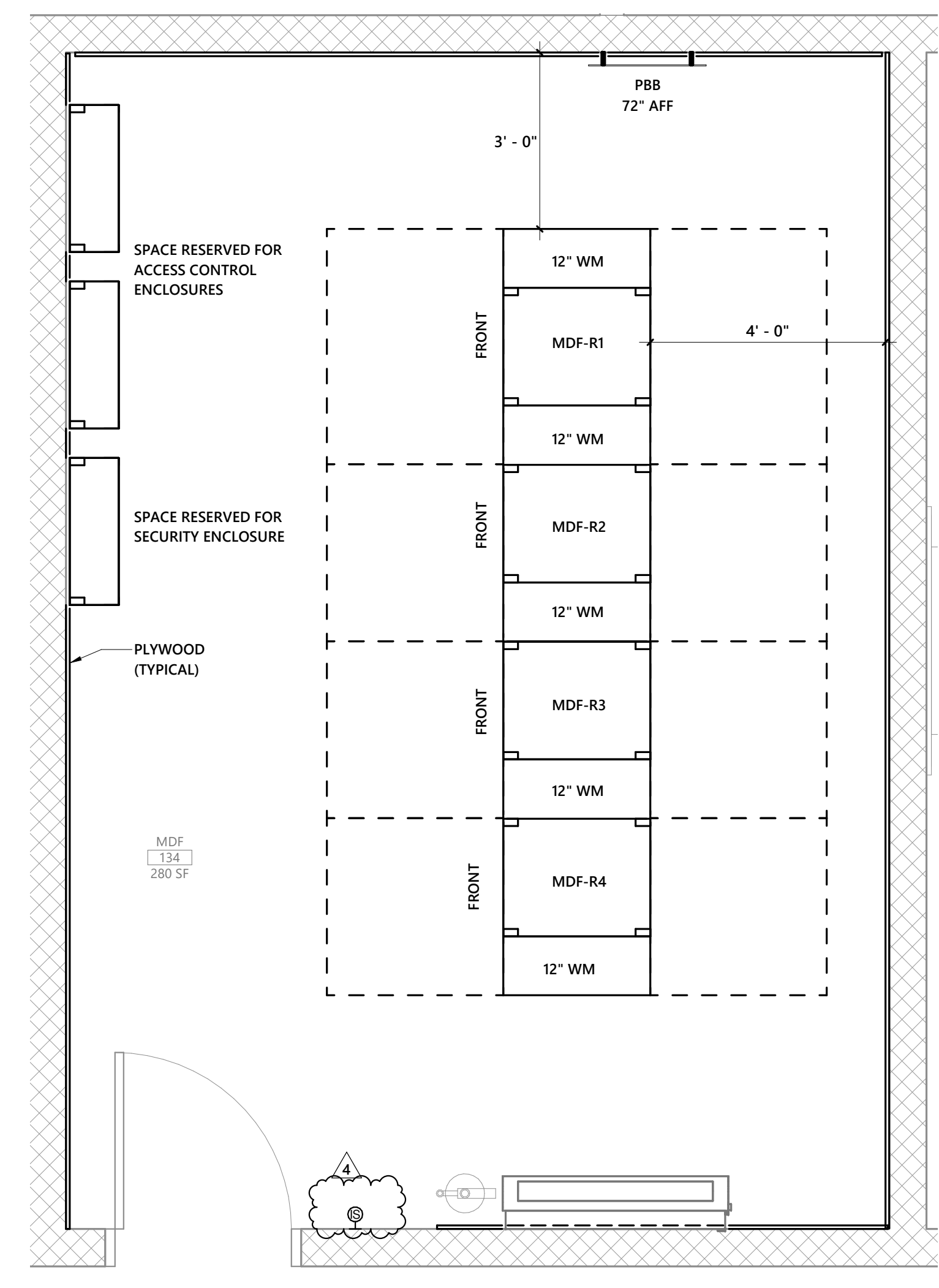
No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

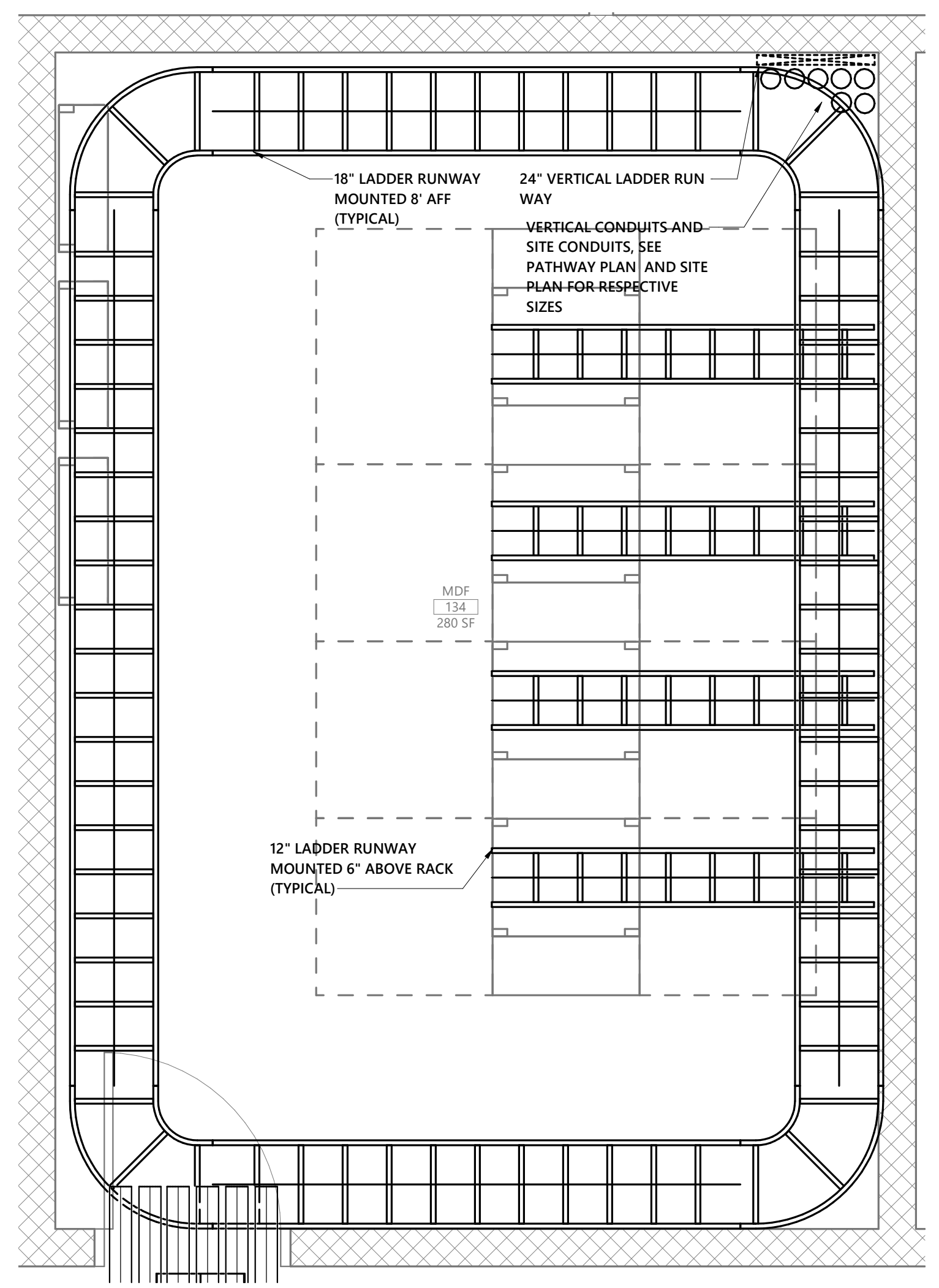
ENLARGED TECHNOLOGY PLANS

T-401

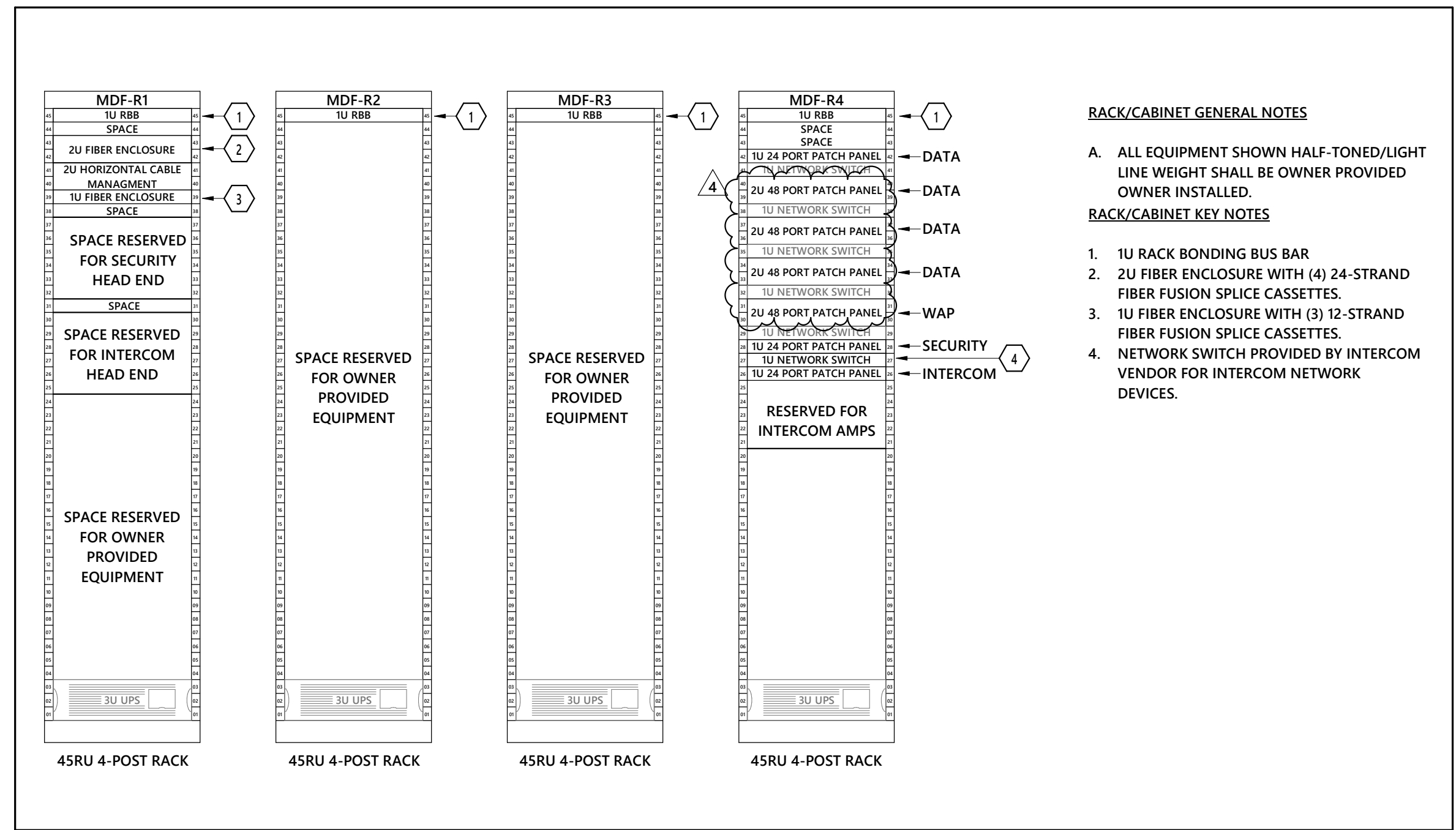
**GENERAL NOTES:**  
A. REFER TO OVERALL PATHWAY PLANS (T-011 & T-012) FOR ADDITIONAL CONDUIT/SLEEVE INFORMATION.  
B. PROVIDE WATERFALL DEVICES AS REQUIRED TO SUPPORT CABLING.



1 FIRST FLOOR ENLARGED MDF 134 (MDF) - AREA A - EQUIPMENT PLAN  
1/2" = 1'-0"

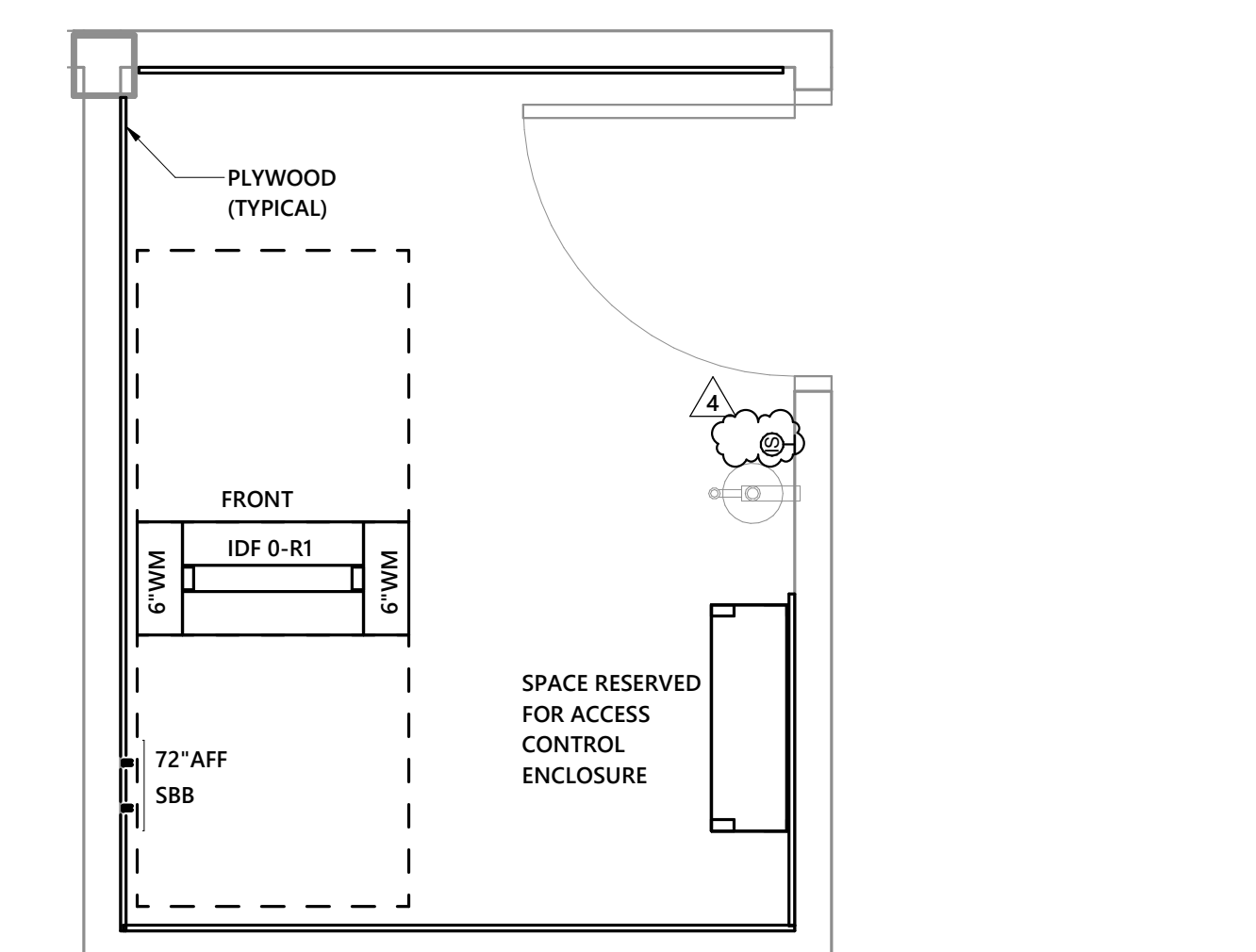


2 FIRST FLOOR ENLARGED MDF 134 (MDF) - AREA A - PATHWAY PLAN  
1/2" = 1'-0"

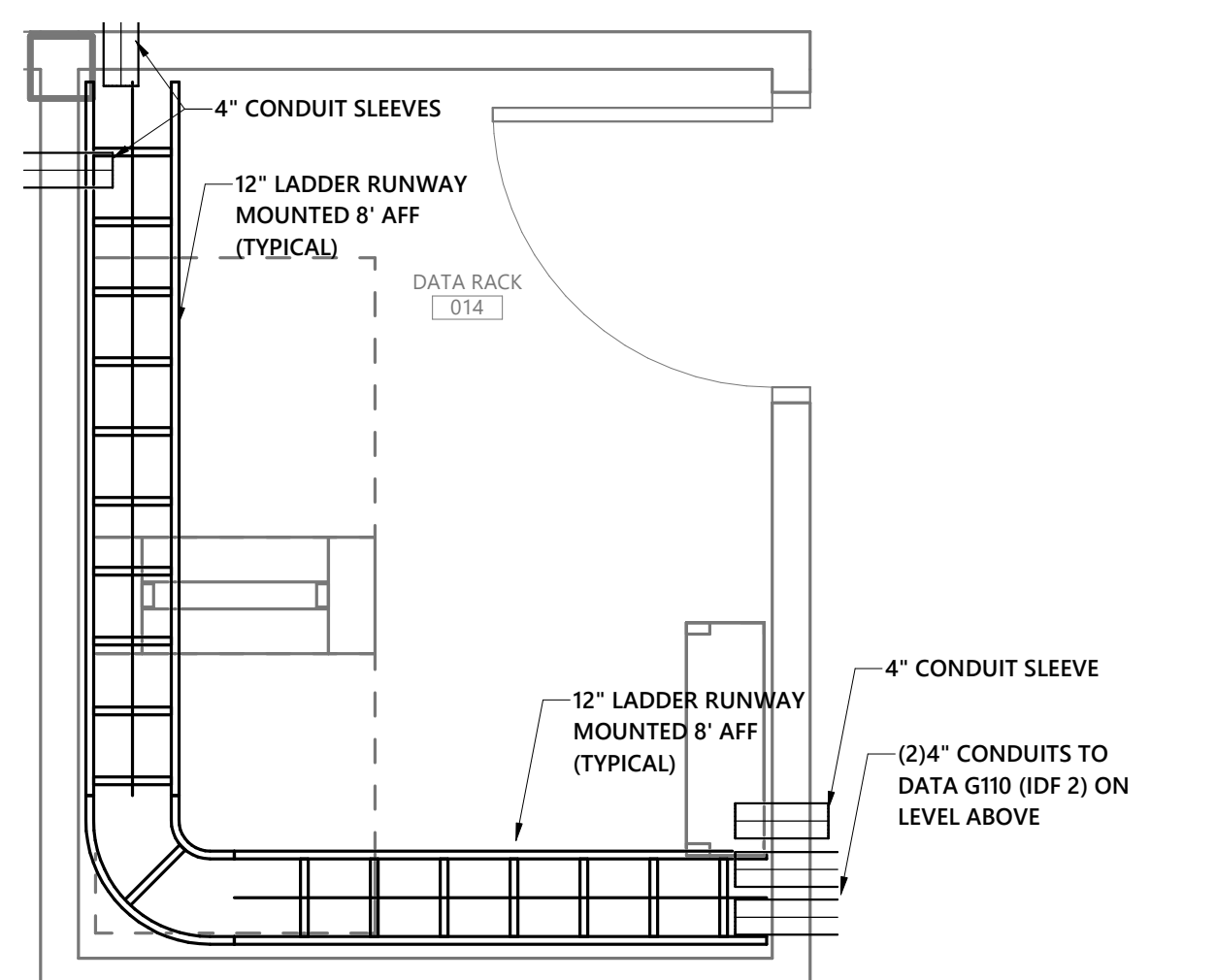


3 MDF - EQUIPMENT RACK ELEVATIONS  
NO SCALE

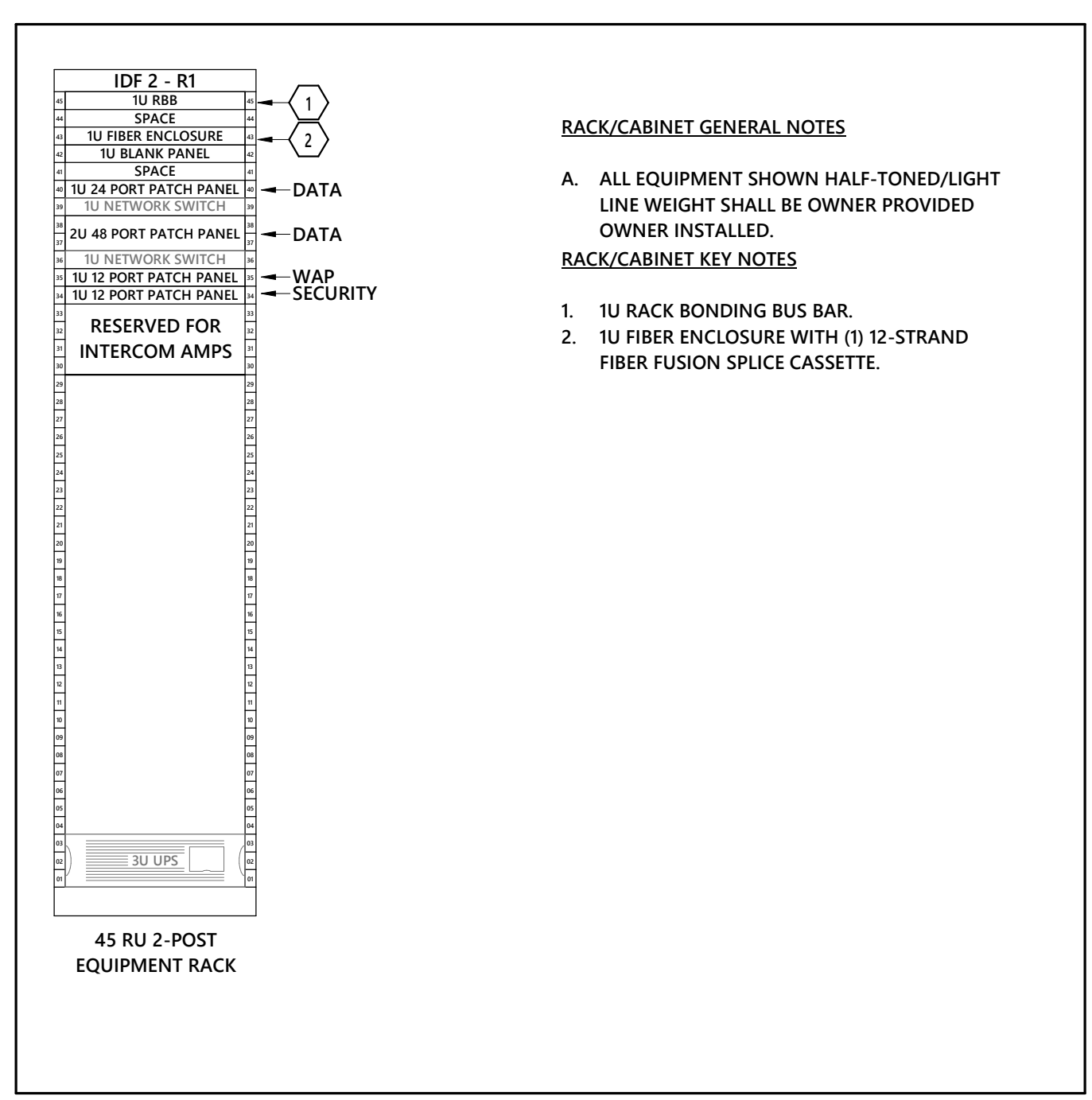
**RACK/CABINET GENERAL NOTES**  
A. ALL EQUIPMENT SHOWN HALF-TONED/LIGHT LINE WEIGHT SHALL BE OWNER PROVIDED. OWNER INSTALLED.  
**RACK/CABINET KEY NOTES**  
1. 1U RACK BONDING BUS BAR  
2. 2U FIBER ENCLOSURE WITH (4) 24-STRAND FIBER FUSION SPLICE CASSETTES.  
3. 1U FIBER ENCLOSURE WITH (3) 12-STRAND FIBER FUSION SPLICE CASSETTES.  
4. NETWORK SWITCH PROVIDED BY INTERCOM VENDOR FOR INTERCOM NETWORK DEVICES.



4 BASEMENT ENLARGED DATA 014 (IDF 0) - EQUIPMENT PLAN  
1/2" = 1'-0"



5 BASEMENT ENLARGED DATA 014 (IDF 0) - PATHWAY PLAN  
1/2" = 1'-0"



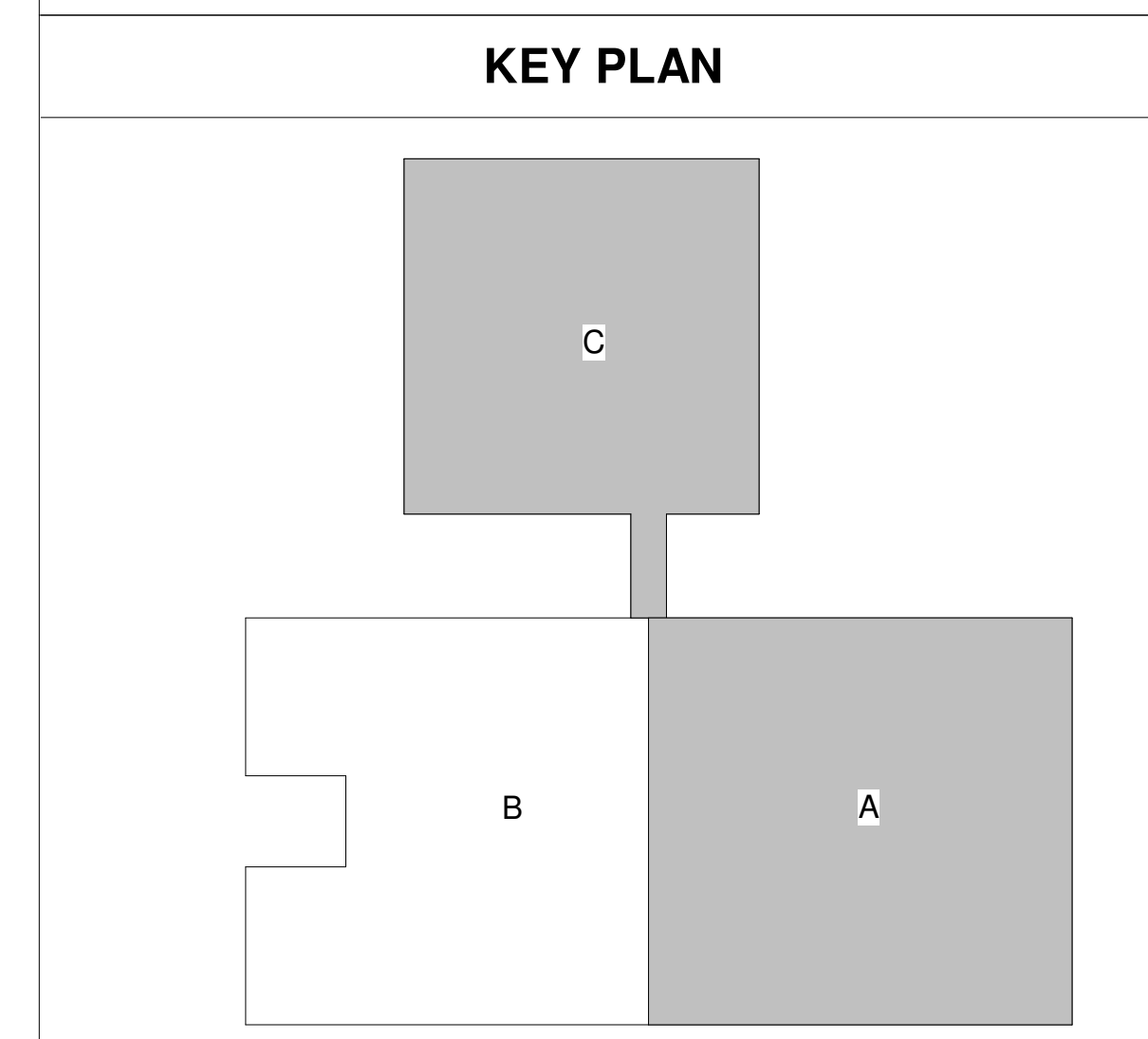
6 IDF 0 - EQUIPMENT RACK ELEVATION  
NO SCALE

**RACK/CABINET GENERAL NOTES**  
A. ALL EQUIPMENT SHOWN HALF-TONED/LIGHT LINE WEIGHT SHALL BE OWNER PROVIDED. OWNER INSTALLED.  
**RACK/CABINET KEY NOTES**  
1. 1U RACK BONDING BUS BAR.  
2. 1U FIBER ENCLOSURE WITH (1) 12-STRAND FIBER FUSION SPLICE CASSETTE.

**PARTITION LEGEND**

- ALL EXTERIOR WALLS TO BE W1 U.N.O.
- ALL INTERIOR MASONRY PARTITIONS TO BE MBNX U.N.O.
- ALL INTERIOR METAL STUD PARTITIONS TO BE TYPE ASSX U.N.O.

- NON-RATED PARTITION TO 4" ABOVE CEILING
- NON-RATED METAL STUD PARTITION TO DECK
- NON-RATED CMU PARTITION
- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK



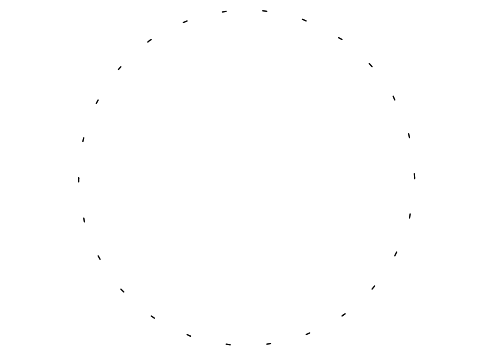
THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING P.A. 2022. ALL RIGHTS RESERVED.



1927 South Tryon St., Suite 300, Charlotte, NC 28203  
Phone: 704.333.1261 • www.optimaengineering.com  
North Carolina License Number: C-0914



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL: 704.333.6666 FAX: 704.333.2926  
WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

No.	Description	Date
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

ENLARGED TECHNOLOGY PLANS

T-402

Optima # 22-0082

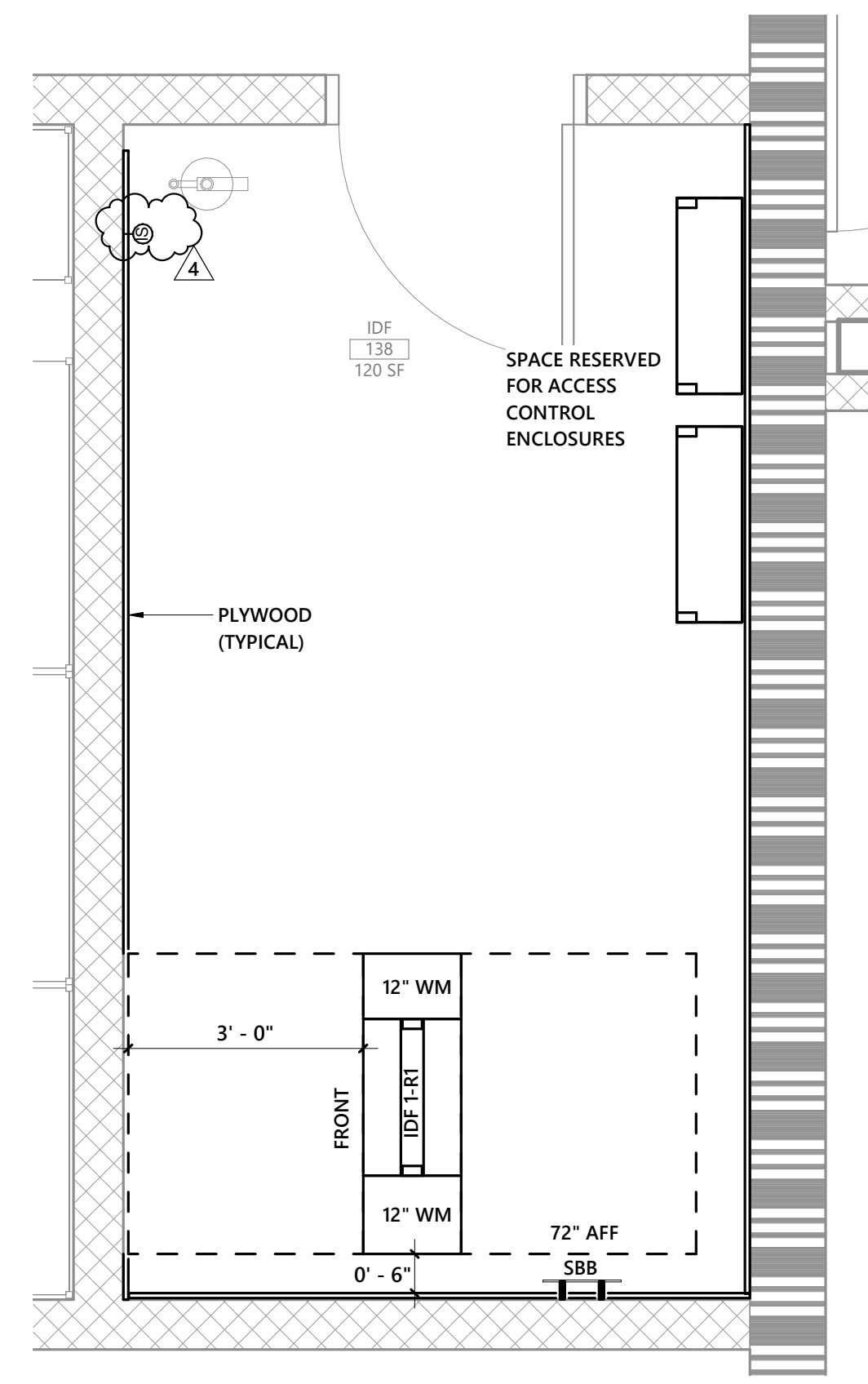
01.12.2023 - BID SET

GENERAL NOTES:

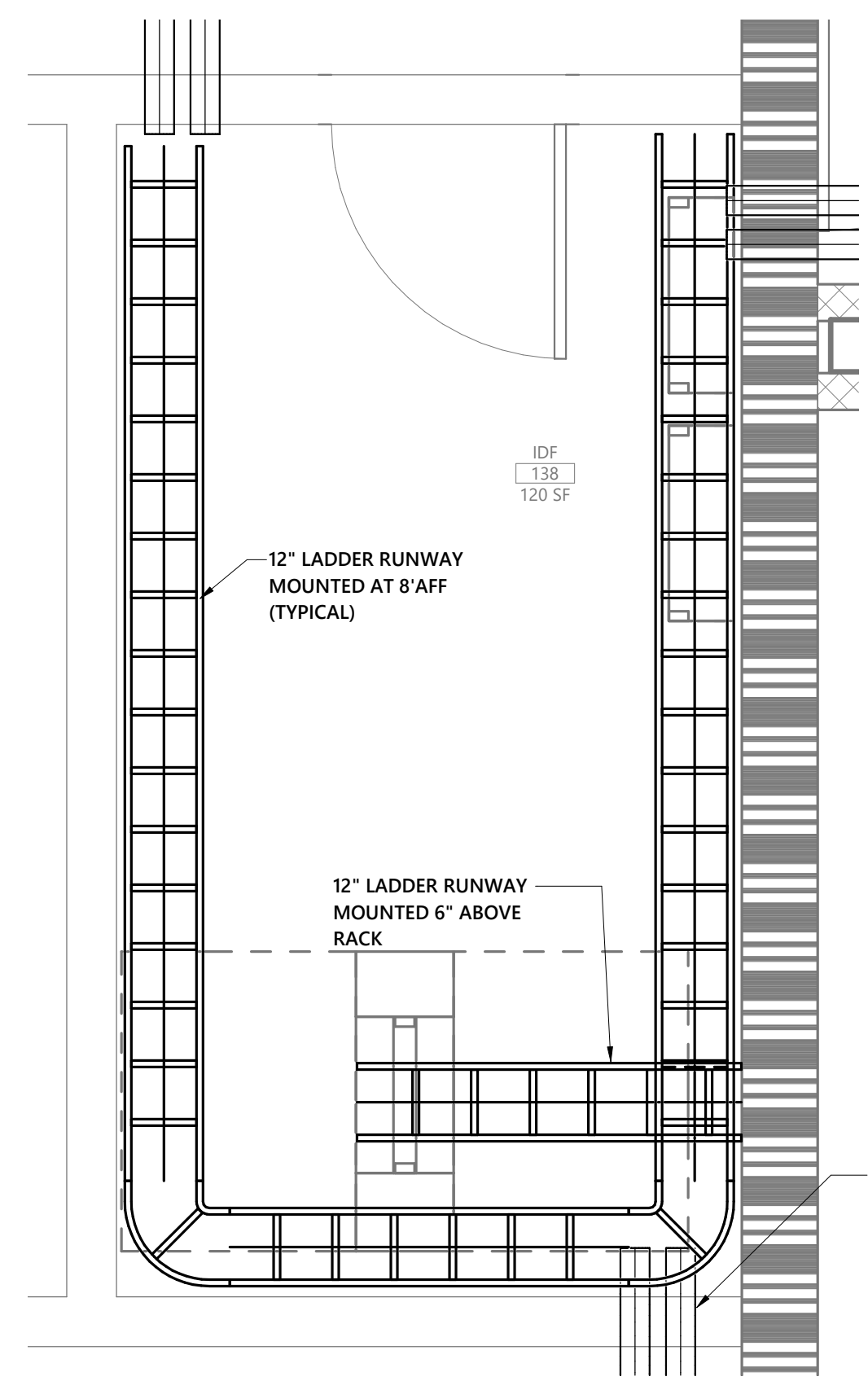
- A. REFER TO OVERALL PATHWAY PLANS (T-011 & T-012) FOR ADDITIONAL CONDUIT/SLEEVE INFORMATION.
- B. PROVIDE WATERFALL DEVICES AS REQUIRED TO SUPPORT CABLING.

BACK/CABINET GENERAL NOTES

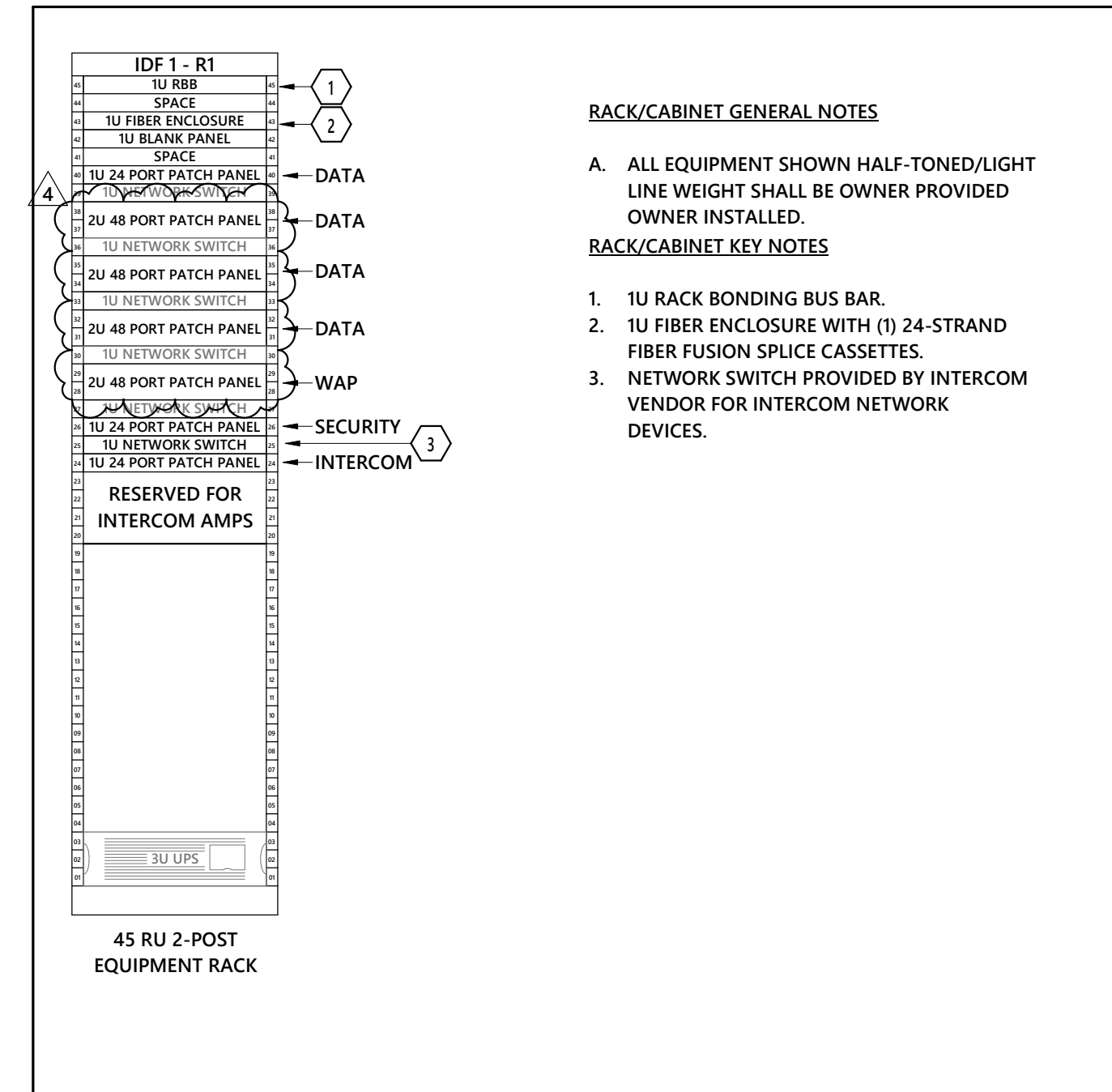
- A. ALL EQUIPMENT SHOWN HALF-TONED/LIGHT LINE WEIGHT SHALL BE OWNER PROVIDED OWNER INSTALLED.
- BACK/CABINET KEY NOTES
- 1. 1U RACK BONDING BUS BAR.
  - 2. 1U FIBER ENCLOSURE WITH (1) 24-STRAND FIBER FUSION SPLICE CASSETTES.
  - 3. NETWORK SWITCH PROVIDED BY INTERCOM VENDOR FOR INTERCOM NETWORK DEVICES.



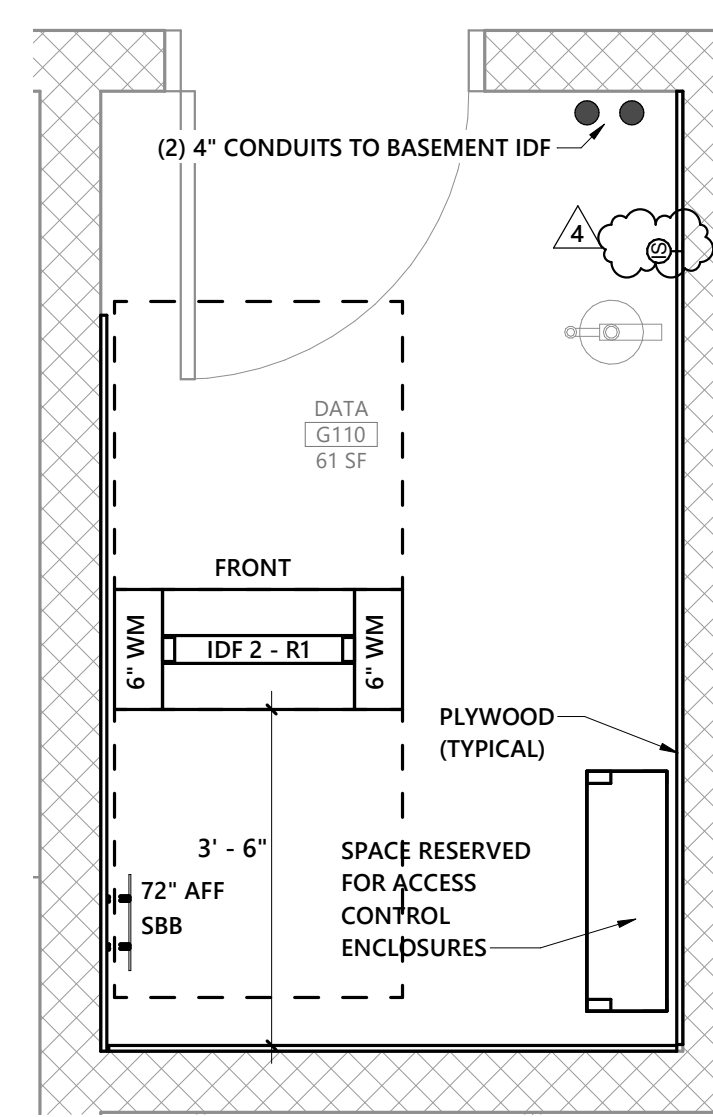
1 FIRST FLOOR ENLARGED IDF 138 (IDF 1) - AREA B - EQUIPMENT PLAN  
1/2" = 1'-0"



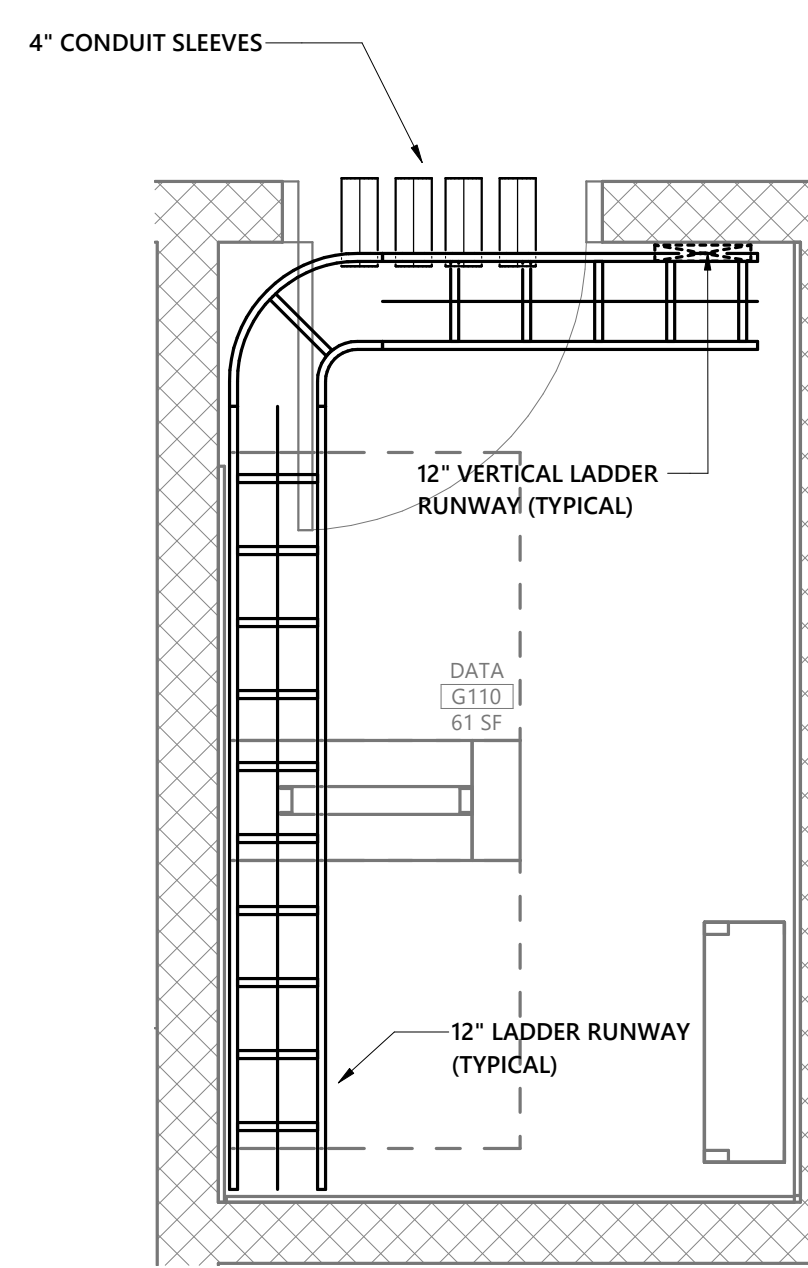
2 FIRST FLOOR ENLARGED IDF 138 (IDF 1) - AREA B - PATHWAY PLAN  
1/2" = 1'-0"



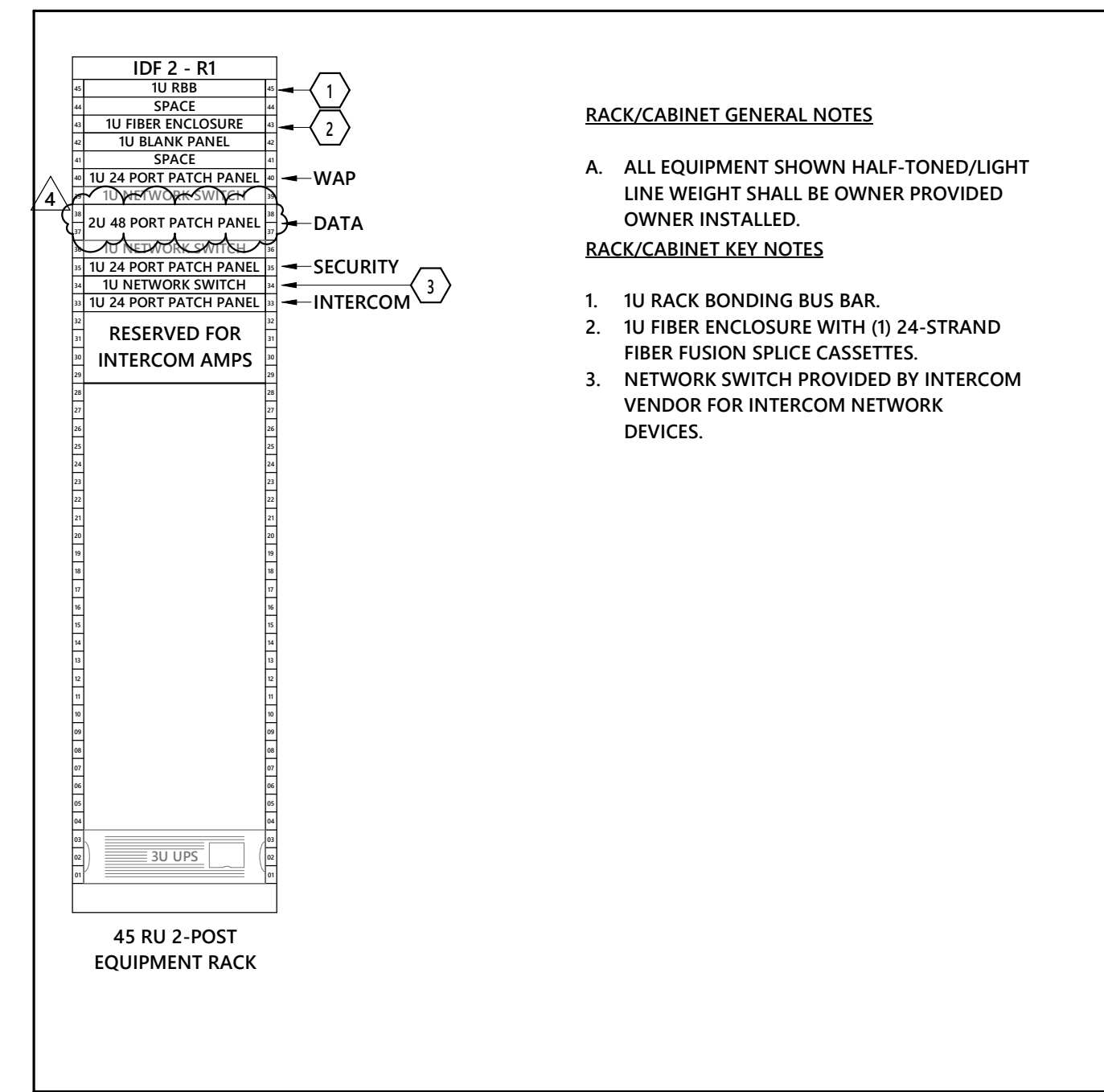
3 EQUIPMENT RACK ELEVATION  
NO SCALE



4 FIRST FLOOR ENLARGED DATA G110 (IDF 2) - AREA C - EQUIPMENT PLAN  
1/2" = 1'-0"



5 FIRST FLOOR ENLARGED DATA G110 (IDF 2) - AREA C - PATHWAY PLAN  
1/2" = 1'-0"

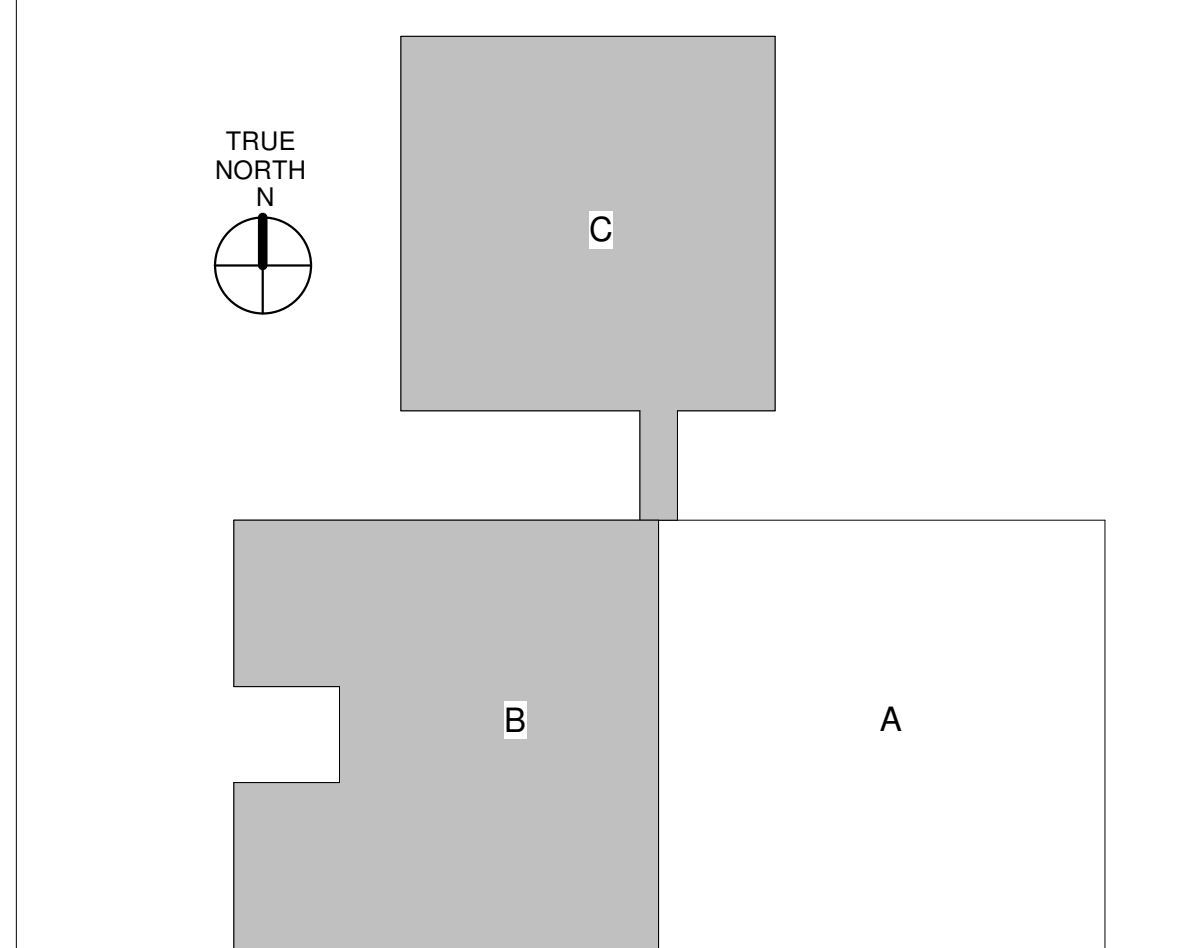


6 EQUIPMENT RACK ELEVATION  
NO SCALE

PARTITION LEGEND

- 1. ALL EXTERIOR WALLS TO BE W1 U.N.O.
  - 2. ALL INTERIOR MASONRY PARTITIONS TO BE MBNX U.N.O.
  - 3. ALL INTERIOR METAL STUD PARTITIONS TO BE ASSX U.N.O.
- NON-RATED PARTITION TO 4" ABOVE CEILING
  - NON-RATED METAL STUD PARTITION TO DECK
  - NON-RATED CMU PARTITION
  - SMOKE PARTITION TO DECK
  - 1 HR. RATED PARTITION TO DECK
  - 2 HR. RATED PARTITION TO DECK

KEY PLAN

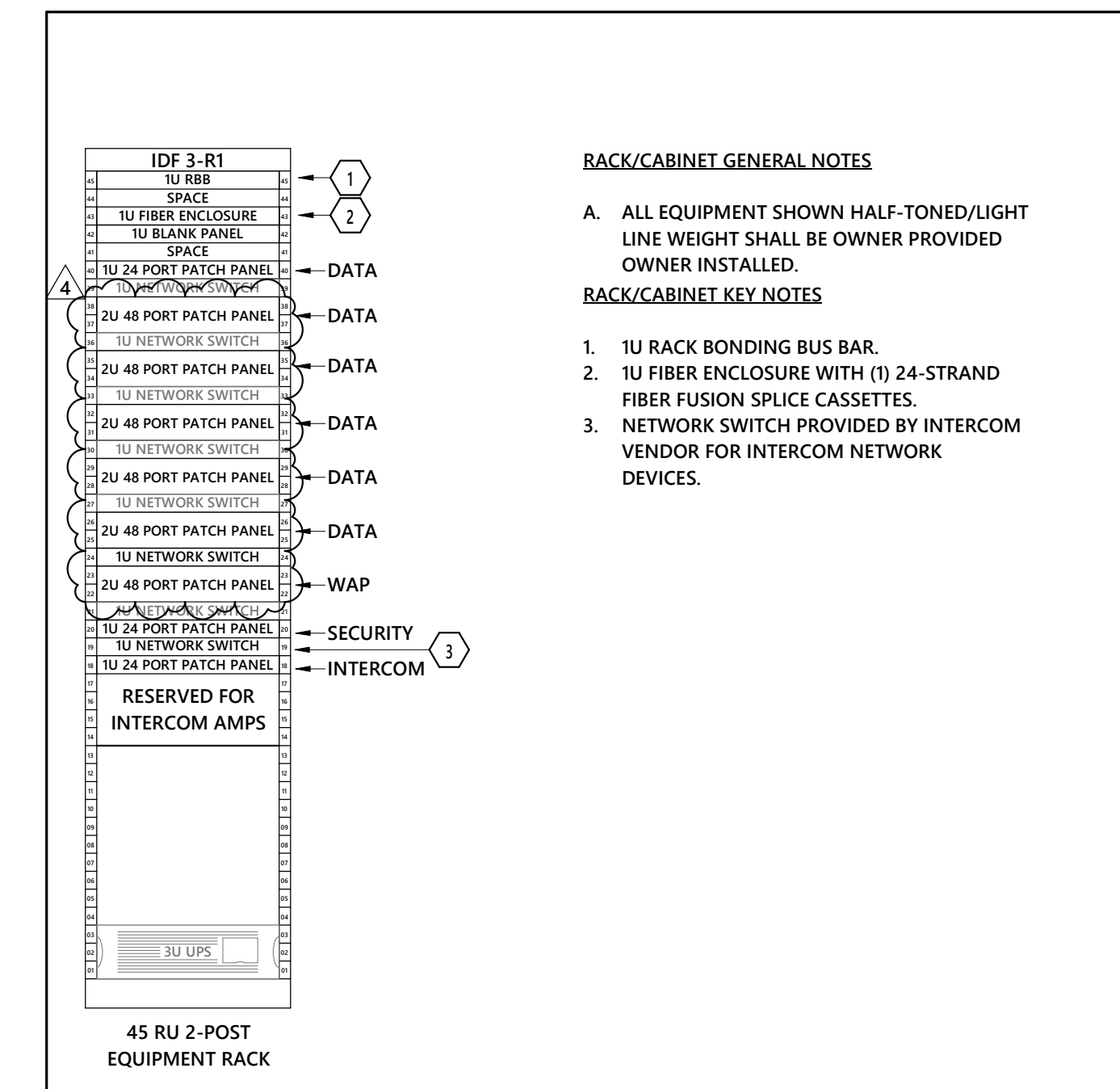
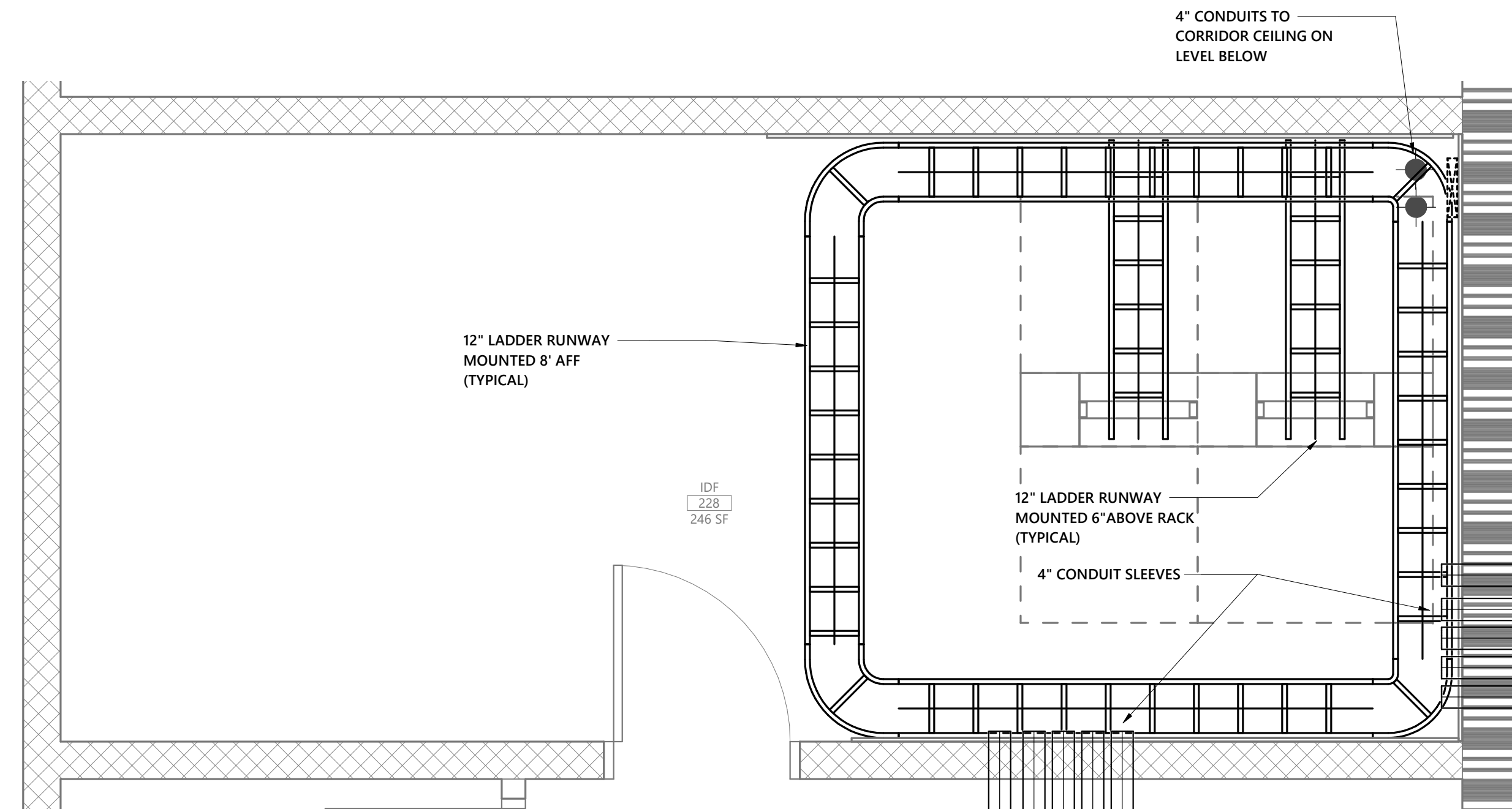
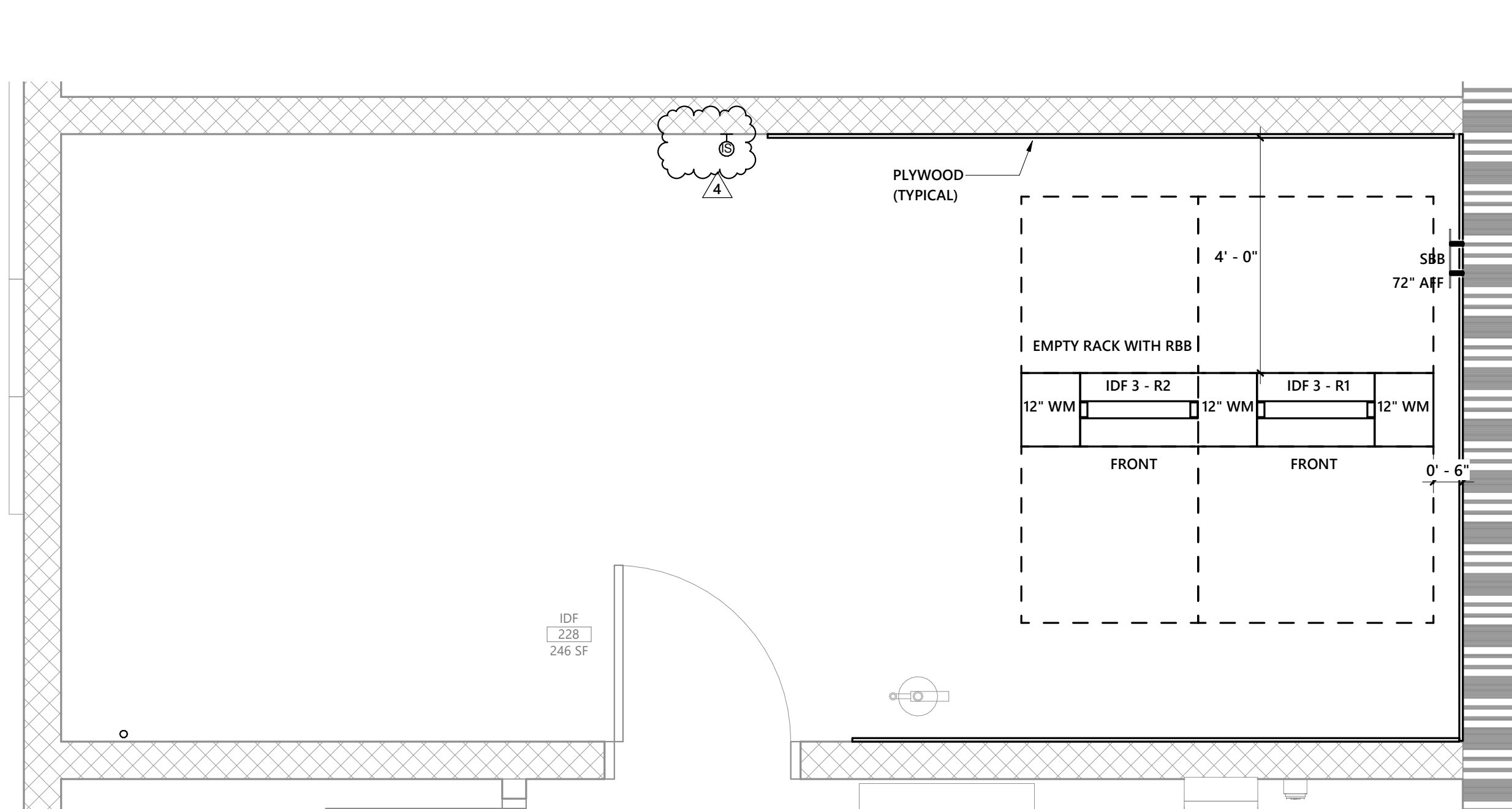


THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING P.A. 2023. ALL RIGHTS RESERVED.



**GENERAL NOTES:**

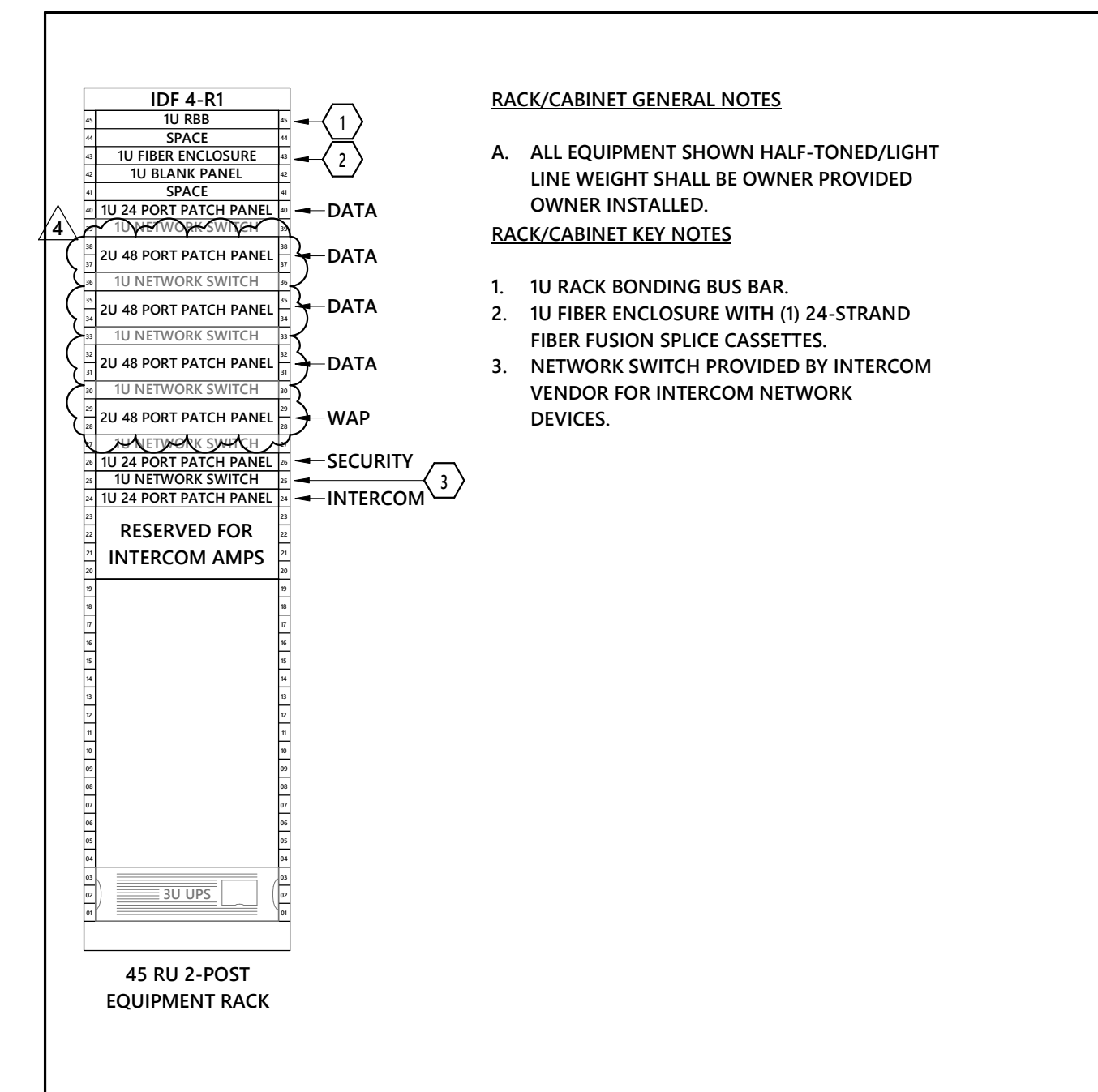
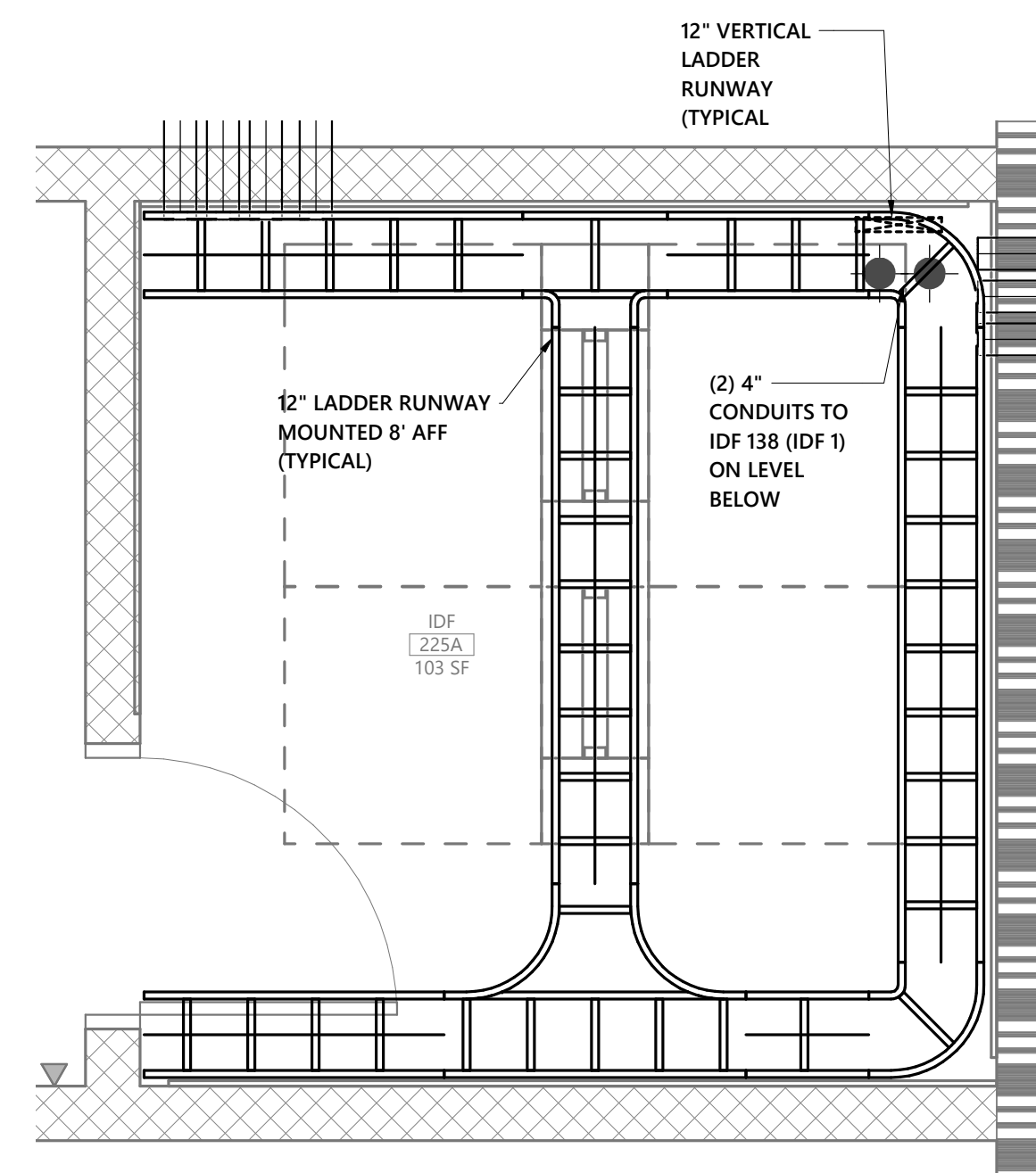
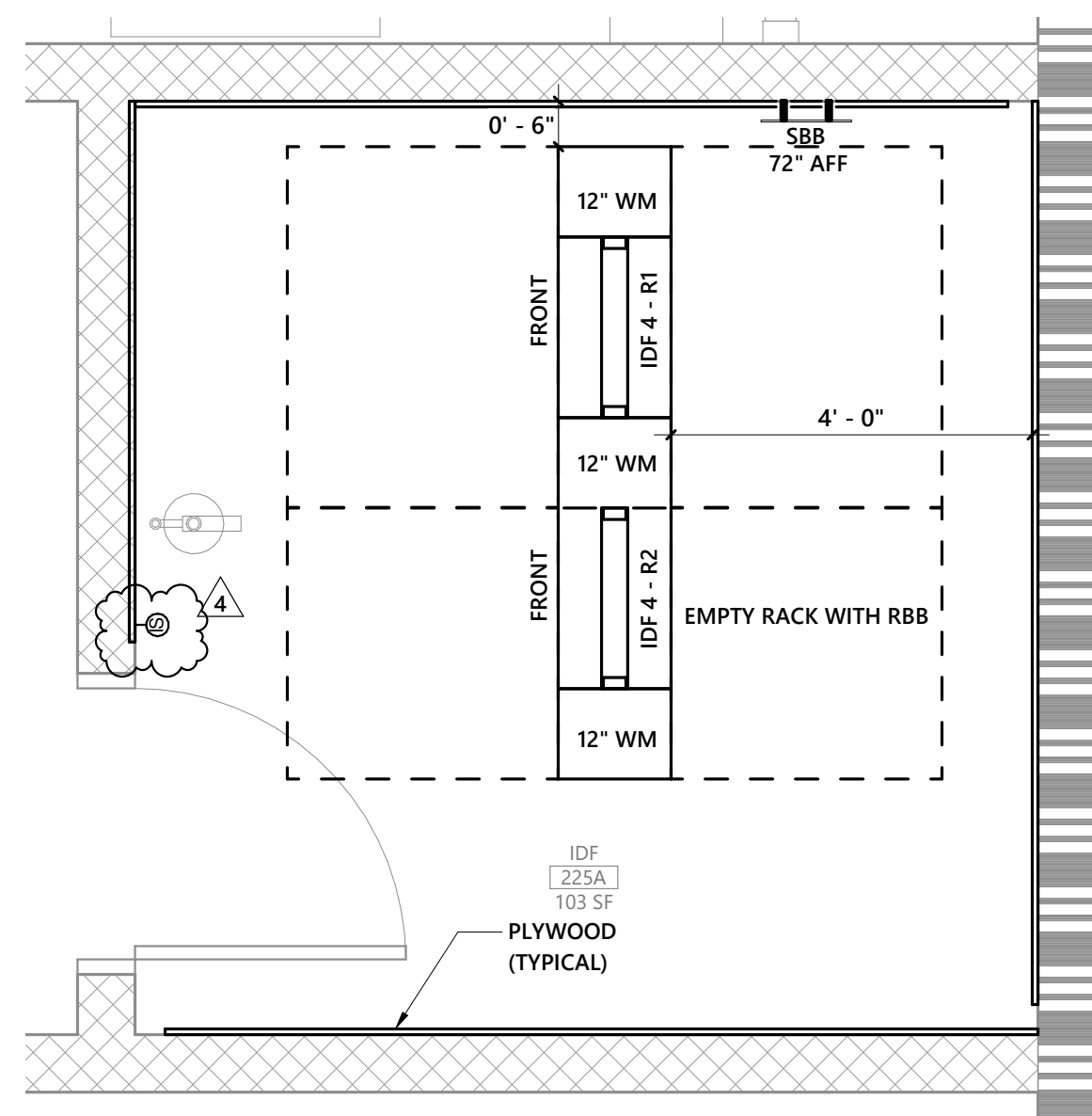
- A. REFER TO OVERALL PATHWAY PLANS (T-011 & T-012) FOR ADDITIONAL CONDUIT/SLEEVE INFORMATION.
- B. PROVIDE WATERFALL DEVICES AS REQUIRED TO SUPPORT CABLING.



**1 SECOND FLOOR ENLARGED TECHNOLOGY PLAN - IDF 228 (IDF 3) - AREA B - EQUIPMENT PLAN**  
1/2" = 1'-0"

**2 SECOND FLOOR ENLARGED TECHNOLOGY PLAN - IDF 228 (IDF 3) - AREA B - PATHWAY PLAN**  
1/2" = 1'-0"

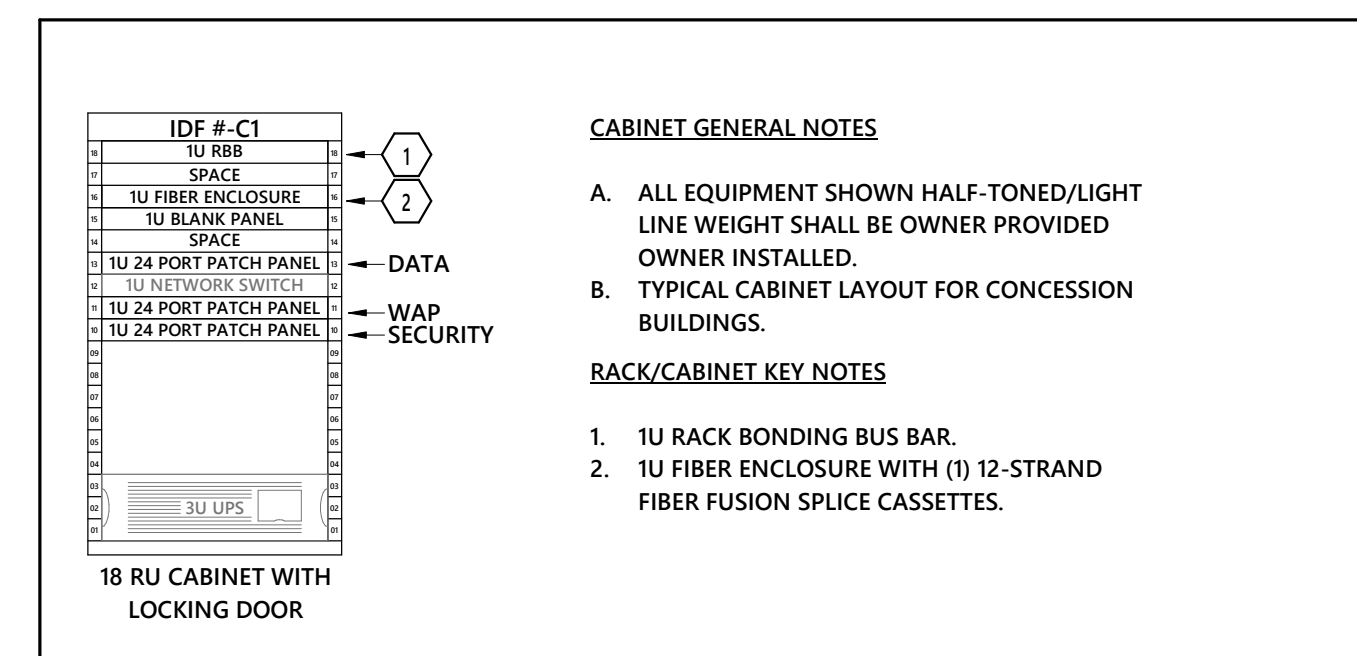
**3 IDF 3 - EQUIPMENT RACK ELEVATION**  
NO SCALE



**4 SECOND FLOOR ENLARGED TECHNOLOGY PLAN - IDF 225A (IDF 4) - AREA B - EQUIPMENT PLAN**  
1/2" = 1'-0"

**5 SECOND FLOOR ENLARGED TECHNOLOGY PLAN - IDF 225A (IDF 4) - AREA B - PATHWAY PLAN**  
1/2" = 1'-0"

**6 IDF 4 - EQUIPMENT RACK ELEVATION**  
NO SCALE

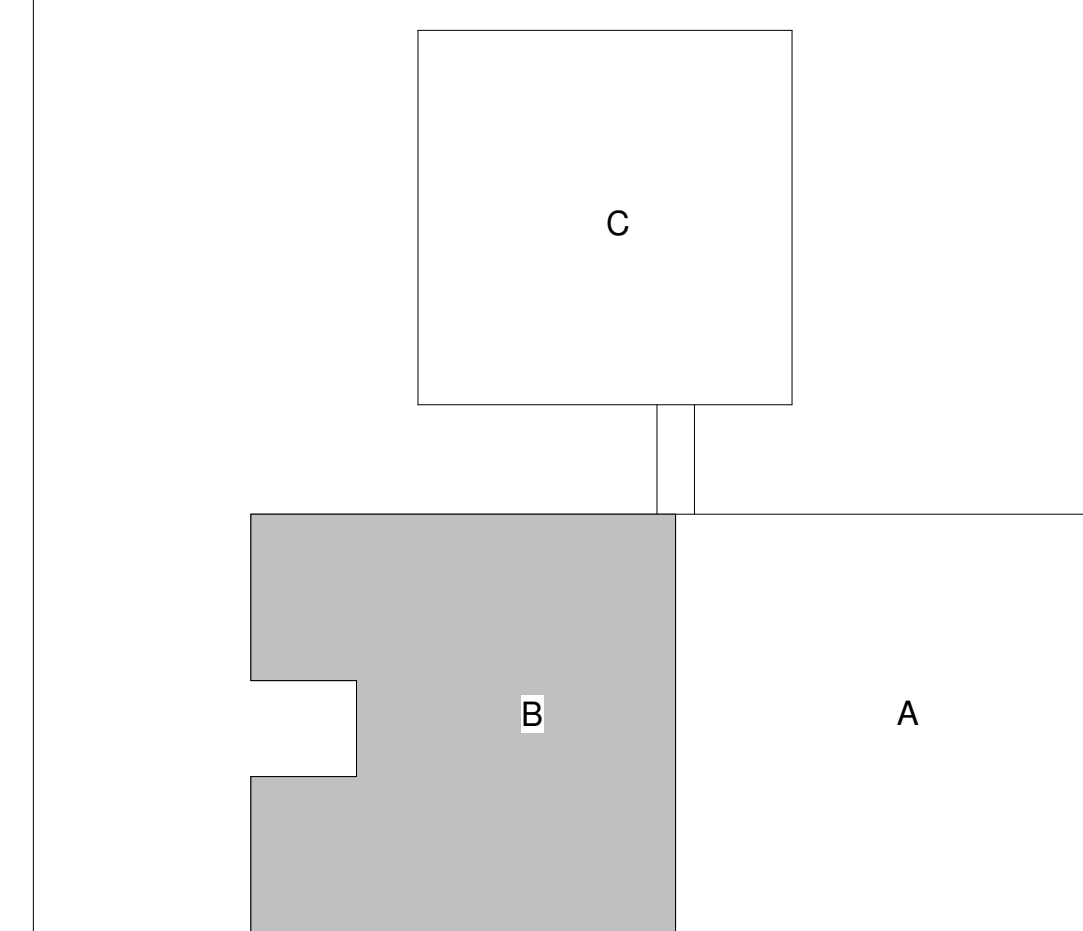


**7 IDF 5/6 (CONCESSIONS) - EQUIPMENT CABINET ELEVATION**  
NO SCALE

**PARTITION LEGEND**

1. ALL EXTERIOR WALLS TO BE W1 \_ U.N.O.
  2. ALL INTERIOR MASONRY PARTITIONS TO BE MBNX \_ U.N.O.
  3. ALL INTERIOR METAL STUD PARTITIONS TO BE TYPE ASSX \_ U.N.O.
- NON-RATED PARTITION TO 4" ABOVE CEILING
  - NON-RATED METAL STUD PARTITION TO DECK
  - NON-RATED CMU PARTITION
  - SMOKE PARTITION TO DECK
  - 1 HR. RATED PARTITION TO DECK
  - 2 HR. RATED PARTITION TO DECK

**KEY PLAN**



**REVISIONS:**

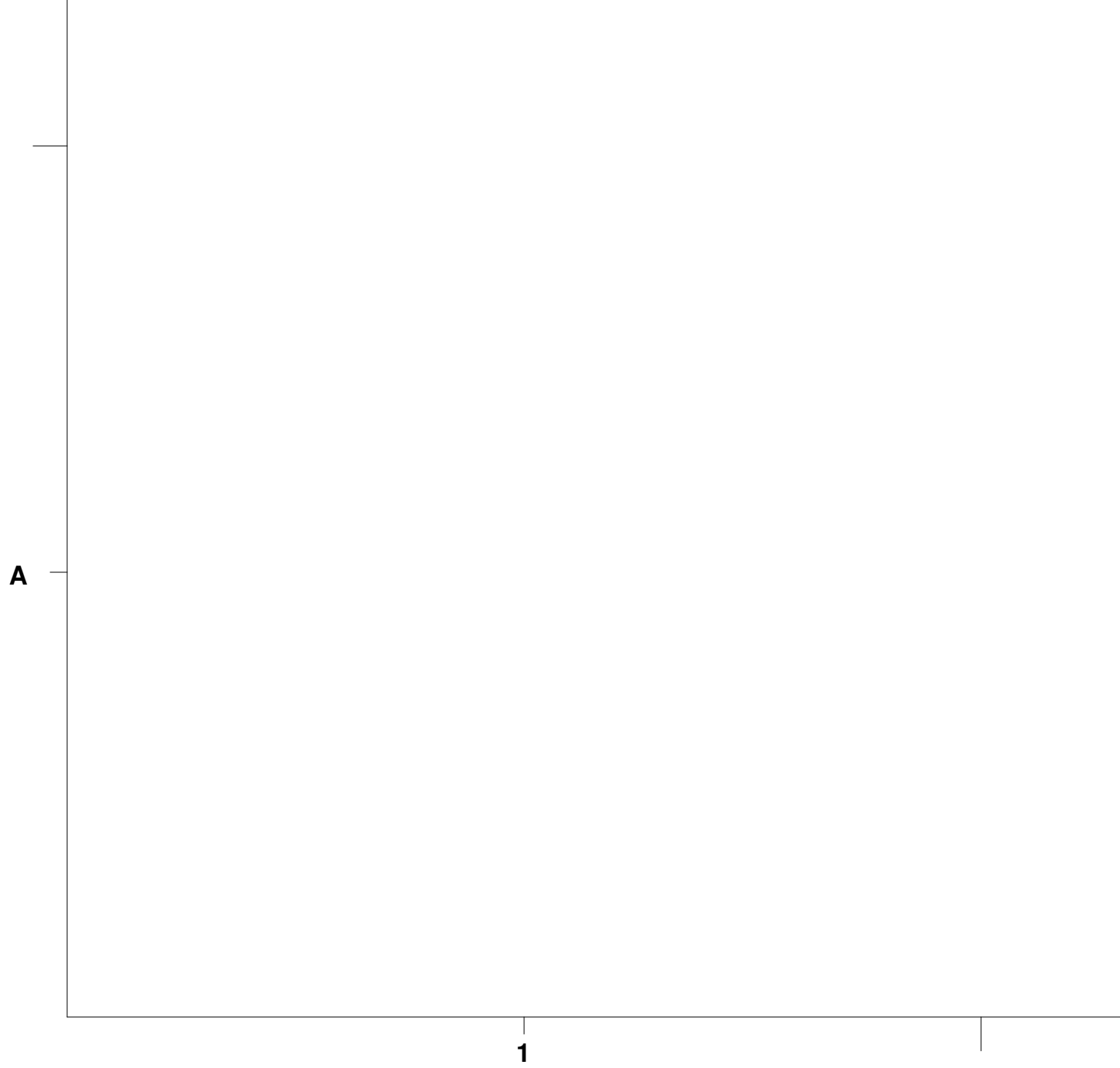
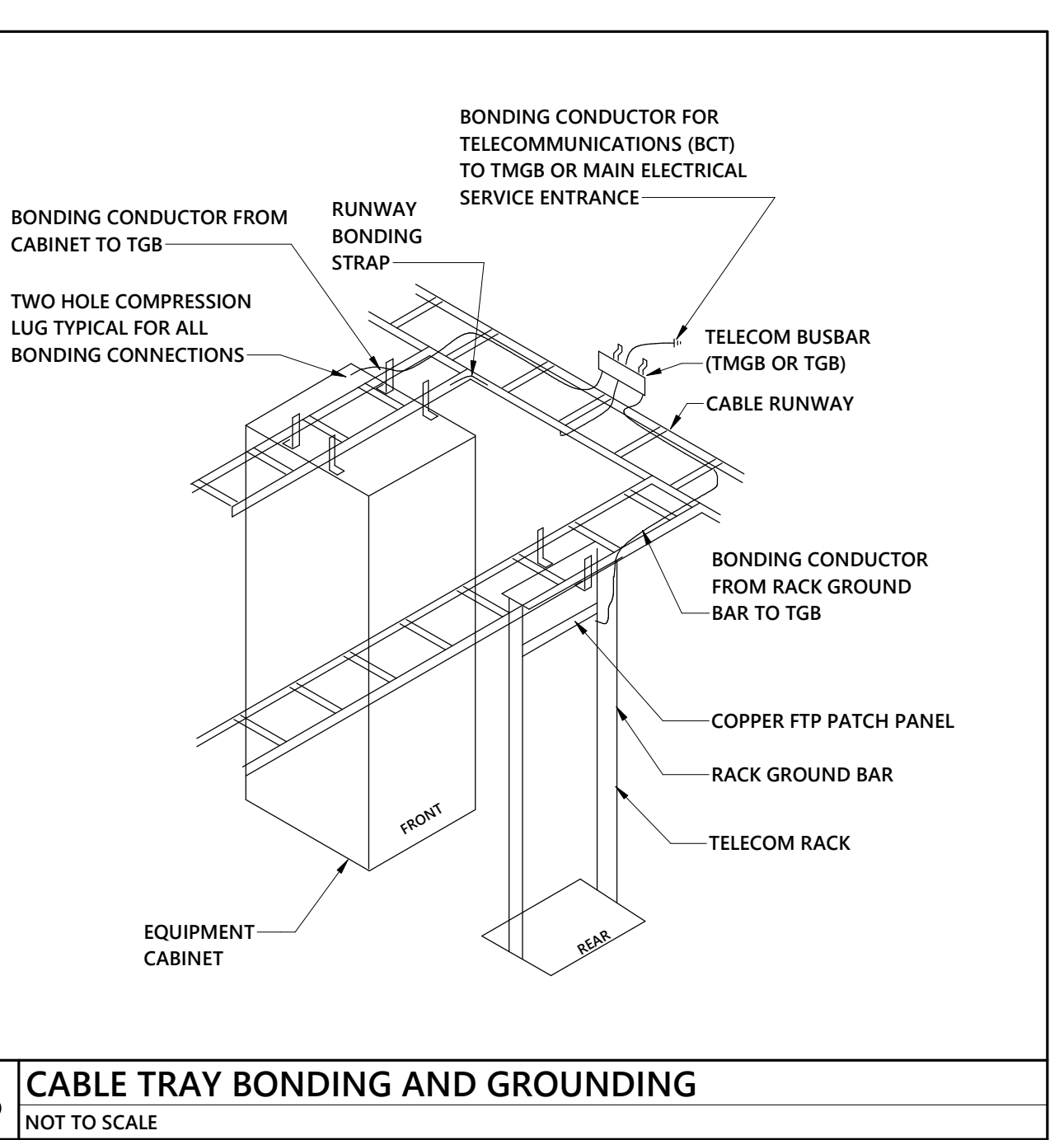
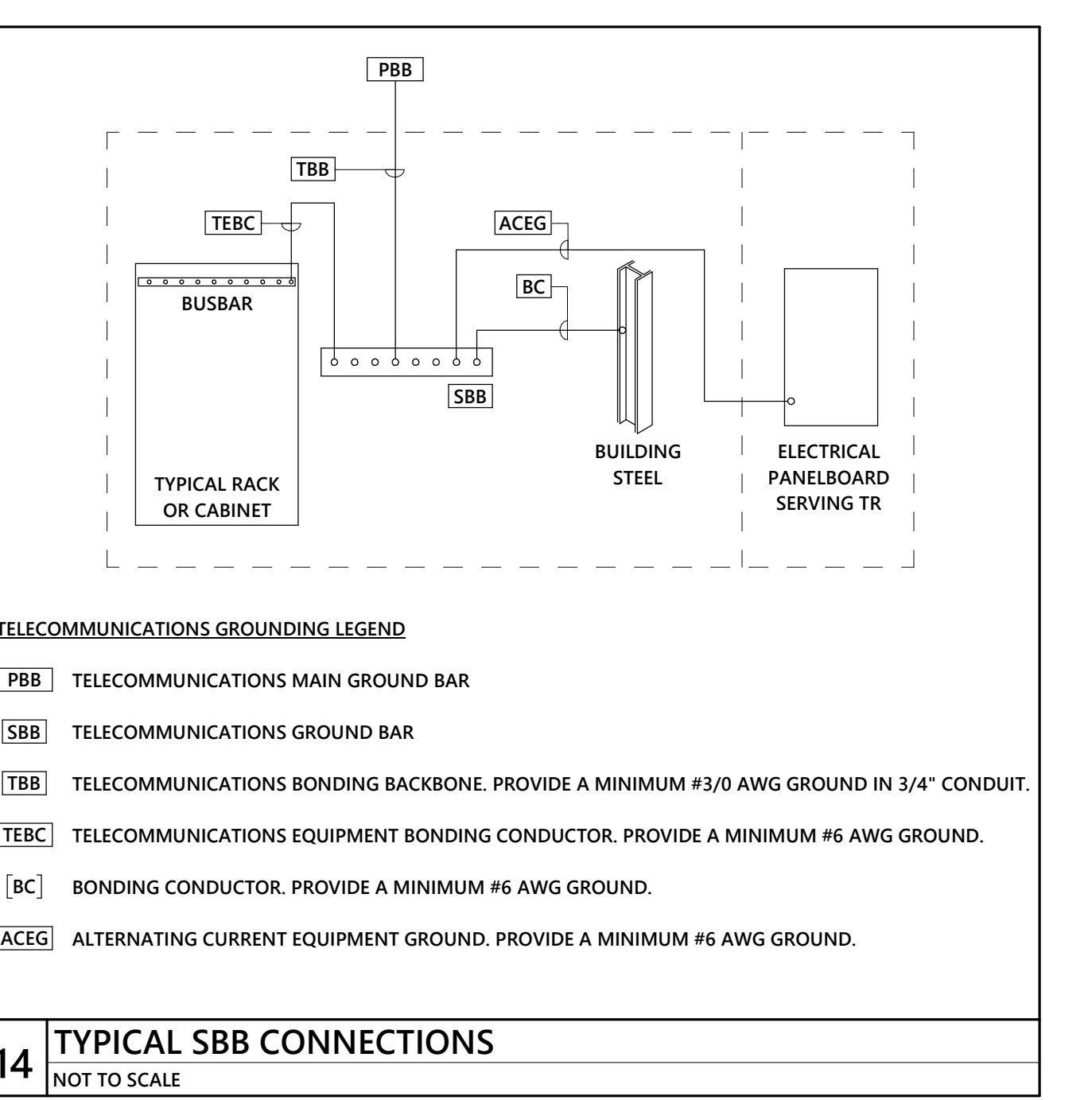
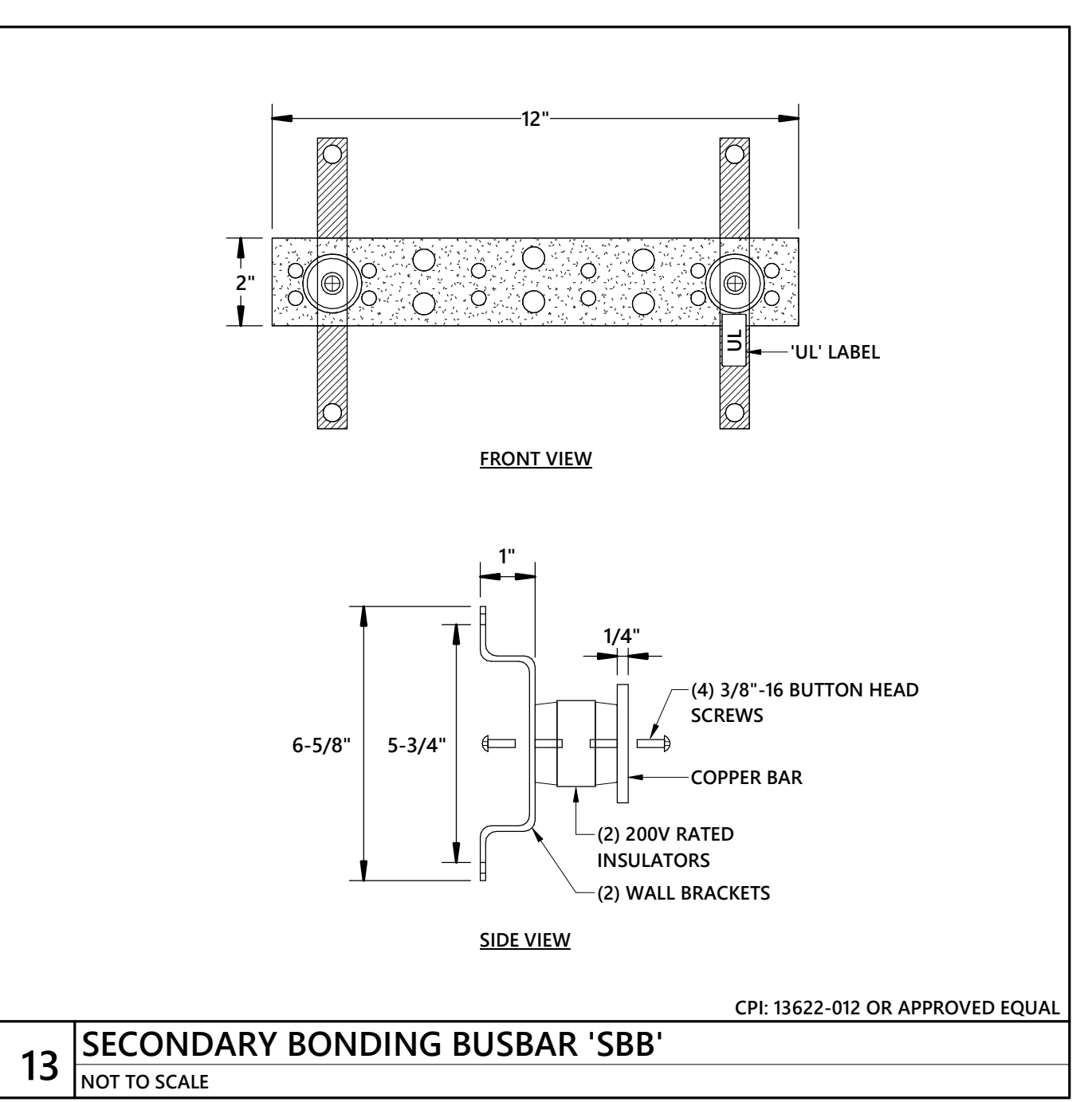
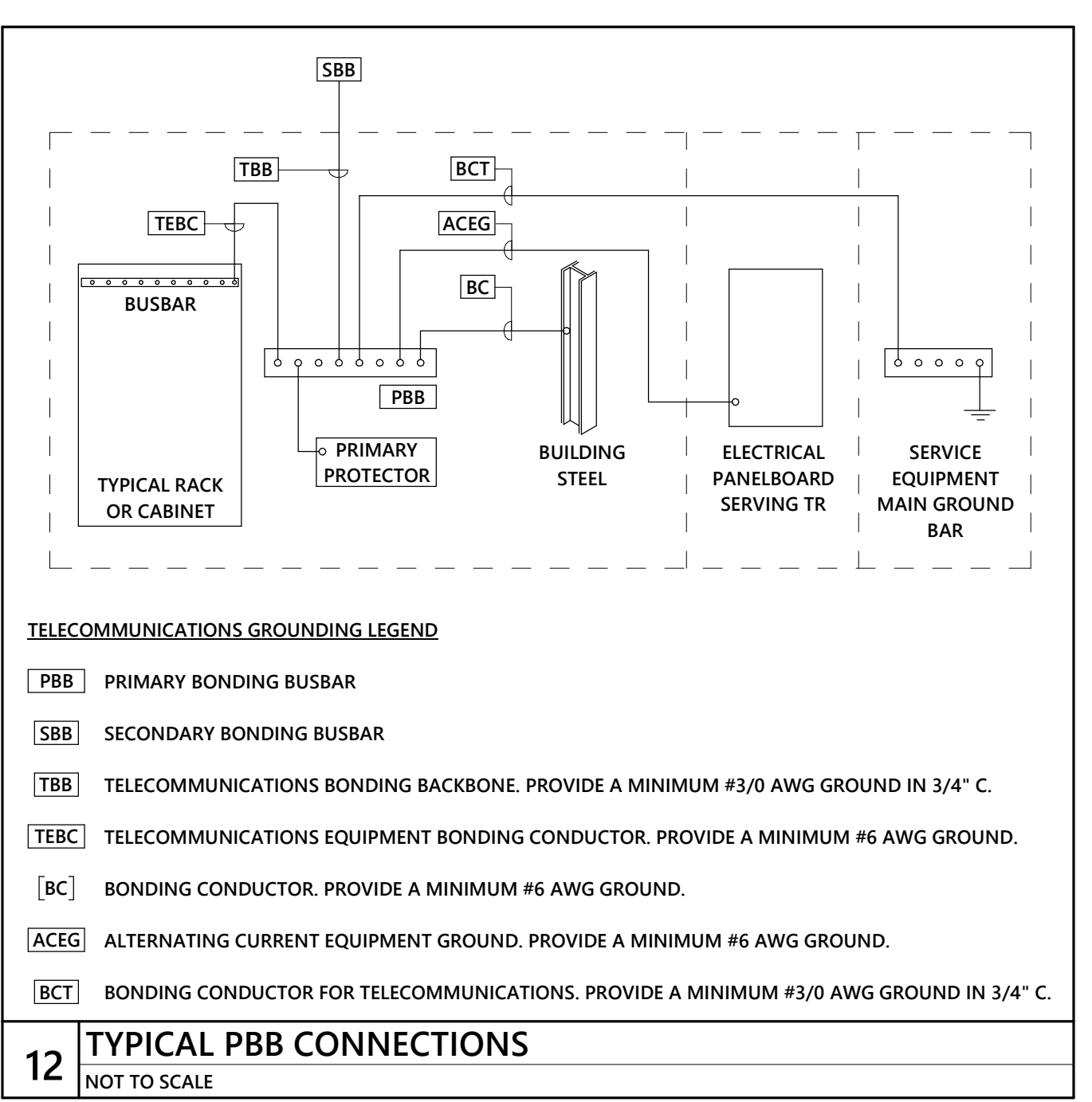
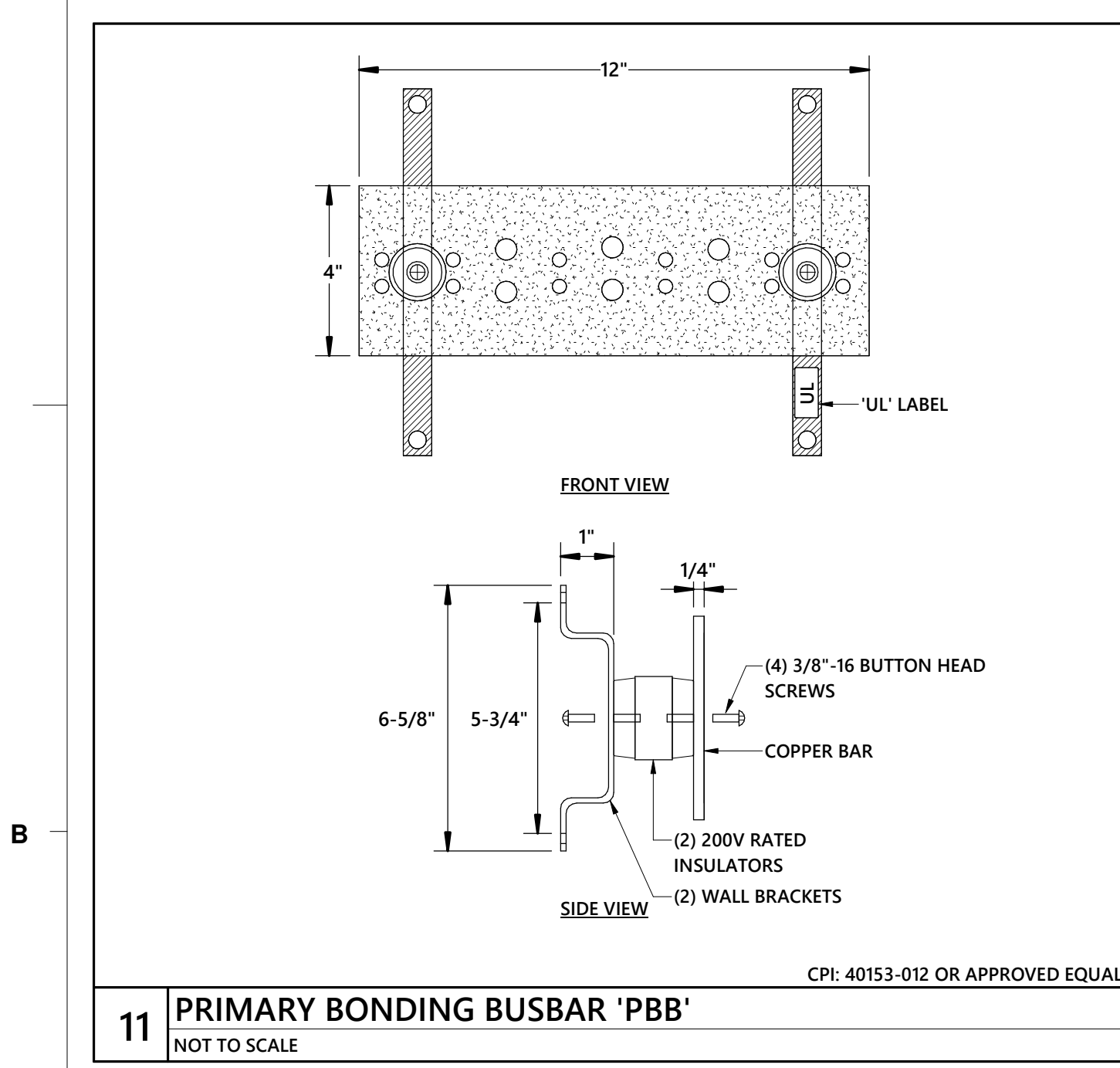
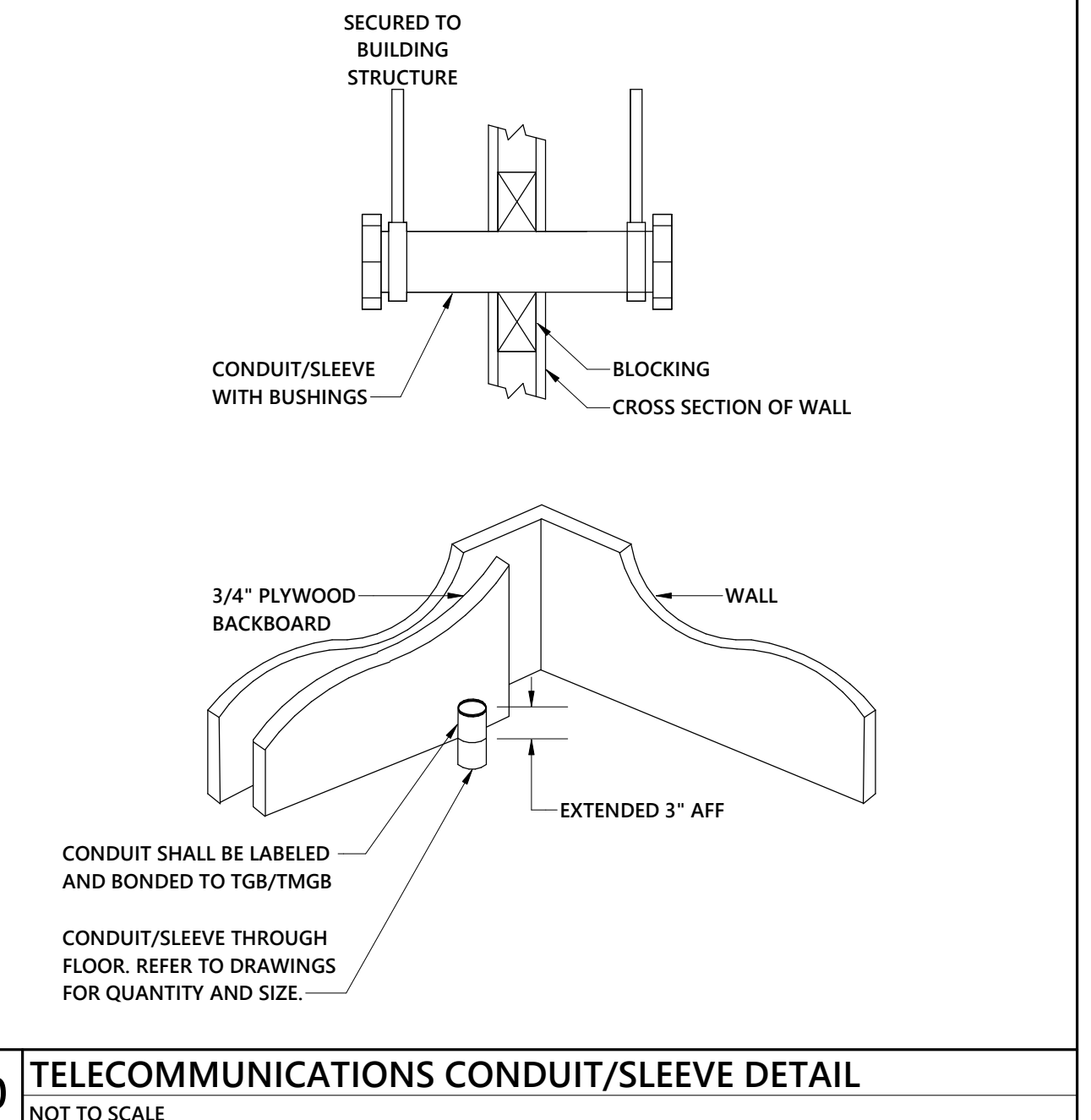
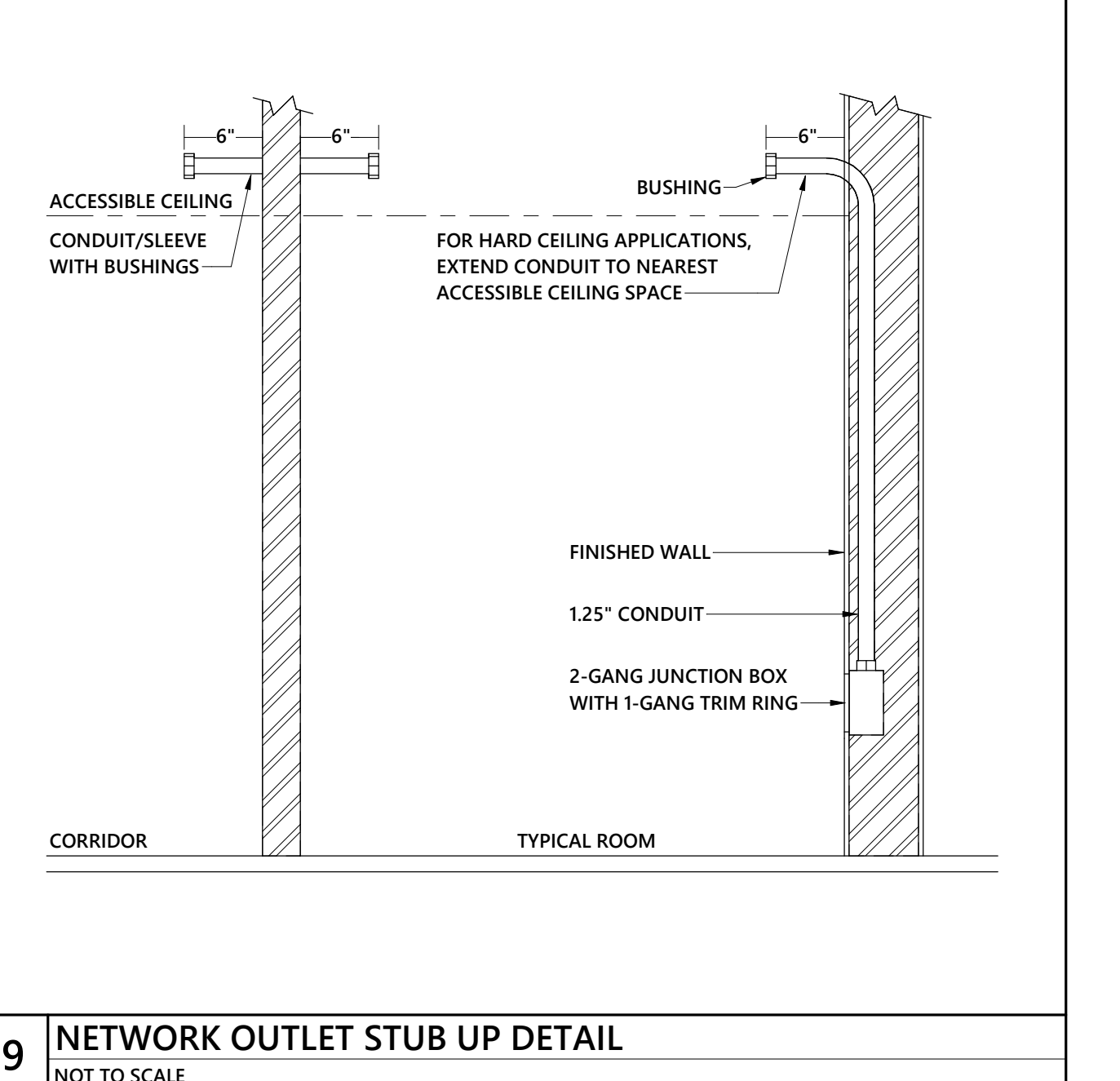
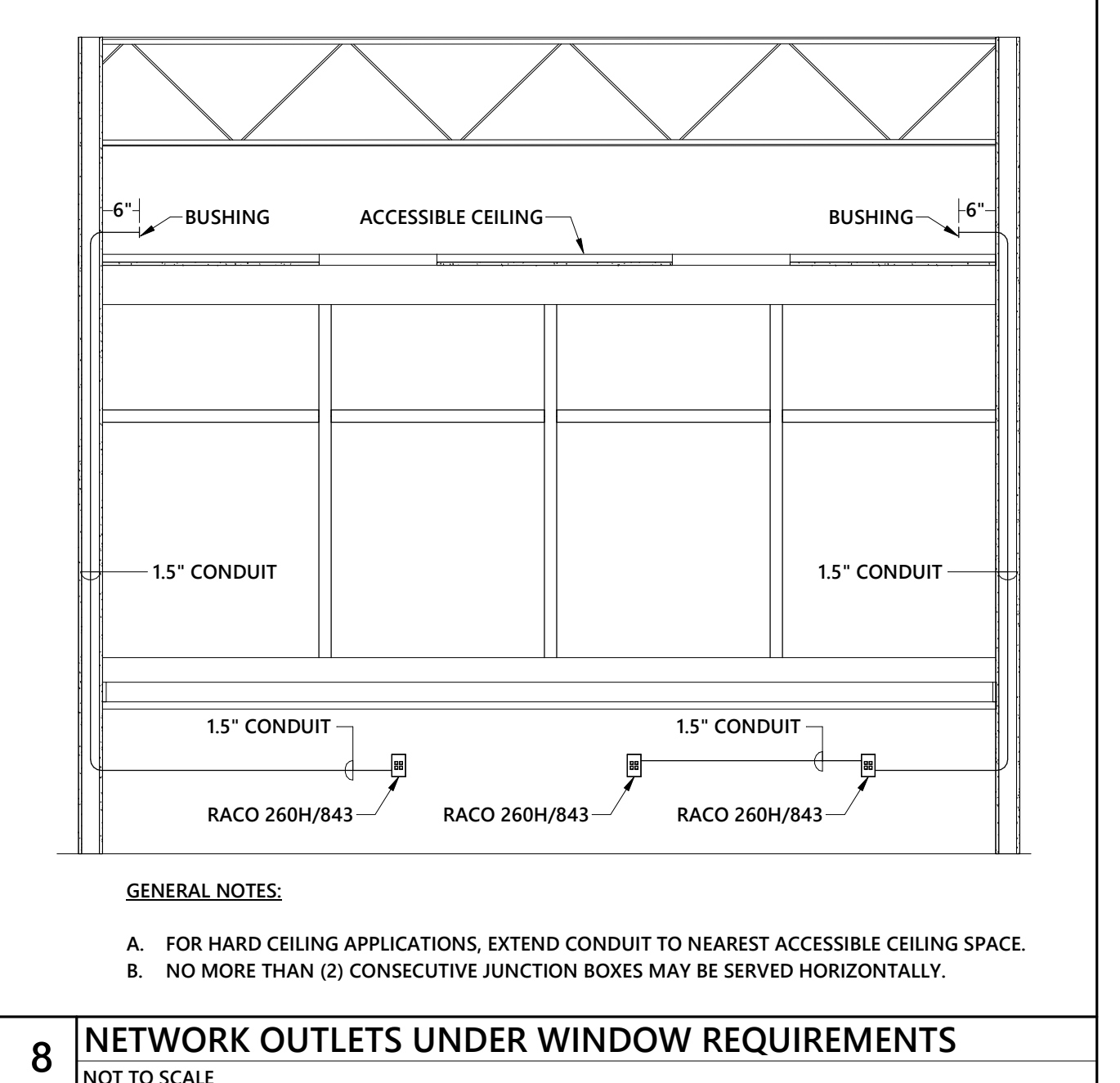
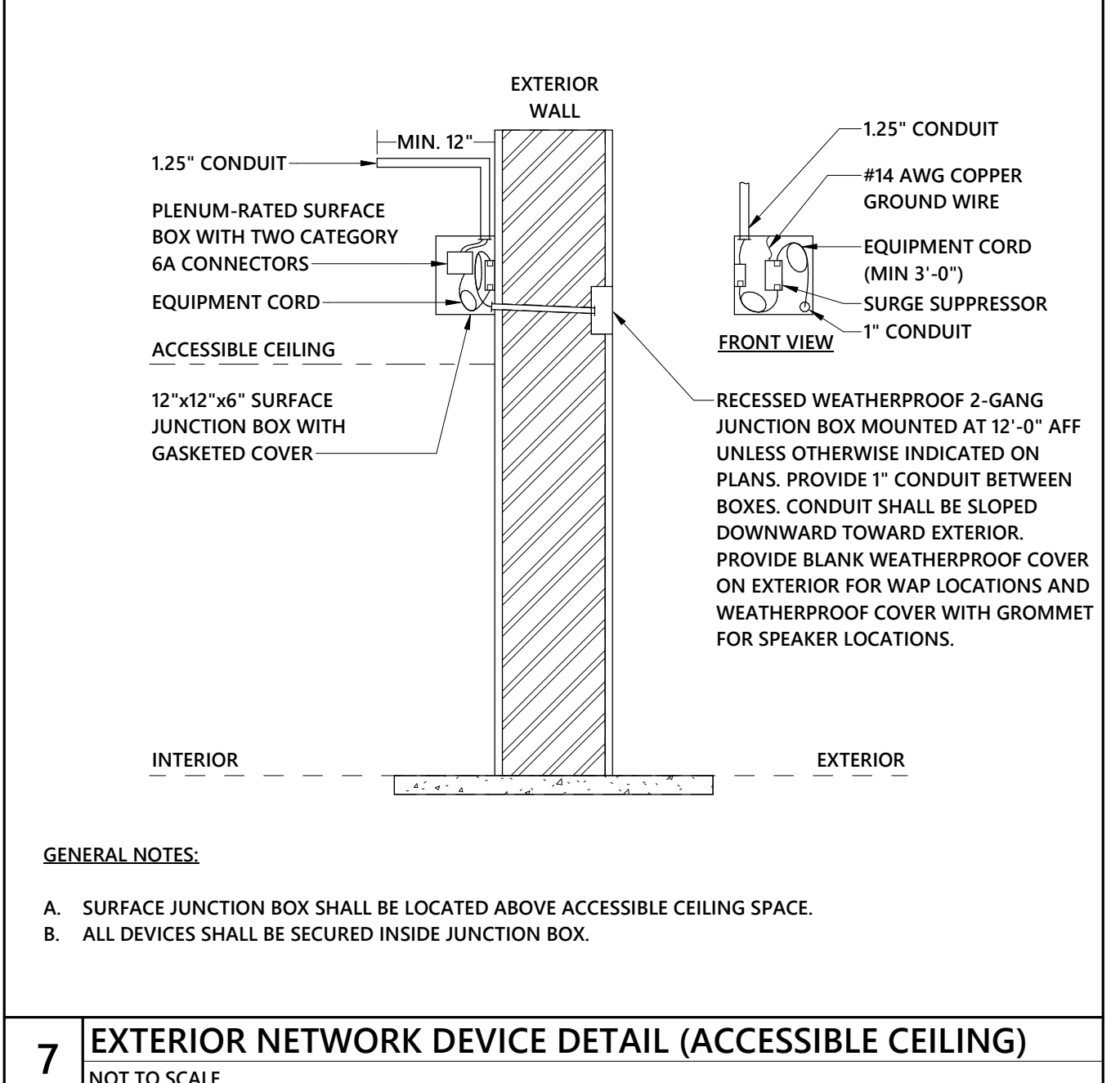
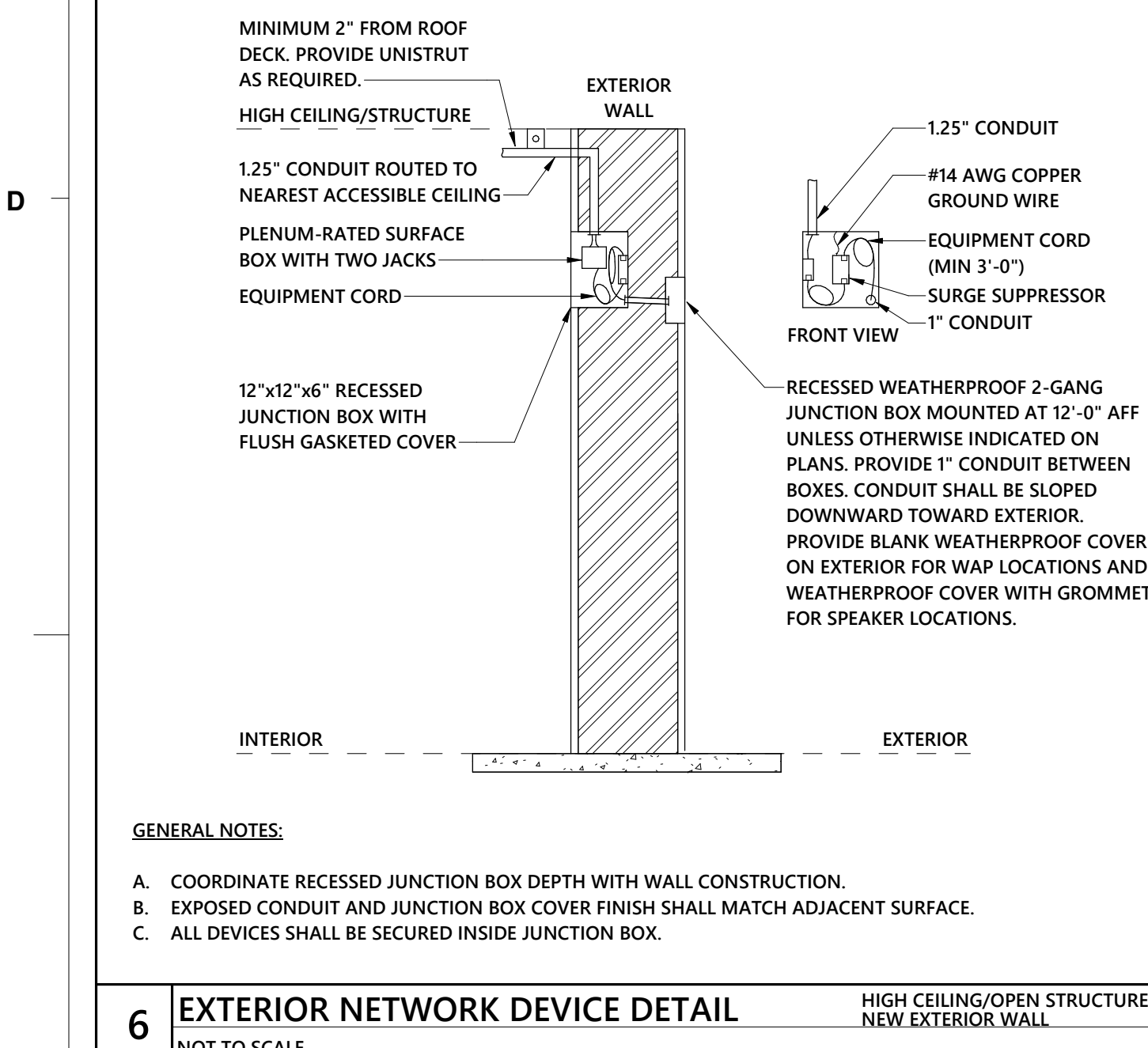
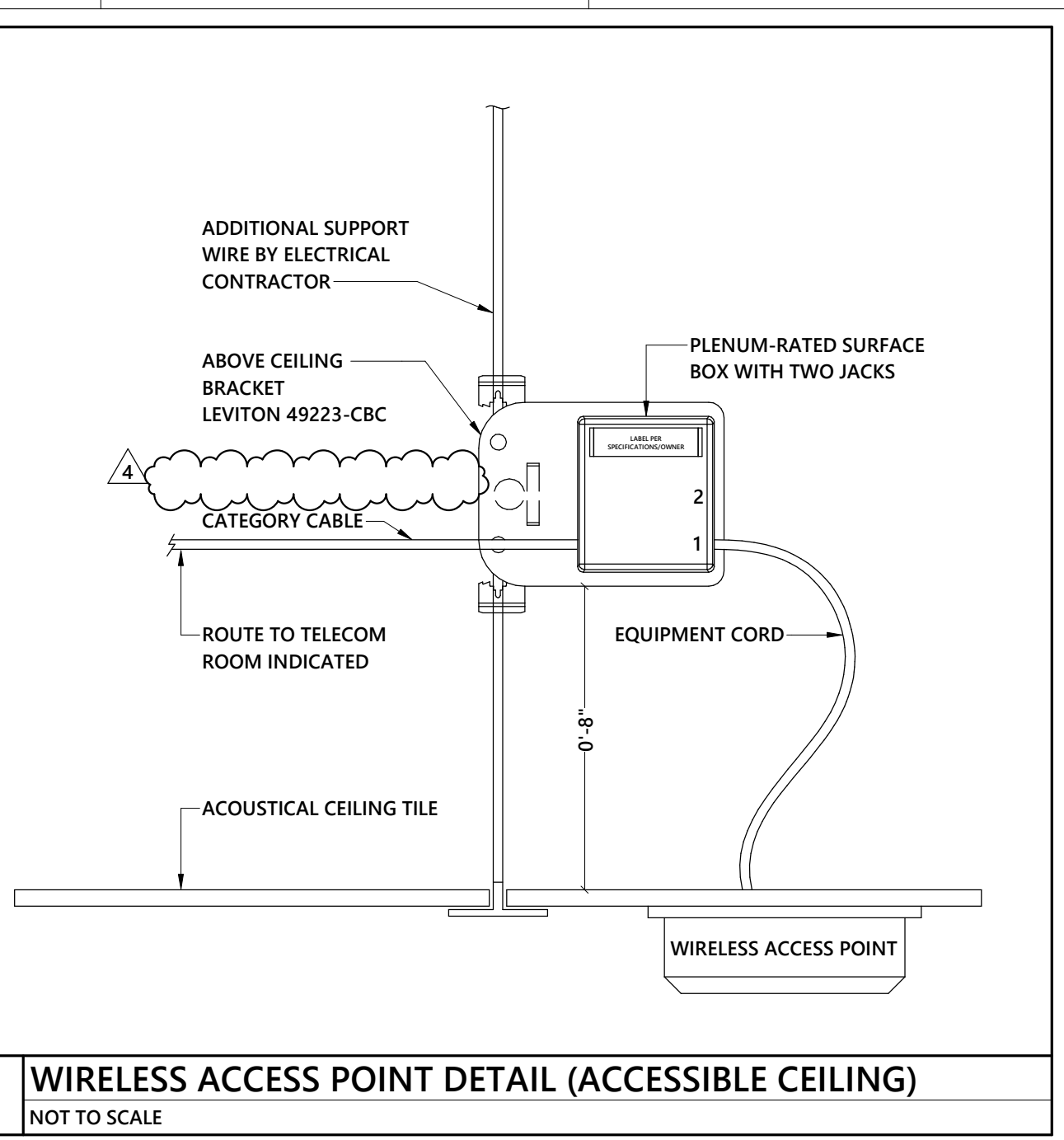
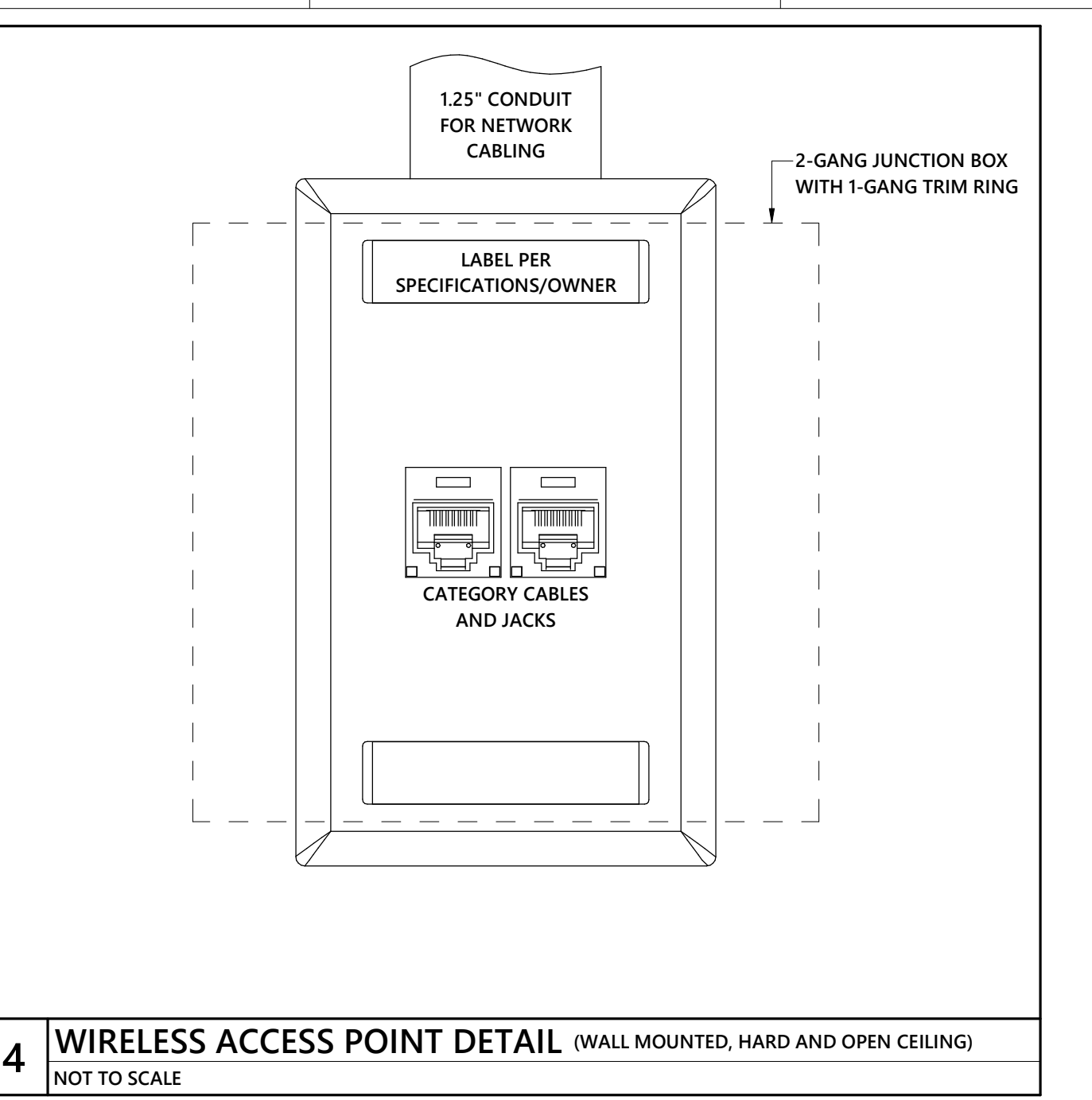
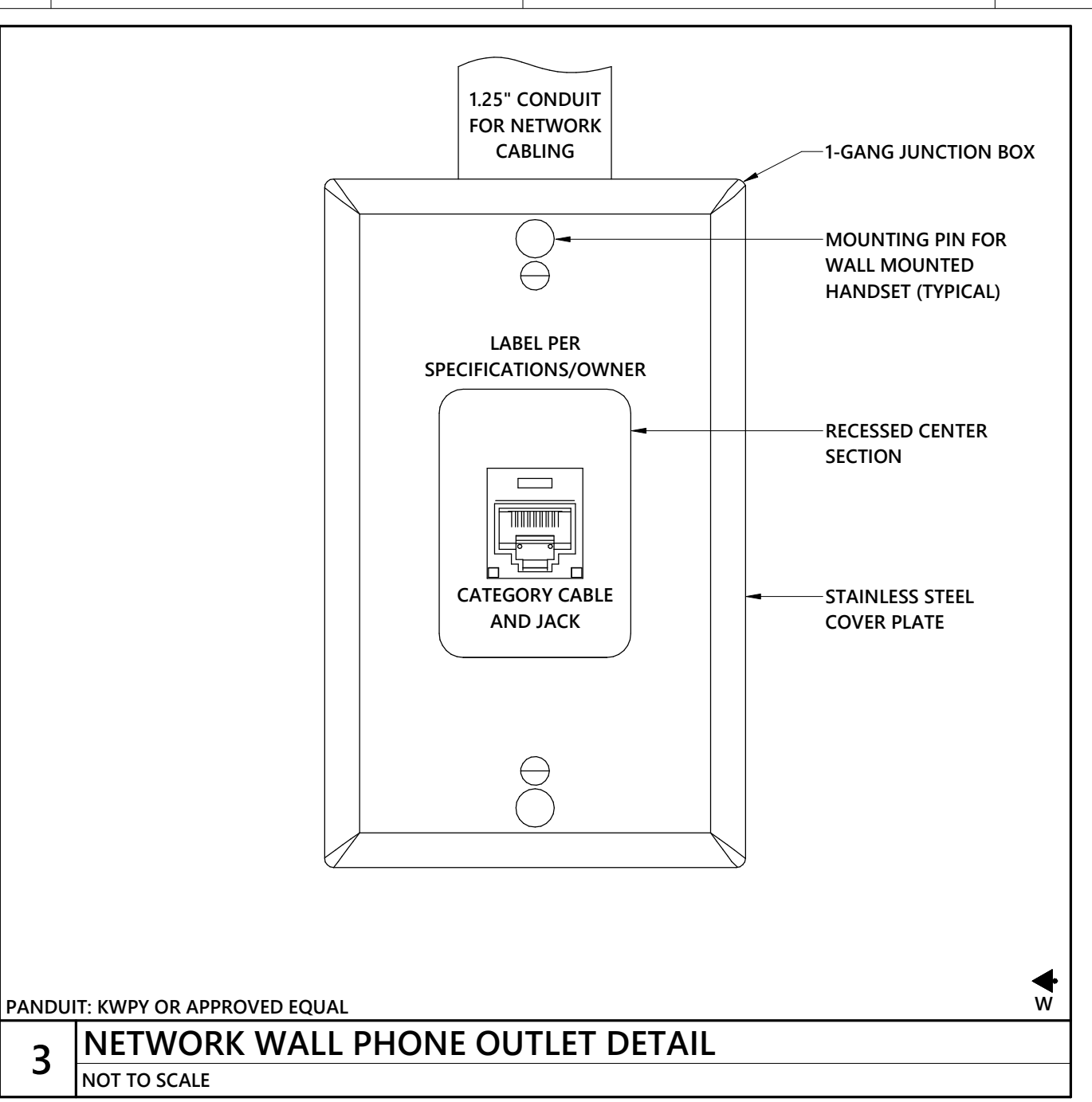
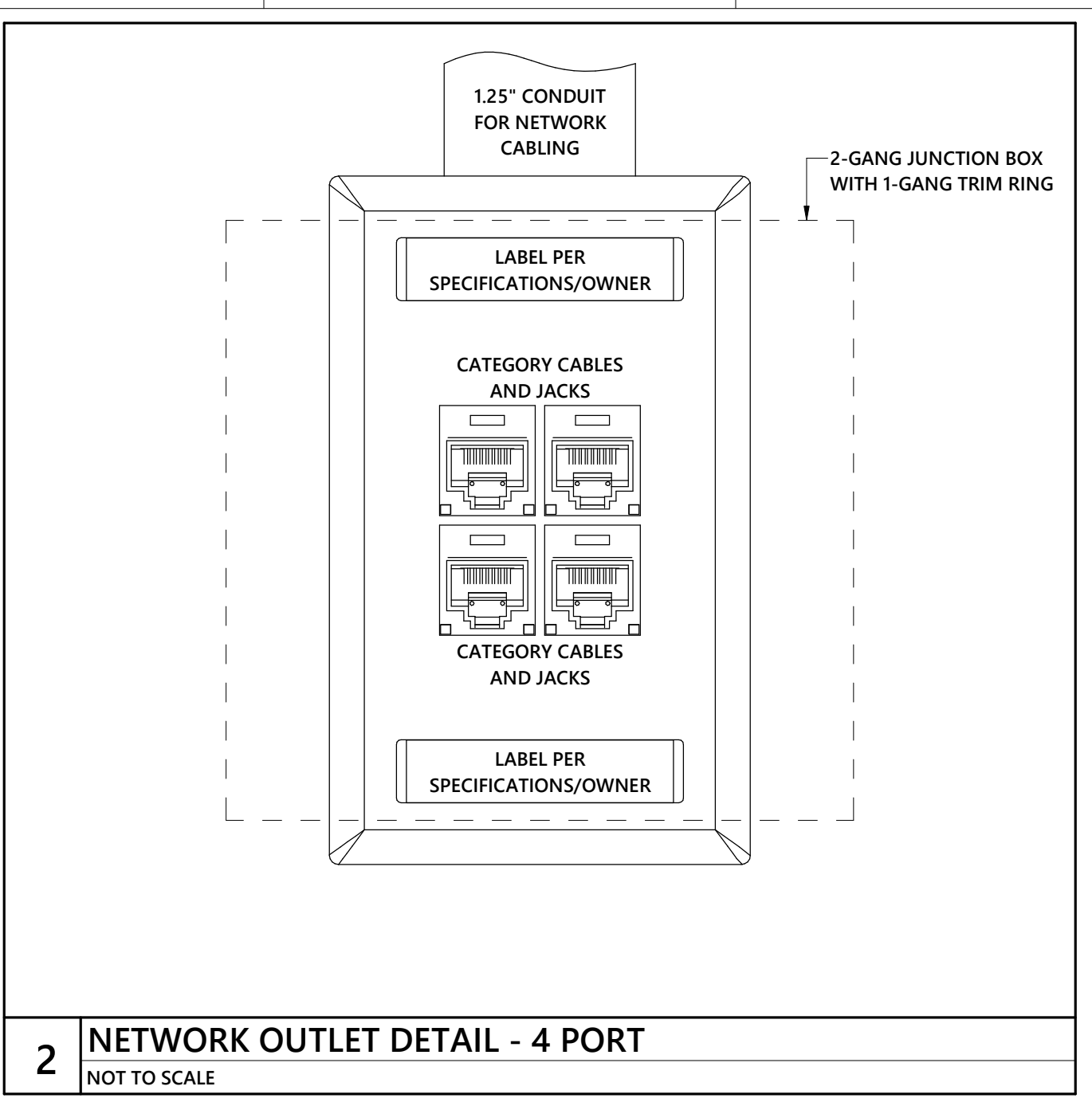
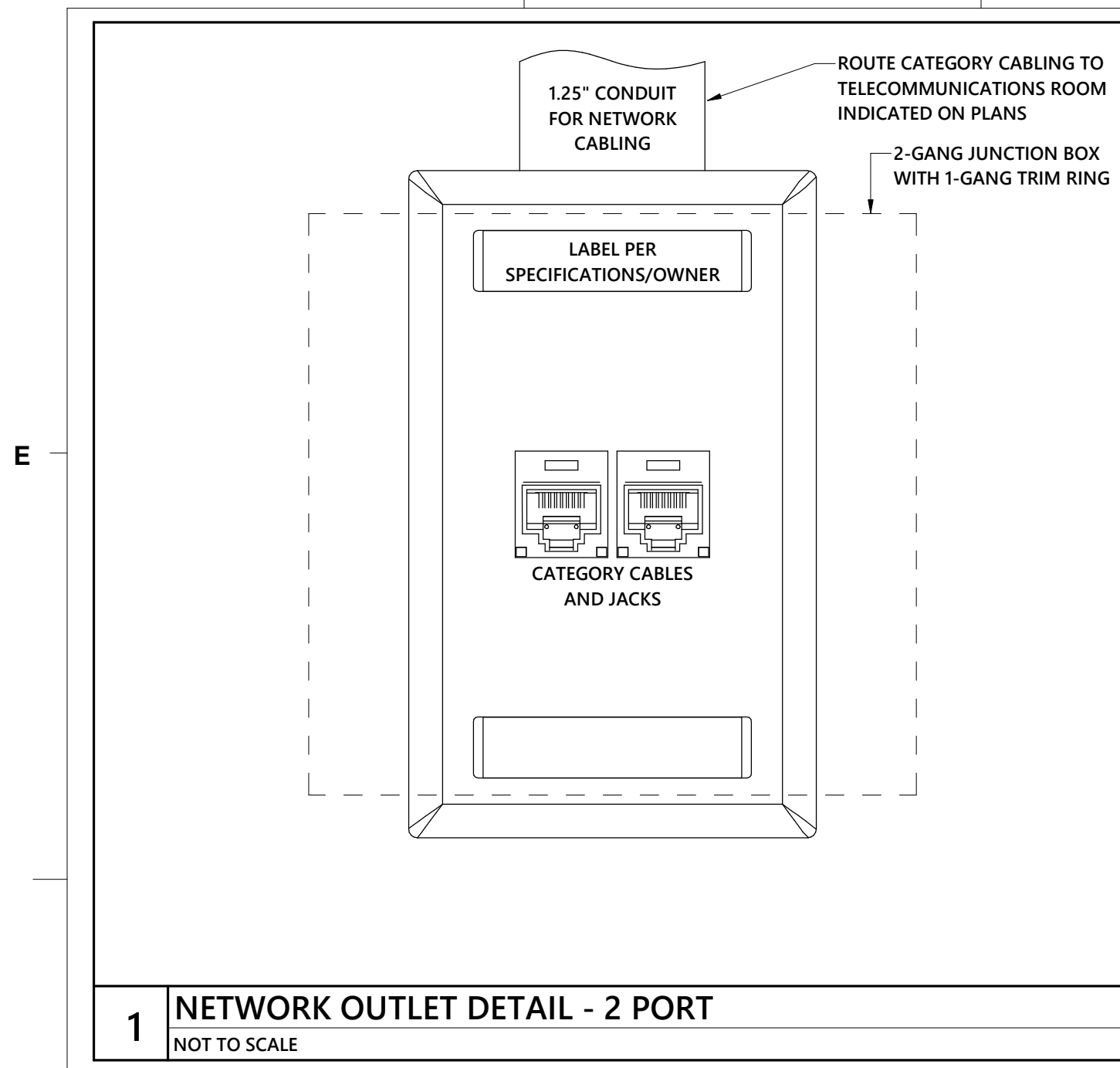
No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

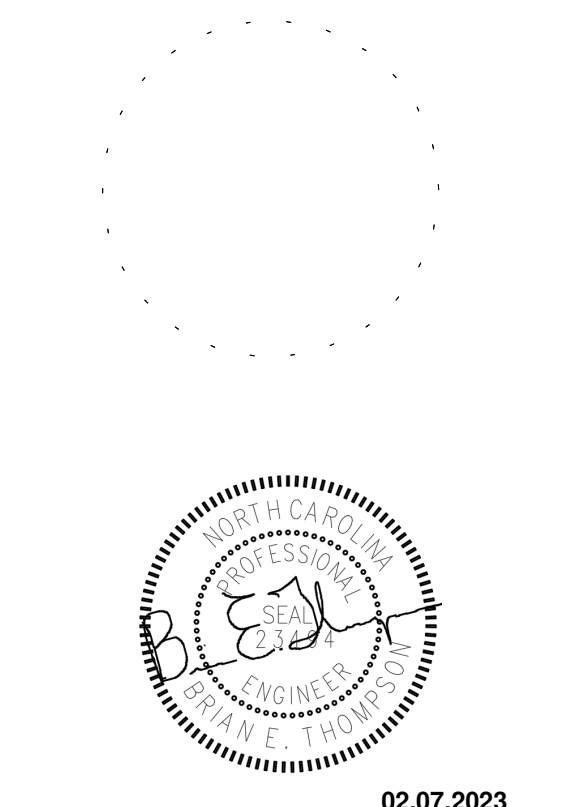
**ENLARGED TECHNOLOGY PLANS**

**T-403**

THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING, P.A. 2023. ALL RIGHTS RESERVED.



THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE EXTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING P.A. 2021. ALL RIGHTS RESERVED.



MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
 PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

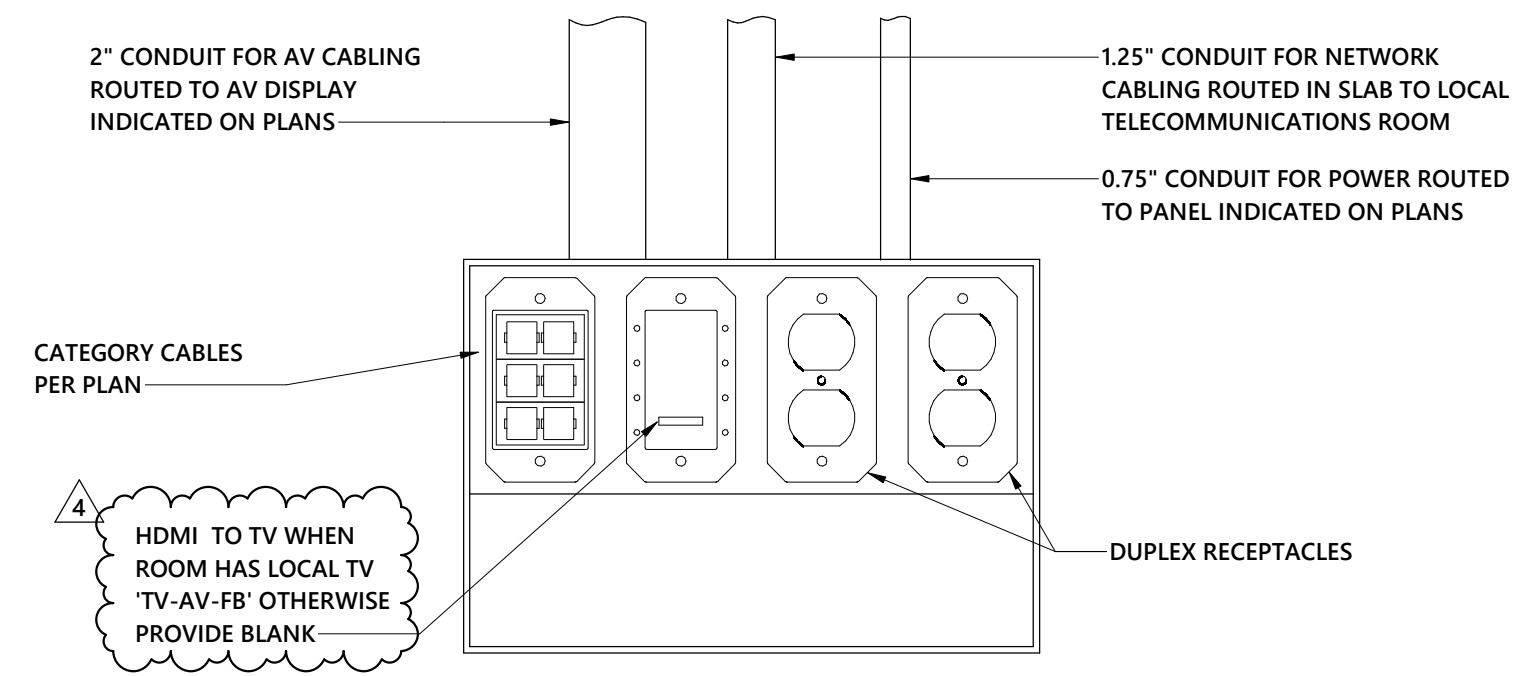
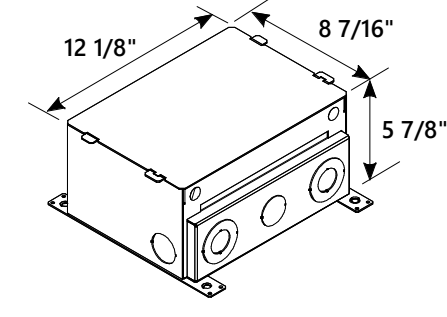
REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
 DATE: 01-12-2023

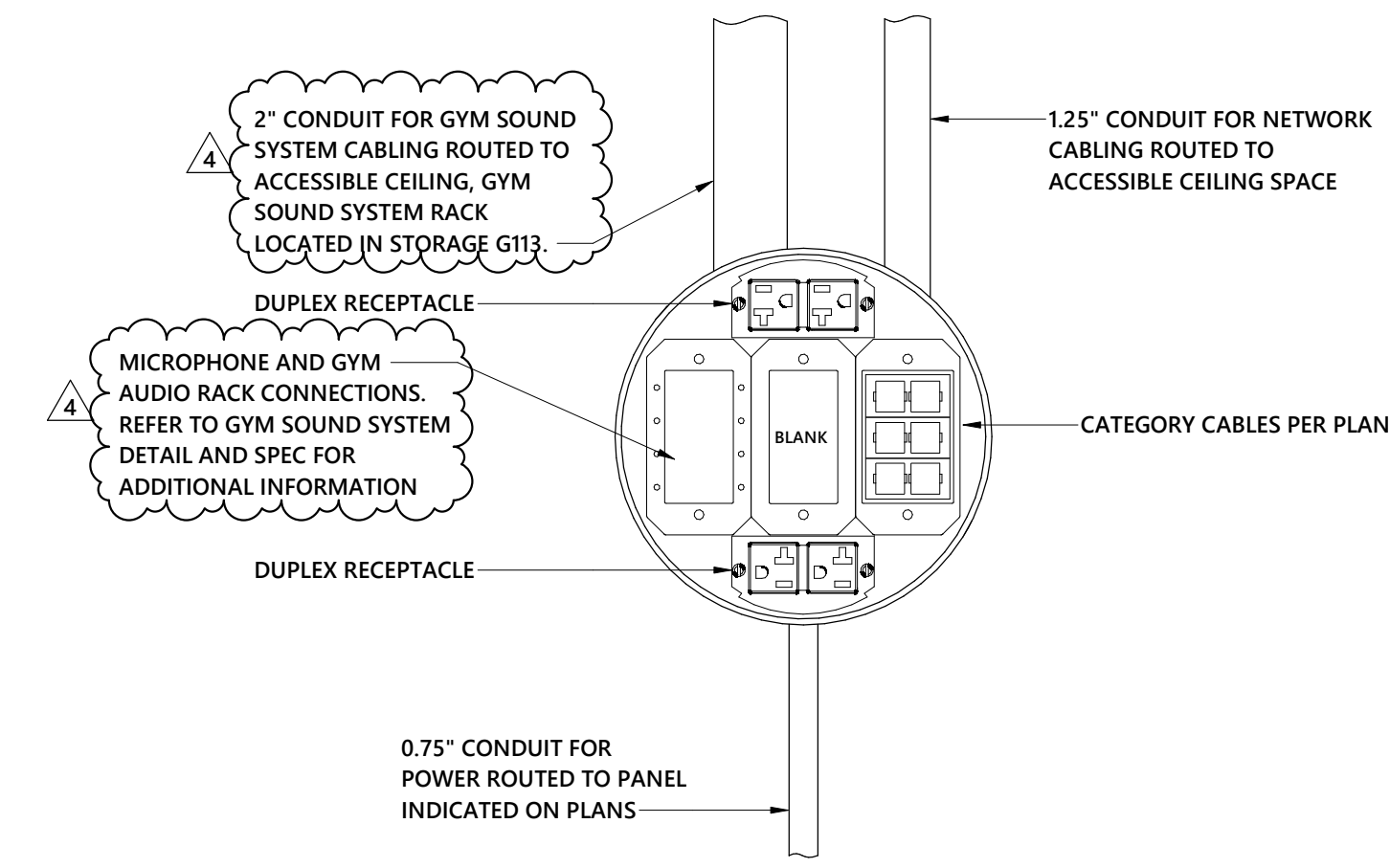
THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING P.A. 2021. ALL RIGHTS RESERVED.

- GENERAL NOTES:**
- BASIS OF DESIGN: LEGRAND EVOLUTION FLOOR BOX EFB45S-OG OR APPROVED EQUAL. PROVIDE HARDWARE AS REQUIRED TO CONNECT DEVICES AND CONDUITS AS INDICATED.
  - PROVIDE (2) 5-20R RECEPTACLES.
  - PROVIDE ALL INSTALLATION HARDWARE AS REQUIRED.
  - ROUTE STRUCTURED CABLING TO TELECOMMUNICATIONS ROOM INDICATED.
  - FLOOR BOX & COVER, CONDUIT, RECEPTACLES AND POWER WIRING SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
  - STRUCTURED CABLING AND ASSOCIATED HARDWARE SHALL BE PROVIDED BY STRUCTURED CABLING CONTRACTOR.
  - AV CABLING AND ASSOCIATED HARDWARE SHALL BE PROVIDED BY AV CONTRACTOR.
  - COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.

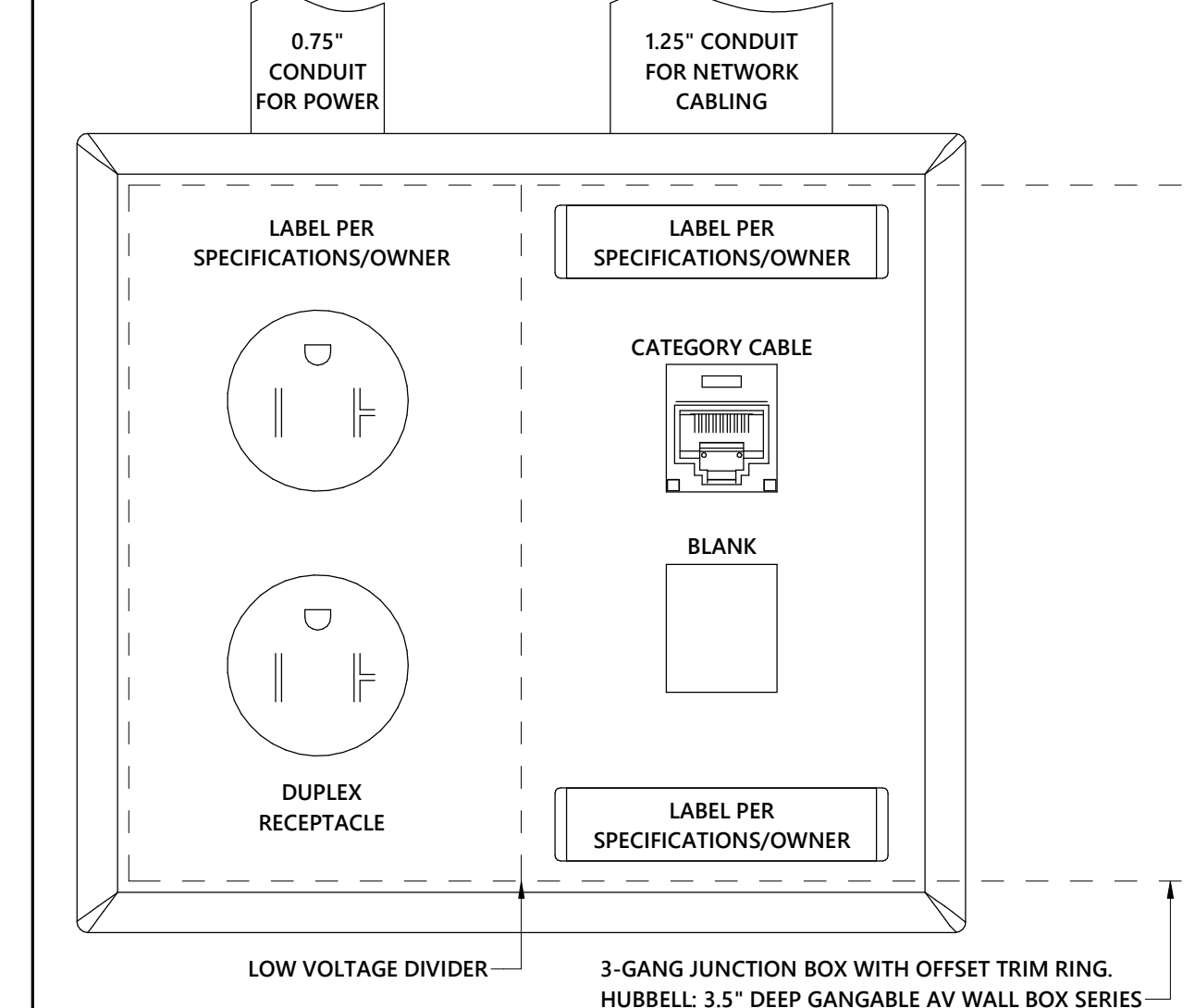


**1 4-GANG MULTI-SERVICE FLOOR BOX**  
NOT TO SCALE

- GENERAL NOTES:**
- BASIS OF DESIGN: LEGRAND EVOLUTION POKE-THRU RAT OR APPROVED EQUAL. PROVIDE HARDWARE AS REQUIRED TO CONNECT DEVICES AND CONDUITS AS INDICATED.
  - PROVIDE (2) 5-20R RECEPTACLES. (PRE-WIRED)
  - PROVIDE ALL INSTALLATION HARDWARE AS REQUIRED.
  - ROUTE STRUCTURED CABLING TO TELECOMMUNICATIONS ROOM INDICATED.
  - POKE-THRU & COVER, CONDUIT, RECEPTACLES AND POWER WIRING SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
  - STRUCTURED CABLING AND ASSOCIATED HARDWARE SHALL BE PROVIDED BY STRUCTURED CABLING CONTRACTOR.
  - NO LONGER USED
  - COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
  - ALL CORE DRILLS AND CONDUIT PENETRATIONS SHALL BE COORDINATED, EVALUATED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

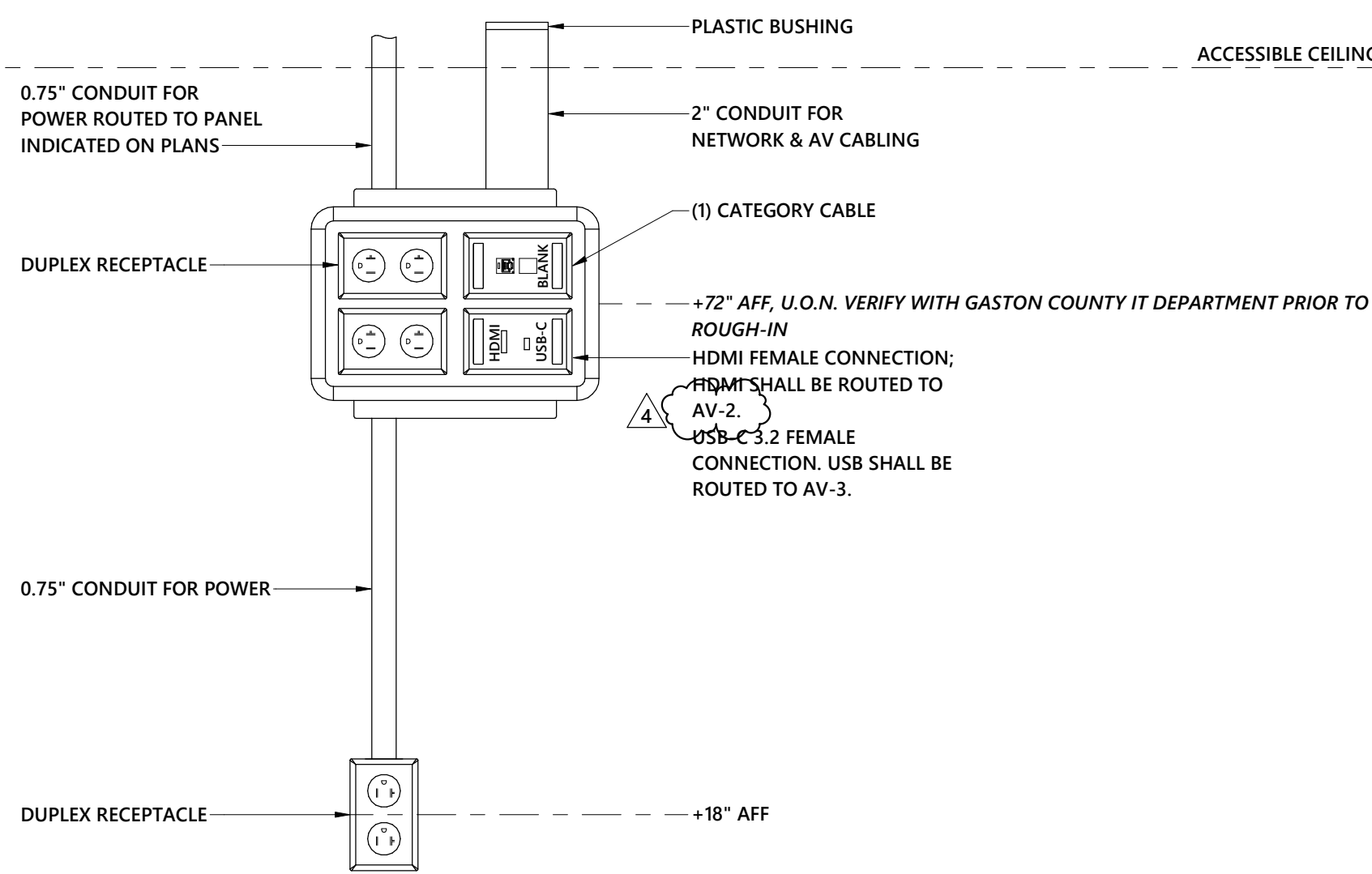
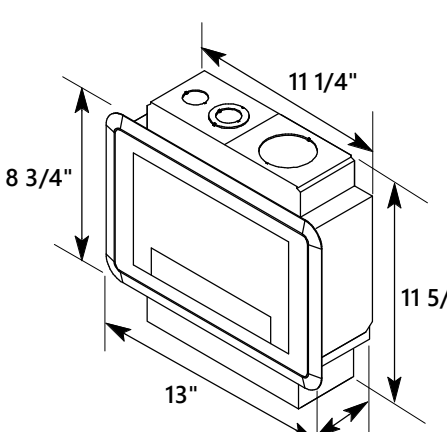


**2 8" MULTI-SERVICE FIRE RATED POKE-THRU FLOOR BOX - TYPE A**  
NOT TO SCALE



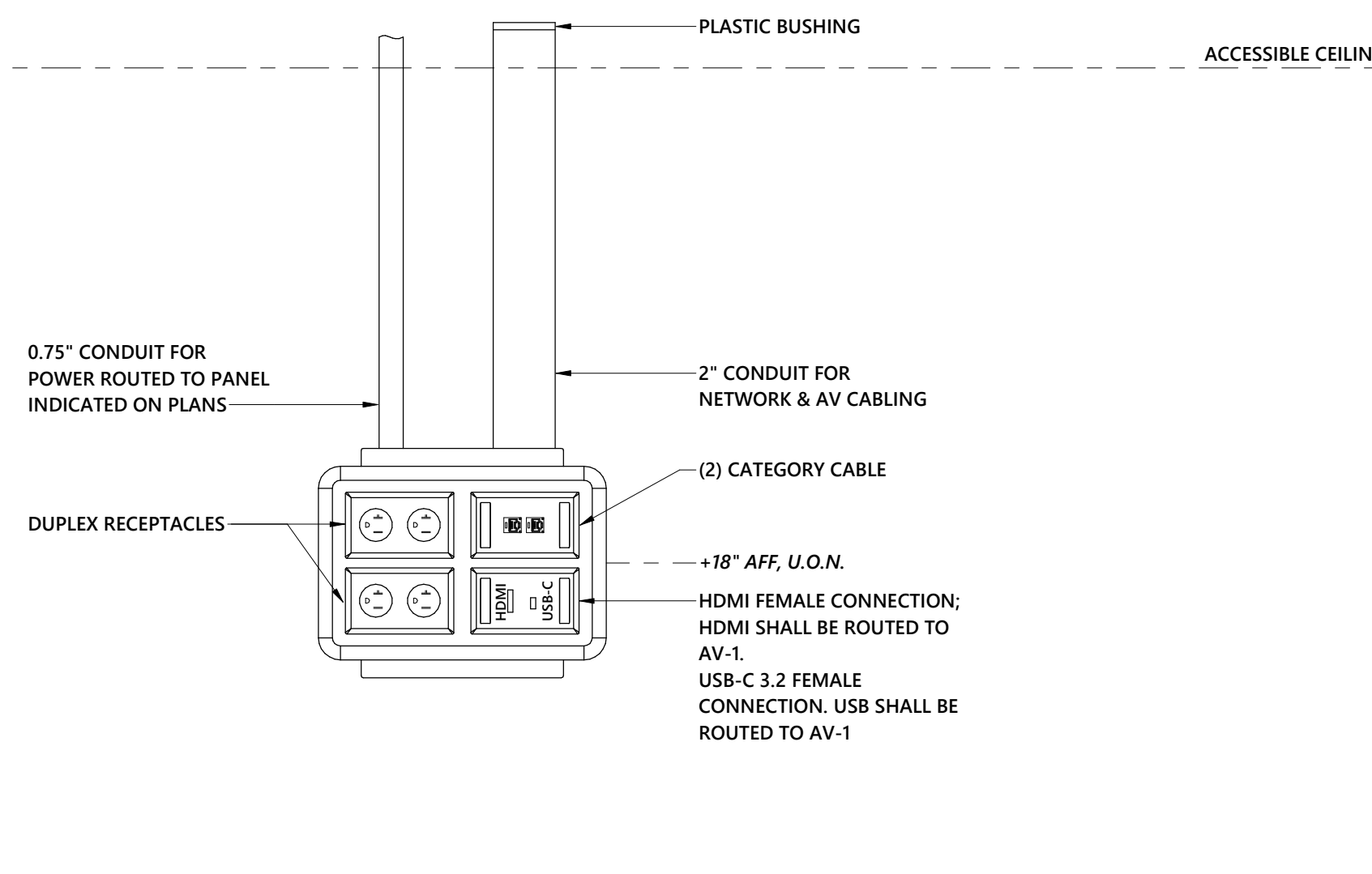
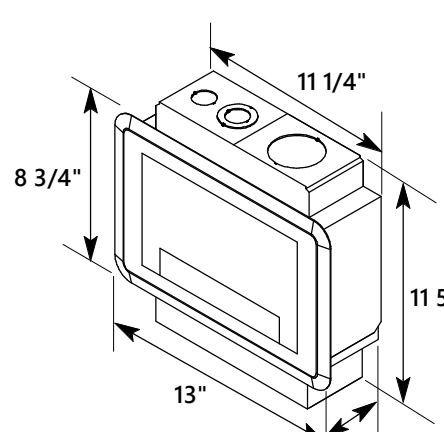
**3 DISPLAY DETAIL WITH NETWORK AND DUPLEX POWER**  
NOT TO SCALE

- GENERAL NOTES:**
- BASIS OF DESIGN: LEGRAND EVOLUTION WALL BOX EFSB4 OR APPROVED EQUAL. PROVIDE HARDWARE AS REQUIRED TO CONNECT DEVICES AND CONDUITS AS INDICATED.
  - PROVIDE (2) 5-20R RECEPTACLES.
  - PROVIDE INSTALLATION HARDWARE AS REQUIRED. COORDINATE WITH ARCHITECTURAL DRAWINGS.
  - ROUTE STRUCTURED CABLING TO TELECOMMUNICATIONS ROOM INDICATED.
  - WALL BOX, CONDUIT, RECEPTACLES AND POWER WIRING SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
  - STRUCTURED CABLING AND ASSOCIATED HARDWARE SHALL BE PROVIDED BY STRUCTURED CABLING CONTRACTOR.



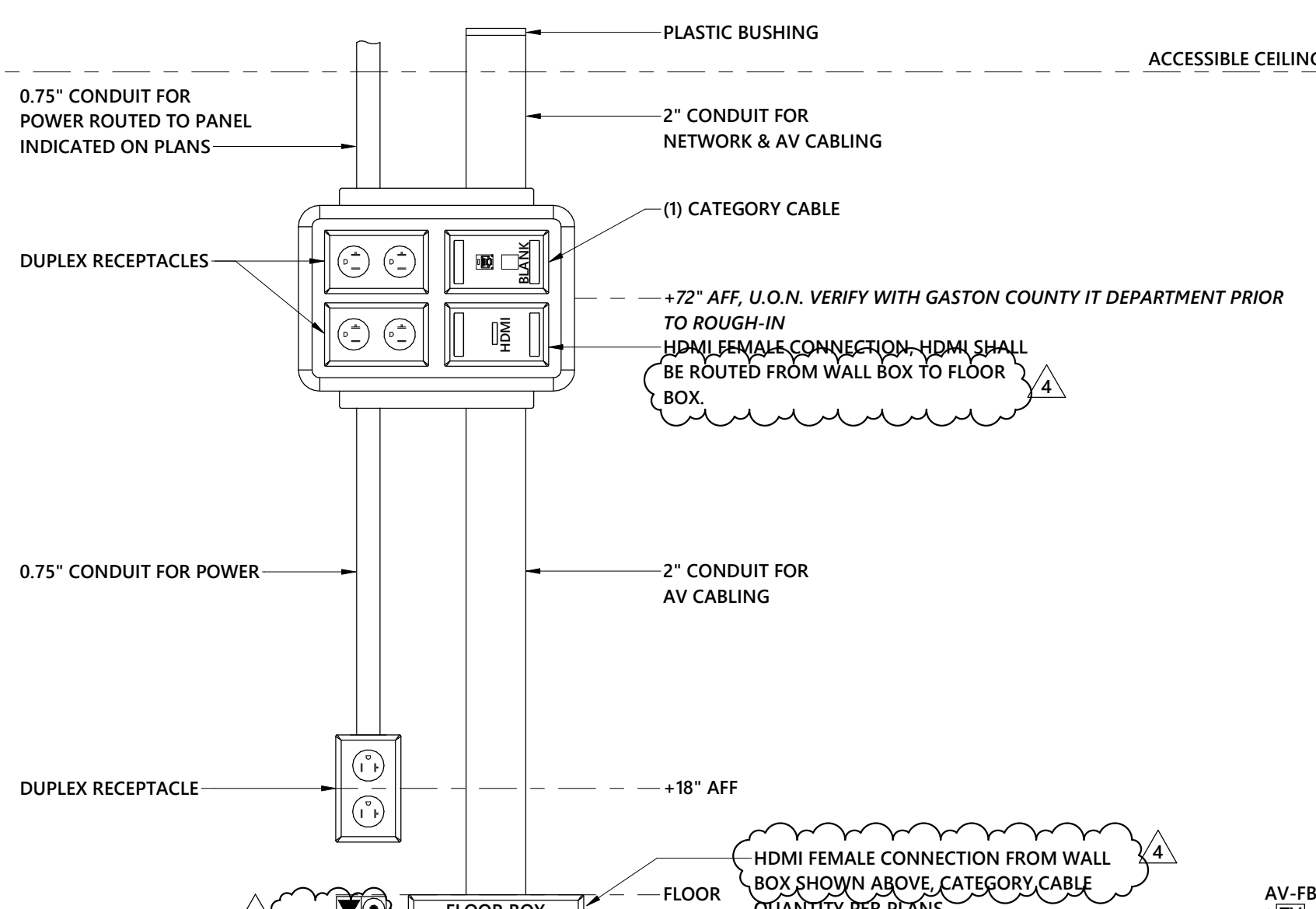
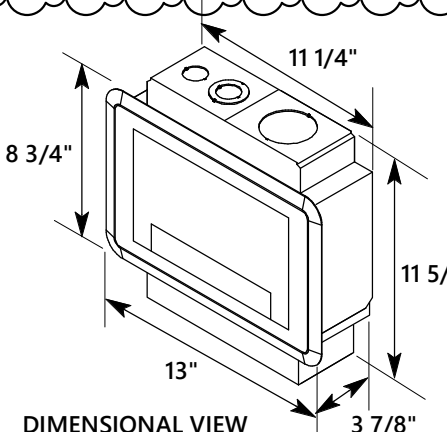
**4 AV-1 DISPLAY DETAIL**  
NOT TO SCALE

- GENERAL NOTES:**
- BASIS OF DESIGN: LEGRAND EVOLUTION WALL BOX EFSB4 OR APPROVED EQUAL. PROVIDE HARDWARE AS REQUIRED TO CONNECT DEVICES AND CONDUITS AS INDICATED.
  - PROVIDE (2) 5-20R RECEPTACLES.
  - PROVIDE INSTALLATION HARDWARE AS REQUIRED. COORDINATE WITH ARCHITECTURAL DRAWINGS.
  - ROUTE STRUCTURED CABLING TO TELECOMMUNICATIONS ROOM INDICATED.
  - WALL BOX, CONDUIT, RECEPTACLES AND POWER WIRING SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
  - STRUCTURED CABLING AND ASSOCIATED HARDWARE SHALL BE PROVIDED BY STRUCTURED CABLING CONTRACTOR.



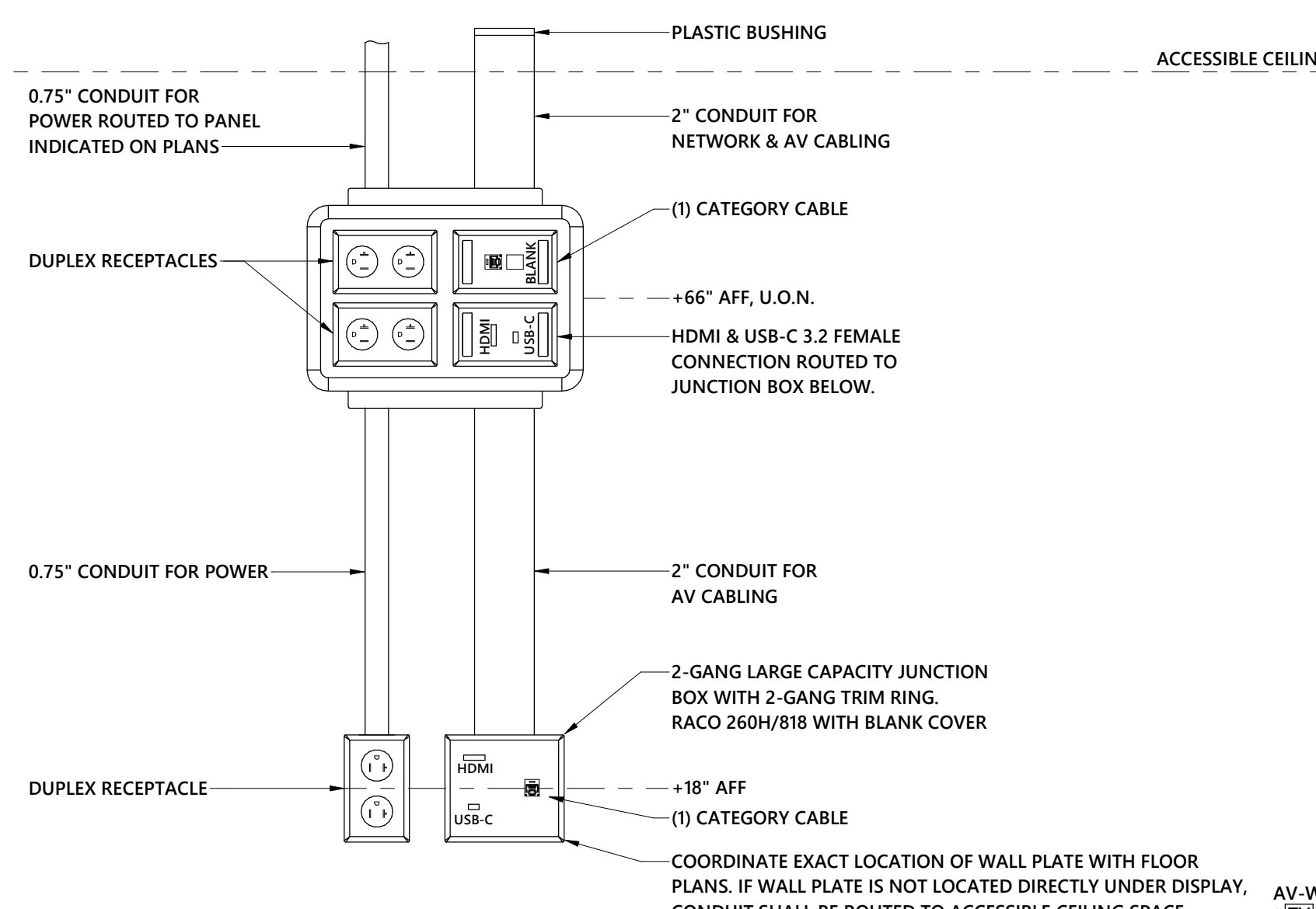
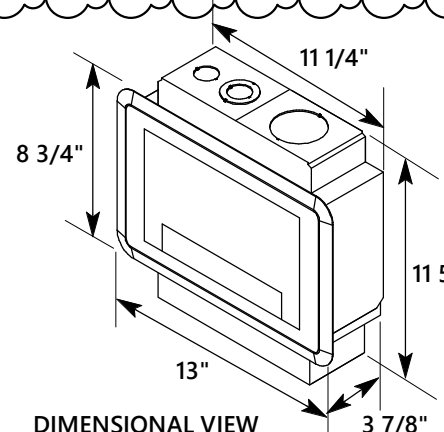
**5 AV-2 DISPLAY DETAIL**  
NOT TO SCALE

- GENERAL NOTES:**
- BASIS OF DESIGN: LEGRAND EVOLUTION WALL BOX EFSB4 OR APPROVED EQUAL. PROVIDE HARDWARE AS REQUIRED TO CONNECT DEVICES AND CONDUITS AS INDICATED.
  - PROVIDE (2) 5-20R RECEPTACLES.
  - PROVIDE INSTALLATION HARDWARE AS REQUIRED. COORDINATE WITH ARCHITECTURAL DRAWINGS.
  - ROUTE STRUCTURED CABLING TO TELECOMMUNICATIONS ROOM INDICATED.
  - WALL BOX, CONDUIT, RECEPTACLES AND POWER WIRING SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
  - STRUCTURED CABLING AND ASSOCIATED HARDWARE SHALL BE PROVIDED BY STRUCTURED CABLING CONTRACTOR.



**6 AV DISPLAY DETAIL WITH FLOOR BOX**  
NOT TO SCALE

- GENERAL NOTES:**
- BASIS OF DESIGN: LEGRAND EVOLUTION WALL BOX EFSB4 OR APPROVED EQUAL. PROVIDE HARDWARE AS REQUIRED TO CONNECT DEVICES AND CONDUITS AS INDICATED.
  - PROVIDE (2) 5-20R RECEPTACLES.
  - PROVIDE INSTALLATION HARDWARE AS REQUIRED. COORDINATE WITH ARCHITECTURAL DRAWINGS.
  - ROUTE STRUCTURED CABLING TO TELECOMMUNICATIONS ROOM INDICATED.
  - WALL BOX, CONDUIT, RECEPTACLES AND POWER WIRING SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
  - STRUCTURED CABLING AND ASSOCIATED HARDWARE SHALL BE PROVIDED BY STRUCTURED CABLING CONTRACTOR.



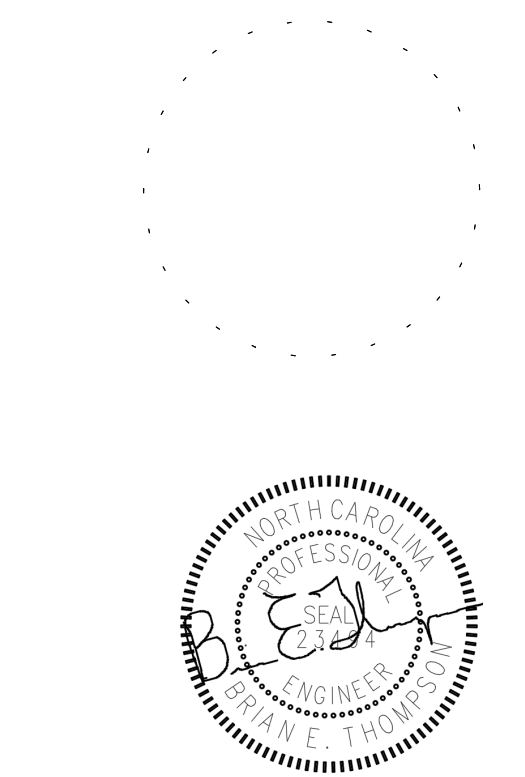
**7 AV DISPLAY DETAIL WITH WALL PLATE**  
NOT TO SCALE



**GRIER MIDDLE SCHOOL REPLACEMENT**



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL. 704.333.6686 FAX 704.333.2926  
WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

**REVISIONS:**

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

**TECHNOLOGY DETAILS**

**T-502**

Optima # 22-0082

01.12.2023 - BID SET

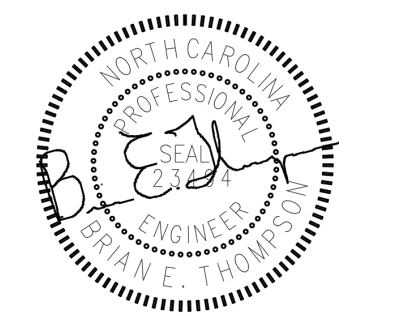




1927 South Tryon St., Suite 300, Charlotte NC 28203  
Phone: 704.333.1261 • www.optimaengineering.com  
North Carolina License Number C-0914



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL. 704.333.6686 FAX 704.333.2926  
WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

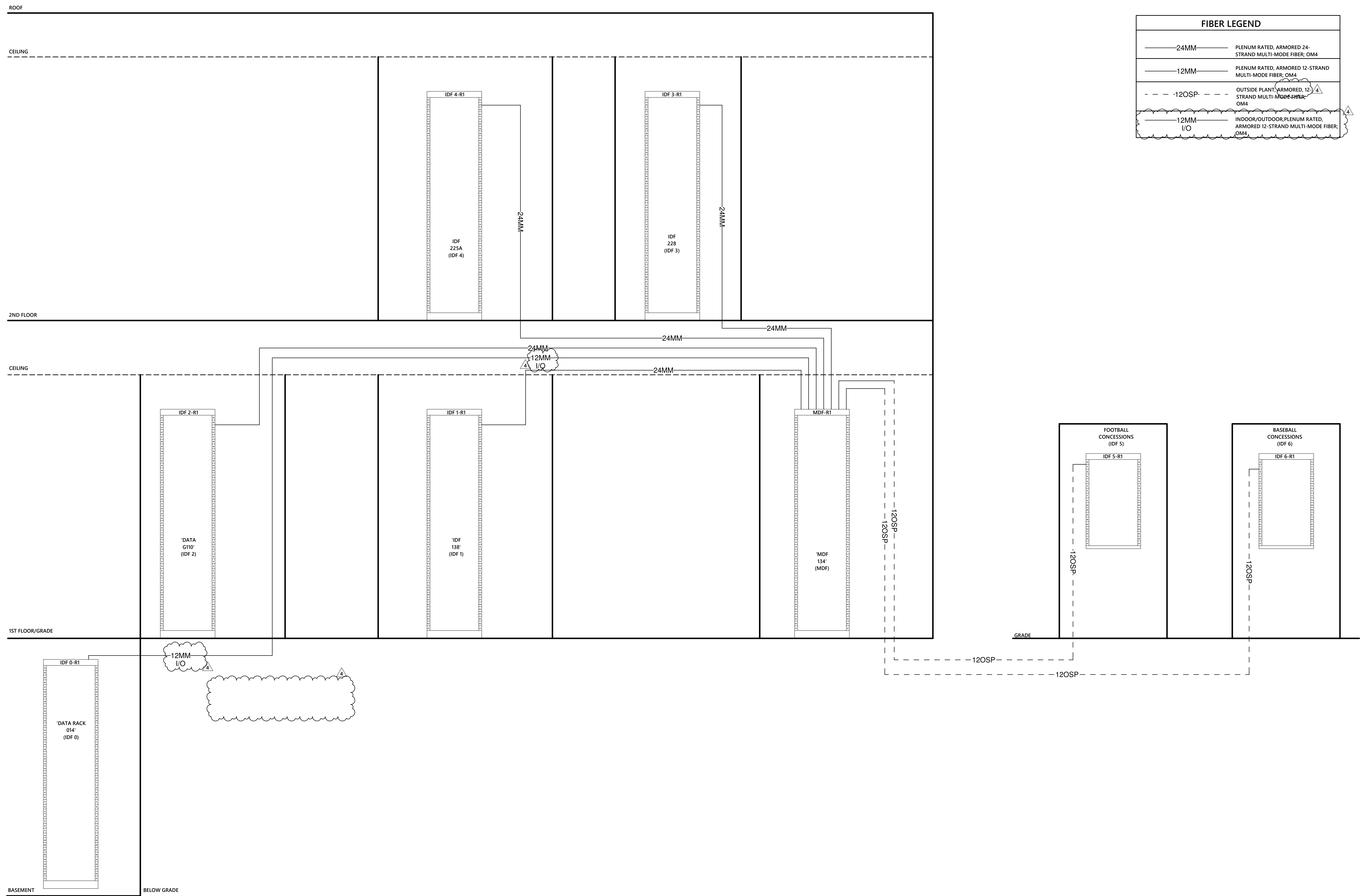
REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

TECHNOLOGY RISER DIAGRAMS

T-701



**FIBER LEGEND**

— 24MM —	PLENUM RATED, ARMORED 24-STRAND MULTI-MODE FIBER, OM4
— 12MM —	PLENUM RATED, ARMORED 12-STRAND MULTI-MODE FIBER, OM4
- - - 12OSP - - -	OUTSIDE PLANT, ARMORED 12-STRAND MULTI-MODE FIBER, OM4
— 12MM I/O —	INDOOR/OUTDOOR, PLENUM RATED, ARMORED 12-STRAND MULTI-MODE FIBER, OM4

1 FIBER RISER DIAGRAM  
NO SCALE

THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING P.A. 2021. ALL RIGHTS RESERVED.



1927 South Tryon St, Suite 300, Charlotte NC 28203  
Phone: 704.333.1261 • www.optimaengineering.com  
North Carolina License Number C-0914



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL: 704.333.6686 FAX 704.333.2926  
WWW.LS3P.COM

02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

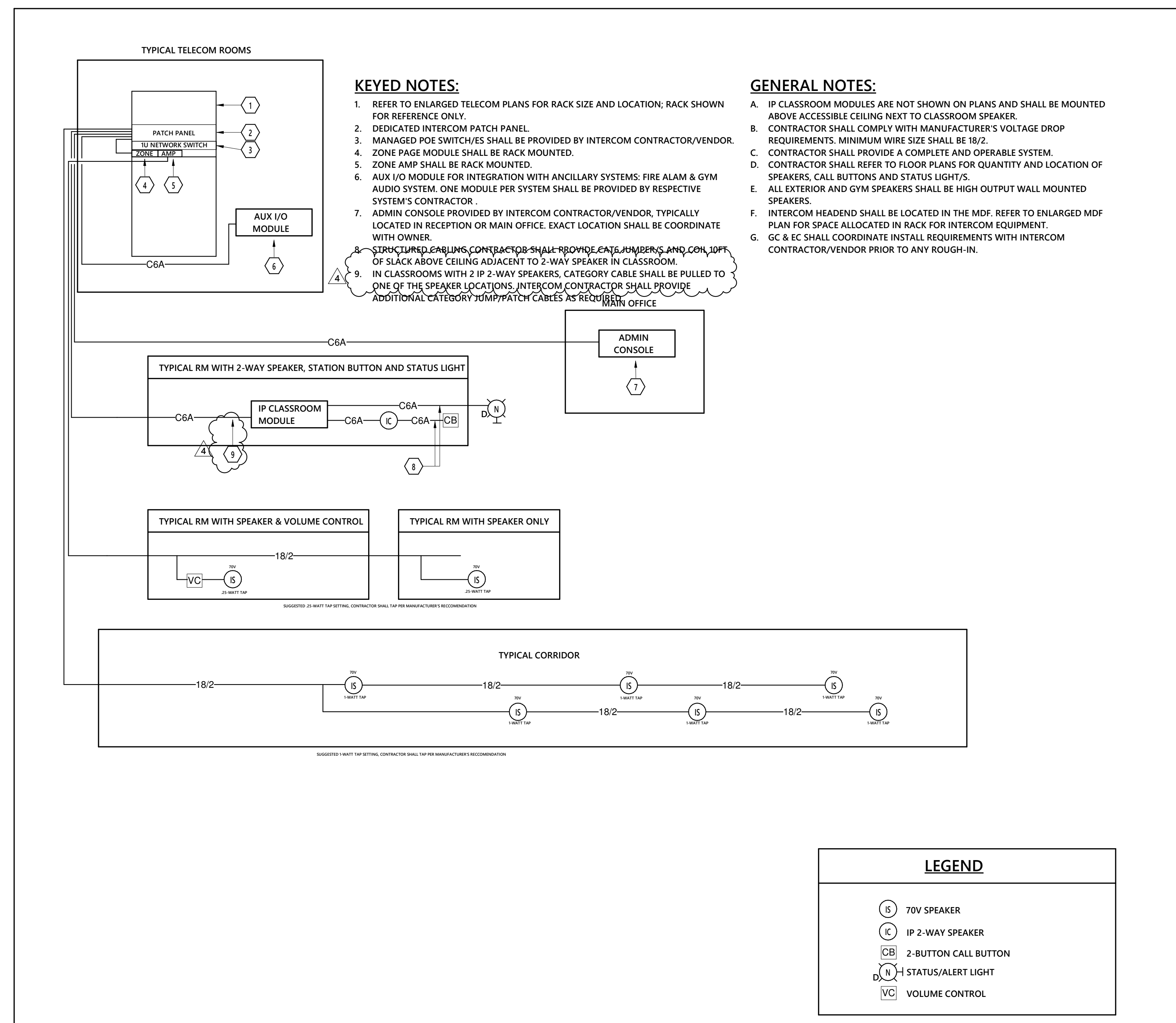
No.	Description	Date
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

TECHNOLOGY RISER DIAGRAMS

T-702

Optima # 22-0082



KEYED NOTES:

- REFER TO ENLARGED TELECOM PLANS FOR RACK SIZE AND LOCATION; RACK SHOWN FOR REFERENCE ONLY.
- DEDICATED INTERCOM PATCH PANEL.
- MANAGED POE SWITCHES SHALL BE PROVIDED BY INTERCOM CONTRACTOR/VENDOR.
- ZONE AMP SHALL BE RACK MOUNTED.
- ZONE AMP SHALL BE RACK MOUNTED.
- AUX I/O MODULE FOR INTEGRATION WITH ANCILLARY SYSTEMS; FIRE ALARM & GYM AUDIO SYSTEM. ONE MODULE PER SYSTEM SHALL BE PROVIDED BY RESPECTIVE SYSTEM'S CONTRACTOR.
- ADMIN CONSOLE PROVIDED BY INTERCOM CONTRACTOR/VENDOR, TYPICALLY LOCATED IN RECEPTION OR MAIN OFFICE. EXACT LOCATION SHALL BE COORDINATE WITH OWNER.
- STRUCTURE, CABLES, CONTRACTOR SHALL PROVIDE CAT6, HUBBERS, AND 10% OF SLACK ABOVE CEILING ADJACENT TO 2-WAY SPEAKER IN CLASSROOM.
- IN CLASSROOMS WITH 2 IP 2-WAY SPEAKERS, CATEGORY CABLE SHALL BE PULLED TO ONE OF THE SPEAKER LOCATIONS; INTERCOM CONTRACTOR SHALL PROVIDE ADDITIONAL CATEGORY JUMP/PATCH CABLES AS REQUIRED.

GENERAL NOTES:

- IP CLASSROOM MODULES ARE NOT SHOWN ON PLANS AND SHALL BE MOUNTED ABOVE ACCESSIBLE CEILING NEXT TO CLASSROOM SPEAKER.
- CONTRACTOR SHALL COMPLY WITH MANUFACTURER'S VOLTAGE DROP REQUIREMENTS. MINIMUM WIRE SIZE SHALL BE 18/2.
- CONTRACTOR SHALL PROVIDE A COMPLETE AND OPERABLE SYSTEM.
- CONTRACTOR SHALL REFER TO FLOOR PLANS FOR QUANTITY AND LOCATION OF SPEAKERS, CALL BUTTONS AND STATUS LIGHTS.
- ALL EXTERIOR AND GYM SPEAKERS SHALL BE HIGH OUTPUT WALL MOUNTED SPEAKERS.
- INTERCOM HEADEND SHALL BE LOCATED IN THE MDF. REFER TO ENLARGED MDF PLAN FOR SPACE ALLOCATED IN RACK FOR INTERCOM EQUIPMENT.
- GC & EC SHALL COORDINATE INSTALL REQUIREMENTS WITH INTERCOM CONTRACTOR/VENDOR PRIOR TO ANY ROUGH-IN.

1 INTERCOM & PA SYSTEM RISER  
NOT TO SCALE

THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWINGS AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING P.A. 2023. ALL RIGHTS RESERVED.



1927 South Tryon St., Suite 300, Charlotte NC 28203  
Phone: 704.333.1251 - www.optimaengineering.com  
North Carolina License Number: C-0914



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL: 704.333.6686 FAX: 704.333.2926  
WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

FIRST FLOOR DATA NETWORK PLAN AREA A

TN-101A

Optima # 22-0082

01.12.2023 - BID SET

GENERAL NOTES:

A. REFER TO OVERALL PATHWAY PLANS FOR CABLING ZONE INFORMATION.

KEYED NOTES:

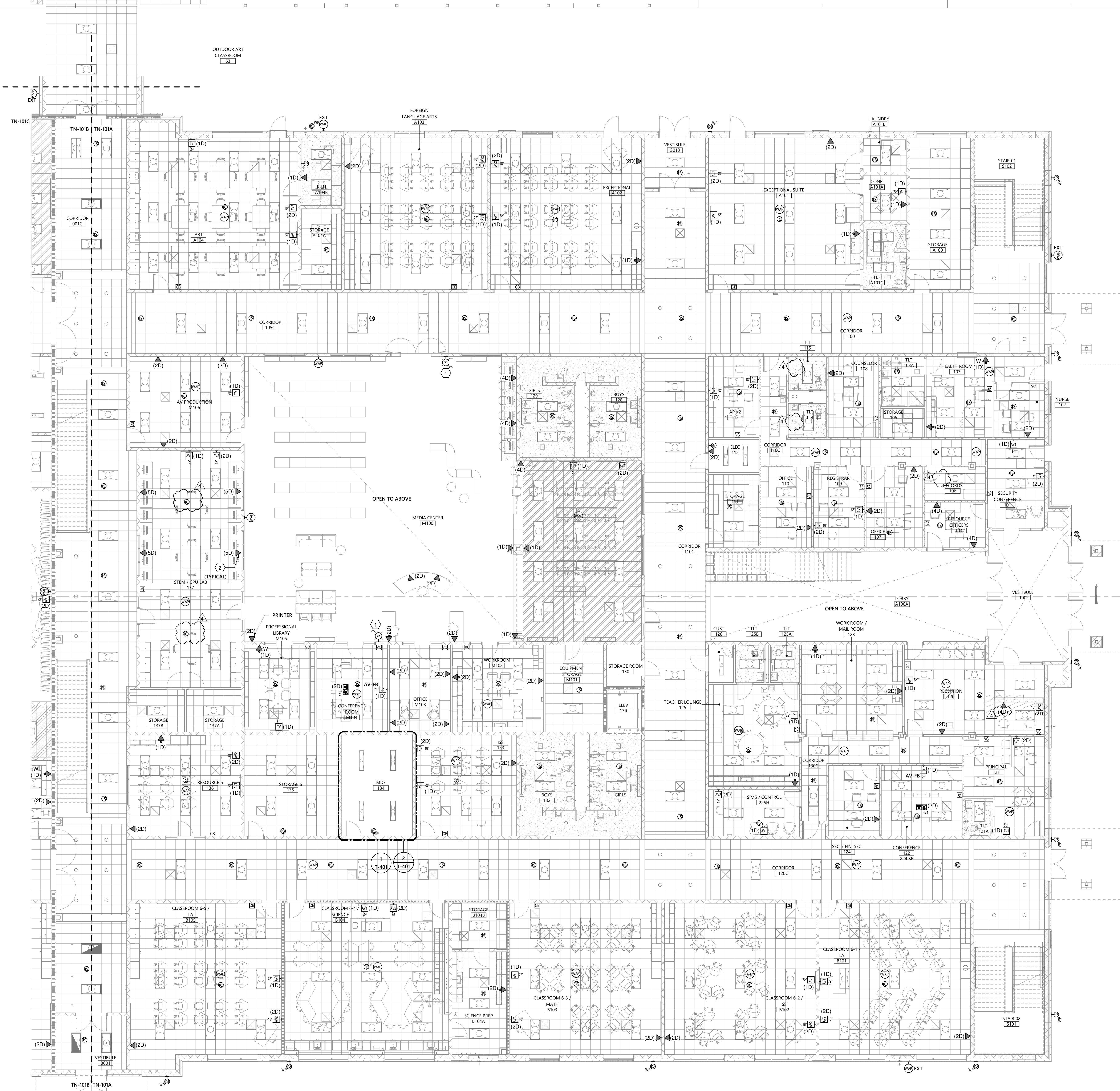
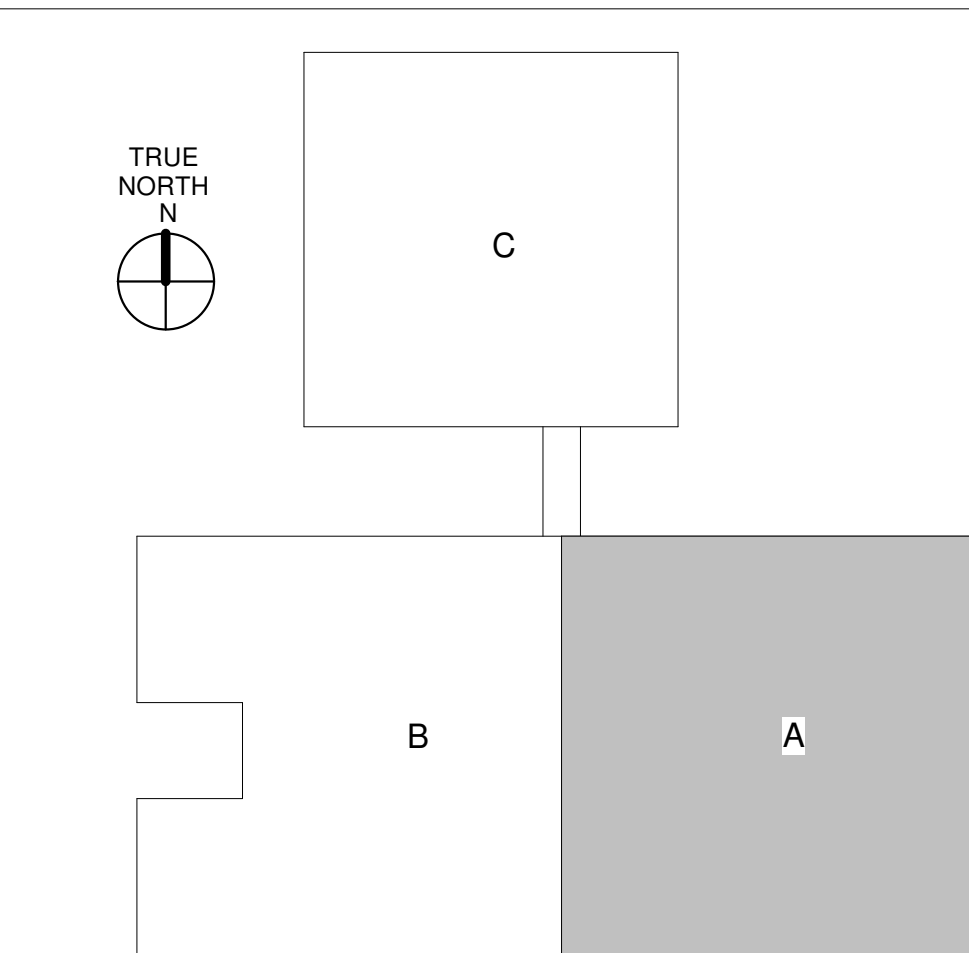
- ALERT LIGHT - WALL MOUNT 9" AFF. BASED ON CORNELL-L101A OR EQUAL WITH 24V POWER SUPPLY. PROVIDE 2 CONDUCTOR PLENUM RATED CABLE WEST PENN 25-224 OR EQUAL. SINGLE GANG BOX WITH STAINLESS STEEL FACEPLATE. RED LED MODULE WITH ACRYLIC WEDGE SHAPED DOME. LIGHT SHALL CLOSE (ILLUMINATE) ON CONTACT FROM PA/INTERCOM SYSTEM. CONNECT TO OUTPUT BOARD OF PA/INTERCOM SYSTEM.
- FOR DEVICE OUTLETS UNDER WINDOWS, REFER TO DETAIL 8 ON SHEET T-501 FOR ADDITIONAL INFORMATION.

PARTITION LEGEND

- ALL EXTERIOR WALLS TO BE U1 U.N.O.
- ALL INTERIOR MASONRY PARTITIONS TO BE MBNX U.N.O.
- ALL INTERIOR METAL STUD PARTITIONS TO BE TYPE ASSX U.N.O.

- NON-RATED PARTITION TO 4" ABOVE CEILING
- NON-RATED METAL STUD PARTITION TO DECK
- NON-RATED CMU PARTITION
- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

KEY PLAN



1 FIRST FLOOR DATA NETWORK PLAN - AREA A  
1/8" = 1'-0"

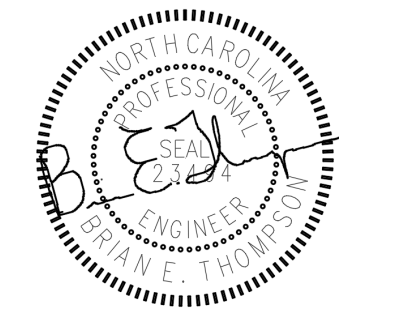
THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING, P.A. 2023. ALL RIGHTS RESERVED.



1927 South Tryon St., Suite 300, Charlotte, NC 28203  
Phone: 704.333.1251 - www.optimaengineering.com  
North Carolina License Number: C-0914



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL: 704.333.6686 FAX: 704.333.2926  
WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED  
IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-216240  
DATE: 01-12-2023

FIRST FLOOR DATA NETWORK PLAN AREA B

TN-101B

Optima # 22-0082

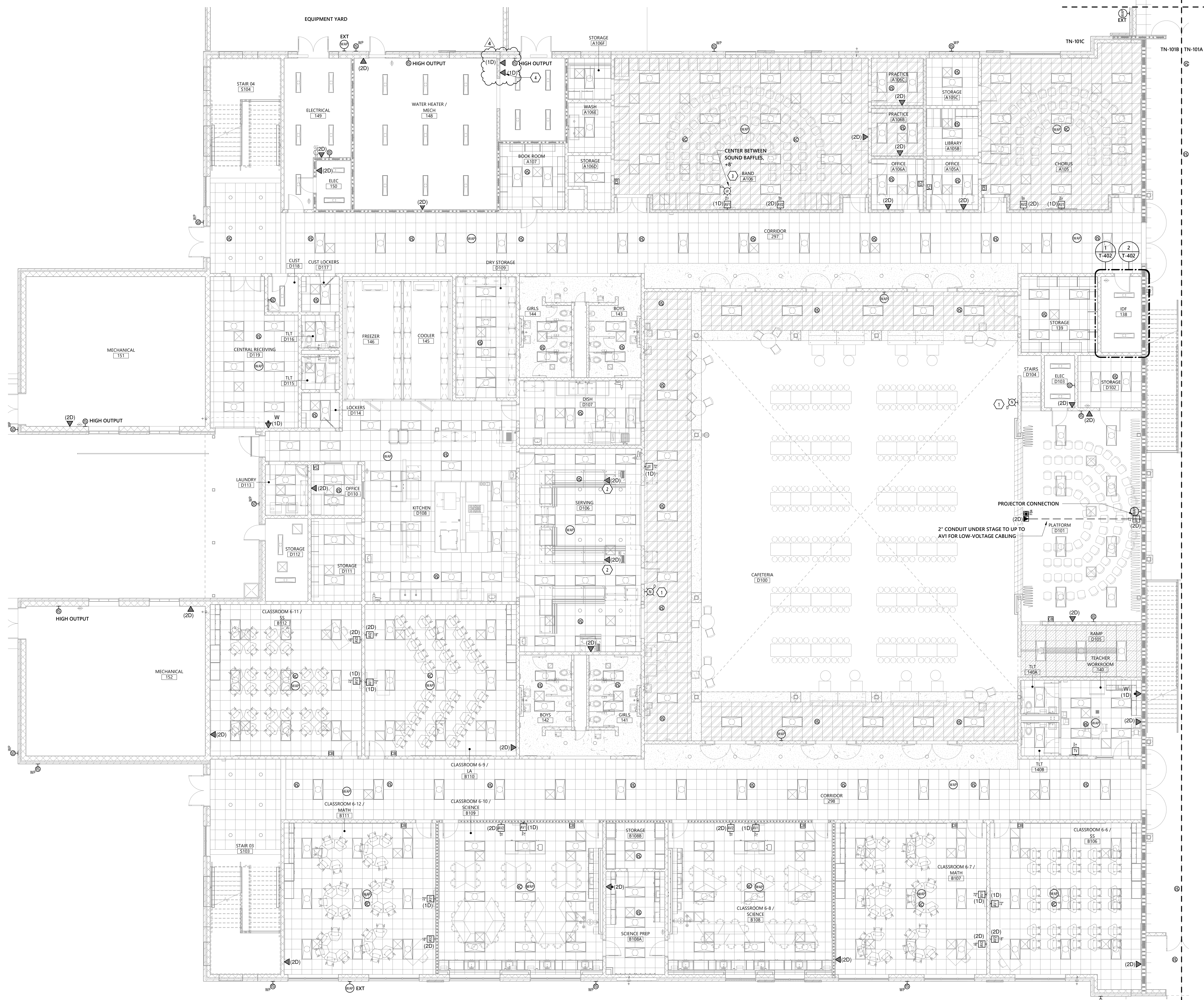
01.12.2023 - BID SET

GENERAL NOTES:

A. REFER TO OVERALL PATHWAY PLANS FOR CABLING ZONE INFORMATION.

KEYED NOTES: (1)

- ALERT LIGHT, WALL MOUNT 9" AFF. BASED ON CORNELL L-101A OR EQUAL WITH 24V POWER SUPPLY. PROVIDE 2 CONDUCTOR PLENUM RATED CABLE WEST PENN 25224 OR EQUAL. SINGLE GANG BOX WITH STAINLESS STEEL FACEPLATE. RED LED MODULE WITH ACRYLIC WEDGE SHAPED DOME. LIGHT SHALL CLOSE (ILLUMINATE) ON CONTACT FROM PA/INTERCOM SYSTEM. CONNECT TO OUTPUT BOARD OF PA/INTERCOM SYSTEM.
- TOMBSTONE STYLE FLOOR BOX. SEE SHEET E-006 DETAIL #13 FOR ADDITIONAL INFORMATION.
- INTERCOM ALERT LIGHT, WALL MOUNT 9" AFF. SINGLE GANG BOX WITH STAINLESS STEEL FACEPLATE AND 1" CONDUIT TO ACCESSIBLE CEILING IN CLASSROOM. RED LED MODULE WITH ACRYLIC WEDGE SHAPED DOME. LIGHT SHALL CLOSE (ILLUMINATE) ON CONTACT FROM PA/INTERCOM SYSTEM. CONNECT TO OUTPUT IN CLASSROOM MODULE OF PA/INTERCOM SYSTEM.
- CATEGORY CONNECTION SHALL BE TERMINATED ON INTERCOM PATCH PANEL. CONNECTION SHALL BE USED FOR AUX I/O MODULE.

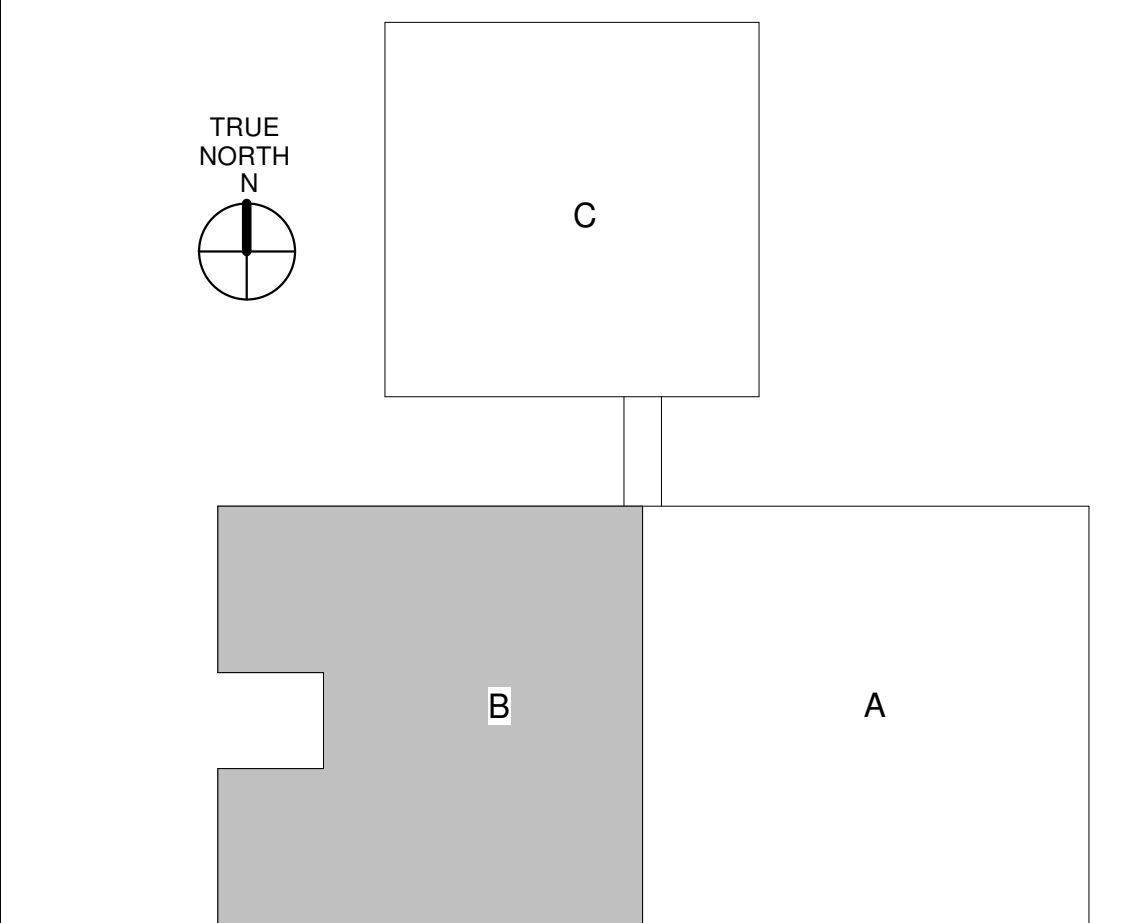


1 FIRST FLOOR DATA NETWORK PLAN - AREA B  
1/8" = 1'-0"

PARTITION LEGEND

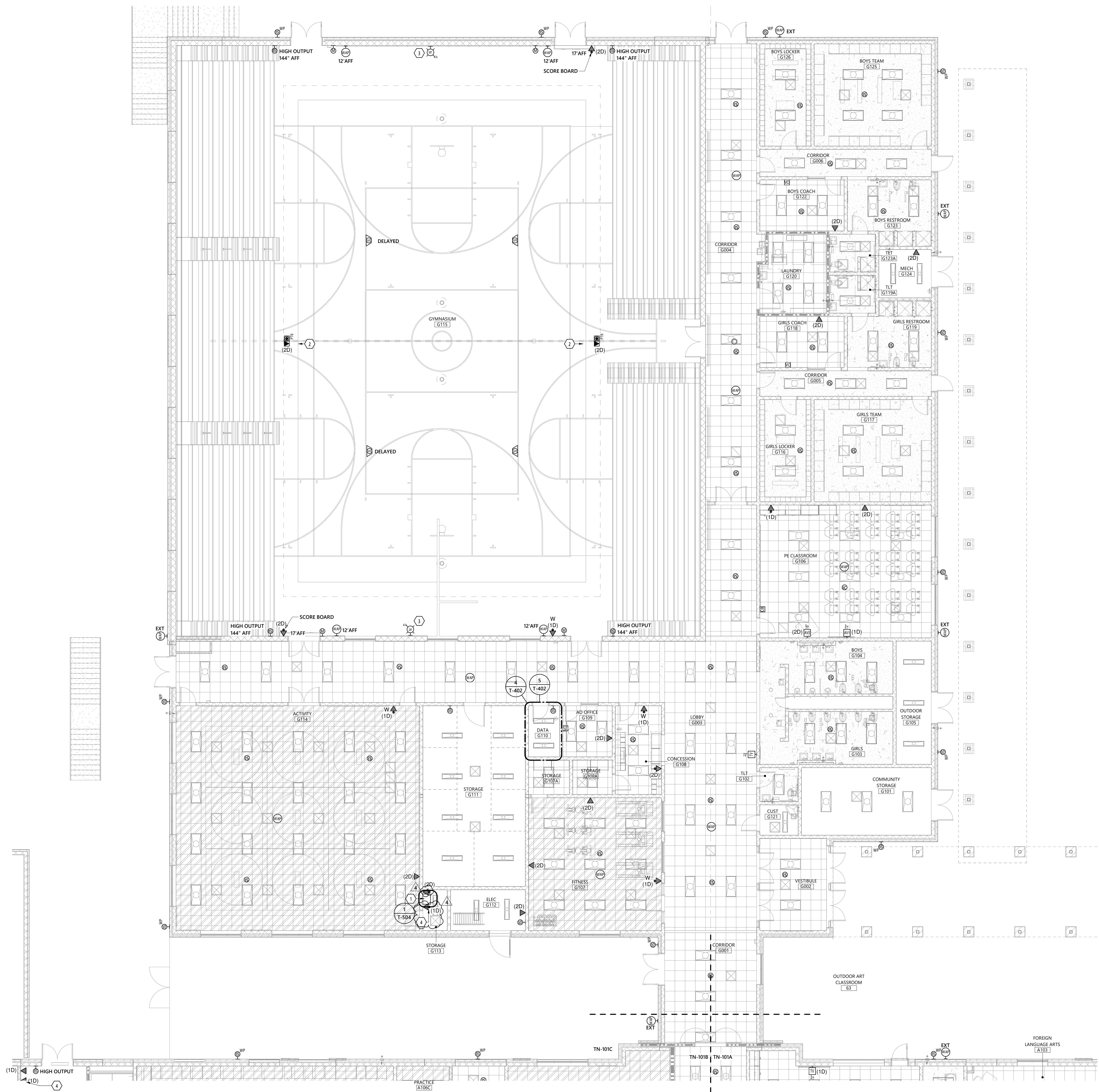
- ALL EXTERIOR WALLS TO BE W1 U.N.O.
- ALL INTERIOR MASONRY PARTITIONS TO BE MBNX U.N.O.
- ALL INTERIOR METAL STUD PARTITIONS TO BE TYPE ASSX U.N.O.
  - NON-RATED PARTITION TO 4" ABOVE CEILING
  - NON-RATED METAL STUD PARTITION TO DECK
  - NON-RATED CMU PARTITION
  - SMOKE PARTITION TO DECK
  - 1 HR. RATED PARTITION TO DECK
  - 2 HR. RATED PARTITION TO DECK

KEY PLAN



THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING, P.A. 2021. ALL RIGHTS RESERVED.

THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING P.A. 2021. ALL RIGHTS RESERVED.



**1** FIRST FLOOR DATA NETWORK PLAN - AREA C  
1/8" = 1'-0"

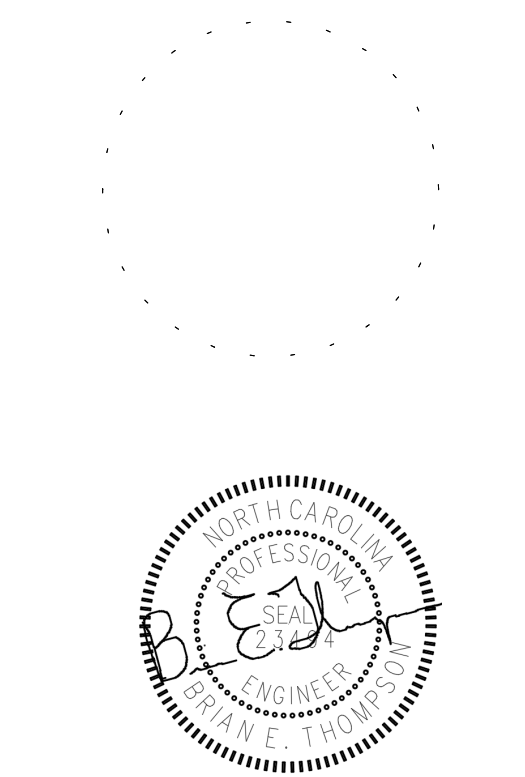
- GENERAL NOTES:**  
A. REFER TO OVERALL PATHWAY PLANS FOR CABLING ZONE INFORMATION.
- KEYED NOTES:** ①
- COORDINATE EXACT LOCATION OF GYM AUDIO RACK WITH OWNER PRIOR TO INSTALL.
  - PT6 SHALL HAVE PROVISIONS FOR GYM AUDIO MICROPHONE INPUT BACK TO AUDIO RACK.
  - ALERT LIGHT: WALL MOUNT 9" AFF. BASED ON CORNELL L-101A OR EQUAL WITH 24V POWER SUPPLY. PROVIDE 2 CONDUCTOR PLENUM RATED CABLE WEST PENN 25224 OR EQUAL. SINGLE GANG BOX WITH STAINLESS STEEL FACEPLATE. RED LED MODULE WITH ACRYLIC WEDGE SHAPED DOME. LIGHT SHALL CLOSE ILLUMINATE ON CONTACT FROM PA INTERCOM SYSTEM. CONNECT TO OUTPUT BOARD OF PA INTERCOM SYSTEM.
  - CATEGORY CONNECTION SHALL BE TERMINATED ON INTERCOM PATCH PANEL. CONNECTION SHALL BE USED FOR AUX I/O MODULE.



**GRIER MIDDLE SCHOOL REPLACEMENT**



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL. 704.333.6686 FAX 704.333.2926  
WWW.LS3P.COM



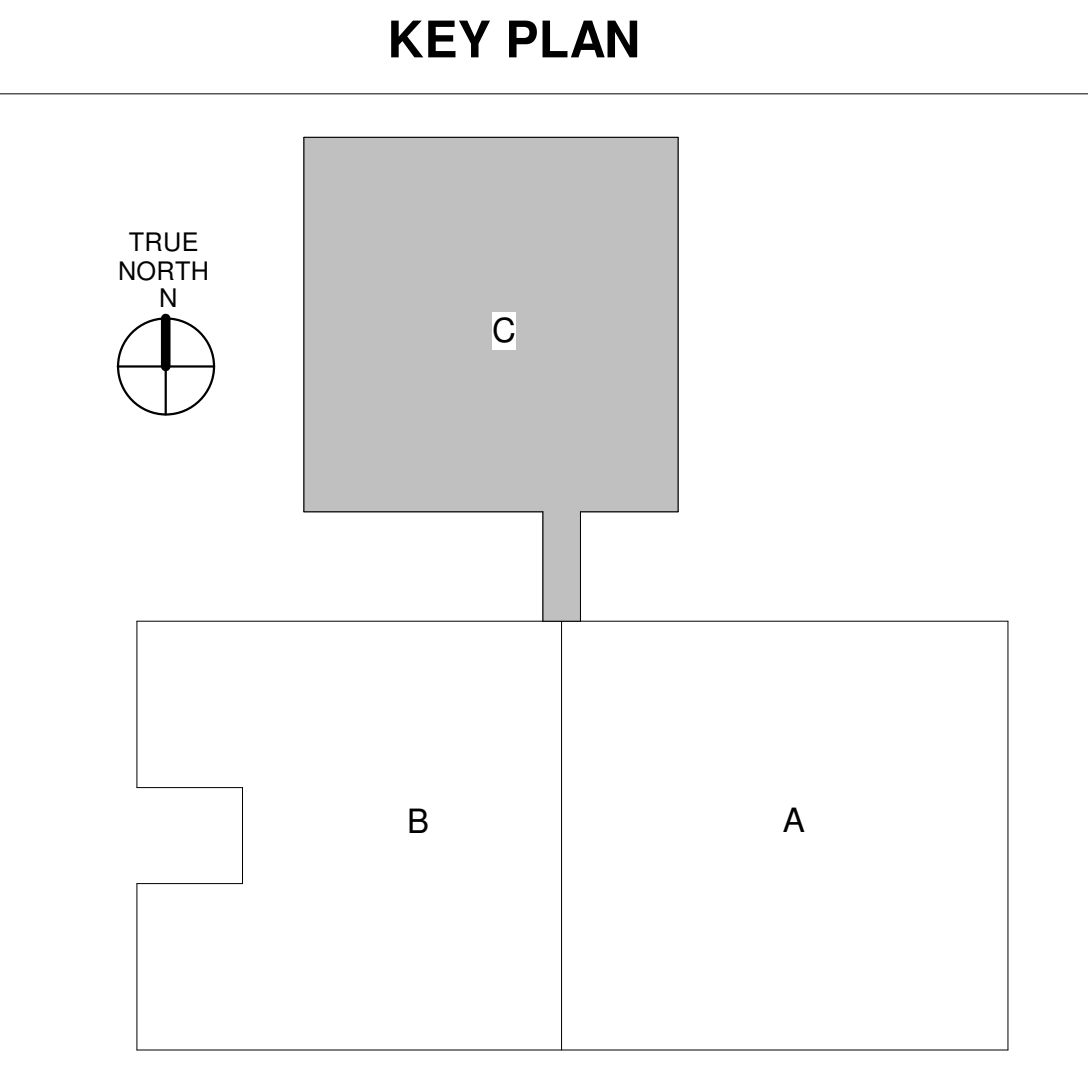
MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

- PARTITION LEGEND**
- ALL EXTERIOR WALLS TO BE W1 U.N.O.
  - ALL INTERIOR MASONRY PARTITIONS TO BE M8NX U.N.O.
  - ALL INTERIOR METAL STUD PARTITIONS TO BE TYPE ASSX U.N.O.
- NON-RATED PARTITION TO 4" ABOVE CEILING
  - NON-RATED METAL STUD PARTITION TO DECK
  - NON-RATED CMU PARTITION
  - SMOKE PARTITION TO DECK
  - 1 HR. RATED PARTITION TO DECK
  - 2 HR. RATED PARTITION TO DECK

**REVISIONS:**

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023



PROJECT: 9201-218240  
DATE: 01-12-2023

**FIRST FLOOR DATA NETWORK PLAN AREA C**

**TN-101C**

Optima # 22-0082

01.12.2023 - BID SET



1927 South Tryon St., Suite 300, Charlotte, NC 28203  
Phone: 704.333.1251 • www.optimaengineering.com  
North Carolina License Number: C-0914



227 WEST TRADE STREET SUITE 700  
CHARLOTTE, NORTH CAROLINA 28202  
TEL: 704.333.6686 FAX: 704.333.2926  
WWW.LS3P.COM



02.07.2023

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

COPYRIGHT 2022 ALL RIGHTS RESERVED  
PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED  
IN ANY FORM WITHOUT WRITTEN PERMISSION FROM LS3P ASSOCIATES LTD.

REVISIONS:

No.	Description	Date
1	AGENCY REVIEW	11-11-2022
4	ADDENDUM NO 2	02.07.2023

PROJECT: 9201-218240  
DATE: 01-12-2023

SECOND FLOOR DATA NETWORK PLAN AREA A

TN-102A

Optima # 22-0082

01.12.2023 - BID SET

GENERAL NOTES:  
A. REFER TO OVERALL PATHWAY PLANS FOR CABLING ZONE INFORMATION.

KEYED NOTES: (7)

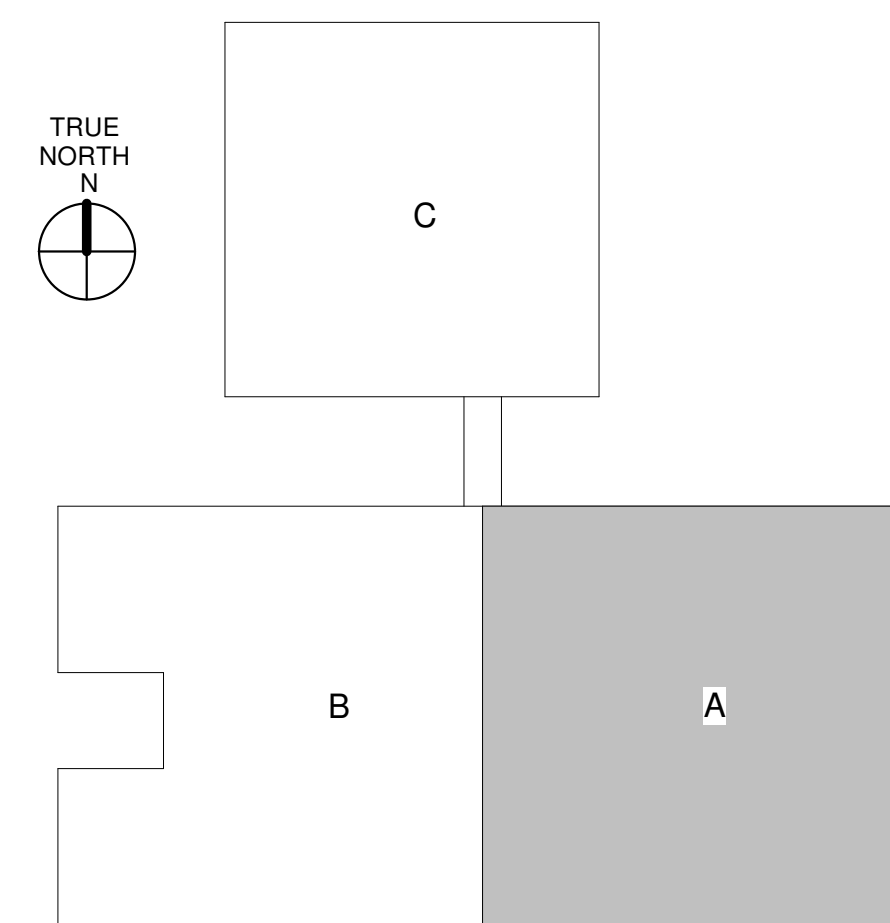
1. FOR DEVICE OUTLETS UNDER WINDOWS, REFER TO DETAIL 8 ON SHEET T-501 FOR ADDITIONAL INFORMATION.

PARTITION LEGEND

- ALL EXTERIOR WALLS TO BE W1 U.N.O.
- ALL INTERIOR MASONRY PARTITIONS TO BE MBNX U.N.O.
- ALL INTERIOR METAL STUD PARTITIONS TO BE TYPE ASSX U.N.O.

- NON-RATED PARTITION TO 4" ABOVE CEILING
- NON-RATED METAL STUD PARTITION TO DECK
- NON-RATED CMU PARTITION
- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

KEY PLAN



1 SECOND FLOOR DATA NETWORK PLAN - AREA A  
1/8" = 1'-0"

THIS DRAWING IS AN INSTRUMENT OF SERVICE. THE DRAWING AND THE INFORMATION THEREON IS THE PROPERTY OF OPTIMA ENGINEERING, P.A. ANY REPRODUCTION, ALTERATION, OR USE FOR OTHER THAN THE INTENDED PROJECT, WITHOUT THE CONSENT OF OPTIMA ENGINEERING, P.A. IS EXPRESSLY FORBIDDEN. COPYRIGHT © OPTIMA ENGINEERING, P.A. 2023. ALL RIGHTS RESERVED.

