



BIDDING ADDENDUM NO. 1

**CATAWBA COUNTY CATTLEMEN'S ASSOCIATION
EDUCATION CENTER
NEWTON, NORTH CAROLINA
CBSA Project 2024.008
August 24, 2026**

(Applying to all bidders according to classification headings listed below.)

This addendum is issued for the purpose of clarifying the intent of the contract documents for making necessary corrections, deletions, and/or additions to the documents on all items of discrepancy raised up to the time of the issuance of this addendum.

Each bidder is hereby instructed and authorized to incorporate into his proposal the instructions contained in this addendum.

TO ALL BIDDERS

PROJECT MANUAL SPECIFICATIONS Page 133400-1

1. Please see attached **SECTION 13 34 00 PRE-ENGINEERED METAL BUILDING SYSTEM** submitted in its entirety with modifications indicated in bold, italicized print. See attached specification section.

DRAWINGS

SHEET BC1.2 1/BC1.2 LIFE SAFETY PLAN

2. Life Safety Plan is modified to omit stone hatching to reduce confusion. See attached drawing.

SHEET CSN101 SITE PLAN

3. Concrete walk is reduced to 5'-0" and relocated 5'-0" away from building. See attached drawing.
4. Parking at right end of building is modified. See attached drawing.
5. Asphalt paving is modified at left end of building to align with the 25'-0" left end bay and extend 36'-0" beyond end of building. See attached drawing.

SHEET CSN501 2/CSN501 GRAVEL SURFACE DETAIL

6. Omit Detail 2/CSN501. See attached drawing.

SHEET BC1.2 1/BC1.2 LIFE SAFETY PLAN

7. Life Safety Plan is modified to omit stone hatching to reduce confusion. See attached drawing.

SHEET A1.0 1/A1.0 FLOOR PLAN

8. 6" ABC stone shall be provided by GC between column lines 1 and 2. See attached drawing.

9. 4" ABC stone shall be provided by GC in all other exposed ground cover areas within Livestock Holding Pens 107 and Equipment Storage 105. Stone specified under concrete slabs shall remain as indicated on drawings. See attached drawing.
10. Concrete walk is modified to be 5'-0" wide and moved 5'-0" away from south building wall. 6'-0" wide walk shall be provided leading into building from the 5'-0" walk. See attached drawing.
11. Metal wall panels are indicated to be on one side of wall between column lines A/9-A/11, D/10-D/1, and A/10-D/10. See attached drawing.

SHEET A4.0 1/A4.0 ROOF PLAN

12. Modify roof ridge to be ridge vent. See attached drawing.

SHEET A5.1 A2/5.1 PARTITION WALL DETAIL

13. Metal wall panel is indicated to be on one side of wall. See attached drawing.

SHEET A6.0 1/A6.0 WALL DETAIL

14. Contractor option to substitute metal framing for wood framing. See attached drawing.

SHEET E2 FLOOR PLAN - POWER

15. Meter base by power provider is located opposite side of exterior wall from Panel A. See attached drawing.

SHEET E4 SITE PLAN - ELECTRICAL

16. Possible route of direct buried power cables by power provider is indicated. Detail for Conduit is provided to be installed under paved drive and marked accordingly. See attached drawing.

This addendum is issued VIA Email to all bidders and to Owner on August 25, 2026 to post so that it can be downloaded at no charge from the following designated Catawba County website:
<https://www.catawbacountync.gov/county-services/purchasing/bid-notices/>

CBSA ARCHITECTS

BY: Marty A. Beal, AIA, LEED AP BD+C

cc. All Bidders
Catawba County

Attachments: Specification Section 133400 – Pre-engineered Metal Building System
Sheet CSN101
Sheet CSN501
Sheet BC1.2
Sheet A1.0
Sheet A4.0
Sheet A5.1
Sheet A6.0
Sheets E1 – E6

SECTION 13 34 00---PRE-ENGINEERED METAL BUILDING SYSTEM:

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK:

- (A) This specification defines the design requirements and materials standards for the design, supply, fabrication, delivery and erection of building systems.
- (B) Acceptable manufacturers are
 - 1. Champion Buildings
 - 2. Varco-Pruden
 - 3. Osteel
 - 4. Metallic
 - 5. Chief
 - 6. Kirby
 - 7. Butler Buildings
 - 8. ***Ascent Buildings***
 - 9. ***Alliance Building Systems***
 - 10. ***Whirlwind Steel Buildings***
- (C) NOTE: The design live, dead and wind loads specified on Structural drawings supersede the specifications.

1.03 ABBREVIATIONS:

The abbreviations listed below shall mean:

AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ASTM	American Society for Testing and Materials
AWS	American Welding Society
BOCA	Building Officials & Code Administrators Int'l., Inc.
MBMA	Metal Building Manufacturers Association
SBCCI	Southern Building Code Congress Int'l., Inc.

UBC Uniform Building Code

1.04 CODES AND STANDARDS:

The latest edition of the following codes and standards shall apply to the extent indicated herein:

AISC	Steel Construction Manual
AISI	Cold-Formed Steel Design Manual
AWS D1.1	Structural Welding Code
FS TT-P	Federal Specification for Primer Coating. 664C
BOCA	Building Officials & Code Administrators Int'l., Inc.
MBMA	Metal Building Systems Code of Standard Practice
SBCCI	Southern Building Code Congress Int'l., Inc.
UBC	Uniform Building Code

1.05 DESIGN REQUIREMENTS:

Building Structures:

(A) The design of the metal building structure and system shall be by a registered professional engineer currently registered to practice in the State of North Carolina.

(B) The building structure frame types shall be multi-span rigid frame, solid web, with straight or tapered sections designed in accordance with AISC type 1 construction. Interior column spacing shall be as indicated on the drawings. Column bases shall be designed as pin connected.

(C) Design of structural steel sections and welded plate members shall be based upon the applicable specifications of AISC Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings as determined by the manufacturer.

(D) Light-gage, cold-formed structural members and exterior coverings shall be designed based upon the applicable sections of AISI Specifications for the Design of Cold-formed Steel Structural members as determined by the manufacturer.

Steel bar joists shall be designed in accordance with Steel Joists Institute Standard.

(E) The design of primary and secondary structural framing as well as roof covering shall be per manufacturer's standard and shall be based upon the provisions of the specified code.

(F) The primary and secondary structural framing as well as roof covering shall be designed for all applicable loads and combinations of these loads as set forth in the latest Edition of the MBMA Recommended Design Practice Manual.

(G) Bracing in the plane of the roof shall be round rods or angle bracing as determined by the building manufacturer. Bracing in the plane of the vertical wall bracing shall be wind columns as designed by the building manufacturer. Vertical wall bracing shall be located as per drawings. Bracing shall be located such that it does not interfere with window openings, door openings, or access to building indicated on drawings.

(H) Design Loads:

- (a) Roof Live Load: **20 PSF**
- (b) Roof Dead Load: **by manufacturere**
- (c) Ground Snow Load: 15 PSF
- (d) Snow Exposure: 1.0
- (e) Basic Wind Speed: **115 MPH Ultimate**
- (f) Exposure: B
- (g) Seismic Design Category **C**
- (h) Seismic Group **I**
- (i) Spectral Response Acceleration
 - Ss **0.26**
 - S1 **0.086**
- (j) Mapped Spectral Response Acc
 - Ss 0.20
 - St 0.08
- (k) Thermal Factor 1.00
- (l) Importance Factors
 - Wind Load **1.0**
 - Snow Load **1.0**
 - Seismic Load **1.0**

(m) Design Base Shear, V:

$V=2.8$ kips

(n) Collateral Load: 1 PSF
Additional dead load above the dead weight of the steel structure.

(o) Mezzanine Loads: Not required for this project.

(p) Crane Loads: Not required for this project.

(q) Lateral Design Control: Wind.

(l) Deflections:

(a) Live Load:

Roof Purlins	Span/180
Roof Joists	Span/240
Mezzanine Beams & Joists	Span/360

(b) Wind Load:

Masonry Wind Girt	Span/240
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(c) Crane Load: **Not required this project.**

(J) Connections:

(a) Bolted moment connections shall be designed in accordance with accepted industry standards utilizing flush plate design methods or extended plate design methods as determined by the manufacturer.

(b) Field connections, made with high strength bolts, shall be made in accordance with the AISC Specification For Structural Joints Using ASTM A325 or A490 bolts. Recommended method of installation, "Turn-of-Nut" method.

(K) Foundations:

Foundation loads, anchor bolt diameters, and anchor bolt patterns shall be determined by the pre-engineered metal building manufacturer. Footing sizes, anchor bolt lengths, and method of transferring lateral and uplift forces from the anchor bolts to the concrete foundation shall be determined by the project's structural engineer of record.

Metal Siding and Roofing:

(A) Metal siding and roofing shall be designed for loads in accordance with the specified code.

(B) All metal siding and roofing shall be designed, fabricated and erected to withstand the loading

conditions without loss of weathertightness, without permanent distortion and without damage to any part of the installation.

(C) Submittals and Shop Drawings:

Shop drawings and submittals for the design, fabrication, and erection of the metal building system required for this project shall be sealed by a currently licensed professional engineer registered to practice in the State of North Carolina. Submit required documents in accordance with requirements of Section 01010 of this project specification.

PART 2 MATERIALS

2.01 STRUCTURAL

(A) Structural steel shall generally conform to ASTM A529, ASTM A572, and/or ASTM A36.

(B) Cold-formed structural steel shall generally conform to ASTM A570 or A607 and shall have a minimum yield strength of 50 KSI.

(C) Bolts: Bolts and nuts shall conform to ASTM A325 for high strength bolts, and ASTM A307 for common bolts.

(D) Anchor Bolts: Anchor bolts shall be designed using allowable loads for A36 threaded parts per AISC.

2.02 METAL ROOFING AND SIDING:

(A) Metal roof panels shall be minimum 24 gauge screw attached panels. Roof panels shall be manufacturer's standard profile sheet. Color shall be manufacturer's **standard** galvalume finish.

(B) Exterior wall panels shall be furnished as manufacturer's standard **PBR** profile **26 gauge** suitable to withstand all design forces applied to wall panels. Panel rib configuration shall be not less than 1-1/2 inch deep ribs spaced not more than 12 inches on center. Wall panel colors shall be as selected from the manufacturer's standard colors.

(C) Flashing and Trim: Exposed flashings and trim shall be minimum 26 gauge. Trim colors shall be as selected from the manufacturer's standard colors.

(D) Fasteners:

Fasteners shall be self-drilling structural fasteners for panel to secondary connections. Panel to panel connections shall be self-tapping screws. Wall fasteners shall have colored heads to match the colors of the material fastened.

(E) Sealants, Mastics and Closures:

(1) Tube sealant shall be a synthetic elastomer based material which becomes tack-free in less

than 2 hours at 75 degree F, but remains flexible. Service range shall be -30 deg. F to 160 degree F.

(2) Tape mastic shall be performed butyl rubber based compound. Service range shall be -30 degree F to 160 degree F.

(3) Panel closures shall be Ethylene-Propylene-Diene-Monomer or equivalent closed cell strips formed to match panel configuration.

Sealants, mastics and closures shall be applied in strict accordance with manufacturer's drawings.

(F) Liner Panels: ***Not required this project.***

2.03 FINISHES:

(A) Roof Panels: ***Roof panels shall be Galvalume® sheet steel***, approximately 50% aluminum and 50% zinc by weight.

Finish shall be warranted for minimum 20 years against rupture, structural failure, or perforation due to normal atmospheric corrosion.

(B) Exterior Wall Panels: Wall panels shall be galvanized per ASTM A525, Class G90.

(C) Panel Finish: Panel color shall be selected from manufacturer's standard colors and finish shall meet the following minimum standards:

(1) Panels shall have a high performance oven baked acrylic primer on both surfaces.

(2) Exposed panel surface shall have a 50% minimum KYNAR® fluorocarbon resin oven baked over the primer for a total dry film thickness of not less than 1 mil.

(3) Panels shall also have an oven baked silicon polyester backer coating for a total dry film thickness of not less than 0.5 mil. Color shall be White-Gray.

(4) Finish shall be warranted for minimum 20 years against chalking, fading blistering, or cracking, when exposed to normal atmospheric conditions.

(D) Interior Liner Panels: ***Not required this project.***

2.04 INSULATION:

(A) Roof Insulation: ***Not required this project.***

2.05 ROOF VENTS: ***Continuous ridge vent to match roof panels.***

2.06 DOORS: Hollow metal doors and frames located within PEMB walls shall be furnished by PEMB manufacturer. Other doors and frames shall be furnished by others under Section 08100.

2.07 LOUVERS: ***Not required for this project.***

2.08 GUTTERS AND DOWNSPOUTS: All Pre-Engineered Metal building trim, gutters and downspouts shall be 26 gauge prefinished painted galvalume. ***Color to be selected from manufacturer's standard selection of colors.***

PART 3 EXECUTION

3.01 FABRICATION:

Steel fabricators shall have been engaged in steel fabrication for the past 10 years, and shall have ICBO approval as a steel fabricator and must be a member of the Metal Building Manufacturers Association. Fabricators shall also have on staff a qualified Professional Engineer registered in the State of North Carolina in charge of engineering.

Fabricator shall be based on approved drawings in accordance with AISC Code of Standard Practice.

All steel members shall be prefabricated into subassemblies of the largest practical size suitable for transportation, handling and field erection. Field cutting, welding and drilling shall be kept to the minimum.

Light gage cold formed sections shall be manufactured by precision roll or brake forming.

Structural steel shall be detailed and fabricated in accordance with the MBMA Code of Standard Practice.

The detailing and fabrication of anchor bolt assemblies shall be in accordance with AISC.

All welders shall be AWS Certified in the positions and type of welding they will be performing during fabrication.

3.02 SHOP PAINTING:

All structural steel shall receive a rust inhibitive shop primer. Shop primer shall be a nominal 1 mil. thick and conform to Federal Specifications TT-P-664c and TT-P-636c. The primer paint is not intended for long term exposure to the elements. General Contractor shall provide finish paint as specified in Section 099100 for pre-engineered metal building.

3.03 ASSEMBLY:

Erection shall be done by a contractor who has a minimum of 5 years experience in the erection of pre-

engineering buildings. The building shall be erected in accordance with the MBMA Code of Standard Practice.

Side laps for roofing shall be one full corrugation.

End laps shall be installed in a down hill lapping manner and properly sealed.

Accessories for roofing, necessary for a complete installation, and as shown, shall be furnished and installed with the roofing. Cutouts and flashing shall be provided for vents, ventilator ducts, roof hatches and all other penetrations as shown and required. Joints shall be caulked as shown and required for a weathertight installation. Field-cut edges of roofing and siding, including penetrations, shall be touched up with manufacturer's coating compatible with sheet finish.

Mechanisms shall be fully lubricated after installation and the assembly tested and adjusted to demonstrate smooth operations to the Project Manager.

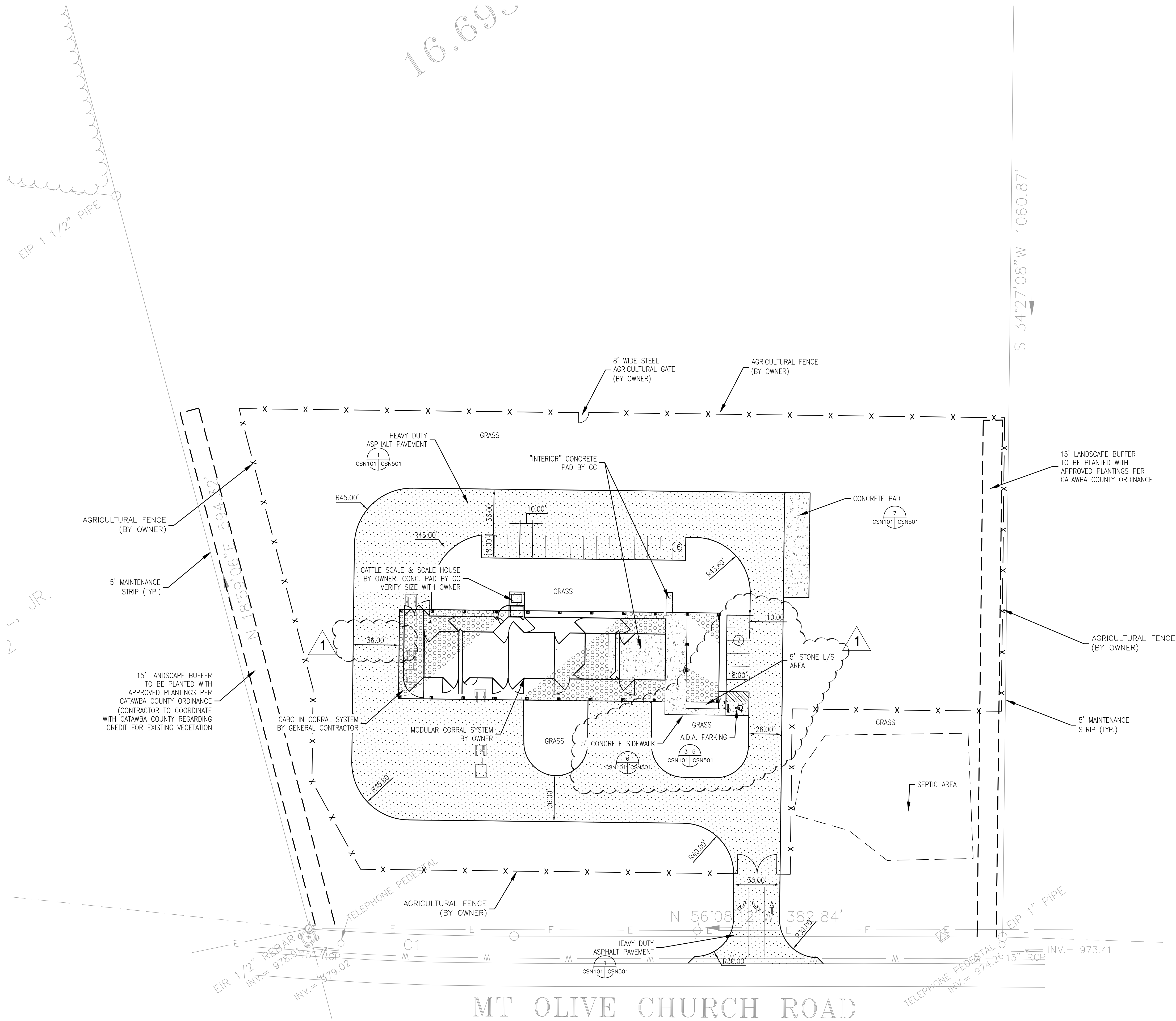
3.04 TOUCH UP PAINTING:

Structural steel connections and all areas damaged subsequent to shop painting shall be repaired, cleaned, and touch up painted, prior to roofing/siding installation.

Damaged or stained areas of roofing and accessories shall be touched up with the manufacturer's coating in accordance with manufacturer's current published instructions.

END OF SECTION 133400

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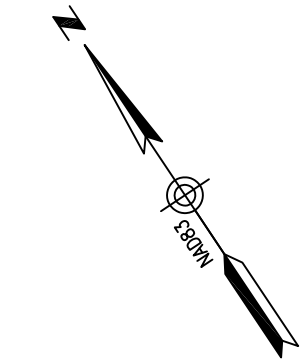
PROJECT DETAILS

- OWNER: CATAWBA COUNTY
PO BOX 389
NEWTON, NC 28658
- PARCEL I.D. NO. = 365902871934
- SITE ZONING = R-30
- TOTAL SITE ACREAGE = 16.680 ACRES (9.14 ACRES IN FRONT)
- BUILDING SIZE: 12,051 SQ FT TOTAL
- PARKING PROVIDED: 23 VEHICLE SPACES
- WATERSHED DISTRICT: NONE
- IMPERVIOUS AREA:
BUILDING: 12,051 SQFT
PARKING: 66,939 SQFT
TOTAL: 78,990 SQFT
BUILT UPON: 19.84%
- SUBJECT PROPERTY IS IN DESIGNATED FLOOD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) FIRM PANEL #3710365900J

NOTES THIS SHEET:

- THE OWNER SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE CATAWBA COUNTY ENGINEERING DIVISION BEFORE ANY WORK BEGINS. THE OWNER SHALL NOTIFY THE CATAWBA COUNTY ENGINEERING DIVISION AT LEAST 7 CALENDAR DAYS PRIOR TO COMMENCING ANY WORK ON THE SITE. FAILURE TO PROVIDE REQUIRED NOTICE SHALL RESULT IN THE OWNERS RESPONSIBILITY TO UNCOVER ANY PRIOR BELOW-GRADE WORK FOR VISUAL INSPECTION BY THE ENGINEERING DIVISION.
- COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
- ALL ROAD IMPROVEMENTS ARE TO BE COORDINATED WITH CATAWBA COUNTY AND NCDOT ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
- IN ROLLING AND HILLY TERRAINS, SWEEPING OF THE STONE BASE AND/OR APPLICATION OF A TACK COAT MAY BE REQUIRED NEAR INTERSECTIONS. THESE REQUIREMENTS SHALL BE ESTABLISHED BY THE INSPECTOR BASED ON FIELD CONDITIONS.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED IN WRITING FROM PROPERTY OWNERS.
- IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
- POLE BASES AND ELECTRICAL DESIGN FOR PARKING LOT LIGHT POLES SHALL BE SUBMITTED PRIOR TO BEGINNING INSTALLATION.
- UNSUITABLE SUBBASE MATERIAL NOT IDENTIFIED BY THE SOIL TESTS, BUT LOCATED DURING CONSTRUCTION, MUST BE REMOVED FROM THE RIGHT-OF-WAY AND REPLACED WITH BACKFILL.
- WHERE VERTICAL CURB AND GUTTER EXIST, ALL DRIVEWAY RAMPS SHALL BE CONSTRUCTED OF PORTLAND CEMENT A MINIMUM OF 6-INCHES DEEP. THE RAMP MUST RISE 4-INCHES ABOVE THE FLOW LINE OF THE GUTTER AT A POINT NO CLOSER THAN 2- FEET FROM THE GUTTER.
- ALL WORK TO BE COMPLETED IN NCDOT R/W TO BE COORDINATED WITH NCDOT.
- SOLID WASTE REMOVAL TO BE BY ROLL-OUT PICK UP.

ASPHALT PAVEMENT



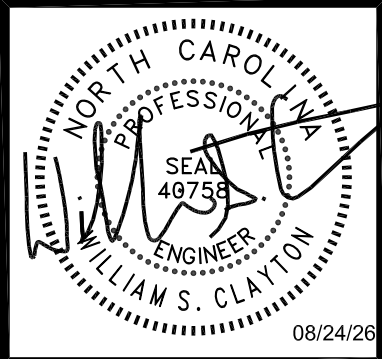
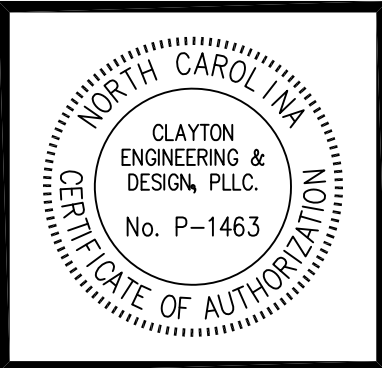
0 40' 80'



SITE PLAN
SCALE: 1" = 40'

Curve	Radius	Tangent	Length	Chord	Chord Bear.
C1	2427.89'	80.18'	160.31'	160.28'	N 54°14'43" W

FOR AGENCY REVIEW



CLAYTON
ENGINEERING & DESIGN

1209 9TH AVE NE, PO BOX 2351
HICKORY, NC 28601

CATAWBA COUNTY
CATTLEMAN'S ASSOCIATION
NEWTON, NORTH CAROLINA

EDUCATION CENTER

CIVIL

CIVIL SITE PLAN

JOB NUMBER: 24105
DATE: 06/22/26
DRAWN BY: EMB
CHECKED BY: WSC

REVISIONS

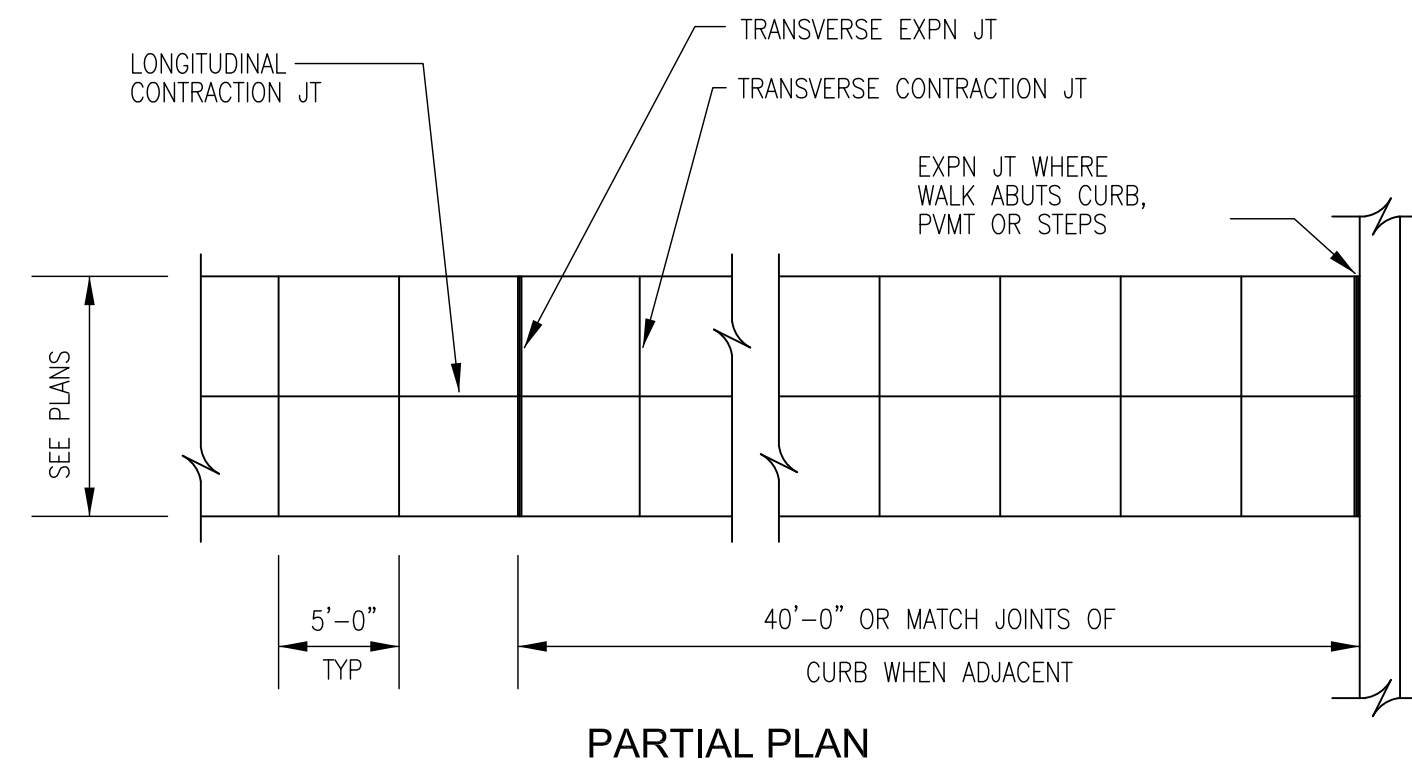
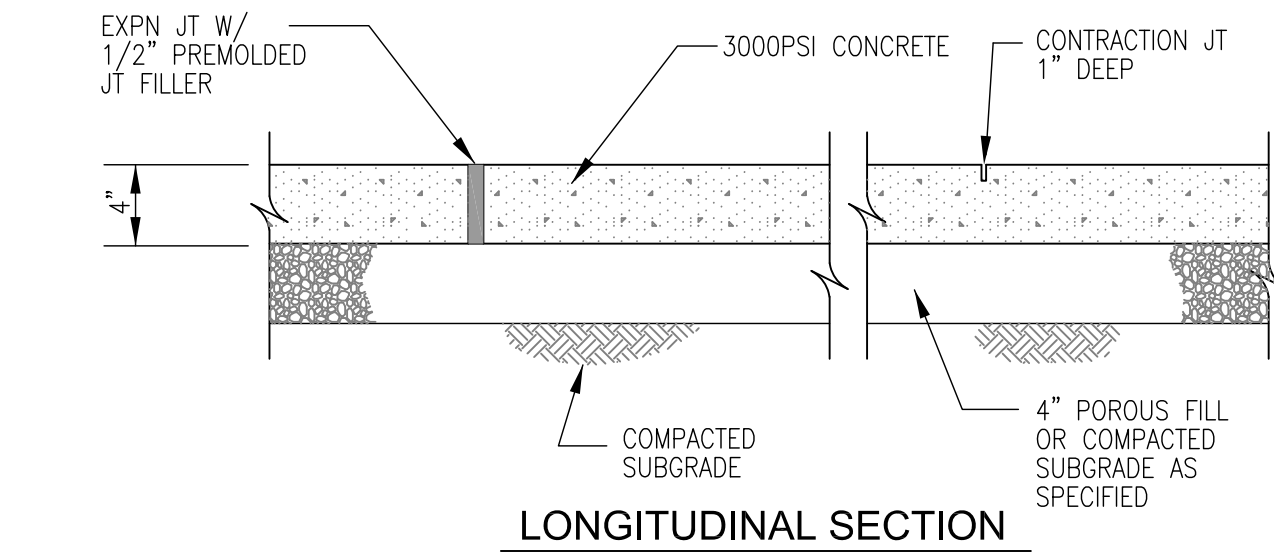
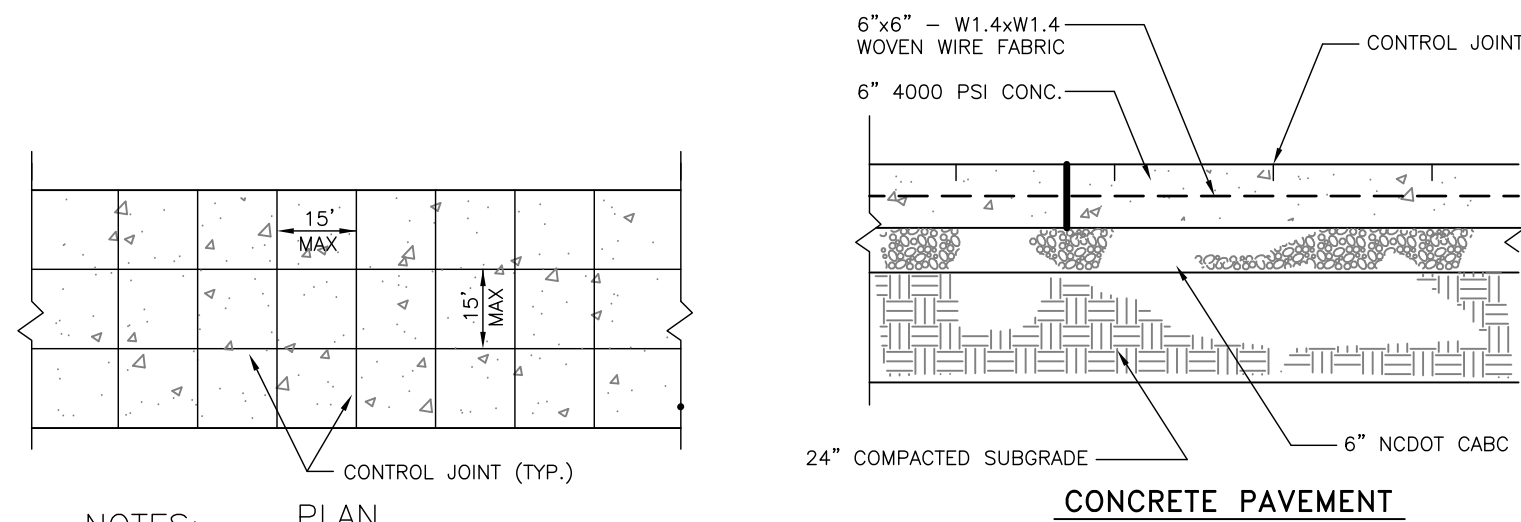
NO.	DESCRIPTION	DATE
1	REVISIONS	08/24/26

CSN101

SHEET 1 OF 1

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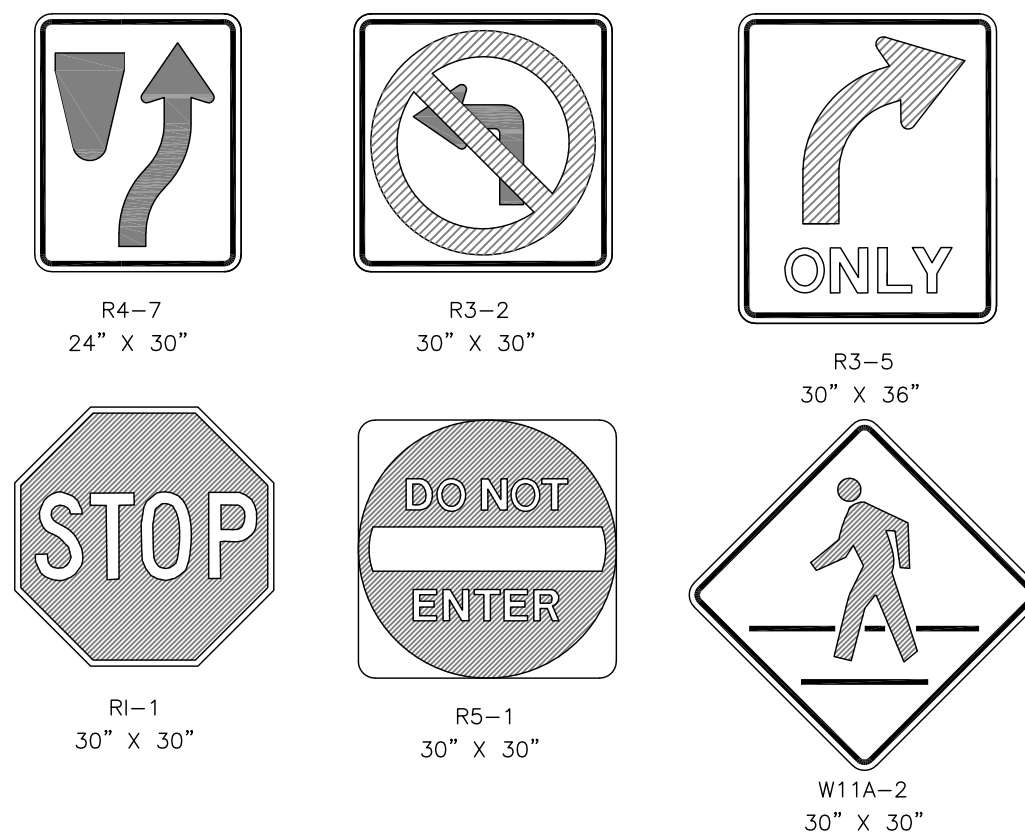
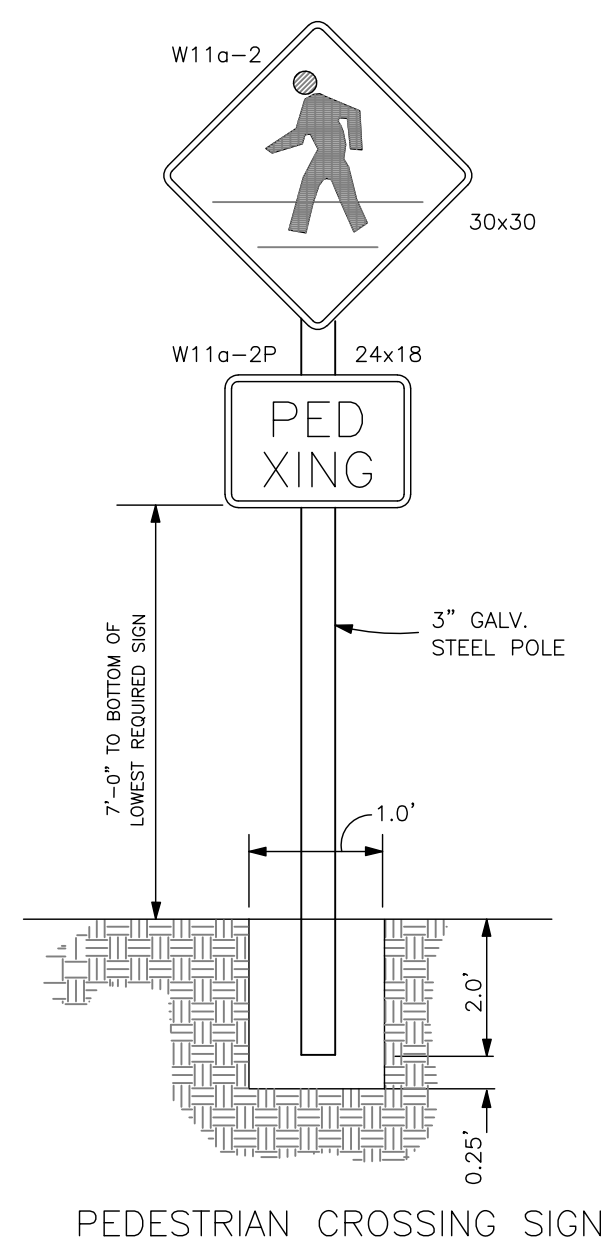


WALK WIDTH	LONGITUDINAL CONTRACTION JOINT
- 5'-11"	NONE
6'-0" - 7'-11"	ONE ALONG WALK AT CENTERLINE
8'-0" - 12'-0"	TWO ALONG WALK AT THIRD POINTS

STANDARD SIDEWALK DETAILS

NO SCALE

CSN101 CSN501

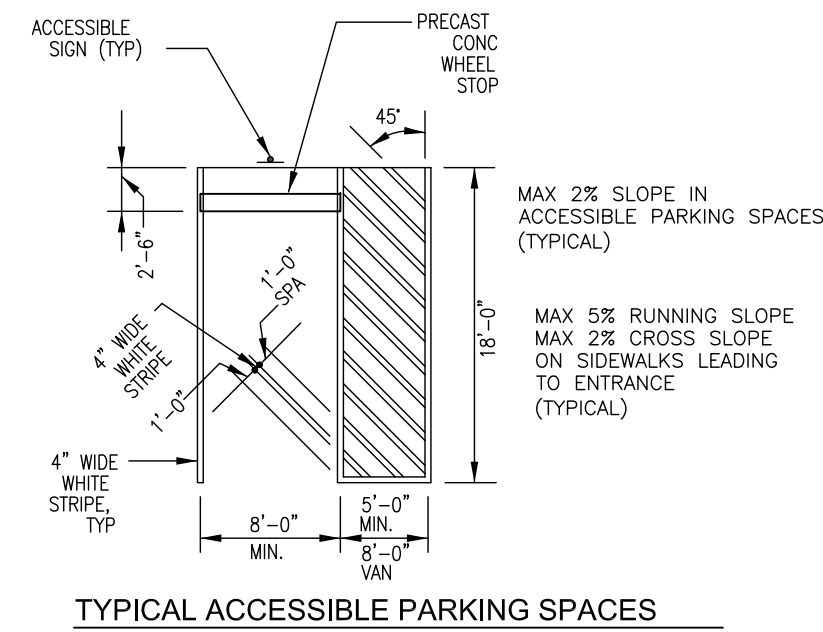
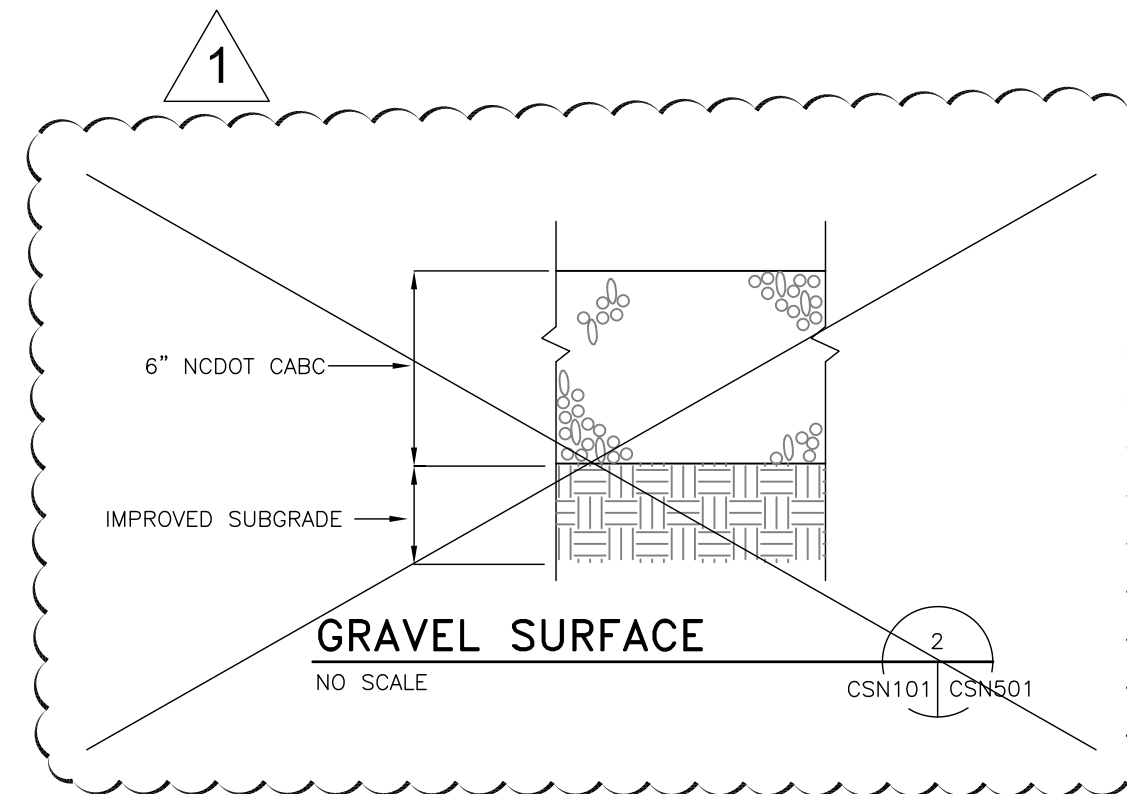
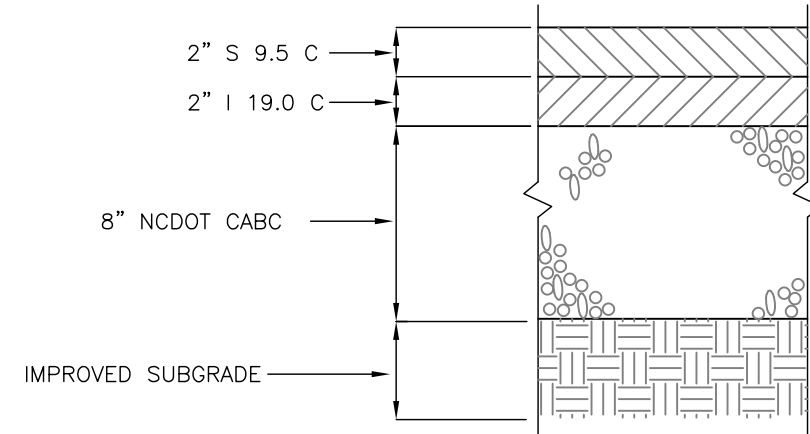


1. ALL SIGNS SHALL CONFORM WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCAL CODE FOR COLOR, SIZE, REFLECTIVITY, AND HEIGHT.
2. SIGNS TO PLACED AS SHOWN ON THE PLANS.
3. FOR SIGNS NOT PROTECTED BY A STANDARD PARKING BUMPER OR BEHIND THE CURB PLACE STEEL POLE IN BOLLARD PER THE HANDICAP PARKING SIGN DETAIL.

HEAVY DUTY PAVING SECTION

NO SCALE

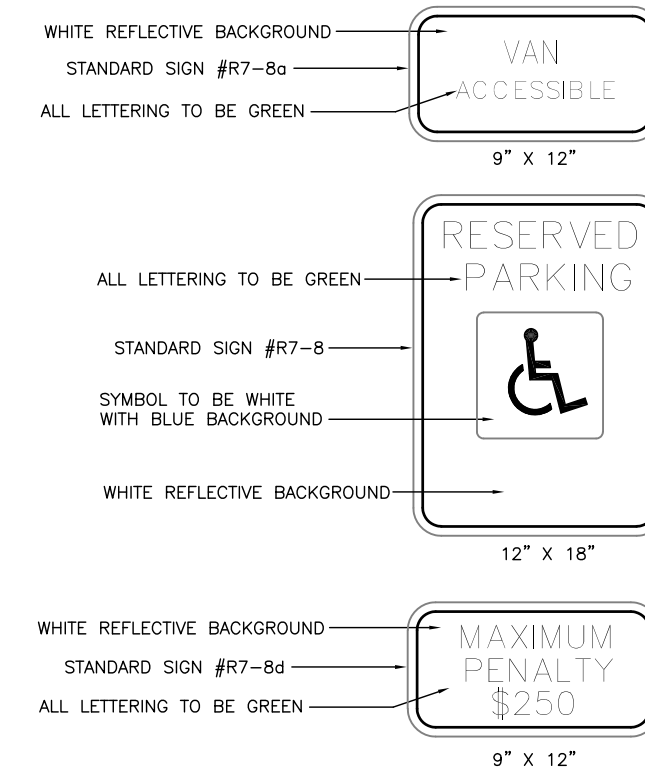
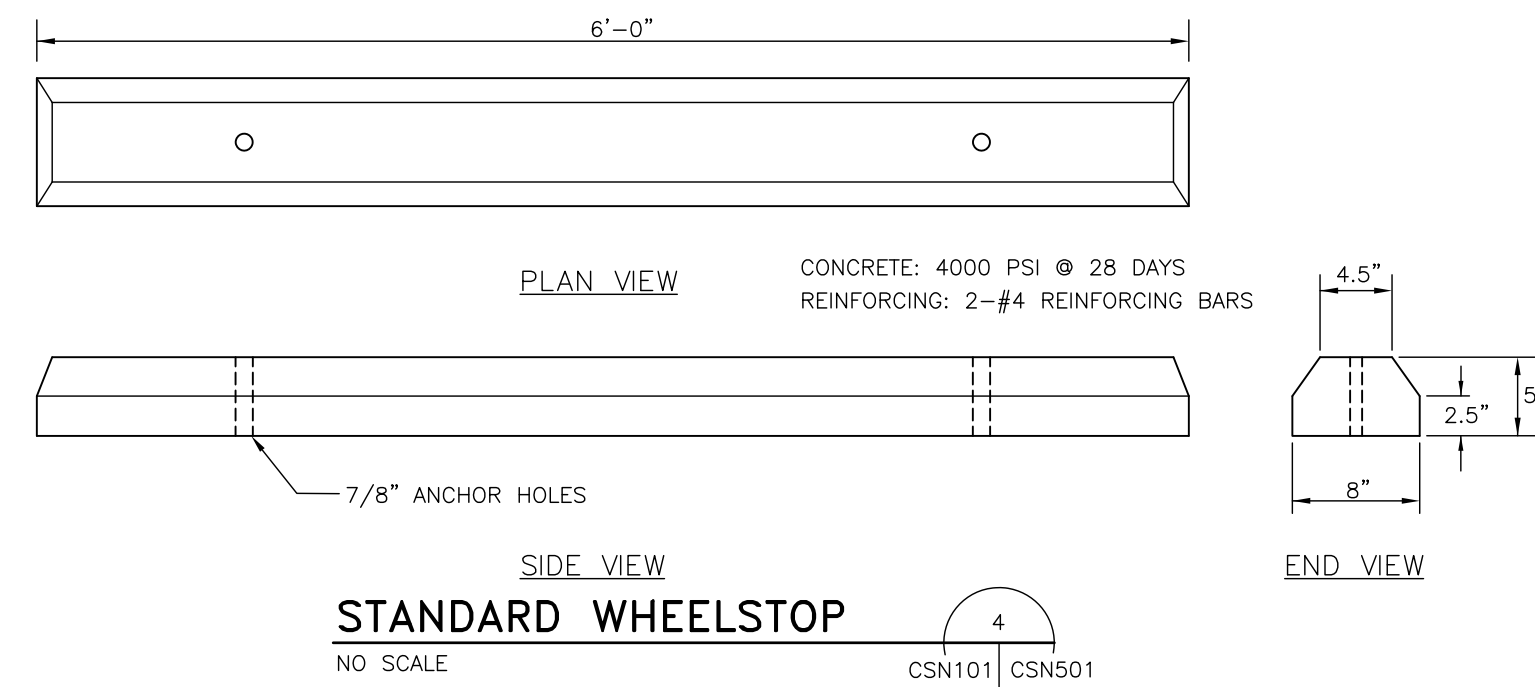
CSN101 CSN501



A.D.A. HANDICAP PARKING SPACE DETAIL

NO SCALE

CSN101 CSN501

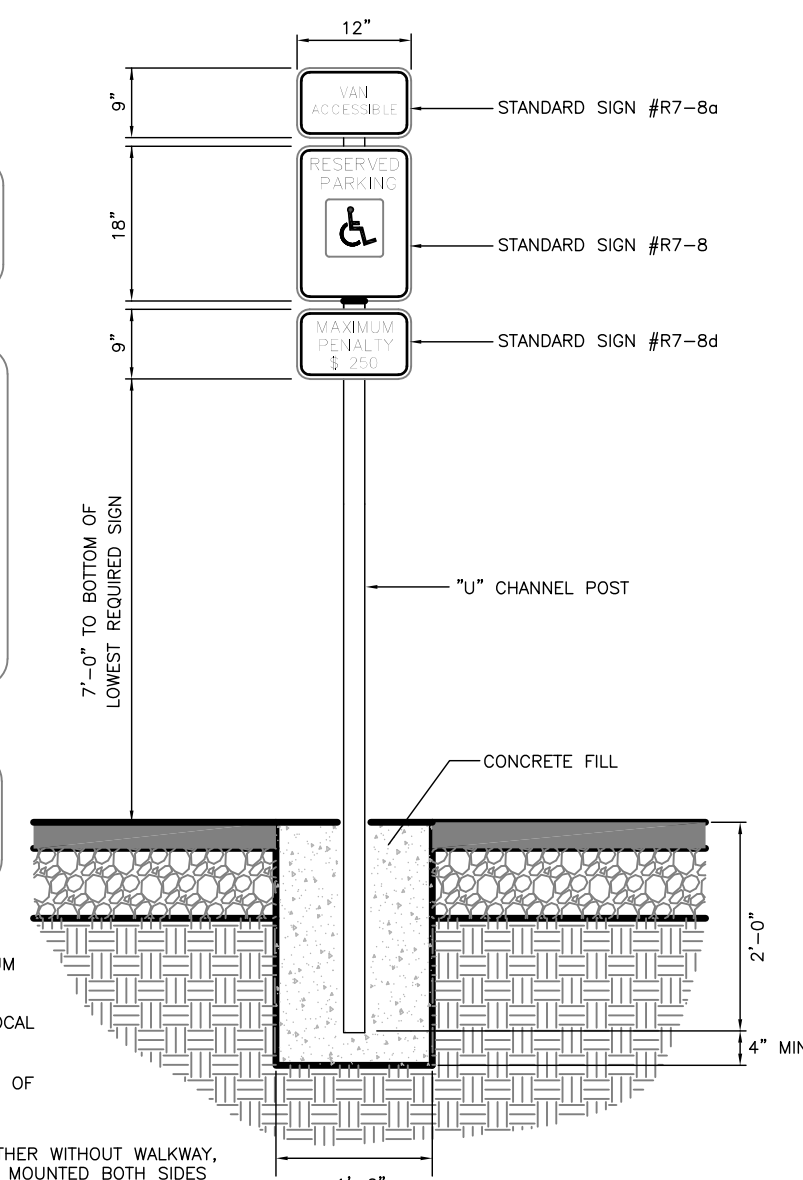


1. ALL SIGNS TO BE 0.080" THICK ALUMINUM
2. ALL SIGNS SHALL CONFORM WITH ALL CURRENT A.D.A., FEDERAL, STATE AND LOCAL CODES AND REGULATIONS.
3. PLACE "VAN ACCESSIBLE" SIGN IN FRONT OF VAN ACCESSIBLE SPACES ONLY.

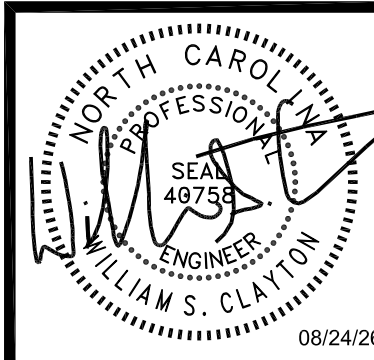
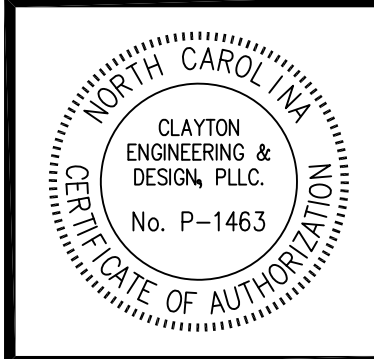
A.D.A. HANDICAP PARKING SIGN

NO SCALE

CSN101 CSN501



FOR AGENCY REVIEW



CLAYTON

ENGINEERING & DESIGN

HICKORY, NC 28601

1209 9TH AVE NE, PO BOX 2351

CATAMBA COUNTY

CATTLEMAN'S ASSOCIATION

NEWTON, NORTH CAROLINA

EDUCATION CENTER

PROJECT TITLE

SITE DETAILS

DRAWING TITLE

JOHN NUMBER	24105
DATE	06/22/26
DRAWN BY:	EMB
CHECKED BY:	WSC

REVISIONS

NO.	DESCRIPTION	DATE
1	REVISIONS	08/24/26

CSN501

SHEET OF

CONSULTANT

SEAL



PROJECT



**CATAWBA COUNTY
CATTLEMEN'S ASSOCIATION
EDUCATION CENTER**

2894 MT. OLIVE CHURCH ROAD
NEWTON, NORTH CAROLINA 28658

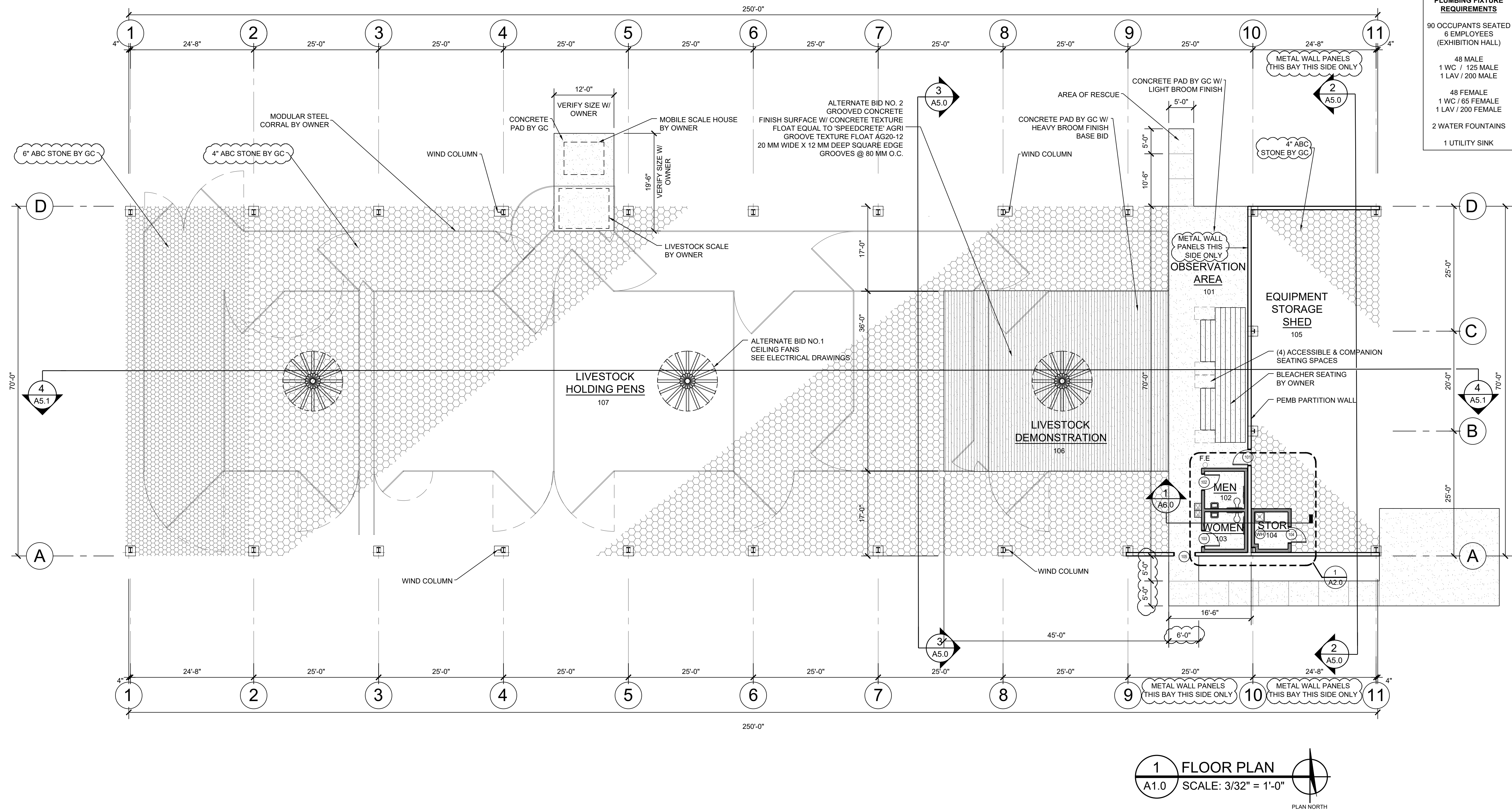
MARK	DATE	DESCRIPTION
SD	10-23-2025	SCHEMATIC DESIGN
DD	11-10-2025	DESIGN DEVELOPMENT
CD	06-22-2026	CONSTRUCTION DOCUMENTS
Δ	08-24-2026	ADDENDUM NO. 1

PROJECT NUMBER:	2024.008
CAD DWG FILE:	
DRAWN BY:	MVS
CHECKED BY:	MAB
COPYRIGHT:	CBSA ARCHITECTS INC. 2026

SHEET TITLE

FLOOR PLAN

A1.0



PLUMBING FIXTURE REQUIREMENTS
90 OCCUPANTS SEATED 6 EMPLOYEES (EXHIBITION HALL)
48 MALE 1 WC / 125 MALE 1 LAV / 200 MALE
48 FEMALE 1 WC / 65 FEMALE 1 LAV / 200 FEMALE
2 WATER FOUNTAINS
1 UTILITY SINK

CONSULTANT

SEAL



PROJECT



CATAWBA COUNTY
CATTLEMEN'S ASSOCIATION
EDUCATION CENTER

2894 MT. OLIVE CHURCH ROAD
NEWTON, NORTH CAROLINA 28658

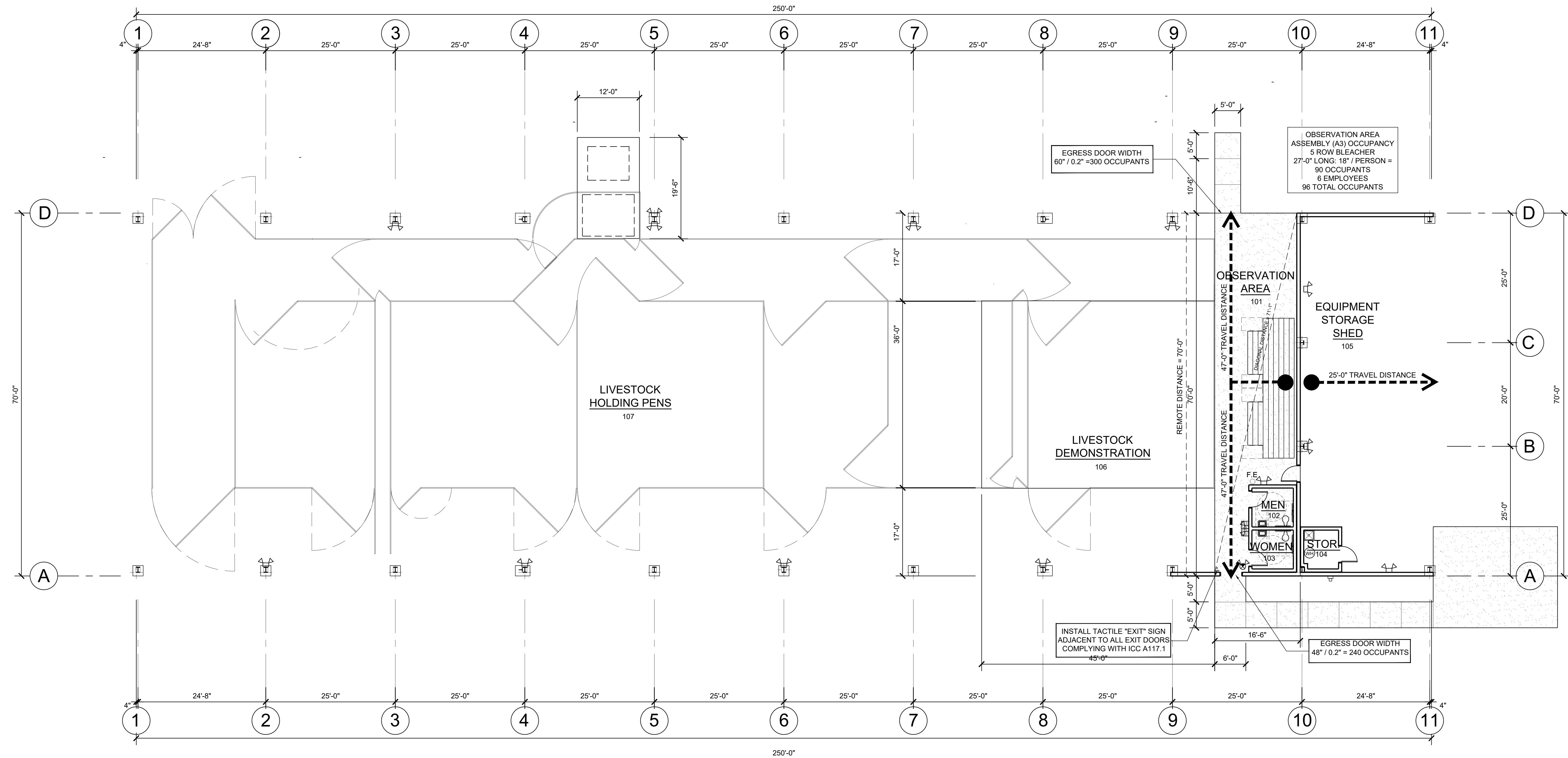
MARK	DATE	DESCRIPTION
SD	10-23-2025	SCHEMATIC DESIGN
DD	11-10-2025	DESIGN DEVELOPMENT
CD	06-22-2026	CONSTRUCTION DOCUMENTS
△	08-24-2026	ADDENDUM NO. 1

PROJECT NUMBER:	2024.008
CAD DWG FILE:	
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SHEET TITLE

LIFE SAFETY PLAN

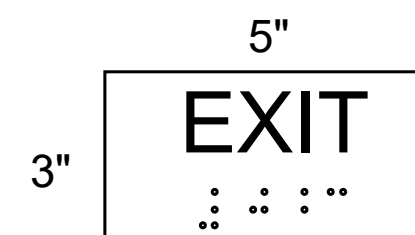
BC1.1



LIFE SAFETY PLAN LEGEND	
	NEW FIRE EXTINGUISHER (10 LB. ABC TYPE)
	EMERGENCY LIGHT W/ 90-MINUTE BATTERY BACK-UP (SEE ELECTRICAL DRAWINGS)
	EXIT LIGHT & EMERGENCY LIGHT W/ 90-MINUTE BATTERY BACK-UP (SEE ELECTRICAL DRAWINGS)
	EMERGENCY EGRESS LIGHT W/ 90-MINUTE BATTERY BACK-UP (SEE ELECTRICAL DRAWINGS)
	PATH OF TRAVEL
	DIRECTION OF TRAVEL
	ORIGIN OF TRAVEL

FIRE DEPARTMENT NOTES

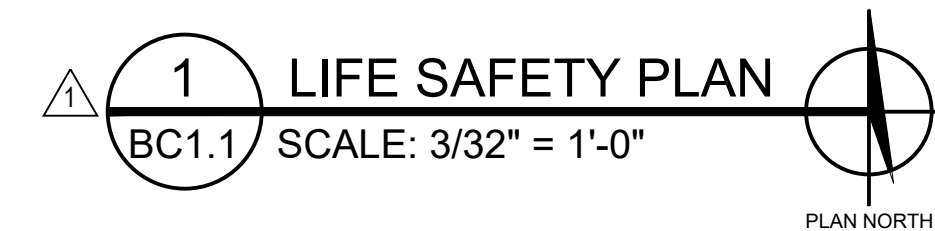
1. A TACTILE SIGN STATING "EXIT" AND COMPLYING WITH NCBC 1013.2 SHALL BE PROVIDED AT EACH EXIT DOOR. SEE DETAIL BELOW.
2. PREMISES IDENTIFICATION THAT MEETS THE REQUIREMENTS OF NCFC 505.1 SHALL BE PRESENT. NUMERALS SHALL BE MINIMUM 6" HIGH AND MINIMUM $\frac{3}{8}$ " STROKE WIDTH. THIS WILL BE VERIFIED AT THE TIME OF THE FINAL INSPECTION BY THE FIRE MARSHAL.
3. FIRE DEPARTMENT ACCESS MUST BE WITHIN 150FT OF ALL PORTIONS OF THE BUILDINGS. BOLLARDS SHALL NOT BE LOCATED AS TO RESTRICT FIRE APPARATUS ACCESS AROUND THE BUILDING.
4. PORTABLE FIRE EXTINGUISHERS SHALL BE SELECTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH 2018 NC FIRE PREVENTION CODE AND NFPA10. FIRE EXTINGUISHERS WILL BE APPROVED BY FIRE MARSHAL AT FINAL INSPECTION.
5. EMERGENCY LIGHTING SHALL BE APPROVED BY FIRE MARSHAL AT FINAL INSPECTION.



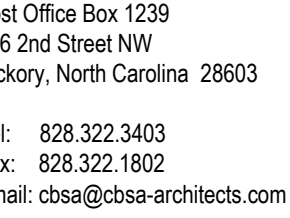
- NOTES
1. RAISED CHARACTERS & BRAILLE.
 2. BOTTOM OF RAISED CHARACTERS 48" MIN A.F.F.
 3. TOP OF RAISED CHARACTERS 60" MAX A.F.F.
 4. CENTER SIGN 9" FROM EDGE OF DOOR SWING.

2 TACTILE EXIT SIGN DETAIL

BC1.1 NOT TO SCALE



1 LIFE SAFETY PLAN
BC1.1 SCALE: 3/32" = 1'-0"



SEAL

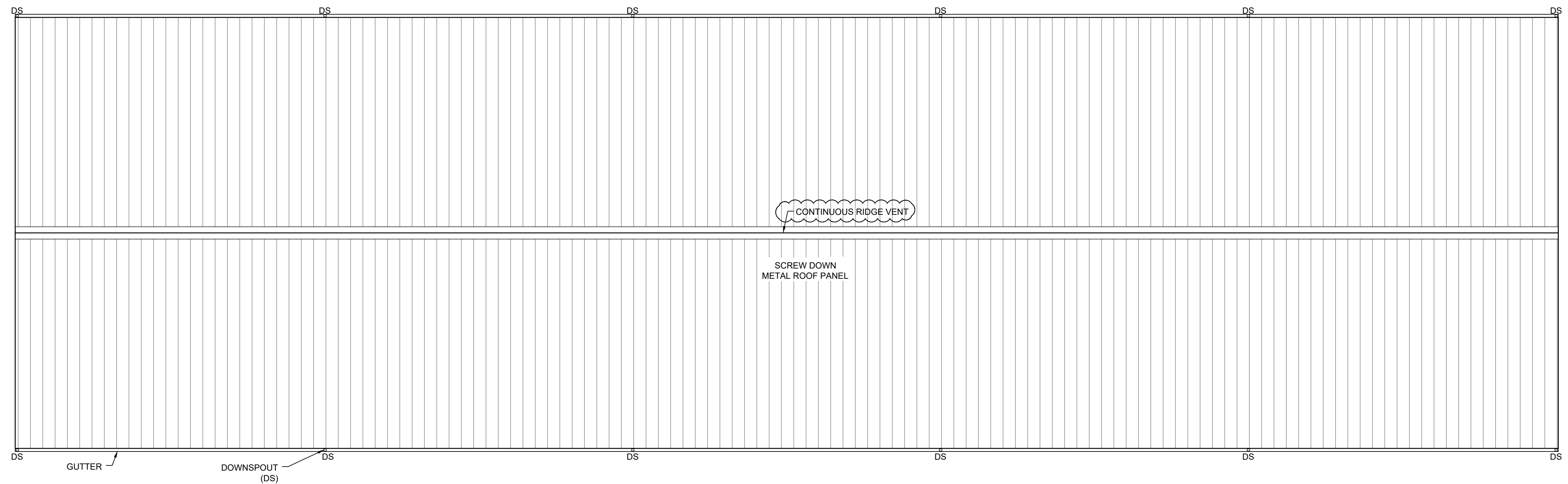


2894 MT. OLIVE CHURCH ROAD
NEWTON, NORTH CAROLINA 28658

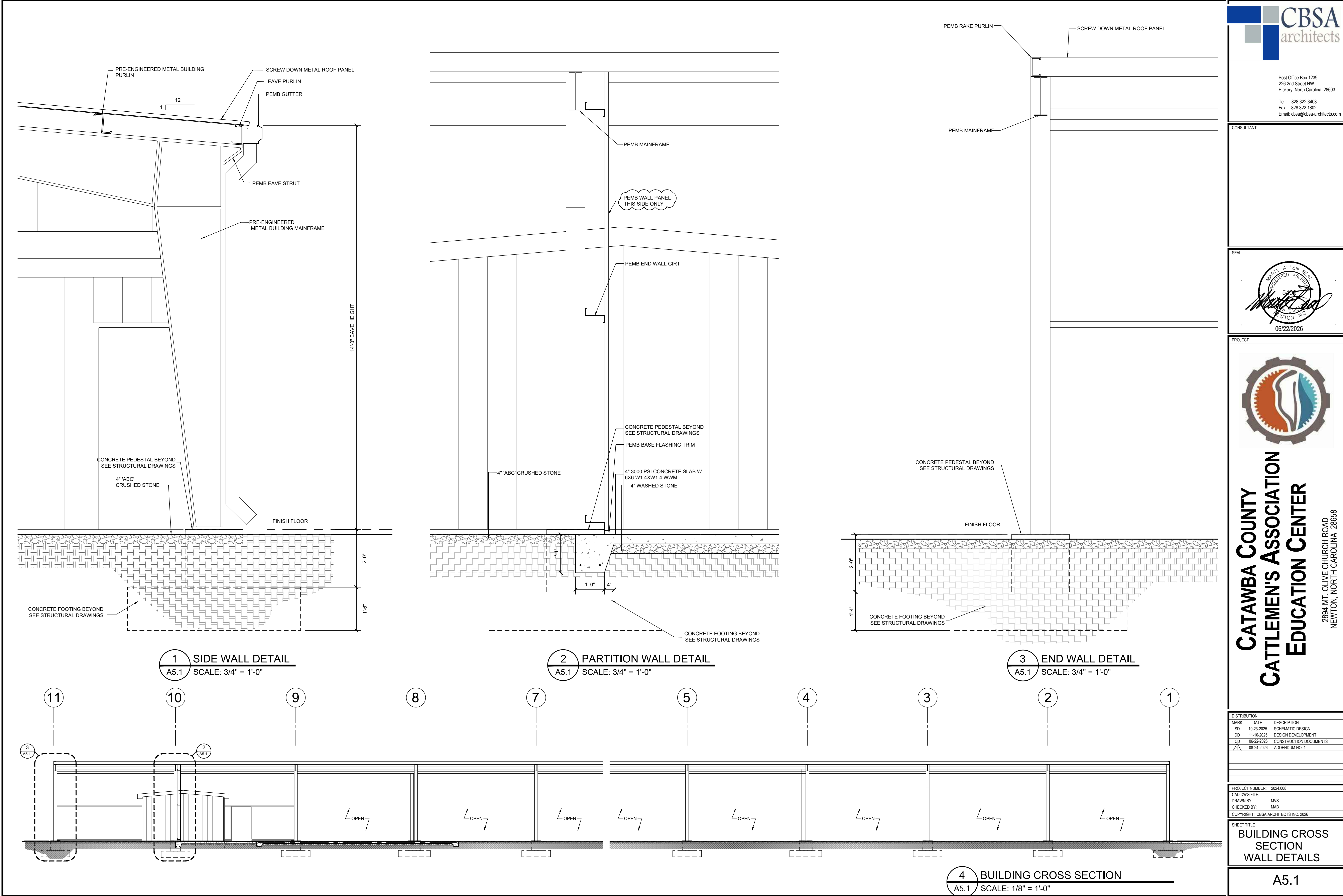
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ROOF PLAN

A4.0



PLAN NORTH





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Tel: 828.322.3403
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Email: cbsa@cbsa-architects.com

CONSULTANT

SEAL



06/22/2026

PROJECT



**CATAWBA COUNTY
CATTLEMEN'S ASSOCIATION
EDUCATION CENTER**

2894 MT. OLIVE CHURCH ROAD
NEWTON, NORTH CAROLINA 28658

DISTRIBUTION	
MARK	DATE
SD	10-23-2025
DD	11-10-2025
CD	06-22-2026
Δ	08-24-2026

PROJECT INFORMATION	
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SHEET TITLE

**BUILDING CROSS
SECTION
WALL DETAILS**

A5.1

CONSULTANT

SEAL



PROJECT



**CATAWBA COUNTY
CATTLEMEN'S ASSOCIATION
EDUCATION CENTER**

2894 MT. OLIVE CHURCH ROAD
NEWTON, NORTH CAROLINA 28658

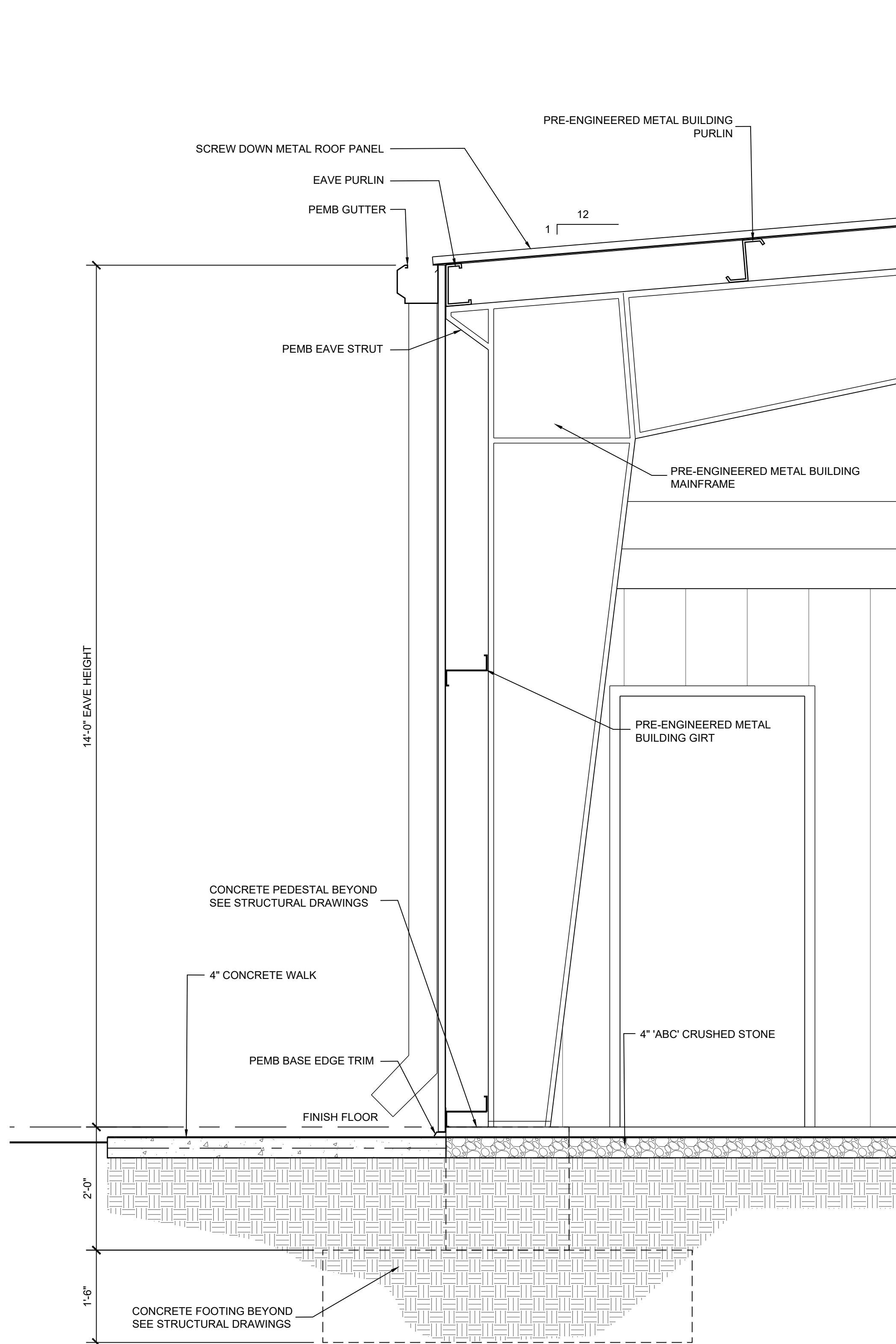
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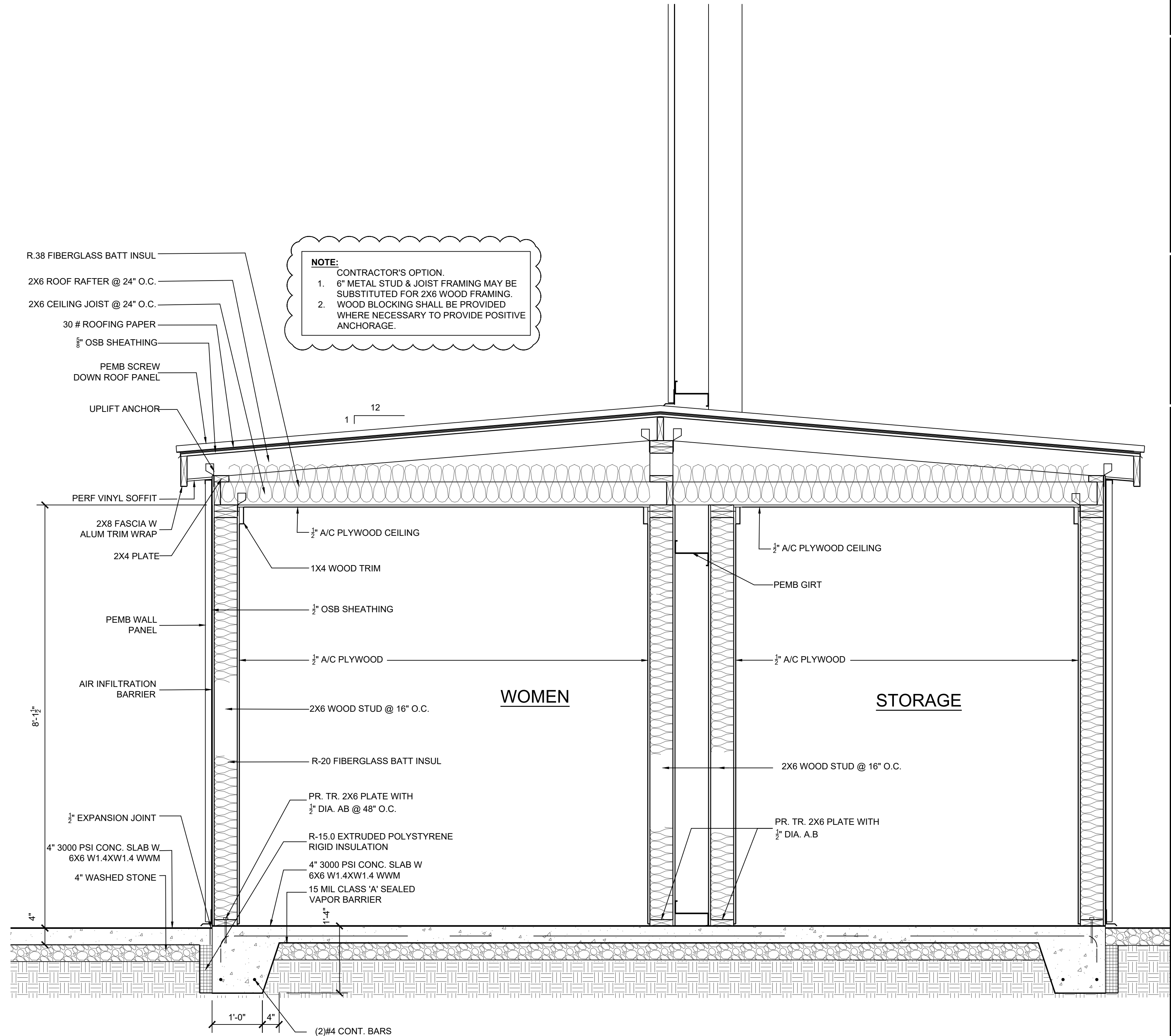
SHEET TITLE

WALL DETAILS

A6.0



2 SIDE WALL DETAIL
A6.0 SCALE: 3/4" = 1'-0"



1 WALL DETAIL
A6.0 SCALE: 3/4" = 1'-0"

DETAILED ELECTRICAL SPECIFICATIONS

SCOPE: FURNISH ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND SUPERVISION NECESSARY TO INSTALL COMPLETE ELECTRICAL POWER AND LIGHTING SYSTEM IN THE BUILDING AS FURTHER DESCRIBED ON THE ELECTRICAL CONTRACT DRAWINGS.

SUPPLY ALL MATERIALS, FITTINGS AND HARDWARE NECESSARY FOR COMPLETE OPERATING SYSTEMS WITHIN THE OBVIOUS INTENT OF THE DRAWINGS. NO ATTEMPT HAS BEEN MADE TO DETAIL OR LIST EACH AND EVERY ITEM OF MATERIAL. THE ELECTRICAL CONTRACTOR IS CAUTIONED TO READ THE ENTIRE PROJECT DRAWINGS AND SPECIFICATIONS TO ASSURE HIMSELF OF A THOROUGH KNOWLEDGE OF BUILDING CONSTRUCTION, STRUCTURAL RESTRICTIONS TO ELECTRICAL CONTRACT WORK AND TO ASSURE THAT NO REFERENCE ANYWHERE IN THE PROJECT DRAWINGS AND SPECIFICATIONS TO WORK BY THE ELECTRICAL CONTRACTOR IS OVERLOOKED.

CODES, PERMITS AND INSPECTIONS: THE LATEST EDITION OF THE STATE OF NORTH CAROLINA BUILDING CODE WHICH INCLUDES THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE IS HEREBY MADE A PART OF THIS SPECIFICATION. CODE REQUIREMENTS SHALL TAKE PRECEDENCE OVER THESE SPECIFICATIONS WHEN THE CODE REQUIREMENTS EXCEED THAT OF THE SPECIFICATIONS. HOWEVER, THE SPECIFICATIONS SHALL BE FOLLOWED WHERE THEY EXCEED CODE REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, OBTAIN THE SERVICES OF THE LOCAL ELECTRICAL INSPECTOR TO MAKE ALL REQUIRED DURING CONSTRUCTION AND COMPLETED ELECTRICAL SYSTEM INSPECTIONS.

MATERIALS AND WORKMANSHIP: ALL MATERIAL BUILT INTO THIS PROJECT SHALL BE NEW OF EQUIVALENT OR BETTER QUALITY THAN THAT SPECIFIED. SPECIFIC NAMES AND CATALOG NUMBERS USED HEREIN ARE TO ESTABLISH THE ITEM FUNCTION, ARRANGEMENT AND QUALITY REQUIRED AND IS IN NO WAY TO RESTRICT COMPETITION. ALL MATERIALS SHALL BE UL APPROVED/LABELED AND/OR BE APPROVED BY A THIRD PARTY TESTING AGENCY IN THE STATE OF NORTH CAROLINA FOR THE PARTICULAR APPLICATION AS USED ON THIS PROJECT.

CONDUCTORS: ALL CONDUCTORS SHALL BE COPPER (#10 AWG AND SMALLER SHALL BE SOLID, AND #8 AWG AND LARGER STRANDED) WITH THHN/THWN INSULATION, INSTALLED IN CONDUIT. CONDUCTORS SHALL BE #12 AWG MINIMUM EXCEPT WITHIN LIGHT FIXTURES, LOW VOLTAGE CONTROLS OR COMMUNICATION/FIRE ALARM EQUIPMENT. CONDUCTOR COLOR CODE SHALL CONFORM TO THE NEC. CONDUCTORS SHALL BE CONTINUOUS FROM TERMINAL TO TERMINAL OR PULL BOX TO PULL BOX. JOINTS SHALL BE MADE WITH IDEAL "WIRENUTS." WIRING TERMINATIONS FOR ALL ELECTRICAL EQUIPMENT SHALL BE TESTED AND APPROVED FOR USE WITH 75°C RATED CONDUCTORS.

RACEWAYS: RACEWAYS SHALL BE UL APPROVED RIGID GALVANIZED STEEL WITH THREADED JOINTS OR METALLIC TUBING (EMT) WITH THREADED STEEL HEXAGONAL COMPRESSION FITTINGS – NEITHER INDENTOR TYPE OR DIE METAL FITTING WILL BE ACCEPTED. CONDUIT UNDER THE FLOOR SLAB AND UNDER GROUND OUTSIDE THE BUILDING MAY BE PVC. FITTINGS IN EMT SHALL BE WEATHER TIGHT (THOMAS AND BETTS SERIES #5123 WITH NYLON INSULATED THROATS), BENDS SHALL BE FACTORY FABRICATED OR MADE "COLD" WITH BENDING TOOL, FREE OF KINKS OR RESTRICTIONS. NO SINGLE BEND SHALL BE IN EXCESS OF 90 DEGREES. THERE SHALL BE NO MORE THAN THE EQUIVALENT OF THREE (3) 90 DEGREE BENDS IN A GIVEN RACEWAY FROM PULL BOX TO PULL BOX. RIGID RACEWAY THREADS SHALL BE CUT STRAIGHT AND TRUE – PIPE ENDS SHALL BE REAMED AND SMOOTHED INSIDE AND OUT. SUPPORT 1-1/2 INCH AND LARGER CONDUIT, 10 FEET O/C OR LESS, AND 1 INCH AND SMALLER 6 FEET O/C MAXIMUM. RACEWAYS SHALL BE SUPPORTED DIRECTLY FROM BUILDING STRUCTURE WITH BOLTS, SCREWS, STRAPS, HANGER RODS AND BRACKETS. ALL METALLIC HARDWARE SHALL BE GALVANIZED OR CADMIUM PLATED, NAILS, WIRE AND/OR PERFORATED STRAPS WILL NOT BE ACCEPTED. USE THREADED LOCKNUTS OUTSIDE AND THREADED LOCKNUT AND BUSHING INSIDE ALL RACEWAY CONNECTIONS TO BOXES, DEVICES, PANELS AND GUTTERS. USE NON-METALLIC BUSHINGS ON ALL 1-1/4 INCH AND LARGER CONDUIT. EXPOSED CONDUIT SHALL BE RUN STRAIGHT AND TRUE PARALLEL AND PERPENDICULAR TO PRIMARY BUILDING LINES.

BOXES AND DEVICES: ALL BOXES, PANELS AND EQUIPMENT SHALL BE SUPPORTED DIRECTLY FROM THE BUILDING STRUCTURE AND SHALL NOT DEPEND ON THE FEEDER RACEWAYS FOR SUPPORT. ALL ITEMS SHALL BE CAREFULLY ALIGNED SO THAT COVERS WILL FINISH FLUSH AND STRAIGHT. ALL UNUSED KNOCKOUTS SHALL BE CLOSED WITH BLANKING DEVICES. BOXES IN CONCRETE OR MASONRY SHALL BE 3-1/2 INCH DEEP (MINIMUM) SQUARE 16 GAUGE GALVANIZED STEEL – STEEL CITY SERIES GW. BOXES INSTALLED IN WOOD PARTITIONS SHALL BE STEEL CITY 3-1/2 INCH DEEP GANGABLE SQUARE CORNER TYPE. SURFACE MOUNTED BOXES SHALL BE STEEL CITY #52151 AND/OR #52171 OR EQUAL. RECEPTACLES SHALL BE PASS & SEYMOUR 5362 SERIES OR EQUAL. SWITCHES SHALL BE PASS & SEYMOUR CBS20AC SERIES OR EQUAL. COVER PLATES SHALL BE STAINLESS STEEL (COORDINATE W/ OWNER). PULL BOXES SHALL BE 14 GAUGE GALVANIZED STEEL WITH BLANK COVER SIZED AS REQUIRED BY NATIONAL ELECTRICAL CODE. LOCATE DEVICES AND EQUIPMENT ABOVE FINISHED FLOOR AS FOLLOWS UNLESS OTHERWISE SPECIFICALLY NOTED ON PLANS:

WALL SWITCHES 4'-0" OR TO NEAREST MASONRY COURSE JOINT.
RECEPTACLES 1'-6" OR TO NEAREST MASONRY COURSE JOINT.
LIGHT FIXTURES – AS NOTED ON FIXTURE SCHEDULE.

GROUNDING: THE ELECTRICAL SYSTEM AND ALL ELECTRICAL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. GREEN EQUIPMENT GROUND WIRE SHALL BE INSTALLED WITH ALL FEEDERS AND BRANCH CIRCUITS AND IT SHALL BE SIZED PER NEC 250.122. WHERE ONLY ONE GROUND ROD IS DRIVEN AS ALLOWED BY THE EXCEPTION IN NEC ARTICLE 250.53(A)(2), THE CONTRACTOR SHALL SUBMIT A TESTING REPORT SHOWING THE ROD PROVIDES A RESISTANCE OF 25 OHMS OR LESS TO THE ENGINEER.

LIGHTING FIXTURES: LIGHTING FIXTURES AND LAMPS SHALL BE PROVIDED AND INSTALLED AS PER SCHEDULE. CATALOG NUMBERS GIVEN IN THE FIXTURE SCHEDULE INDICATE THE MINIMUM QUALITY AND PERFORMANCE REQUIRED. EQUAL FIXTURES WILL BE ALLOWED ONLY UPON APPROVAL BY ENGINEER. EQUAL FIXTURES SHALL MEET THE MINIMUM QUALITY AND PERFORMANCE OF THE SPECIFIED FIXTURE. EQUAL FIXTURES BY HUBBELL, COOPER, PHILIPS OR ACUTY SHALL BE ALLOWED. ALL FIXTURES SHALL BE CLEANED ON COMPLETION OF INSTALLATION. BALLASTS AND/OR THE FIXTURE UNIT IN WHICH THEY ARE INSTALLED SHALL HAVE UL APPROVAL FOR DIRECT CONTACT MOUNTING TO COMBUSTIBLE CEILING MATERIAL. ALL FLUORESCENT FIXTURES SHALL BE SUPPLIED WITH ELECTRONIC BALLASTS AND LED FIXTURES SHALL BE SUPPLIED WITH DIMMABLE LED DRIVERS. THE FIXTURES SHALL BE COMPLETE IN ALL RESPECTS INCLUDING PLASTER RINGS WHERE REQUIRED, END PLATES AND OTHER APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION. ALL LIGHTING FIXTURES SHALL BE SECURED TO THE CEILING STRUCTURE PER THE NEC. ADDITIONAL SUPPORT WIRES (TIE WIRES) SHALL BE INSTALLED FOR EACH LAY-IN TYPE FIXTURE. THERE SHALL BE TWO STEEL WIRES OF THE SAME TYPE AS USED TO SUPPORT THE LAY-IN CEILING TRACK. ONE WIRE AT EACH OPPOSITE CORNER OF THE FIXTURE. THE WIRES SHALL BE FASTENED TO THE BUILDING STRUCTURE. FOR FIRE RATED CEILING, FIXTURE SHALL BE SUPPORTED ON ALL FOUR CORNERS AND AS PER THE CEILING DESIGN CRITERIA, TO THE BUILDING STRUCTURE.

TESTING: CABLE INSULATION TESTING: THE CONTRACTOR SHALL MEGGER ALL BUSWAYS, CABLES AND CONTROL CONNECTIONS TO PROVE INSULATION RESISTANCE IS OF ACCEPTABLE VALUE.

EMERGENCY LIGHT TESTING: CONTRACTOR SHALL PERFORM A TEST ON EACH UNIT AFTER IT IS PERMANENTLY INSTALLED AND CHARGED FOR A MINIMUM OF 24 HOURS. BATTERY SHALL BE TESTED FOR 90 MINUTES AT 120 VOLTS. IT MUST MEET THE REQUIREMENTS OF NEC 700.12 (A). ANY UNIT WHICH FAILS THE TEST MUST BE REPAIRED OR REPLACED, AND TESTED AGAIN. A COPY OF THE TEST REPORT SHALL BE PRESENTED TO THE ENGINEER PRIOR TO FINAL INSPECTION.

TESTING DOCUMENTATION: ALL TESTS SPECIFIED SHALL BE COMPLETELY DOCUMENTED AND TURNED OVER TO THE ENGINEER WHERE REQUIRED IN THESE SPECIFICATIONS. THE TEST CERTIFICATIONS SHALL IDENTIFY THE TEST VALUES, EQUIPMENT TESTED, TIME OF DAY AND DATE OF TESTING, TEMPERATURE AT TIME OF TESTING, THE NAME OF THE ELECTRICIAN THAT CONDUCTED THE TEST, AND SIGNATURE OF PERSON RESPONSIBLE FOR THE TEST.

PANELBOARDS: PROVIDE PANELBOARDS RATED AND SIZED AS INDICATED IN THE SCHEDULE AND SHOWN ON THE PLANS EQUAL TO SQUARE D COMPANY MODEL NO FOR SERVICES UP TO 240 VOLTS; MODEL NF FOR SERVICES UP TO 480 VOLTS; AND "I-LINE" FOR POWER DISTRIBUTION PANELS. ALL PANELBOARDS SHALL BE SUPPLIED WITH A COPPER EQUIPMENT GROUNDING BUS. CONSTRUCTION FEATURES SHALL INCLUDE MINIMUM 5" WIDE GUTTERS, DEAD FRONT CONSTRUCTION, ELECTROPLATED COPPER CURRENT CARRYING PARTS; UL LISTED TERMINALS SUITABLE FOR CONDUCTORS SPECIFIED; FLUSH FRONT HINGED "DOOR IN DOOR" WITH CYLINDER TUMBLER TYPE LOCKS (ALL KEYS ALIKE); CIRCUIT DIRECTORY AND FRAME, CODE GAUGE STEEL, GALVANIZED AND BAKED ENAMEL FINISHED. CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE QOB (NQ PANELBOARDS), TYPE EDB (NF PANELBOARDS), AND TYPE FA AND FH (I-LINE PANELBOARDS). BREAKERS SHALL BE TOGGLE ACTION WITH QUICK-MAKE, QUICK-BREAK MECHANISM. TRIP INDICATION SHALL BE BY BREAKER HANDLE TAKING A POSITION BETWEEN ON AND OFF. ALL MULTI-POLE BREAKERS SHALL BE COMMON TRIP WITH A SINGLE HANDLE. ACCEPTABLE MANUFACTURERS: SQUARE D, GENERAL ELECTRIC, SIEMENS, CUTLER-HAMMER.

SAFETY SWITCHES: SWITCHES SHALL BE EQUAL TO SQUARE D TYPE HD WITH RATINGS AND FUSING PROVISIONS AS INDICATED.

IDENTIFICATION AND NAMEPLATES: PROVIDE ENGRAVED, LAMINATED BAKELITE (WHITE LETTERS ON BLACK SURFACE) NAMEPLATES SCREWED TO EACH PIECE OF ELECTRICAL DISTRIBUTION EQUIPMENT AS FOLLOWS:

A. PANELBOARDS, SWITCHBOARDS – DESIGNATION L1, P1, ETC., VOLTAGE, PHASE NUMBER OF WIRES, ETC.; WORDING EXAMPLE: PANEL L1-208V-3 PHASE, 4 WIRE.

B. MOTOR STARTERS, DISCONNECT SWITCHES – UNLESS MOUNTED DIRECTLY ON OR ADJACENT TO IDENTIFY EQUIPMENT: WORDING EXAMPLE: EXHAUST FAN 1, MAKE-UP AIR UNIT.

PROVIDE TYPED DIRECTORIES FOR PANELBOARD BRANCH CIRCUIT IDENTIFICATION. IDENTIFY EACH CIRCUIT BREAKER AS TO THE EXACT ROOM NUMBERS OR AREA SERVED AND THE TYPE OF CIRCUIT, I.E. "ROOMS 101-104 LIGHTS" OR "CAFETERIA EXHAUST FAN". PROVIDE ALL ADDITIONAL LABELING AS REQUIRED BY NEC ARTICLES 110.16 (ARC FLASH HAZARD) & 110.24 (AVAILABLE FAULT CURRENT).

EQUIPMENT CONNECTIONS: THIS CONTRACTOR SHALL BRING ALL REQUIRED ELECTRICAL SERVICE TO ALL EQUIPMENT ITEMS FURNISHED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS OR BY THE OWNER, MAKE FINAL CONNECTIONS, AND LEAVE EQUIPMENT READY FOR OPERATION. THIS CONTRACTOR SHALL COORDINATE WITH ANY AFFECTED TRADE TO ASSURE CORRECT OPERATION OF THE EQUIPMENT ITEM.

CONTROL AND INTERLOCK WIRING: EXCEPT AS OTHERWISE INDICATED ON THE DRAWINGS, ALL CONTROL AND INTERLOCK WIRING SHALL BE PERFORMED BY THE RESPECTIVE CONTRACTORS. THE ELECTRICAL SUBCONTRACTOR SHALL INSTALL ALL STARTERS, PILOT SWITCHES, CONTROL DEVICES AND MISCELLANEOUS ITEMS OF ELECTRICAL EQUIPMENT FURNISHED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS THAT ARE NOT INTEGRALLY MOUNTED WITH THEIR ASSOCIATED EQUIPMENT.

SERVICE: THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING SERVICE WITH THE UTILITY COMPANY. ALL CHARGES ASSOCIATED WITH SERVICE SHALL BE PAID BY THE E.C. PROVIDE UTILITY REQUIRED METERING PROVISIONS. PROVIDE CT CAN OR CONCRETE PAD FOR TRANSFORMER AS REQUIRED. PROVIDE CONDUIT FOR UTILITY PRIMARY IF REQUIRED. EC SHALL WORK DIRECTLY WITH THE UTILITY AND SHALL COMPLETE AND SUBMIT ALL LOAD DATA SHEETS REQUIRED FOR SERVICE APPLICATION. WHERE A NEW SERVICE IS NOT REQUIRED, BUT LOADS ARE ADDED TO AN EXISTING SERVICE, E.C. SHALL NOTIFY UTILITY OF ADDITIONAL LOADS E.C. SHALL PROVIDE THIS INFORMATION AT BEGINNING OF PROJECT TO ALLOW TIME FOR A TRANSFORMER CHANGE OUT IF NECESSARY.

VIBRATION ISOLATION AND SEISMIC RESTRAINT: ALL EQUIPMENT AND CONDUIT FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE SEISMICALLY RESTRAINED BY CHAPTER 16 OF THE INTERNATIONAL BUILDING CODE, VOL. 1 – GENERAL CONSTRUCTION.

SUBMITTALS: SHOP DRAWING SUBMITTALS WILL BE REQUIRED FOR THIS PROJECT. SUBMIT ELECTRONIC COPIES OF ALL LIGHT FIXTURES AND MAJOR SPECIFIED EQUIPMENT TO THE ENGINEER FOR APPROVAL. THE ELECTRICAL CONTRACTOR SHALL REVIEW ALL SUBMITTALS AND MAKE CORRECTIONS AS REQUIRED PRIOR TO SUBMITTING TO ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL ALSO AFFIX HIS STAMP TO THE SUBMITTALS INDICATING THAT HIS REVIEW HAS BEEN COMPLETED. IT IS UNDERSTOOD THAT PROOF OF EQUALITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR SUPPLIER AND THAT IT IS NOT THE RESPONSIBILITY OF THE ENGINEER TO PROVE THE INEQUALITY OF THE PROPOSED SUBSTITUTIONS. FURTHERMORE THE DECISION OF THE ENGINEER IS FINAL. SHOULD ANY SUBSTITUTE ITEMS BE SUBMITTED AND DISAPPROVED, THEN THOSE ITEMS MUST BE FURNISHED EXACTLY AS DESCRIBED HEREIN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS AND/OR SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DRAWINGS OR SPECIFICATIONS.

PROJECT CLOSE-OUT: DEMONSTRATION OF COMPLETE ELECTRICAL SYSTEMS: AFTER INSTALLATION HAS BEEN COMPLETED, EQUIPMENT HAS BEEN TESTED, SYSTEMS PLACED IN PERMANENT OPERATION, AND ALL ADJUSTMENTS MADE, THIS CONTRACTOR SHALL DEMONSTRATE THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT HE HAS INSTALLED TO THE OWNER'S REPRESENTATIVE.

OPERATING AND MAINTENANCE MANUALS: THIS CONTRACTOR SHALL PROVIDE THE OWNER WITH A SET OF OPERATION AND MAINTENANCE MANUALS FOR THE EQUIPMENT HE HAS PROVIDED AND INSTALLED ON THE PROJECT. THE FIRST PAGE OF THE MANUALS SHALL IDENTIFY PROJECT AND GIVE NAME, ADDRESS AND PHONE NUMBER OF ARCHITECT, ENGINEER, MECHANICAL AND ELECTRICAL SUB-CONTRACTORS AND ANY SERVICE COMPANIES INVOLVED AND GIVE NAME AND NIGHT PHONE NUMBERS OF EACH PARTY REPRESENTING THE ELECTRICAL CONTRACTOR RESPONSIBLE FOR SERVICE DURING WARRANTY PERIOD.

WARRANTIES / GUARANTEE: THIS CONTRACTOR SHALL DELIVER TO THE OWNER ALL WARRANTIES FOR EQUIPMENT HE HAS PURCHASED AND INSTALLED. THIS CONTRACTOR SHALL ALSO GUARANTEE THAT ALL WORK PERFORMED AND/OR MATERIALS INSTALLED UNDER HIS CONTRACT IS OF THE QUALITY THAT COMPLIES WITH ALL SPECIFIC REQUIREMENTS OF THE PROJECT DOCUMENTS AND INSURES THE OWNER AGAINST ALL DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.

FINAL CLEAN UP: DURING CONSTRUCTION THIS CONTRACTOR SHALL KEEP THE SITE CLEAR OF DEBRIS AND UPON COMPLETION OF CONSTRUCTION HE SHALL CLEAN UP THE PREMISES AND REMOVE ALL EVIDENCE OF HIS WORK.

RECORD DRAWINGS: AT THE END OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT ONE SET OF THE ELECTRICAL DRAWINGS, UPDATED TO REFLECT CHANGES THAT HAVE TAKEN PLACE DURING THE CONSTRUCTION PERIOD, TO THE OWNER FOR THEIR USE. THE CORRECTED PLANS SHALL INDICATE ALL CHANGES AND DEVIATIONS FROM THE ORIGINAL CONTRACT DOCUMENTS.

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE:

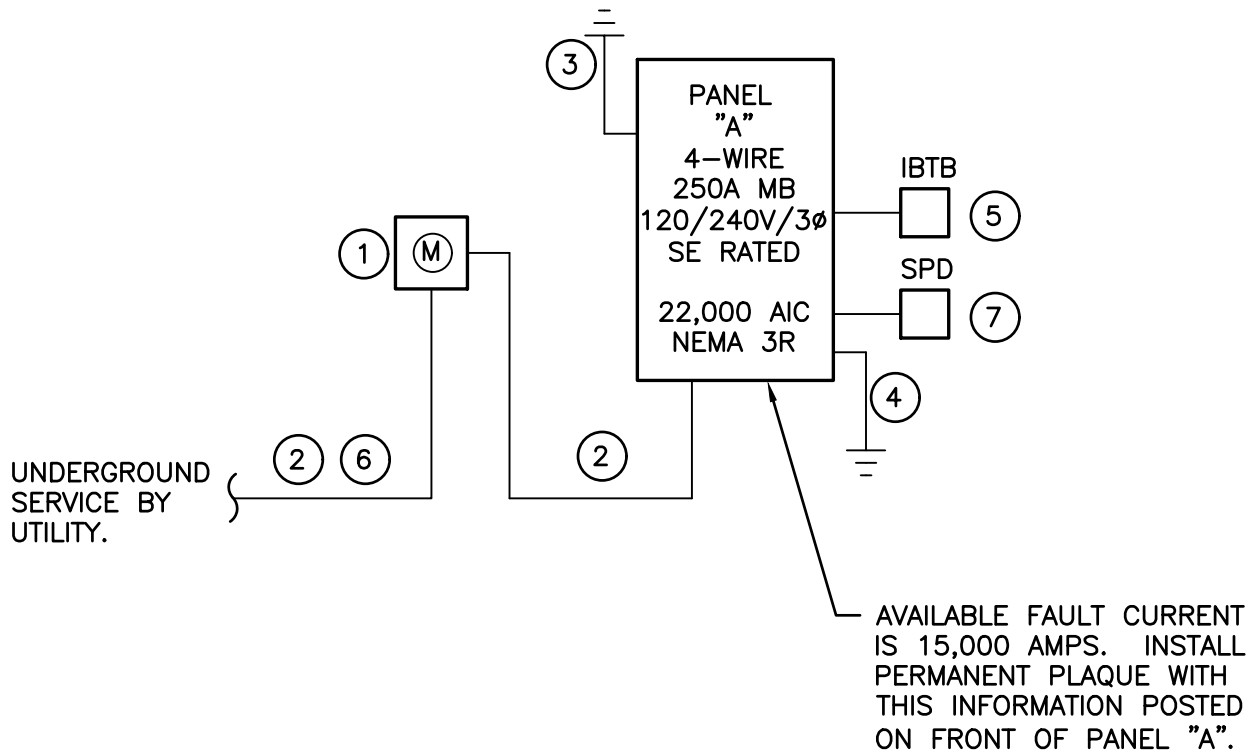
Energy Code: Prescriptive ☒ Performance ☐
ASHRAE 90.1: Prescriptive ☐ Performance ☐

Lighting schedule

lamp type required in fixture See Fixture Schedule
number of lamps in fixture See Fixture Schedule
ballast type used in the fixture See Fixture Schedule
number of ballasts in fixture See Fixture Schedule
total wattage per fixture See Fixture Schedule
total interior wattage specified vs allowed 4,000/10,550
total exterior wattage specified vs allowed 1,128/16,200

Additional Prescriptive Compliance

C406.2 More Efficient Mechanical Equipment ☐
C406.3 Reduced Lighting Power Density ☒
C406.4 Enhanced Lighting Controls ☐
C406.5 On-Site Supply of Renewable Energy ☐
C406.6 Dedicated Outdoor Air System ☐
C406.7 High-Efficiency Service Water Heating ☐



POWER RISER

NTS

POWER RISER NOTES:

- 250A, 120/240V, 3Ø, 4-WIRE METER BASE.
- 4 #250 KCMIL, 3°C UNDERGROUND.
- #2 GND, 1" PER NEC 250.50 & 250.52. REFER ALSO TO "SERVICE EQUIPMENT GROUNDING DETAIL".
- #6 GND, 1/2" TO GND RODS (MIN OF 2).
- INTERSYSTEM BONDING TERMINAL BOX IN CABINET. REFER TO DETAIL.
- COORDINATE ELECTRIC SERVICE INSTALLATION W/ UTILITY. PROVIDE CONDUCTORS AND CONDUITS AS REQUIRED. INCLUDE ALL INSTALLATION COSTS IN BID.
- SURGE PROTECTION DEVICE (SPD) RATED FOR 80KA PER PHASE.

LIGHTING FIXTURE SCHEDULE

MARK	TYPE	MOUNTING	MANUFACTURER CATALOG NO.	LAMPS QTY/TYPE	TOTAL WATTS	VOLTAGE	REMARKS
A	4' LED ENCLOSED & GASKETED	STRUCTURE	LITHONIA FEM L48 10000 LPAFL MD GZ10 40K 80CRI WLF4X STSL	LED 10,223 LM 4000K	63W	MVOLT 240V	
B	4' LED STRIP LIGHT	STRUCTURE	LITHONIA CLX LED L48 7000 SEF FDL MVOLT G21 40K 80CRI WH W/ WIREGUARD WGCLX48	LED 6865 LM 4000K	47W	MVOLT	
E	INDOOR EMERGENCY	WALL MOUNT	LITHONIA ELM 4L	LED 640 LM 5000K	2W	UVOLT	90 MINUTE BATTERY BACKUP, DAMP LOCATION
EH	HIGH OUTPUT EMERGENCY	WALL MOUNT	LITHONIA ELM 6L	LED 1100 LM 5000K	3W	UVOLT	90 MINUTE BATTERY BACKUP, WET LOCATION, CORROSION RESISTANT
J	3' LED VANITY LIGHT	SURFACE	LITHONIA FMVSTL 36" MVOLT 30K 90 CRI BN	LED 2009 LM 3000K	25W	120V	
K	2' STRIP LIGHT	SURFACE	LITHONIA CLX L24 2500LM SEF RDL MVOLT GZ10 40K 80CRI WH	LED 2500 LM 4000K	19W	120V	DIMMABLE
XE	EXIT/EGRESS COMBINATION	WALL MOUNT ABOVE DOOR	LITHONIA LHQM LP06VS S W 3 R HO M (W/TWIN GRAY EGRESS LIGHTS) ELA T SD QWP L0309	EXIT) LED EGRESS) 2-3W LED LAMPS	4W	MVOLT	PROVIDE 90 MINUTE BATTERY BACKUP
W	EXTERIOR WALL PACK	EXTERIOR WALL MOUNTED AT 12" ABOVE DOOR	LITHONIA WPX2 LED 40K MVOLT DBDX	LED 5896 LM 4000K	47W	MVOLT	WET LOCATION RATED, DARK BRONZE

NOTES:

ACCEPTABLE MANUFACTURERS OF COMPARABLE LIGHTING FIXTURES EQUAL TO FIXTURES SPECIFIED IN THIS LIGHTING FIXTURE SCHEDULE ARE ACUTY, EATON, HLI CURRENT, SIGNIFY AND WILLIAMS. ACUTY MODEL NUMBERS ARE USED ONLY AS A BASIS FOR DESIGN WHICH IS NOT RESTRICTIVE TO ANY PARTICULAR BRAND OF PRODUCT AS LONG AS THE PRODUCTS USED ARE EQUAL IN FORM, FIT AND FUNCTION TO THOSE SPECIFIED.

ESTIMATED LOAD TABULATION FOR POWER CO.

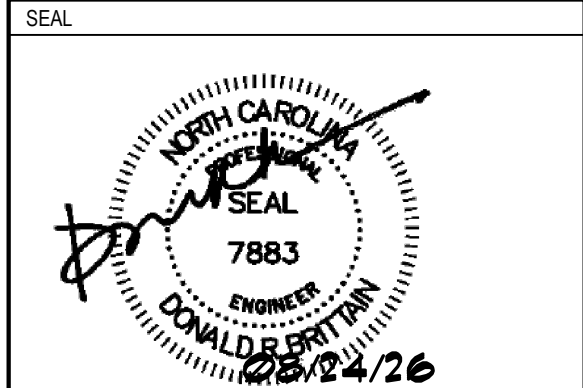
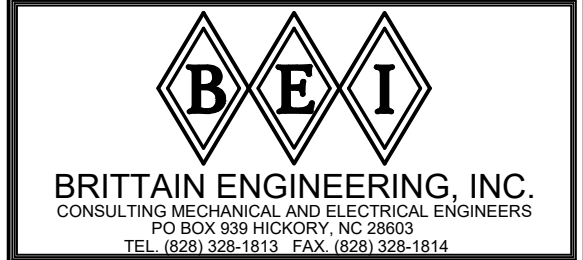
LOADS IN KVA	EXISTING DEMAND		NEW CONNECTED		DIVERSITY FACTOR	NEW DEMAND		TOTAL KVA EXISTING & NEW DEMAND
	SINGLE PHASE	THREE PHASE	SINGLE PHASE	THREE PHASE		SINGLE PHASE	THREE PHASE	
LIGHTING	-	-	7.3	-	125%	9.1	-	9.1
RECEPTACLES	-	-	2.3	-	100%	2.3	-	2.3
FANS & HEATERS	-	-	13.1	-	80%	10.5	-	10.5
WATER HEATER	-	-	4.5	-	90%	4.1	-	4.1
FUTURE WELDER	-	-	-	14.4	90%	-	13.0	13.0
TOTAL	-	-	27.2	14.4		26.0	13.0	39.0

TOTAL ESTIMATED PEAK LOAD OF 39.0 KW = 110.0 AMPS AT 208V/3Ø, WITHIN THE CAPACITY OF PANEL "A" OF 250A AT 208V/3Ø.

PANEL <u>A</u>			22,000 AMPS RMS. SYM. I.C. INTEGRATED EQUIPMENT RATING			SURFACE MOUNTED SE RATED		
120/208 VOLTS,			3 PHASE,			4 WIRE, 250 AMP MAIN BREAKER		
SERVES	CR LOAD	CR W	A B C			CR LOAD	CR W	SERVES
BIG FANS F1	1.20	1	—	—	—	2	0.46	WATER COOLER ①
F2	1.20	3	—	—	—	4	0.36	RECEPTACLES
↓ F3	1.20	5	—	—	—	6	0.18	
LIGHTING PLUS EF-1, 2 & 3	0.27	7	—	—	—	8	0.18	
EQUIPMENT STORAGE	0.47	9	—	—	—	10	0.18	
DEMONSTRATION	1.20	11	—	—	—	12	0.18	
HOLDING PENS	1.26	13	—	—	—	14	0.36	
↓ HOLDING PENS	1.00	15	—	—	—	16	0.18	↓ AT PANEL "A"
OUTSIDE	1.13	17	—	—	—	18	0.18	WP JUNCTION BOXFOR SCALE
RECEPTACLE MASTER GARDNER	0.18	19	—	—	—	20	2.25	WATER HEATER
↓ HOT BOX	0.18	21	—	—	25	22	2.25	↓
EW-1	1.50	23	20	—	20	24	1.65	EW-1
↓ EW-1	1.50	25	—	—	—	26	1.65	↓
EW-2	1.50	27	—	—	—	28	0.50	TELEPHONE BOARD
↓ EW-2	1.50	29	20	—	—	30		SPARE
SPARE		31	—	—	—	32		
		33	—	—	—	34		
↓		35	—	—	—	36		↓
		37	—	—	—	38		
SPACE FOR FUTURE WELDER		39	—	—	30	40		SURGE PROTECTION DEVICE
		41	—	—	—	42		
TOTAL CONNECTED LOAD: <u>26</u> KVA (72A) EST.			ALL BREAKERS ARE 1P-20A UNLESS OTHERWISE NOTED					
PANEL NOTES:			① GFI CIRCUIT BREAKER					



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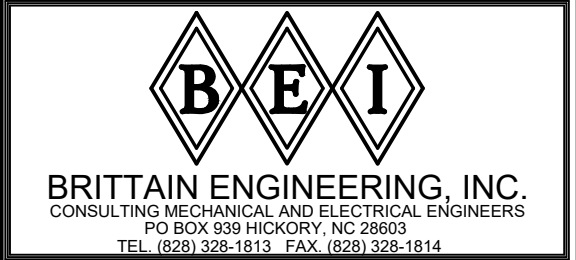
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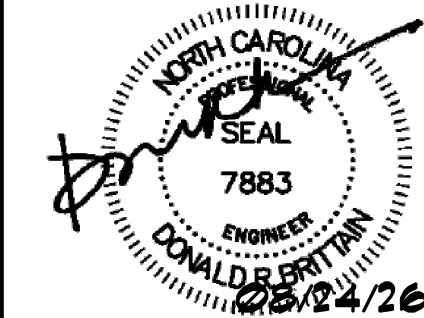
SHEET TITLE

Specifications
Schedules
Appendix B

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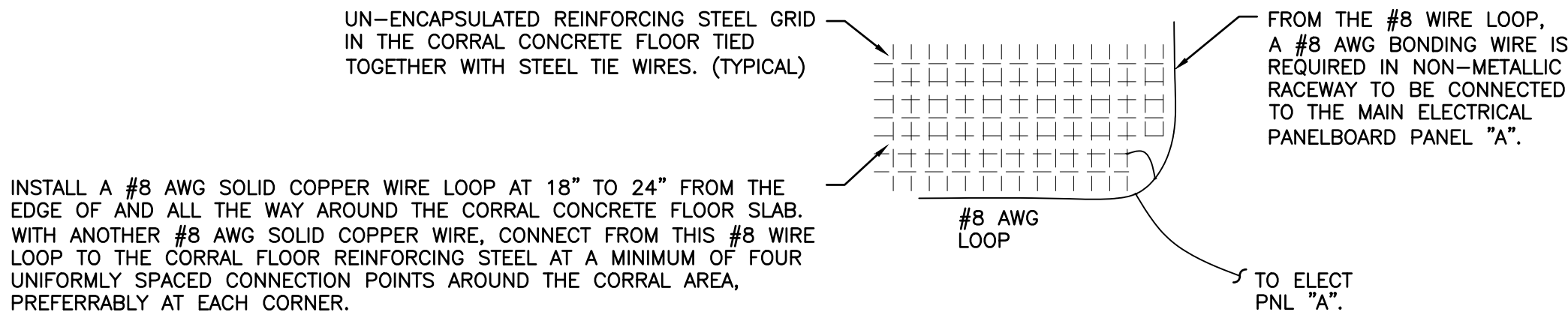
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SHEET TITLE
Floor Plan Power

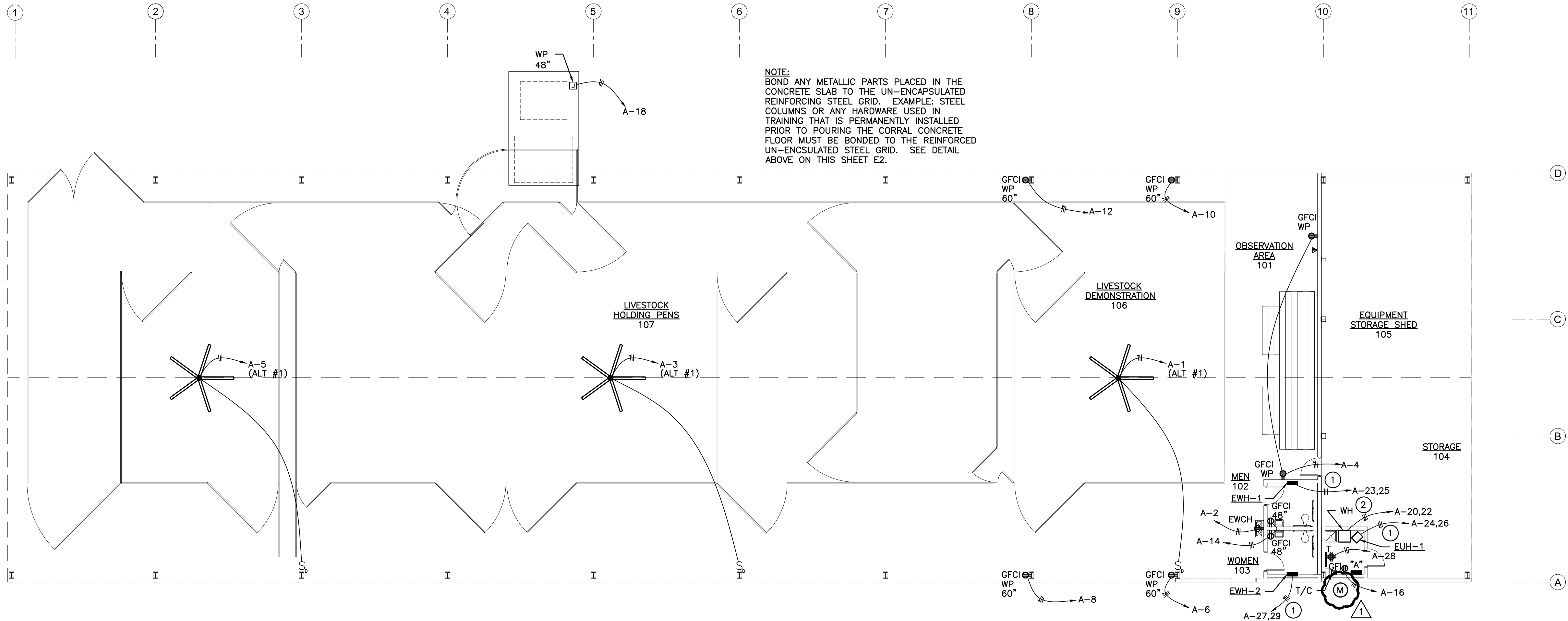


FLOOR STEEL GRID BONDING

NTS

POWER FLOOR PLAN NOTES:

- 1 2 #12, #12 GND, 3/4"C.
- 2 2 #10, #10 GND, 3/4"C.



FLOOR PLAN - POWER

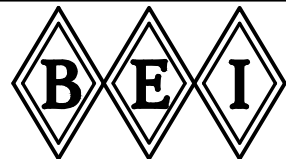
SCALE: 3/32" = 1'-0"



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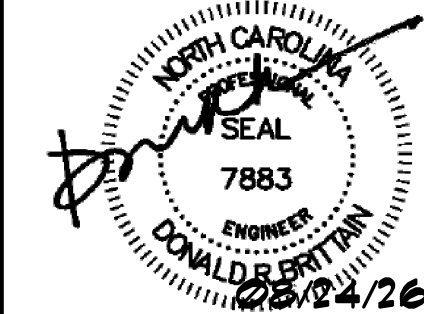
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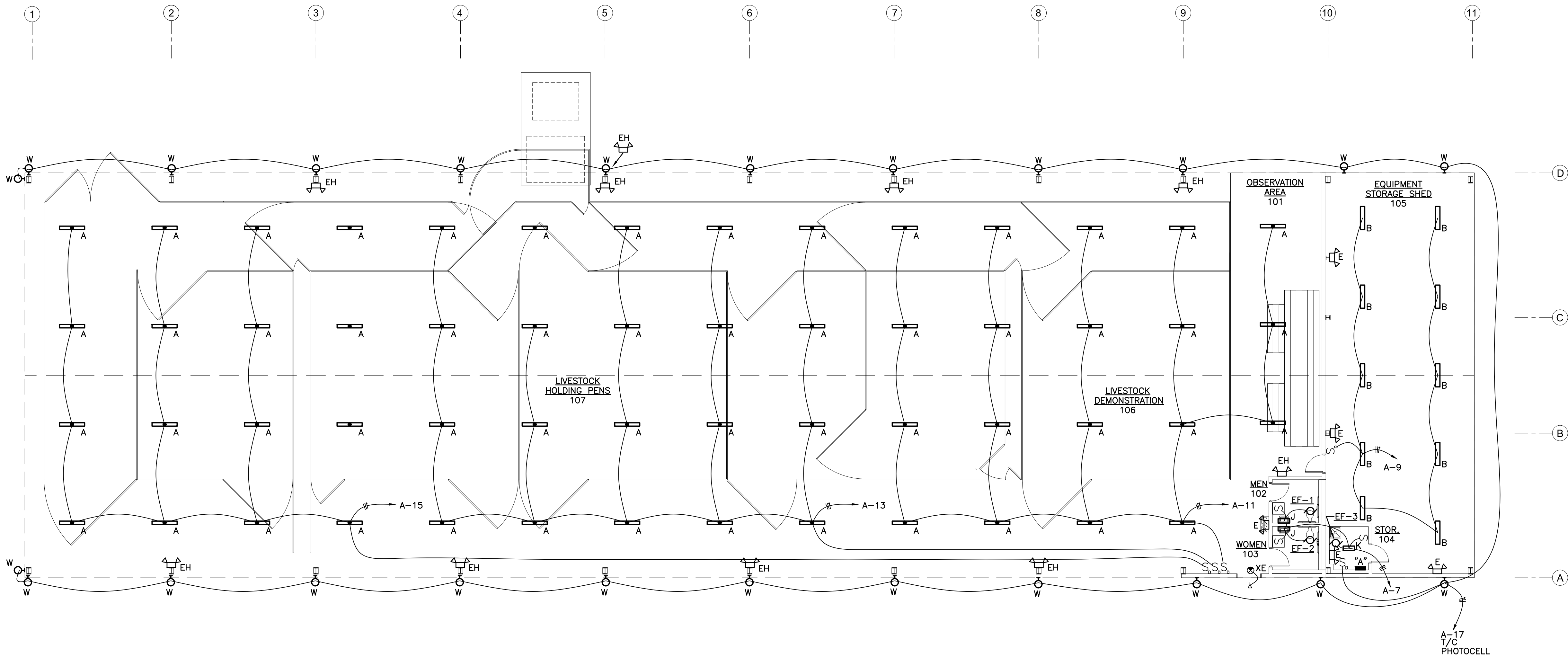
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SHEET TITLE

Floor Plan
Lighting

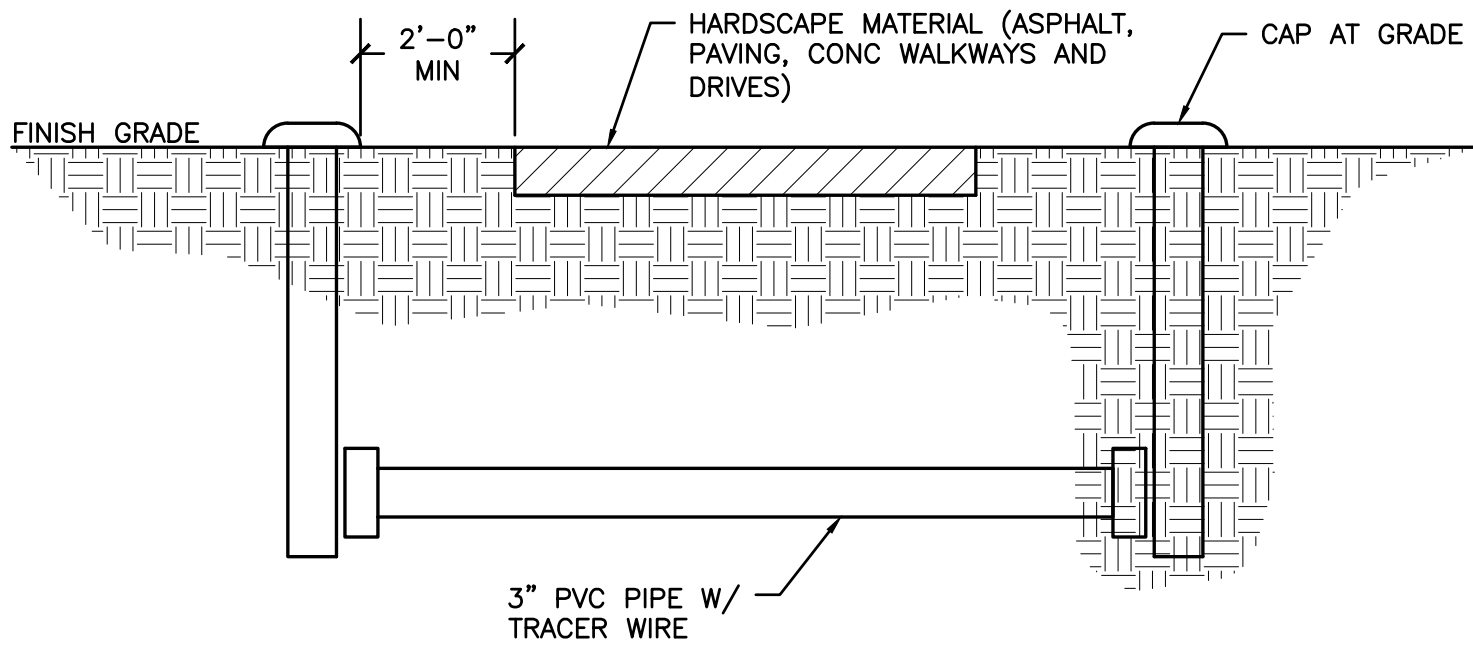
E3



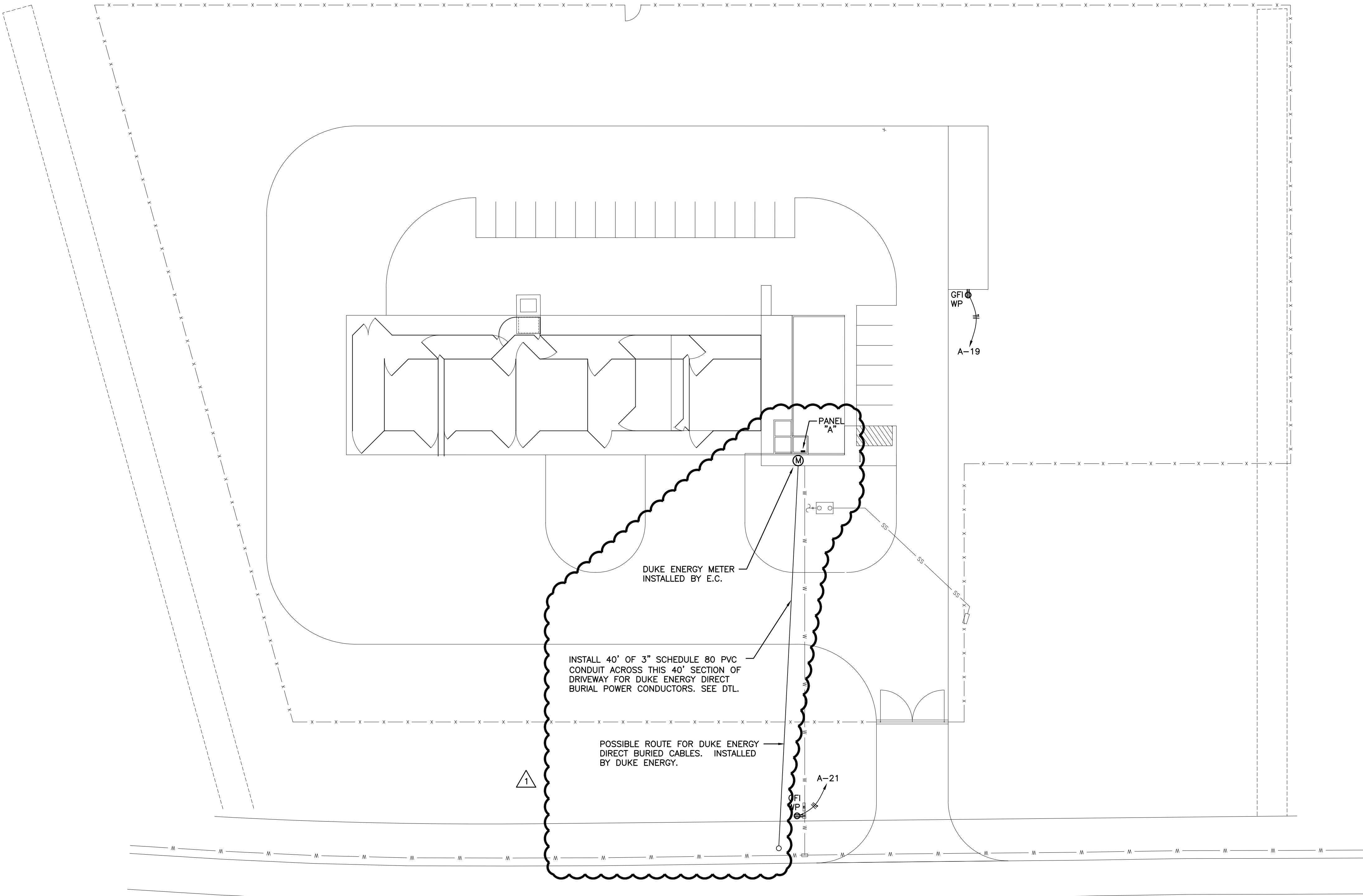
FLOOR PLAN - LIGHTING

SCALE: 3/32" = 1'-0"

062226MW217100



PVC SLEEVE DETAIL
NTS



MT OLIVE CHURCH ROAD
SITE PLAN - ELECTRICAL
SCALE: 1" = 30'-0"



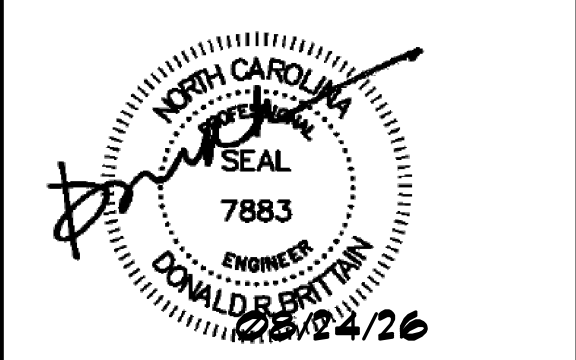
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SHEET TITLE
Site Plan Electrical

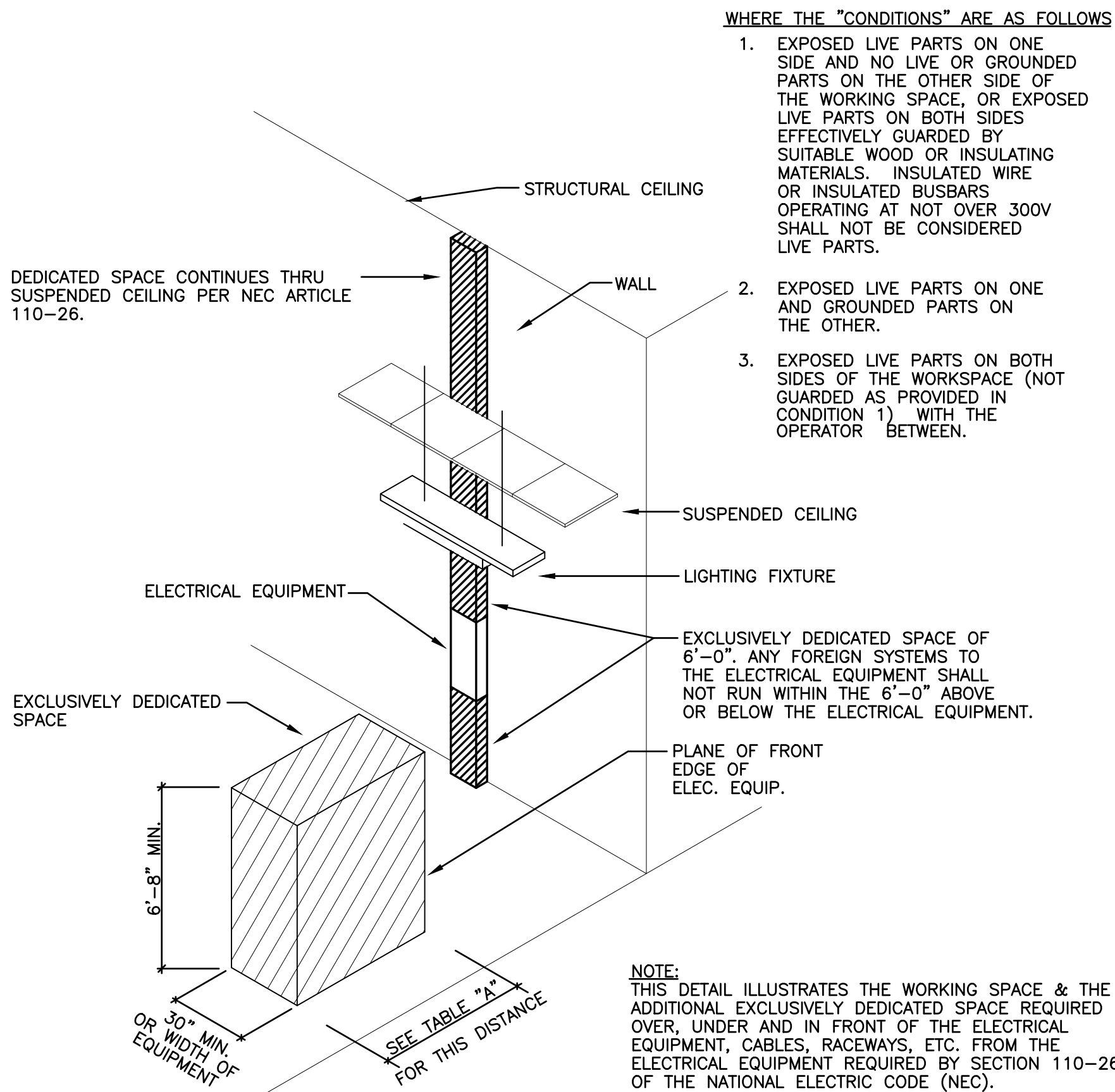
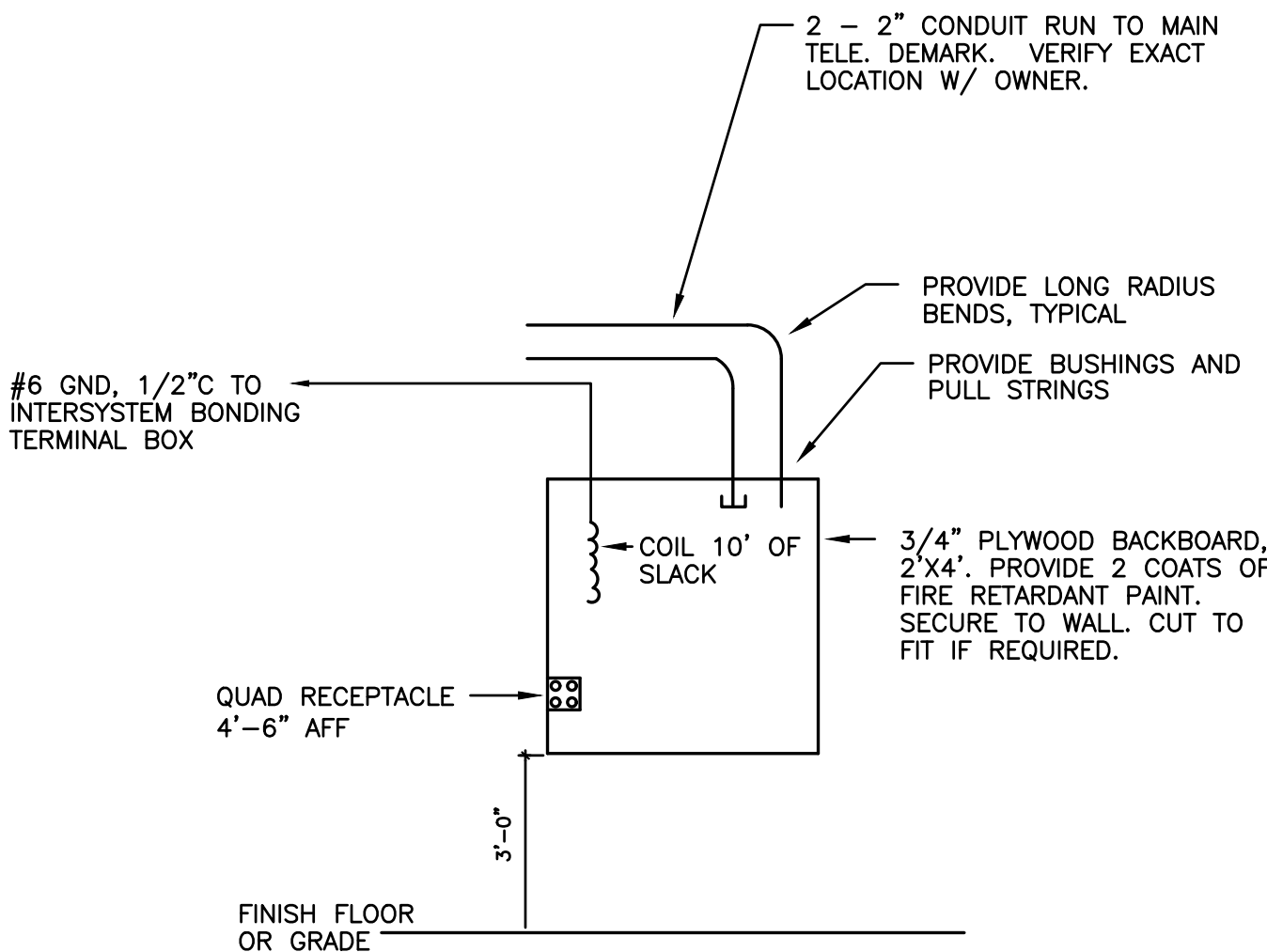


TABLE A - CLEARANCES				
VOLTAGE TO GROUNDED NOMINAL	MINIMUM CLEAR DISTANCE (FEET)			
	CONDITION: 1	2	3	
0 - 150	3	3	3	
151 - 600	3	3.5	4	

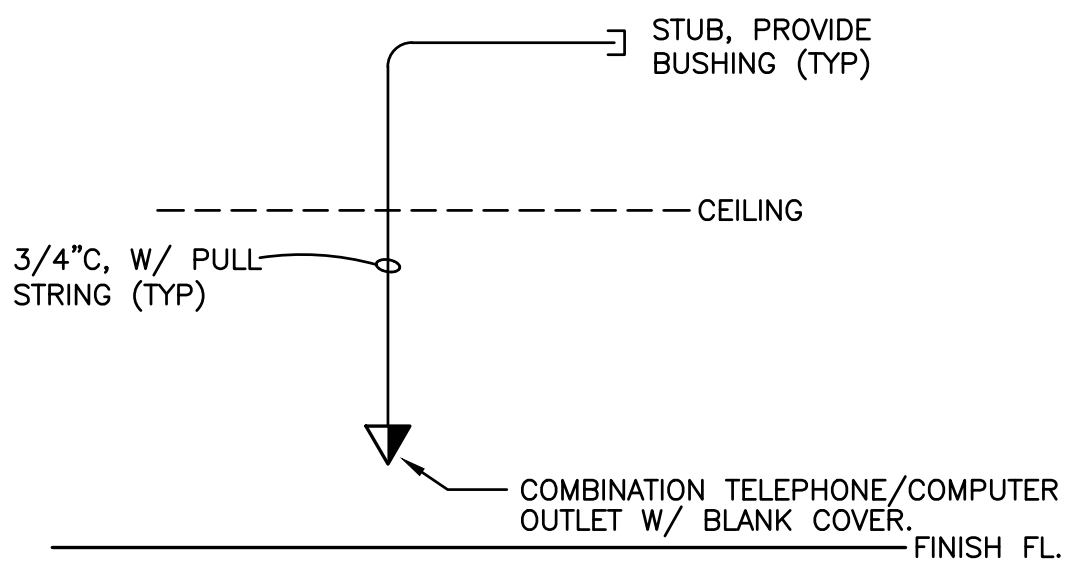
CLEARANCES FOR ELEC. EQUIPMENT

NTS



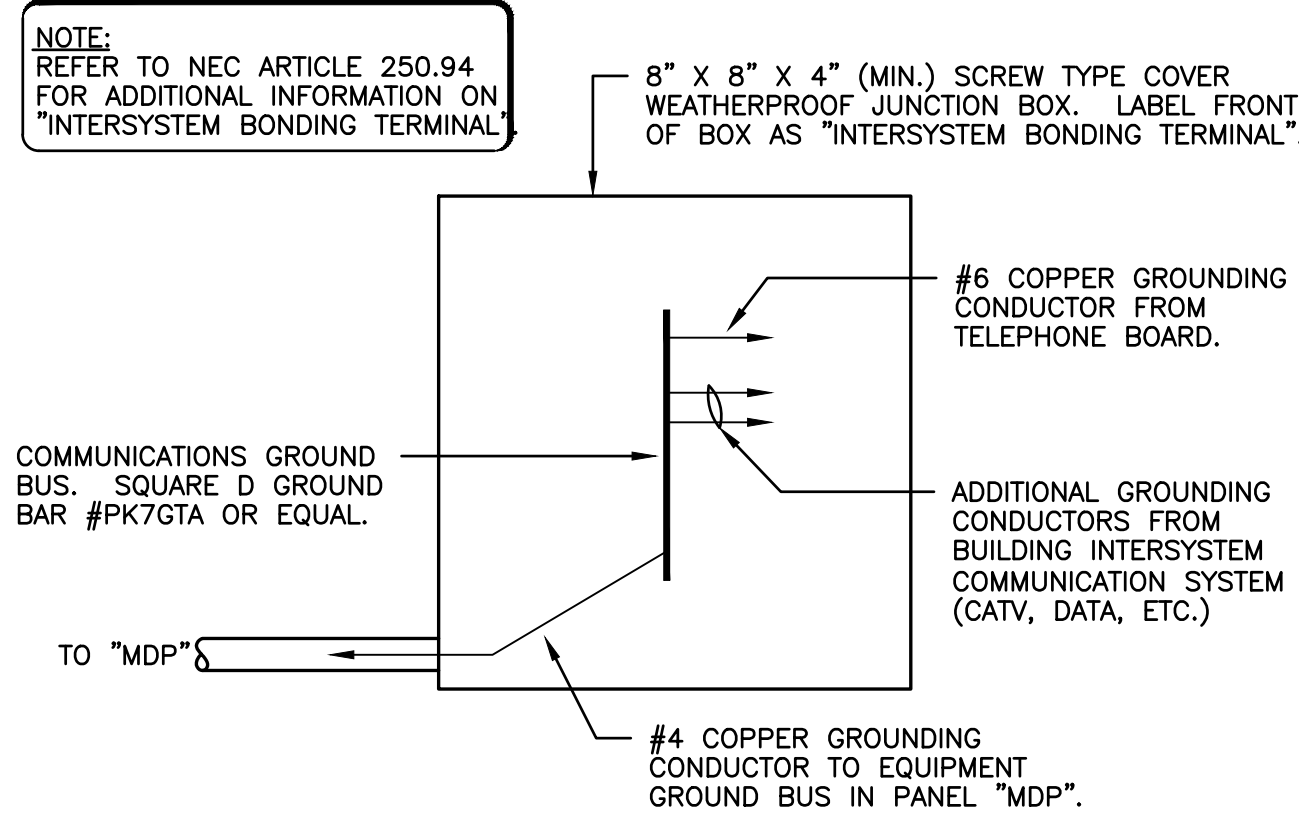
TELEPHONE BOARD SERVICE DETAIL

NTS



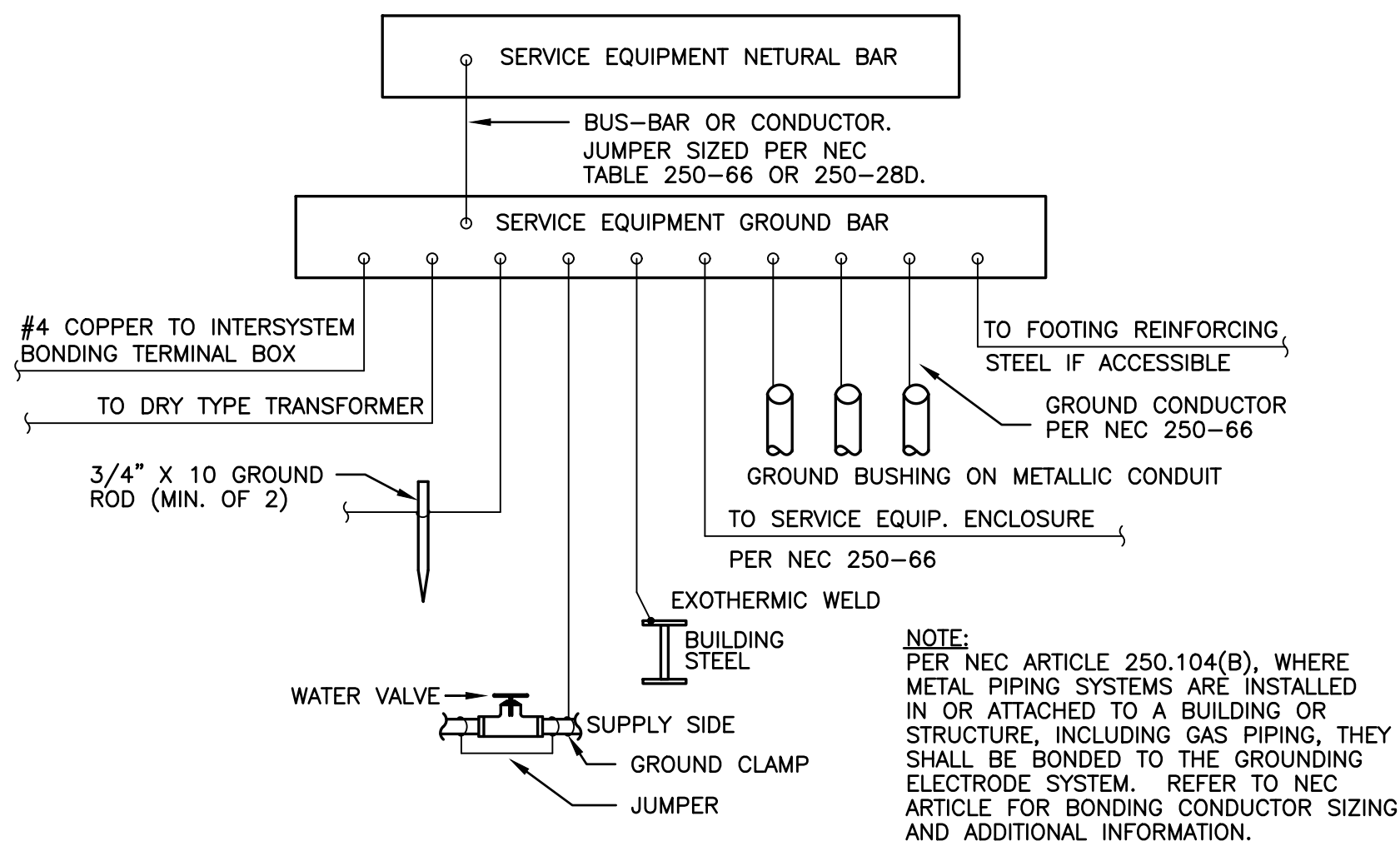
TYPICAL COMBINATION TELEPHONE / DATA OUTLET

NTS



INTERSYSTEM BONDING TERMINAL DETAIL

NTS



SERVICE EQUIPMENT GROUNDING DETAIL

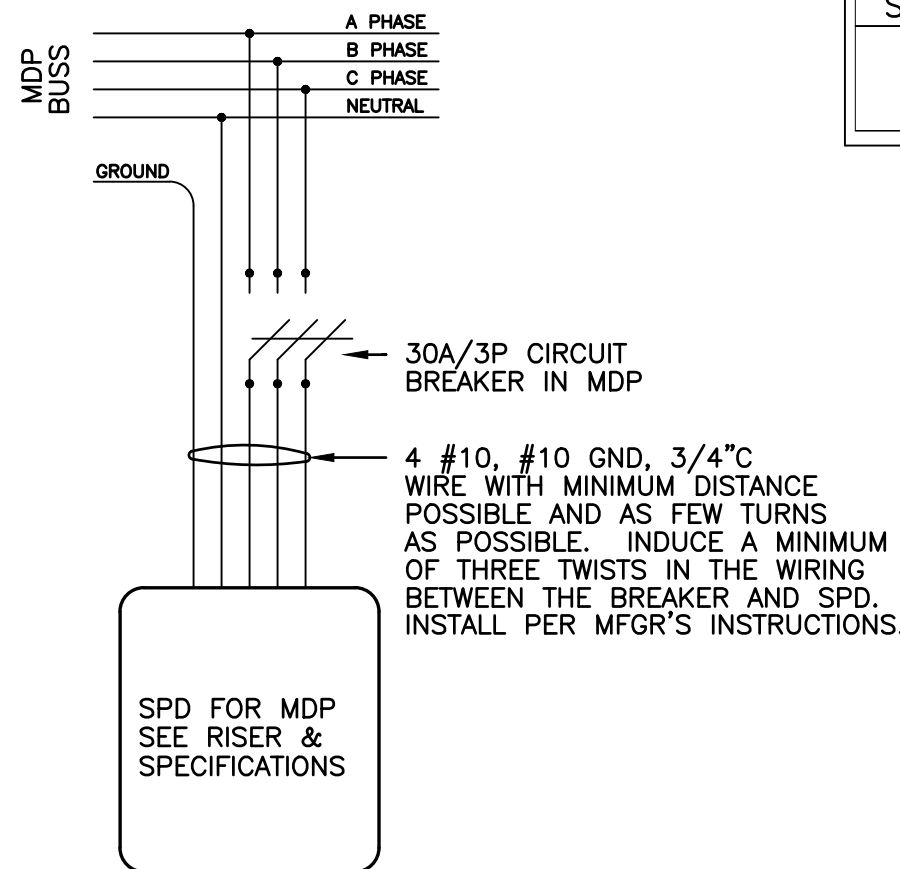
NTS

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
---	CONDUIT
---	CONDUIT UNDERFLOOR OR UNDERGROUND
⚡	ARROW INDICATES HOMERUN, TICKMARKS: NEUTRAL, PHASE, GND.
■	POWER PANEL
Ⓜ	JUNCTION BOX
ⓧ	DISCONNECT SWITCH; FUSED; NONFUSED
FPN	FUSE PER NAMEPLATE
S _m	MOTOR TOGGLE SWITCH
Ⓜ	MOTOR
---	EXISTING OR BY OTHERS
○	LIGHT FIXTURE
S ₁ , S ₂ , S ₃ , S ₄	SINGLE POLE SWITCH, 3 WAY, 4 WAY
S _p , S _d	PILOT LIGHT, DIMMER
AFF	ABOVE FINISHED FLOOR
ⓧ	DUPLEX RECEPT, ABOVE COUNTER
ⓧ WP, ⓧ GFI	WEATHERPROOF, GROUND FAULT
ⓧ	QUAD-PLEX RECEPTACLE
▽	TELEPHONE/COMPUTER COMBINATION OUTLET

OCCUPANCY SENSOR LEGEND

SYMBOL	DESCRIPTION
ⓧ	SENSORSWITCH CAT #WSD WH WALL SWITCH SENSOR - PASSIVE INFRARED (PIR)



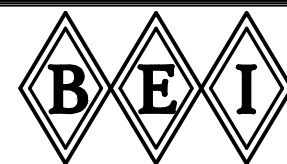
SURGE PROTECTION DEVICE (SPD) CONNECTION

NTS



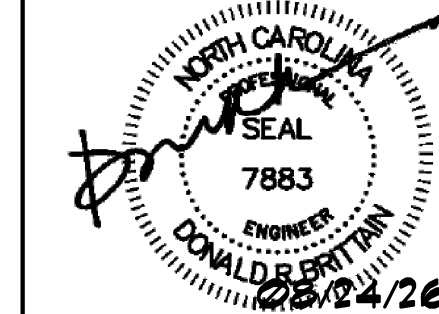
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Details

System No. W-L-1001

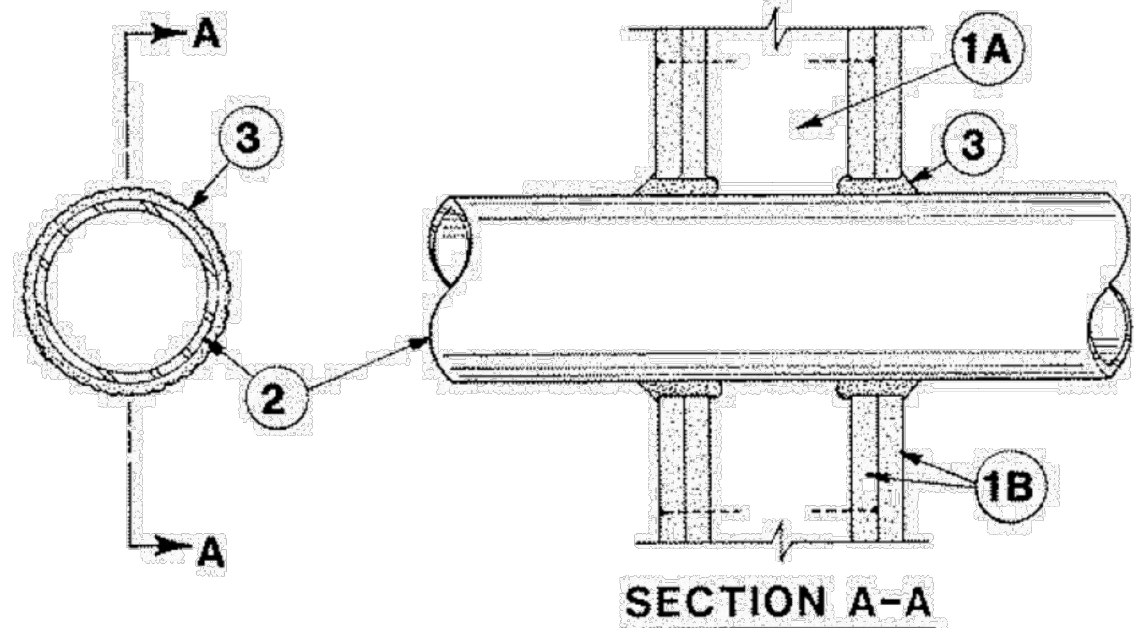
June 15, 2005

F Ratings — 1, 2, 3 and 4 Hr (See Items 2 and 3)

T Ratings — 0, 1, 2, 3, and 4 Hr (See Item 3)

L Rating At Ambient — less than 1 CFM/sq ft

L Rating At 400 F — less than 1 CFM/sq ft



1. **Wall Assembly** —The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/snd wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
- A. **Studs** — Wall framing may consist of either wood studs (max 2 h fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.
- B. **Gypsum Board*** —Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft. (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm).
2. **Through-Penetrant** — One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in / (0 mm). (point contact) to max 2 in. (51 mm) Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
- A. **Steel Pipe** — Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
- B. **Iron Pipe** — Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
- C. **Conduit** — Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in (102 mm) diam (or smaller) steel electrical metallic tubing
- D. **Copper Tubing** — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing
- E. **Copper Pipe** — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
- F. **Through Penetrating Product*** — Flexible Metal Piping The following types of steel flexible metal gas piping may be used:
1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

OMEGA FLEX INC

2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

GASTITE, DIV OF TITFLEX

3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

WARD MFG INC

3. **Fill, Void or Cavity Material*** — **Caulk or Sealant** — Min 5/8 , 1-1/4,1-7/8 and 2-1/2 in. (16, 32, 48 and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

Max Pipe or Conduit Diam In (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

+When copper pipe is used, T Rating is 0 h.

3M COMPANY — CP 25WB+ or FB-3000 WT.

*Bearing the UL Classification Mark

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2020 NEC SECTION 547. "AGRICULTURAL BUILDINGS". IS APPLICABLE TO THIS PROJECT. ATTENTION TO THESE SPECIFIC SECTIONS IS CRITICAL AND REQUIRED.

547.2 DEFINITIONS
EQUIPOTENTIAL PLANE (AGRICULTURAL BUILDINGS). AN AREA WHERE WIRE MESH OR OTHER CONDUCTIVE ELEMENTS ARE EMBEDDED IN OR PLACED UNDER CONCRETE, BONDED TO ALL METAL STRUCTURES AND FIXED NON-ELECTRICAL EQUIPMENT THAT COULD BECOME ENERGIZED, AND CONNECTED TO THE ELECTRICAL GROUNDING SYSTEM TO MINIMIZE VOLTAGE DIFFERENCES WITHIN THE PLANE, BETWEEN THE PLANES, THE GROUNDED EQUIPMENT, AND THE EARTH.

- 547.5 WIRING METHODS
(A) WIRING SYSTEMS. TYPES UF, NMC, COPPER SE CABLES, JACKETED TYPE MC CABLE, RIGID NONMETALLIC CONDUIT, LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT, OR OTHER CABLES OR RACEWAYS SUITABLE FOR THE LOCATION, WITH APPROVED TERMINATION FITTINGS, SHALL BE THE WIRING METHODS EMPLOYED.
(B) MOUNTING. ALL CABLES SHALL BE SECURED WITHIN 200 MM (8 IN.) OF EACH CABINET, BOX, OR FITTING. NONMETALLIC BOXES, FITTINGS, CONDUIT, AND CABLES SHALL BE PERMITTED TO BE MOUNTED DIRECTLY TO ANY BUILDING SURFACE COVERED BY THIS ARTICLE WITHOUT MAINTAINING THE 6 MM (¼ IN.) AIRSPACE IN ACCORDANCE WITH 300.6(D).
(C) EQUIPMENT ENCLOSURES, BOXES, CONDUIT BODIES, AND FITTINGS.
(1) EXCESSIVE DUST. EQUIPMENT ENCLOSURES, BOXES, CONDUIT BODIES, AND FITTINGS INSTALLED IN AREAS OF BUILDINGS WHERE EXCESSIVE DUST MAY BE PRESENT SHALL BE DESIGNED TO MINIMIZE THE ENTRANCE OF DUST AND SHALL HAVE NO OPENINGS (SUCH AS HOLES FOR ATTACHMENT SCREWS) THROUGH WHICH DUST COULD ENTER THE ENCLOSURE.
(2) DAMP OR WET LOCATIONS. IN DAMP OR WET LOCATIONS, EQUIPMENT ENCLOSURES, BOXES, CONDUIT BODIES, AND FITTINGS SHALL BE PLACED OR EQUIPPED FOR USE IN WET LOCATIONS AND EQUIPMENT ENCLOSURES SHALL BE WEATHERPROOF.
(3) CORROSIVE ATMOSPHERE. EQUIPMENT ENCLOSURES, BOXES, CONDUIT BODIES, AND FITTINGS SHALL HAVE CORROSION RESISTANCE PROPERTIES SUITABLE FOR THE CONDITIONS.
(G) RECEPTACLES. GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION SHALL BE PROVIDED AS REQUIRED IN 210.8(B). GFCI PROTECTION SHALL NOT BE REQUIRED FOR OTHER THAN 125-VOLT, 15-AMPERE AND 20-AMPERE RECEPTACLES.

547.6 SWITCHES, RECEPTACLES, CIRCUIT BREAKERS, CONTROLLERS, AND FUSES. SWITCHES, INCLUDING PUSHBUTTONS, RELAYS, AND SIMILAR DEVICES, RECEPTACLES, CIRCUIT BREAKERS, CONTROLLERS, AND FUSES SHALL BE PROVIDED WITH ENCLOSURES AS SPECIFIED IN 547.5(C).

547.7 MOTORS. MOTORS AND OTHER ROTATING ELECTRICAL MACHINERY SHALL BE TOTALLY ENCLOSED OR DESIGNED SO AS TO MINIMIZE THE ENTRANCE OF DUST, MOISTURE, OR CORROSIVE PARTICLES.

- 547.8 LUMINAIRES.
(A) MINIMIZE THE ENTRANCE OF DUST. LUMINAIRES SHALL BE INSTALLED TO MINIMIZE THE ENTRANCE OF DUST, FOREIGN MATTER, AND CORROSIVE MATERIAL.
(B) EXPOSED TO PHYSICAL DAMAGE. LUMINAIRES EXPOSED TO PHYSICAL DAMAGE SHALL BE PROTECTED BY A SUITABLE GUARD.
(C) EXPOSED TO WATER. LUMINAIRES EXPOSED TO WATER FROM CONDENSATION, BUILDING CLEANSING WATER, OR SOLUTION SHALL BE LISTED FOR USE IN WET LOCATIONS.

- 547.10 EQUIPOTENTIAL PLANES AND BONDING OF EQUIPOTENTIAL PLANES.
(A) WHERE REQUIRED.
(1) INDOORS. EQUIPOTENTIAL PLANES SHALL BE INSTALLED IN CONFINEMENT AREAS WITH CONCRETE FLOORS WHERE METALLIC EQUIPMENT IS LOCATED THAT MAY BECOME ENERGIZED AND IS ACCESSIBLE TO LIVESTOCK.
(2) OUTDOORS. EQUIPOTENTIAL PLANES SHALL BE INSTALLED IN CONCRETE SLABS WHERE METALLIC EQUIPMENT IS LOCATED THAT MAY BECOME ENERGIZED AND IS ACCESSIBLE TO LIVESTOCK. THE EQUIPOTENTIAL PLANES SHALL ENCOMPASS THE AREA WHERE LIVESTOCK STANDS WHILE ACCESSING METALLIC EQUIPMENT THAT MAY BECOME ENERGIZED.
(B) BONDING. EQUIPOTENTIAL PLANES SHALL BE CONNECTED TO THE ELECTRICAL GROUNDING SYSTEM. THE BONDING CONDUCTOR SHALL BE SOLID COPPER, INSULATED, COVERED OR BARE, AND NOT SMALLER THAN #8 AWG. THE MEANS OF BONDING TO WIRE MESH OR CONDUCTIVE ELEMENTS SHALL BE BY PRESSURE CONNECTORS OR CLAMPS OF BRASS, COPPER, COPPER ALLOY, OR AN EQUALLY SUBSTANTIAL APPROVED MEANS.

NOTE: GROUNDING OR BONDING REQUIREMENTS UNIQUE TO AGRICULTURAL SETTINGS ARE NECESSARY DUE TO THE SENSITIVITY OF LIVESTOCK TO THE SLIGHT DIFFERENCES IN POTENTIAL BETWEEN SURFACES WITH WHICH THEY ARE IN DIRECT CONTACT. THE WET OR DAMP CONCRETE COMMON TO ANIMAL CONFINEMENT AREAS ENHANCES THAT SENSITIVITY.

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architects

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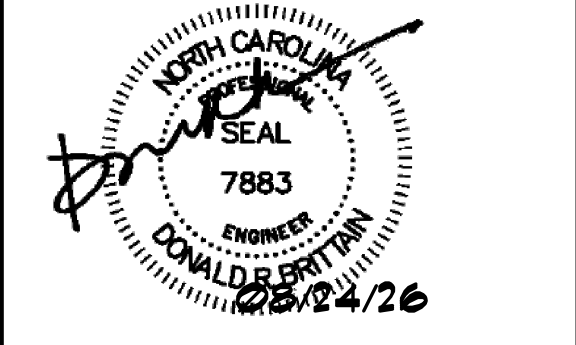
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SEAL



PROJECT



CATAWBA COUNTY
CATTLEMEN'S ASSOCIATION
EDUCATION CENTER

2894 MT. OLIVE CHURCH ROAD
NEWTON, NORTH CAROLINA 28658

DISTRIBUTION		
MARK	DATE	DESCRIPTION
SD	10-23-2025	SCHEMATIC DESIGN
DD	11-10-2025	DESIGN DEVELOPMENT
CD	06-22-2026	CONSTRUCTION DOCUMENTS

PROJECT NUMBER:	2024.008
CAD DWG FILE:	
DRAWN BY:	DGR
CHECKED BY:	DRB
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SHEET TITLE
Details and Etc.